Commonwealth of Massachusetts

Workers' Compensation
Self-Insurance Unpaid Claim Estimates
as of June 30, 2023

Deloitte Consulting LLP
September 29, 2023

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September 29, 2023

Ms. Pauline Lieu
Chief Financial Reporting Officer
Office of the Comptroller
Commonwealth of Massachusetts
One Ashburton Place – 9th Floor
Boston, MA 02108

Dear Ms. Lieu:

Deloitte Consulting LLP is pleased to submit the actuarial report regarding our analysis of the Commonwealth of Massachusetts (the "Commonwealth") unpaid loss and loss adjustment expense (LAE) associated with the workers' compensation self-insurance program as of June 30, 2023.

Rod Morris is a member of the Casualty Actuarial Society and the American Academy of Actuaries and meets the qualification standards to issue this actuarial report.

We have enjoyed working with the Commonwealth of Massachusetts on this analysis. If you have any questions after reviewing this report, please do not hesitate to contact us.

Sincerely,

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I. OVERVIEW

Deloitte Consulting LLP ("Deloitte Consulting", "us", "we" or "our") was retained by the Commonwealth of Massachusetts (the "Commonwealth") to provide an independent actuarial analysis of the Commonwealth's workers' compensation unpaid loss and loss adjustment expense reserves. This report has been created to support and document the analysis.

This report discusses our approach and presents the results of our June 30, 2023 review. Our unpaid claim estimates are presented on an undiscounted basis and discounted basis using the Commonwealth's selected annual interest rates of 4.0% and 6.0%. The basis of the unpaid claim estimates considered in our analysis was selected to meet the requirements for US General Accounting Standards Board (GASB). All information presented in this report is as of June 30, 2023 and displayed in US dollars unless otherwise stated.

Our analysis is organized on a fiscal-accident year basis. Fiscal years run from July 1 of a given year to June 30 of a subsequent year (e.g., fiscal year 2023 runs from July 1, 2022 to June 30, 2023).

BACKGROUND

The Commonwealth of Massachusetts 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.

Effective November 1, 2009 a new entity, the Massachusetts Department of Transportation (MassDOT), was created. As part of the creation, various agencies ceased to be considered part of the Commonwealth and became part of the MassDOT. The agencies, previously part of the Commonwealth, that now comprise the MassDOT are the Old Mass Highway Department (MHD), Registry of Motor

Vehicle (RMV), The Office of Transportation (TRP); The Mass Aeronautics Commission (MAC); Tobin Bridge (TOBIN); The Massachusetts Turnpike Authority (MTA); and a small operation of the Department of Conservation and Recreation (DCR).

Per discussions with the Commonwealth, it is our understanding that the MassDOT would assume the total historical liability of each of those departments; MHD, RMV, TRP, MAC, TOBIN, MTA and DCR.

REPORT SECTIONS

This report is comprised of the following sections:

- Overview – provides a general introduction and overview of the engagement;
- Scope – describes the work and reports that Deloitte Consulting has performed and produced;
- Conditions and Limitations – details the limitations that apply to this engagement's work product, report and results;
- Summary of Results – provides our estimates of the unpaid claims and estimated funding, including relevant comments that discuss the areas of note observed throughout our analysis;
- Actuarial Methodology – describes the approach underlying the results of our estimates of unpaid claims;
- Disclosures – discusses certain disclosures required by Actuarial Standards of Practice pertaining to the estimation of property/casualty unpaid claims;
- Exhibits – describes the contents of the exhibits included in this report.

II. SCOPE

Deloitte Consulting serves as an independent consultant to the Commonwealth of Massachusetts under an agreement between the Commonwealth of Massachusetts Office of the Comptroller and Deloitte Consulting. Our role under such engagement is to provide an actuarial analysis of the Commonwealth of Massachusetts workers' compensation self-insurance program as of June 30, 2023.

The estimates included in this report include loss and loss adjustment expenses (LAE). The LAE portion of the estimates consist of two separate amounts. These two items are:

- Allocated loss adjustment expenses (ALAE), which are expenses that generally can be assigned to particular claims and are included with loss data.
- Unallocated loss adjustment expenses (ULAE), which are overhead or claims administrative expenses.

The scope of work is to provide the following:

- Estimate of the Commonwealth's self-insured loss and LAE unpaid claims as of June 30, 2023 for occurrences through June 30, 2023. This estimate is provided on an undiscounted basis. At the request of the Commonwealth, we have discounted the estimate of unpaid claims at both an interest rate of 4.0% and 6.0%. We note that the selection of the interest used to discount the estimate of unpaid claims was provided to us by the Commonwealth. We also note that we offer no opinion as to the reasonableness of the assumed 4.0% and 6.0% annual return on invested assets, since the selection of the annual interest rates used for discounting is not within the scope of our analysis.
- At the request of the Commonwealth, separate analyses were performed for the following eight (8) departments:
    1. Department of Developmental Services (DDS)
    2. Department of Mental Health (DMH)
    3. Department of Corrections (DOC)
    4. University of Massachusetts – Amherst (UMass Amherst)
    5. University of Massachusetts – Medical School (UMass Medical)
    6. Other Colleges and Universities (Other C&U)
    7. All Other Departments (All Other)

8. Department of Transportation (MassDOT)

- Allocation of the combined unpaid loss and LAE estimate for "Other Colleges and Universities" (Other C&U – Item 6 above) to the 27 individual state colleges and universities.

- Our unpaid loss and LAE estimate for MassDOT (Item 8 above) includes the former Massachusetts Turnpike Authority (MTA). All further references in this report to "MassDOT" include MTA. We are no longer performing an allocation of "All Other Departments" to MassDOT, rather we are giving full credibility to MassDOT's own historical experience.

Rod Morris is a Member of the American Academy of Actuaries (MAAA) and a Fellow of the Casualty Actuarial Society (FCAS). These organizations have professional standards that, among other provisions, require an actuary perform only assignments for which he or she is qualified. Rod Morris prepared and supervised the various analyses contained in this report that supports the findings expressed in this report. Rod Morris meets the qualification standards promulgated by the American Academy of Actuaries and is appropriately qualified to perform this analysis. Rod Morris has attested compliance with the Casualty Actuarial Society Continuing Education Policy as of December 31, 2022 to perform actuarial services in 2023. Kim Mitchell, Managing Director, performed a professional-standards review to confirm this work was performed appropriately and that all actuarial standards of practice have been followed as promulgated by the American Academy of Actuaries.

The estimates contained in this report provide for loss and LAE and do not include any provisions for other expenses such as:

- Administrative expenses
- Brokerage or insurance costs including commissions
- Risk management fees
- Loss control fees
- Legal fees (other than claim defense costs)
- Actuarial fees
- Assessments
- Excess Insurance Premiums

Claim payments fall into several categories as listed below:

- **Indemnity payments**: represent the wage compensation an injured worker receives when injured on the job
- **Lump Sum Payments**: represent payments made to an injured worker to settle and close a claim
- **Medical payments**: represent the reimbursements of the medical costs associated with the injury
- **Allocated loss adjustment expenses (ALAE)**: represent claim expenses that are allocated to individual claims and include mostly expenses related to rehabilitation and investigations
- **Unallocated loss adjustment expenses (ULAE)**: represent claim expenses that are not allocated to individual claims, which consist of internal workers' compensation litigation payments provided by the state Legislature

In our analysis, Indemnity and Lump Sum Payments are reviewed on a combined basis. ALAE expenses are combined and reviewed with the medical payments. A separate analysis is performed for the unpaid ULAE expenses.

"Actuarial central estimate" is defined by actuarial literature as "an estimate that represents an expected value over the range of reasonably possible outcomes." Our range of unpaid claim estimates provided in this report is a range of actuarial central estimates. We want to emphasize that the endpoints of the range are not meant to be a "best" and "worst" case scenario, but rather endpoints of a reasonable range. We have provided a range of estimates based on our judgment after consideration of the results of multiple actuarial methods and varying assumptions within those actuarial methods.

The services we performed in this actuarial analysis do not constitute an audit, review, examination, or other form of attestation as those terms are defined by the American Institute of Certified Public Accountants (AICPA). Any use of the word "review" within this report should be interpreted in the common use of that term, and not the definition of "review" promulgated by the AICPA.

Deloitte Consulting affirms, to the best of our knowledge, that it presently has no interest, direct or indirect, which would conflict with the performance of services for this analysis.

III. CONDITIONS AND LIMITATIONS

Due to the inherent uncertainty in projecting the ultimate costs of claims, no assurance can be offered that any particular range of estimates will be adequate. We believe, however, that the actuarial techniques and assumptions used in our analysis are reasonable.

In estimating unpaid loss and LAE, it is necessary to project the future payments of unpaid loss and LAE. It is certain that actual future payments of loss and LAE will not develop exactly as projected by any actuarial technique and may, in fact, vary significantly from the projections. No warranty is expressed or implied that such variance will not occur.

Further, our projections make no provision for the broadening of coverage by legislative action or judicial interpretation or for extraordinary future emergence of new classes of losses or types of losses not sufficiently represented in the Commonwealth's historical database or which are not yet quantifiable.

In particular, our projections make no separate provision or specific adjustment for the impact of the COVID-19 pandemic on the number and severity of future reported claims or the development of previously reported claims. The effect of the pandemic on medical treatment, legal processes and business operations was initially disrupted but quickly returned to normal within the State. In our analysis we have not incorporated estimated adjustments to our actuarial assumptions in consideration of the effects of the pandemic and at this point believe the effect has been relatively minor. However, we caution that the volatility and uncertainty of our projections are increased due to the potential for unanticipated effects of the pandemic in the future.

The volume of data affected by the pandemic which was available at the time of this analysis is small and immature. According to our conversations with the Commonwealth, we understand that there have been 572 Covid-19 claims through September 1, 2023 with total paid losses of approximately $2.7 million.

DISTRIBUTION AND USE

This analysis has been prepared solely for the internal use of the Commonwealth of Massachusetts and as documentation supporting our unpaid claim estimates as of June 30, 2023. Limited distribution of this report is permitted to the Commonwealth's external auditors to support their audit process, provided that it is made available on a confidential basis and that any further distribution by auditors to third parties is prohibited without Deloitte Consulting's prior written consent.

This report may be made available to applicable state self-insurance regulatory authorities who shall use the report solely in connection with the discharge of their regulatory oversight responsibilities and for no other purpose. This confidential report may only be made available to state regulatory agencies provided that the requesting agency can demonstrate, through the existence of law or similar means, that it is able to preserve the confidentiality of this document.

It is our understanding that this report will not be made available for public inspection.

Any other distribution of this report is not permitted without the prior written consent of Deloitte Consulting. The supporting data, analysis and tables contained in our exhibits are provided to clearly document the assumptions which support the results stated herein and are integral parts of this study. It is our intention that this report be used in its entirety, as a whole, and not segmented for other purposes.

Deloitte Consulting shall have no liability, regardless of form, to any person or entity other than the Commonwealth of Massachusetts for any action taken or omitted to be taken by such parties in respect of this report. Third parties should recognize that the furnishing of this report is not a substitute for their own due diligence and may not place any reliance on this report or data contained herein that would result in the creation of any duty or liability by Deloitte Consulting to any third party.

DATA RELIANCE

Deloitte Consulting has relied upon data provided by the Commonwealth for this review. A specific audit to verify the accuracy or completeness of the data is beyond the scope of this engagement. While we have reviewed the data with regard to its reasonableness and consistency, we have relied on such data without audit or verification and our conclusions are based on the assumption that it is accurate and complete. If the underlying information provided is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

IV. SUMMARY OF RESULTS

We have estimated a reasonable range of unpaid claims net of subrogation on an undiscounted basis as of June 30, 2023 to be between $315.2 million and $368.2 million (excluding MassDOT) and between $346.4 million and $404.8 million (including MassDOT).

At the request of the Commonwealth, we have also estimated a reasonable range of unpaid claims net of subrogation on a discounted basis using annual interest rates of 4.0% and 6.0% that were provided to us by the Commonwealth. An opinion as to the reasonableness of the Commonwealth's selected 4.0% and 6.0% annual interest rates is beyond the scope of our actuarial services and we offer no opinion as to the reasonableness of the Commonwealth's selected 4.0% and 6.0% annual interest rates.

Below is a summary of the undiscounted and discounted reasonable ranges by Department:

	Undiscounted Unpaid Loss & LAE		Discounted at 4% Unpaid Loss & LAE		Discounted at 6% Unpaid Loss & LAE	
	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High
Department	(1)	(2)	(3)	(4)	(5)	(6)
DDS (Department of Developmental Services)	24,060,519	28,124,867	19,384,418	22,739,978	17,838,203	20,961,304
DMH (Department of Mental Health)	27,205,639	32,167,273	22,579,987	26,767,132	21,018,752	24,943,744
DOC (Department of Corrections)	34,371,943	40,253,989	27,914,877	32,840,652	25,818,969	30,439,152
UMassAmherst - (University of Massachusetts Amherst)	10,431,023	12,240,473	8,332,121	9,810,807	7,654,507	9,027,334
UMassMedical - (University of Massachusetts Medical Center)	2,729,017	3,174,351	2,196,689	2,561,471	2,014,327	2,351,489
Other C&U (Other Collages and Universities)	29,451,432	34,232,109	21,999,094	25,608,740	19,583,616	22,818,226
All Other - (All Other Agencies)	186,914,890	217,958,137	138,317,009	161,756,074	123,351,255	144,482,891
Total (Excluding MassDOT)	315,164,463	368,151,199	240,724,195	282,084,855	217,279,629	255,024,141
DOT (Department of Transportation)	31,264,138	36,695,729	22,551,256	26,549,907	19,926,563	23,495,257
Total (Including MassDOT)	346,428,602	404,846,928	263,275,451	308,634,762	237,206,191	278,519,397

Note: DOT amounts include Massachusetts Turnpike Authority (MTA)

We have also split the undiscounted loss and LAE unpaid claims into its short-term and long-term portions. The short-term liability represents the portion of the unpaid claims that is expected to be paid within the next twelve months. A more detailed display of our unpaid loss and LAE estimates is presented on the summary of the supporting exhibits and shows breakouts by Indemnity (including Lump-Sum payments), Medical (including ALAE), and ULAE.

The unpaid loss and LAE estimates provided above make provisions for:

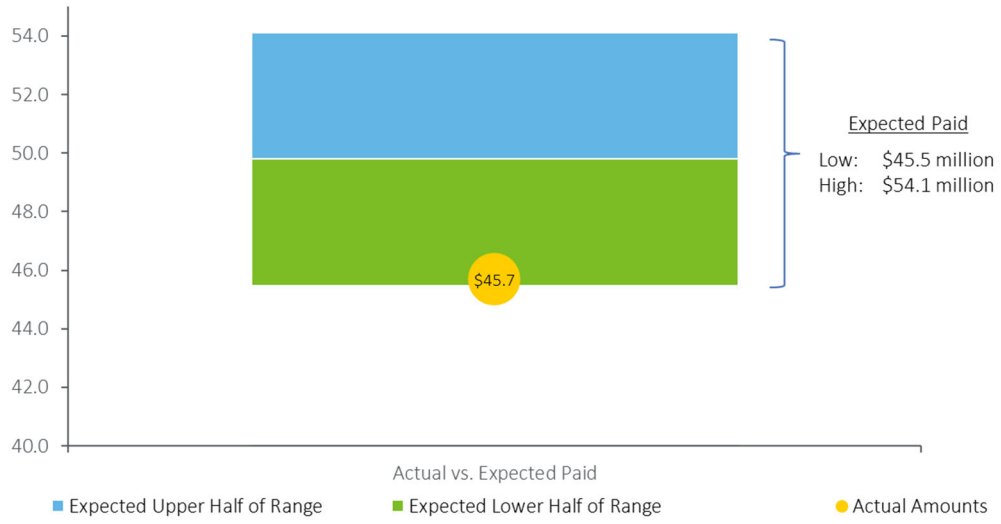
- Reported claims.
- Incurred but not reported claims (IBNR); claims not yet reported and not recorded in the loss system, which are expected to arise from accidents that have already occurred.
- "Pipeline" claims; claims known but not yet recorded in the loss system.

- Reopened claims; future reopened claims which should be coded to the year the claim was originally incurred.

RELEVANT COMMENTS

Actual Versus Expected from our June 30, 2022 Analysis:

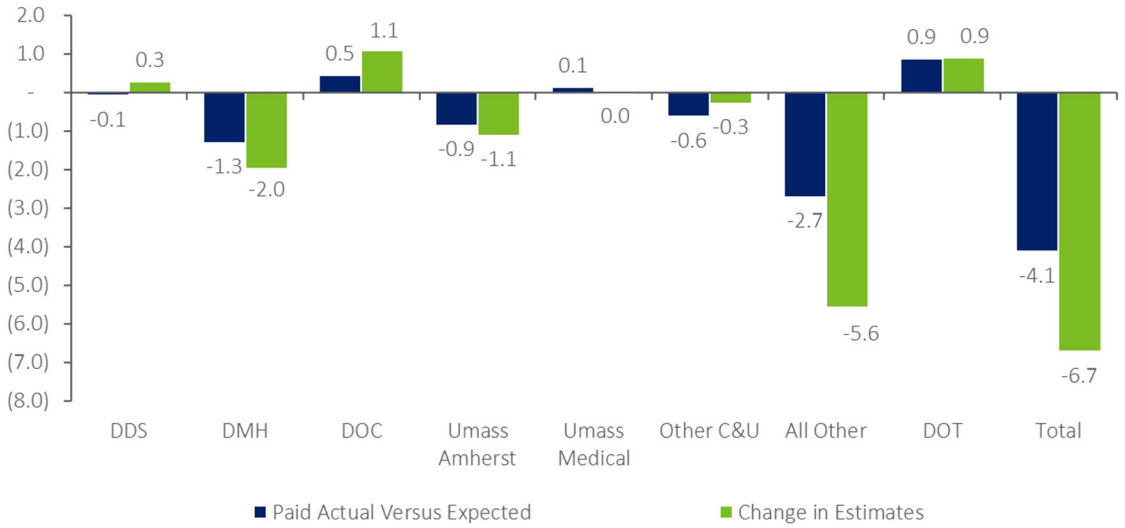
In order to test our assumptions and selections from our analyses as of June 30, 2022, we performed emergence tests on the paid amounts. The emergence test compares expected payment amounts to actual payments for all claims occurring on or prior to June 30, 2022. Below is a summary of the results of the test for all departments.



Payment amounts during fiscal year 2023 were expected to fall between $45.5 million and $54.1 million for all departments. Actual payments came in at the low end of the range at $45.7 million. The favorable development that has occurred during fiscal year 2023 has occurred across all departments, except the Department of Corrections and the Department of Transportation.

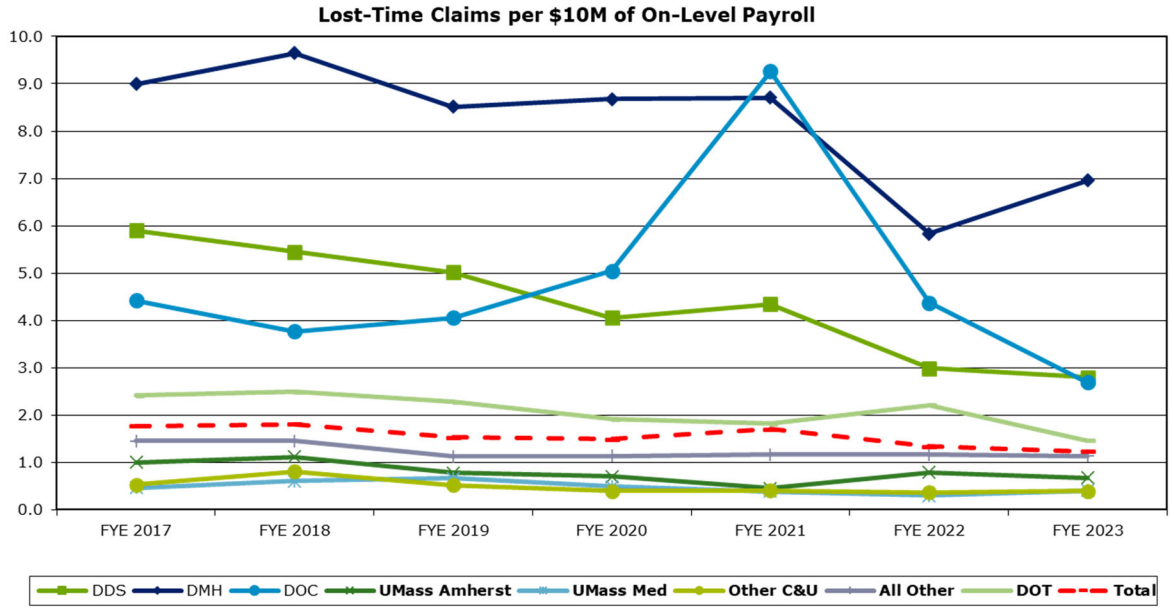
The midpoint of our ultimate loss range has decreased a total of $6.7 million for all departments, which represents an approximate 1.8% decrease to our June 30, 2022 unpaid claim estimate. The low end of our range decreased by $1.3 million and the high end of our range decreased by approximately $12.2 million. Below is graph that compares the paid retrospective test to our change in ultimate loss by department. The amounts are stated in millions of dollars. The decrease in our estimates is primarily driven by All Other Departments and Department of Mental Health where there is general favorable development across accident years, as well as a few closures of older claims that had been receiving lifetime payments.

As such, the unpaid estimates for those claims have been taken down to zero. In general, our change in estimates is consistent with the emergence that has occurred the past fiscal year.



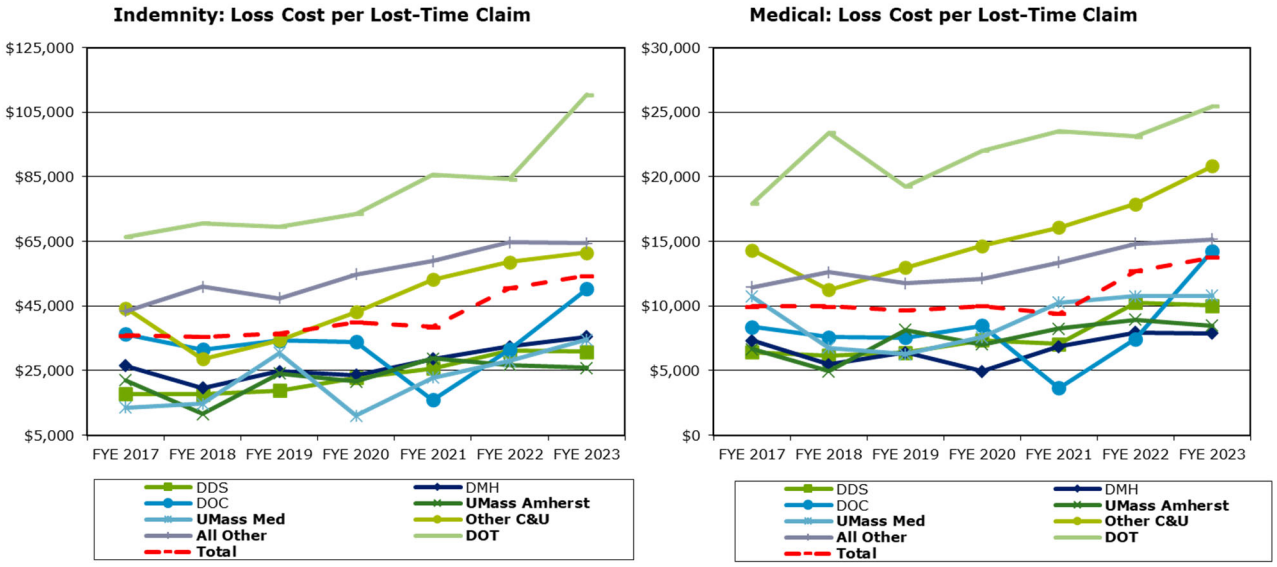
Frequency Trends:

Lost-time frequency rate (number of lost-time claims per $10 million of on-level payroll) is shown below by fiscal year for all departments. Most departments' claim frequency has been trending down with the exception of Department of Mental Health, UMass Medical, and Other Colleges & Universities. The increase for Department of Corrections in fiscal year 2021 is driven by low severity COVID claims. The Department of Corrections fiscal year 2023 frequency is lower than all recent historical years. The Department of Mental Health saw a large frequency decrease in fiscal year 2022 which increased in 2023, but is still suppressed compared to recent historical years.



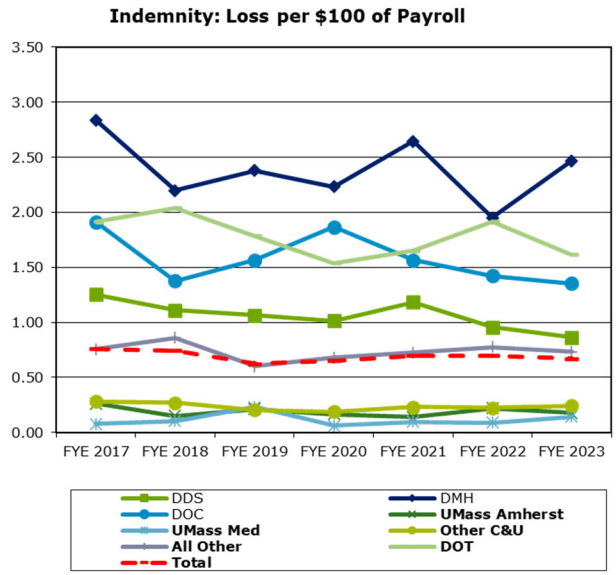
Severity (Cost per Claim) Trends:

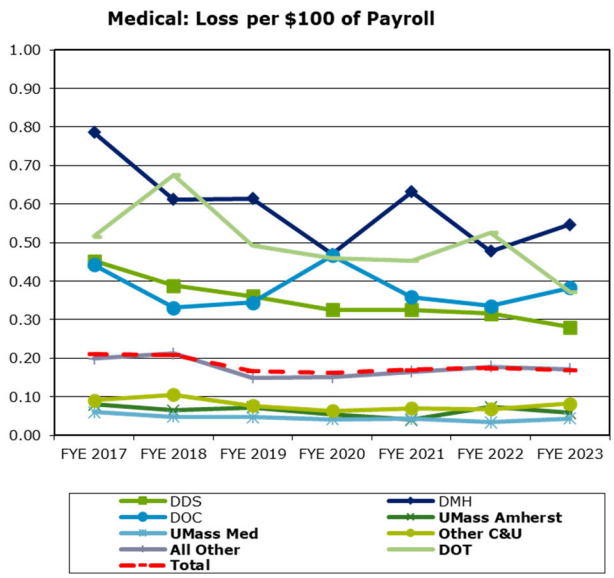
Severity (loss cost per lost-time claim) is shown below by fiscal year and broken out by indemnity and medical, for all departments. Severity has been trending upwards in recent years across all departments.



Loss Rates:

Loss rates (loss per $100 of payroll) are shown below by fiscal year and broken out by indemnity and medical, for all departments. For Indemnity and medical, loss rates have been relatively stable since fiscal year 2017 across departments. The decrease for Department of Mental Health in fiscal year 2022 is driven by decreased frequency, and 2023 appears to be more in line with historical years.


Indemnity: Loss per $100 of Payroll
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
FYE 2017
FYE 2018
FYE 2019
FYE 2020
FYE 2021
FYE 2022
FYE 2023
DDS
DMH
DOC
UMass Amherst
UMass Med
Other C&U
All Other
DOT
Total


Medical: Loss per $100 of Payroll
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
FYE 2017
FYE 2018
FYE 2019
FYE 2020
FYE 2021
FYE 2022
FYE 2023
DDS
DMH
DOC
UMass Amherst
UMass Med
Other C&U
All Other
DOT
Total

V. ACTUARIAL METHODOLOGY

DATA

In performing our analysis, we have relied on the loss and exposure data provided by the Commonwealth. For claim payments made during fiscal years 2013 through 2023, we received claims reports from the Commonwealth. For claim payments made prior to fiscal year 2013, the Commonwealth provided aggregated historical data from the previous actuary's report in 2020. As we move forward, we will expect to continue to receive claim payments for each subsequent 12-month period only. These reports detail separately Indemnity, Lump Sum, Medical, and Rehabilitation/Investigation payments, all net of subrogation. We have analyzed the payments according to the following groupings, by department and fiscal year:

- Indemnity including Lump Sum payments;
- Medical including ALAE (rehabilitation/investigation) payments;

The Commonwealth of Massachusetts loss data was grouped into eight departments which include:

- Department of Developmental Services (DDS)
- Department of Mental Health (DMH)
- Department of Corrections (DOC)
- University of Massachusetts – Amherst (UMass Amherst)
- University of Massachusetts – Medical School (UMass Medical)
- Other Colleges and Universities (Other C&U)
- All Other Departments (All Other)
- Department of Transportation (MassDOT)

Department of Transportation was analyzed separately from All Other Departments. We are no longer performing an allocation of "All Other Departments" to MassDOT, rather we are giving full credibility to MassDOT's own historical experience.

Exposure information (payroll) by fiscal year was provided to us by the Commonwealth for each of the eight departments listed above.

Paid ULAE amounts, which consist of workers' compensation litigation payments provided by the state Legislature, were provided by the Commonwealth for fiscal years 2016 through 2023.

It should be specifically noted that we did not audit the loss or exposure data provided to us by the Commonwealth, and therefore do not express an opinion as to its overall accuracy. We have recommended that appropriate periodic studies be authorized in order to confirm the quality of the data.

UNPAID LOSS AND LAE

During the course of our analysis, Deloitte Consulting considered the following:

- Historical paid loss development patterns by coverage and any recent changes in these patterns;
- Historical reported and closed claim count development patterns and any recent changes in these patterns;
- Historical LAE costs; and
- Industry information where needed to supplement Commonwealth's own data.

Several actuarial methods may be used for estimating ultimate losses and LAE. The methods used by each line of business are applied based on the credibility of the historical data, changes in company operations affecting the historical data (e.g., changes in claim reporting), the characteristics of that line of business (e.g., long versus short tail of development), and actuarial judgment. The paragraphs below describe the mechanics of the various methods and outline the underlying assumptions for each method.

General assumptions may include, but not be limited to, the following items:

- Loss development factors, including age-to-age, age-to-ultimate, and "tail" development factors
- Loss trends, including severity trend, frequency trend, and loss cost trend
- Loss cost amounts
- Benefit-level changes for workers' compensation claims
- Exposure trends — primarily payroll

LOSS METHODS

- Paid Loss Development Method

  This approach projects losses to ultimate based upon historical changes in the valuation of paid losses at given points in time (e.g., 12 months, 24 months). This method is particularly appropriate when loss development patterns have been historically stable and can be predicted with reasonable accuracy.

- Expected Loss Rate Method

  The expected loss rate method adjusts the historical loss rates to a current year on-level basis to reflect changes in the benefit levels (workers' compensation only), claim cost inflation, exposure trend, and frequency. Loss rates are defined as the estimated losses per unit of exposure. An on-level loss rate is selected and then unadjusted to each appropriate year. The selected unadjusted loss rates are then multiplied by the exposure to calculate ultimate losses.

- Paid B-F Method

  This method is essentially a combination of two other reserving techniques: the paid loss development method and the expected loss rate method. The B-F method blends these two methods by splitting expected losses into two distinct pieces: expected paid losses and expected unpaid losses. As an accident year matures, the expected paid losses are replaced with actual paid losses plus expected unpaid losses to produce ultimate losses. Thus, as the accident year matures, the initial expected paid loss estimate becomes less important while the actual paid loss experience becomes more important. To calculate this method, one must estimate initial expected losses and a loss payment pattern. The initial expected losses are calculated by selecting an average loss rate and multiplying by the exposure. The payment pattern is taken from the paid loss development method.

- Frequency-Severity Method

  The frequency-severity method begins with selecting initial expected loss severities, after consideration of the results from the loss development approaches. The initial loss severities are representative of the ultimate costs per claim. These expected loss severities are then applied to estimated ultimate claim counts to estimate ultimate losses.

TAIL METHODS

- Claim Survival Analysis (Mortality Based Approach)

  There are several open claims for accidents that occurred in fiscal years 1993 & prior. The majority of these claims are permanent claims that have annual indemnity and medical benefits paid each year that will likely continue for the rest of the injured worker's life. For these open claims, we have deployed a claim survival analysis. The method first estimates annual payments by claimant. For medical, annual payments by claimant is based on the average of the prior three calendar years of historical on-level payments. For indemnity, annual payments by claimant is based on the latest calendar year payments. Future annual payments are estimated by applying an annual inflation

factor to the original average annual on-level payment. We rely upon the claimant's age and gender to discount these future payments for survivorship using the 2005 Group Term Life Waiver Study which is a study of the probability of death following a disability. We have used an annual inflation factor of 3.0% for indemnity and 4.0% for medical to both on-level historical calendar year payments and to inflate future annual payments. The 3.0% and 4.0% inflation rates were selected by reviewing the historical growth in payments per open claimant over the past nine calendar years. This analysis was used to estimate the unpaid claims amounts for fiscal accident years 1993 & prior.

- Department of Corrections – Indemnity Tail Calculation

  For DOC – Indemnity, we similarly calculated estimated payments as described above in the Claim Survival Analysis approach, which were applied to the cumulative losses as of 372 months for multiple accident years, as a proxy for payments subsequent to 372 months to produce an indication of the tail at 372 months.

Unallocated Loss Adjustment Expense Methods

- Traditional Paid ULAE to Paid Loss Method

  The theory supporting the traditional method is that a certain percent of ULAE payments is estimated to occur when a claim is reported, with the remaining percent of ULAE payments estimated to occur between reporting and closure of the claim. Therefore, 100 percent of a selected ULAE to loss ratio, based upon historical calendar year paid activity, is applied to pure IBNR, and only 57 percent of the ratio is applied to the remaining loss and ALAE amount assuming that 43% of ULAE payments are made when a claim is reported and the remining 57% during the life of the claim.

Selected Ultimate Loss and LAE and Unpaid Loss and LAE Calculation

The range of ultimate loss and ALAE by accident year is selected based on the indications of the methods described above. More weight is applied to the Bornhuetter-Ferguson method in more recent periods and the loss development method in older periods. We calculated unpaid loss and ALAE by subtracting paid loss and ALAE from these ultimate selections. Then, the unpaid ULAE was calculated as a percentage of the unpaid loss & ALAE, using the method mentioned above, for each department. The unpaid Loss and LAE is the sum of the unpaid loss and ALAE and the unpaid ULAE.

ALLOCATION OF ESTIMATES: OTHER COLLEGES & UNIVERSITIES

Below is a brief description of the allocation methodology used to estimate the Other Colleges and Universities unpaid loss and LAE by college/university. The allocation includes the following twenty-seven colleges and universities:

- Berkshire Community College
- Bridgewater State College
- Bristol Community College
- Bunker Hill Community College
- Cape Cod Community College
- Fitchburg Community College
- Framingham Community College
- Greenfield Community College
- Holyoke Community College
- Massachusetts Bay Community College
- Massachusetts College of Art
- Massachusetts Maritime Academy
- Massachusetts College of Liberal Arts
- Massasoit Community College
- Middlesex Community College
- Mt Wachusett Community College
- North Essex Community College
- North Shore Community College
- Quinsigamond Community College
- Roxbury Community College
- Salem State College
- Springfield Tech Community College
- University of Massachusetts – Boston
- University of Massachusetts – Dartmouth
- University of Massachusetts – Lowell
- Westfield State College
- Worcester State College

We performed a complete actuarial analysis using historical data, indemnity and medical combined, to determine unpaid loss and LAE in total for Other Colleges & Universities. We then allocated the estimates down to a more granular college/university level. The primary goal of an allocation system is to distribute total costs to the appropriate college/university in an equitable manner. A model should:

- Use readily available data (exposures and historical claim costs)
- Use exposures that correlate well with the expected claim costs
- Be easy to understand and calculate
- Balance conflicting goals of stability and responsiveness

We've used three basic approaches to allocating the unpaid claims. The exposure method allocates unpaid claims to each college/university as a percentage of a college/university's exposure (payroll) to the overall exposure (payroll). The experience method allocates unpaid claims to each college/university as a percentage of a college/university's paid loss experience over the past eleven calendar years to the overall paid loss experience over the past eleven calendar years. The open counts method allocates unpaid loss to each college/university as a percentage of a college/university's current number of open lost-time claims to the overall number of open lost-time claims. There is equal weighting between the three methods.

The final allocation per college or university is the implied allocation as described in the paragraph above, adjusted for a cap of +/-10% above the overall Colleges & Universities year over year change in unpaid loss and ALAE. The overall Colleges & Universities unpaid loss and ALAE estimate change was +3% this year and as such, the cap range is -7% to +13%. To the extent the overall unpaid loss and ALAE for the "Other Colleges & Universities" department does not equal the summation of each college/university's unpaid loss and ALAE after this capping, the difference is allocated to the colleges and universities whose unpaid loss and ALAE have not been capped, on a pro-rata basis. This practice is common among allocation methodologies in order to maintain stability year over year for each individual college/university while also reacting to current loss, exposure, and open count experience. This capping procedure is done on an undiscounted basis and as such, discounted college/university's unpaid loss and ALAE may slightly breach the -7% to +10% cap.

For fiscal accident years 1993 & prior, we allocate the open claims to the respective college/university.

OTHER CONSIDERATIONS

Discounting

The Commonwealth's selected annual interest rates of 4.0% and 6.0% were used to estimate discounted unpaid claims. In our discount calculation, we assume that interest payments will be made in the middle of each successive development period and that the selected payment patterns will apply in the future. The paid development patterns used are based upon the patterns produced by our analysis of the supporting data at various retentions.

Subrogation

Our analysis is performed net of subrogation received. Therefore, our unpaid claim estimates implicitly include anticipated subrogation recoveries. The Commonwealth's reserves are established net of anticipated subrogation.

VI. DISCLOSURES

The following disclosures are applicable to our analysis of the Commonwealth's unpaid claims as of June 30, 2023:

ASOP 43

Actuarial Standard of Practice No. 43: *"Property/Casualty Unpaid Claim Estimates"* requires certain disclosures to accompany actuarial estimates of unpaid claims.

- Terminology: The terms "Unpaid Loss & LAE Estimates", "Estimates of Unpaid Claims", and "Unpaid Claim Estimates" are used interchangeably and are meant to convey the same meaning.
- Purpose or Use of the Unpaid Claim Estimates: The purpose of the unpaid claim estimates is to provide the Commonwealth with an independent analysis and estimates of unpaid loss and LAE.
- Scope of the Unpaid Claim Estimates: The intended measure of the unpaid claim estimates provided is an actuarial central estimate (an estimate that represents an expected value over the range of reasonably likely outcomes). Our range of estimates is intended to represent a range of actuarial central estimates. Our estimates are shown on both an undiscounted and a discounted basis and are net of subrogation.
- Constraints on the Unpaid Claim Estimates: There were certain constraints in the performance of this actuarial analysis. These constraints stem from substantial uncertainties in estimating the loss and LAE for unpaid claims. Examples include but are not limited to the rate of inflation inherent in losses during observable development periods, the projected development for losses as they age beyond the observable development periods, and the inherent variability in losses over time.
- Uncertainty and Range: We have not attempted to measure the uncertainty in the estimates. We have provided a range of estimates based on our judgment, which includes a reflection of the results of our analysis using different methods of estimating ultimate losses.
- Applicable Dates: These unpaid claim estimates as of June 30, 2023 were based on data evaluated as of June 30, 2023 and additional information provided to us through September 18, 2023.

- Documentation: This report, along with the accompanying exhibits, provides documentation supporting our unpaid claim estimates as of June 30, 2023.

ASOP 56

Actuarial Standard of Practice No. 56: *"Modeling"* requires disclosure of certain information regarding the actuary's use of models. For this valuation, the unpaid claim estimate calculations were determined using Microsoft Excel based reserving models developed and maintained internally by Deloitte Consulting. The model was designed specifically for the measurement of property & casualty unpaid claim estimates and the actuary has updated the applicable parameters for the specific coverages reviewed and assumptions selected for this valuation.

VII. EXHIBITS

SUMMARY EXHIBITS

Summary: Overall summary of total undiscounted and discounted unpaid claim estimates as of June 30, 2023, Diagnostics (Low, Mid, High), Emergence / Retrospective Tests, 1993 & Prior Claim Survival Analysis, ULAE analysis, and Colleges & Universities Allocation

DETAILED EXHIBITS

Our detailed exhibits display the estimation of unpaid claim estimates for each of the following segmentations of the Commonwealth's exposure:

Section I, Exhibit I: Department of Developmental Services - Indemnity

Section I, Exhibit II: Department of Developmental Services - Medical

Section II, Exhibit I: Department of Mental Health - Indemnity

Section II, Exhibit II: Department of Mental Health - Medical

Section III, Exhibit I: Department of Corrections - Indemnity

Section III, Exhibit II: Department of Corrections - Medical

Section IV, Exhibit I: UMass Amherst – Indemnity

Section IV, Exhibit II: UMass Amherst – Medical

Section V, Exhibit I: UMass Medical – Indemnity

Section V, Exhibit II: UMass Medical – Medical

Section VI, Exhibit I: Other Colleges & Universities – Indemnity

Section VI, Exhibit II: Other Colleges & Universities – Medical

Section VII, Exhibit I: All Other Departments – Indemnity

Section VII, Exhibit II: All Other Departments – Medical

Section VIII, Exhibit I: Department of Transportation – Indemnity

Section VIII, Exhibit II: Department of Transportation – Medical

Section IX: Fiscal Accident Years 1993 & Prior

Section X: ULAE

Commonwealth of Massachusetts
All Combined
Overall Summary - Department / Coverage

Summary
Exhibit 1
Sheet 1

Net of Subrogation
Undiscounted

	Unpaid Loss & ALAE		Unpaid ULAE		Undiscounted Unpaid Loss & LAE		Short-Term Unpaid Loss & LAE		Long-Term Unpaid Loss & LAE	
	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High
Department / Coverage	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
DDS - Indemnity (Including Lump Sum)	17,537,009	20,556,453	164,326	192,619	17,701,335	20,749,072	2,664,340	3,123,075	15,036,995	17,625,998
DDS - Medical	6,300,150	7,307,324	59,034	68,471	6,359,184	7,375,795	852,454	988,732	5,506,730	6,387,063
DMH - Indemnity (Including Lump Sum)	20,947,749	24,878,567	196,285	233,118	21,144,034	25,111,686	4,088,360	4,855,536	17,055,673	20,256,149
DMH - Medical	6,005,334	6,990,089	56,271	65,499	6,061,605	7,055,588	854,199	994,270	5,207,407	6,061,318
DOC - Indemnity (Including Lump Sum)	25,760,148	30,192,766	241,379	282,913	26,001,527	30,475,679	3,912,842	4,586,135	22,088,685	25,889,544
DOC - Medical	8,292,711	9,687,535	77,705	90,774	8,370,416	9,778,309	1,106,534	1,292,652	7,263,882	8,485,658
UMassAmherst - Indemnity (Including Lump Sum)	8,431,890	9,930,743	79,009	93,053	8,510,899	10,023,796	1,138,069	1,340,372	7,372,830	8,683,424
UMassAmherst - Medical	1,902,299	2,196,099	17,825	20,578	1,920,124	2,216,677	291,089	336,046	1,629,035	1,880,631
UMassMedical - Indemnity (Including Lump Sum)	2,130,748	2,481,348	19,966	23,251	2,150,714	2,504,599	442,424	515,222	1,708,290	1,989,377
UMassMedical - Medical	572,934	663,534	5,369	6,217	578,303	669,752	134,200	155,422	444,103	514,330
Other C&U - Indemnity (Including Lump Sum)	22,997,939	26,766,041	215,496	250,804	23,213,435	27,016,845	2,708,608	3,152,400	20,504,827	23,864,445
Other C&U - Medical	6,180,089	7,148,283	57,909	66,981	6,237,997	7,215,264	751,180	868,862	5,486,818	6,346,402
All Other - Indemnity (Including Lump Sum)	154,230,219	180,050,351	1,445,173	1,687,114	155,675,393	181,737,465	19,235,727	22,456,037	136,439,665	159,281,428
All Other - Medical	30,949,493	35,884,426	290,004	336,246	31,239,497	36,220,672	4,361,411	5,056,843	26,878,086	31,163,829
Total (Excluding MassDOT)	312,238,713	364,733,560	2,925,750	3,417,639	315,164,463	368,151,199	42,541,438	49,721,603	272,623,026	318,429,595
DOT - Indemnity (Including Lump Sum)	25,069,622	29,463,510	234,908	276,080	25,304,530	29,739,590	3,277,149	3,851,526	22,027,382	25,888,064
DOT - Medical	5,904,284	6,891,564	55,325	64,576	5,959,608	6,956,139	857,370	1,000,734	5,102,238	5,955,405
Total (Including MassDOT)	343,212,619	401,088,633	3,215,983	3,758,295	346,428,602	404,846,928	46,675,956	54,573,864	299,752,646	350,273,065

Note: DOT amounts include Massachusetts Turnpike Authority (MTA)

(1), (2) Selected by Deloitte
(3), (4) Selected by Deloitte
(5) = (1) + (3)
(6) = (2) + (4)
(7) = (5) x [Short-Term Portion from Sheet 2 of each Exhibit]
(8) = (6) x [Short-Term Portion from Sheet 2 of each Exhibit]
(9) = (5) x [Long-Term Portion from Sheet 2 of each Exhibit]
(10) = (6) x [Long-Term Portion from Sheet 2 of each Exhibit]

Commonwealth of Massachusetts
All Combined
Overall Summary - Department / Coverage

Summary
Exhibit 1
Sheet 2

Net of Subrogation
Discounted at 4%

	Discounted at 4% Unpaid Loss & ALAE		Unpaid ULAE		Discounted at 4% Unpaid Loss & LAE		Short-Term Unpaid Loss & LAE		Long-Term Unpaid Loss & LAE	
	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High
Department / Coverage	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
DDS - Indemnity (Including Lump Sum)	14,353,749	16,886,165	134,498	158,227	14,488,247	17,044,393	2,664,340	3,123,075	11,823,907	13,921,318
DDS - Medical	4,850,718	5,642,712	45,452	52,874	4,896,171	5,695,585	852,454	988,732	4,043,716	4,706,853
DMH - Indemnity (Including Lump Sum)	17,868,988	21,274,221	167,437	199,344	18,036,424	21,473,565	4,088,360	4,855,536	13,948,064	16,618,029
DMH - Medical	4,501,383	5,244,425	42,179	49,141	4,543,562	5,293,566	854,199	994,270	3,689,364	4,299,296
DOC - Indemnity (Including Lump Sum)	20,931,767	24,642,890	196,136	230,910	21,127,902	24,873,799	3,912,842	4,586,135	17,215,061	20,287,664
DOC - Medical	6,723,969	7,892,895	63,005	73,958	6,786,975	7,966,853	1,106,534	1,292,652	5,680,440	6,674,201
UMassAmherst - Indemnity (Including Lump Sum)	6,821,133	8,063,413	63,916	75,556	6,885,049	8,138,969	1,138,069	1,340,372	5,746,980	6,798,598
UMassAmherst - Medical	1,433,639	1,656,318	13,434	15,520	1,447,072	1,671,838	291,089	336,046	1,155,983	1,335,792
UMassMedical - Indemnity (Including Lump Sum)	1,716,056	2,003,444	16,080	18,773	1,732,136	2,022,217	442,424	515,222	1,289,712	1,506,995
UMassMedical - Medical	460,240	534,249	4,313	5,006	464,553	539,255	134,200	155,422	330,352	383,833
Other C&U - Indemnity (Including Lump Sum)	17,469,569	20,365,057	163,694	190,825	17,633,263	20,555,882	2,708,608	3,152,400	14,924,656	17,403,482
Other C&U - Medical	4,325,302	5,005,950	40,529	46,907	4,365,831	5,052,857	751,180	868,862	3,614,651	4,183,996
All Other - Indemnity (Including Lump Sum)	114,321,349	133,888,813	1,071,218	1,254,570	115,392,567	135,143,383	19,235,727	22,456,037	96,156,839	112,687,346
All Other - Medical	22,711,629	26,365,639	212,813	247,052	22,924,443	26,612,691	4,361,411	5,056,843	18,563,032	21,555,848
Total (Excluding MassDOT)	238,489,492	279,466,191	2,234,703	2,618,664	240,724,195	282,084,855	42,541,438	49,721,603	198,182,757	232,363,251
DOT - Indemnity (Including Lump Sum)	18,100,905	21,345,712	169,610	200,014	18,270,515	21,545,726	3,277,149	3,851,526	14,993,366	17,694,200
DOT - Medical	4,241,003	4,957,726	39,739	46,455	4,280,742	5,004,181	857,370	1,000,734	3,423,372	4,003,447
Total (Including MassDOT)	260,831,399	305,769,628	2,444,052	2,865,133	263,275,451	308,634,762	46,675,956	54,573,864	216,599,495	254,060,898

Note: DOT amounts include Massachusetts Turnpike Authority (MTA)

(1), (2) Selected by Deloitte
(3), (4) Selected by Deloitte
(5) = (1) + (3)
(6) = (2) + (4)
(7) = (5) x [Short-Term Portion from Sheet 2 of each Exhibit]
(8) = (6) x [Short-Term Portion from Sheet 2 of each Exhibit]
(9) = (5) x [Long-Term Portion from Sheet 2 of each Exhibit]
(10) = (6) x [Long-Term Portion from Sheet 2 of each Exhibit]

Commonwealth of Massachusetts
All Combined
Overall Summary - Department / Coverage

Summary
Exhibit 1
Sheet 3

Net of Subrogation
Discounted at 6%

	Discounted at 6% Unpaid Loss & ALAE		Unpaid ULAE		Discounted at 6% Unpaid Loss & LAE		Short-Term Unpaid Loss & LAE		Long-Term Unpaid Loss & LAE	
	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High
Department / Coverage	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
DDS - Indemnity (Including Lump Sum)	13,291,175	15,661,755	124,541	146,754	13,415,716	15,808,509	2,664,340	3,123,075	10,751,376	12,685,434
DDS - Medical	4,381,432	5,104,961	41,055	47,835	4,422,487	5,152,795	852,454	988,732	3,570,033	4,164,063
DMH - Indemnity (Including Lump Sum)	16,808,397	20,031,268	157,499	187,698	16,965,896	20,218,966	4,088,360	4,855,536	12,877,535	15,363,429
DMH - Medical	4,015,232	4,680,917	37,624	43,861	4,052,856	4,724,778	854,199	994,270	3,198,657	3,730,508
DOC - Indemnity (Including Lump Sum)	19,359,113	22,838,052	181,399	213,998	19,540,512	23,052,050	3,912,842	4,586,135	15,627,670	18,465,915
DOC - Medical	6,220,173	7,318,526	58,284	68,576	6,278,457	7,387,102	1,106,534	1,292,652	5,171,923	6,094,450
UMassAmherst - Indemnity (Including Lump Sum)	6,303,943	7,464,499	59,069	69,944	6,363,013	7,534,443	1,138,069	1,340,372	5,224,944	6,194,071
UMassAmherst - Medical	1,279,505	1,479,033	11,989	13,859	1,291,494	1,492,891	291,089	336,046	1,000,405	1,156,845
UMassMedical - Indemnity (Including Lump Sum)	1,574,142	1,839,859	14,750	17,240	1,588,892	1,857,099	442,424	515,222	1,146,468	1,341,877
UMassMedical - Medical	421,486	489,801	3,949	4,590	425,435	494,390	134,200	155,422	291,235	338,968
Other C&U - Indemnity (Including Lump Sum)	15,648,991	18,260,213	146,635	171,102	15,795,626	18,431,316	2,708,608	3,152,400	13,087,018	15,278,916
Other C&U - Medical	3,752,825	4,346,186	35,165	40,725	3,787,990	4,386,911	751,180	868,862	3,036,811	3,518,049
All Other - Indemnity (Including Lump Sum)	102,116,207	119,798,949	956,853	1,122,544	103,073,060	120,921,493	19,235,727	22,456,037	83,837,332	98,465,457
All Other - Medical	20,089,948	23,342,672	188,248	218,726	20,278,195	23,561,398	4,361,411	5,056,843	15,916,784	18,504,555
Total (Excluding MassDOT)	215,262,568	252,656,688	2,017,061	2,367,453	217,279,629	255,024,141	42,541,438	49,721,603	174,738,191	205,302,538
DOT - Indemnity (Including Lump Sum)	16,019,388	18,921,876	150,105	177,302	16,169,493	19,099,178	3,277,149	3,851,526	12,892,344	15,247,652
DOT - Medical	3,722,192	4,355,269	34,878	40,810	3,757,070	4,396,078	857,370	1,000,734	2,899,700	3,395,344
Total (Including MassDOT)	235,004,147	275,933,833	2,202,044	2,585,565	237,206,191	278,519,397	46,675,956	54,573,864	190,530,235	223,945,534

Note: DOT amounts include Massachusetts Turnpike Authority (MTA)

(1), (2) Selected by Deloitte
(3), (4) Selected by Deloitte
(5) = (1) + (3)
(6) = (2) + (4)
(7) = (5) x [Short-Term Portion from Sheet 2 of each Exhibit]
(8) = (6) x [Short-Term Portion from Sheet 2 of each Exhibit]
(9) = (5) x [Long-Term Portion from Sheet 2 of each Exhibit]
(10) = (6) x [Long-Term Portion from Sheet 2 of each Exhibit]

Commonwealth of Massachusetts
All Combined
Overall Summary - Department

Summary
Exhibit 2
Sheet 1

Unpaid Claim Analysis as of 06/30/2023
($U.S.)

Net of Subrogation
Undiscounted

	Unpaid Loss & ALAE		Unpaid ULAE		Undiscounted Unpaid Loss & LAE		Short-Term Unpaid Loss & LAE		Long-Term Unpaid Loss & LAE	
	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High
Department	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
DDS (Department of Developmental Services)	23,837,159	27,863,777	223,360	261,090	24,060,519	28,124,867	3,516,794	4,111,806	20,543,724	24,013,061
DMH (Department of Mental Health)	26,953,083	31,868,656	252,557	298,617	27,205,639	32,167,273	4,942,559	5,849,806	22,263,080	26,317,467
DOC (Department of Corrections)	34,052,860	39,880,301	319,083	373,688	34,371,943	40,253,989	5,019,376	5,878,787	29,352,567	34,375,202
UMassAmherst - (University of Massachusetts Amherst)	10,334,190	12,126,842	96,834	113,631	10,431,023	12,240,473	1,429,158	1,676,418	9,001,866	10,564,055
UMassMedical - (University of Massachusetts Medical Center)	2,703,683	3,144,883	25,334	29,468	2,729,017	3,174,351	576,625	670,644	2,152,392	2,503,707
Other C&U (Other Collages and Universities)	29,178,027	33,914,323	273,405	317,785	29,451,432	34,232,109	3,459,787	4,021,262	25,991,645	30,210,847
All Other - (All Other Agencies)	185,179,712	215,934,777	1,735,177	2,023,360	186,914,890	217,958,137	23,597,138	27,512,880	163,317,751	190,445,257
Total (Excluding MassDOT)	312,238,713	364,733,560	2,925,750	3,417,639	315,164,463	368,151,199	42,541,438	49,721,603	272,623,026	318,429,595
DOT (Department of Transportation)	30,973,906	36,355,074	290,233	340,656	31,264,138	36,695,729	4,134,518	4,852,260	27,129,620	31,843,469
Total (Including MassDOT)	343,212,619	401,088,633	3,215,983	3,758,295	346,428,602	404,846,928	46,675,956	54,573,864	299,752,646	350,273,065

Note: DOT amounts include Massachusetts Turnpike Authority (MTA)

(1) - (10) = Sum of Indemnity + Medical from Summary, Exhibit 1

Commonwealth of Massachusetts
All Combined
Overall Summary - Department

Summary
Exhibit 2
Sheet 2

Unpaid Claim Analysis as of 06/30/2023
($U.S.)

Net of Subrogation
Discounted at 4%

	Unpaid Loss & ALAE		Unpaid ULAE		Discounted at 4% Unpaid Loss & LAE		Short-Term Unpaid Loss & LAE		Long-Term Unpaid Loss & LAE	
	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High
Department	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
DDS (Department of Developmental Services)	19,204,468	22,528,877	179,950	211,101	19,384,418	22,739,978	3,516,794	4,111,806	15,867,624	18,628,171
DMH (Department of Mental Health)	22,370,371	26,518,646	209,616	248,486	22,579,987	26,767,132	4,942,559	5,849,806	17,637,428	20,917,325
DOC (Department of Corrections)	27,655,736	32,535,784	259,141	304,868	27,914,877	32,840,652	5,019,376	5,878,787	22,895,501	26,961,865
UMassAmherst - (University of Massachusetts Amherst)	8,254,772	9,719,731	77,349	91,076	8,332,121	9,810,807	1,429,158	1,676,418	6,902,963	8,134,389
UMassMedical - (University of Massachusetts Medical Center)	2,176,296	2,537,693	20,392	23,779	2,196,689	2,561,471	576,625	670,644	1,620,064	1,890,827
Other C&U (Other Collages and Universities)	21,794,871	25,371,007	204,223	237,732	21,999,094	25,608,740	3,459,787	4,021,262	18,539,307	21,587,478
All Other - (All Other Agencies)	137,032,978	160,254,452	1,284,031	1,501,622	138,317,009	161,756,074	23,597,138	27,512,880	114,719,871	134,243,194
Total (Excluding MassDOT)	238,489,492	279,466,191	2,234,703	2,618,664	240,724,195	282,084,855	42,541,438	49,721,603	198,182,757	232,363,251
DOT (Department of Transportation)	22,341,908	26,303,438	209,349	246,469	22,551,256	26,549,907	4,134,518	4,852,260	18,416,738	21,697,647
Total (Including MassDOT)	260,831,399	305,769,628	2,444,052	2,865,133	263,275,451	308,634,762	46,675,956	54,573,864	216,599,495	254,060,898

Note: DOT amounts include Massachusetts Turnpike Authority (MTA)

(1) - (10) = Sum of Indemnity + Medical from Summary, Exhibit 1

Commonwealth of Massachusetts
All Combined
Overall Summary - Department

Summary
Exhibit 2
Sheet 3

Unpaid Claim Analysis as of 06/30/2023
($U.S.)

Net of Subrogation
Discounted at 6%

	Unpaid Loss & ALAE		Unpaid ULAE		Discounted at 6% Unpaid Loss & LAE		Short-Term Unpaid Loss & LAE		Long-Term Unpaid Loss & LAE	
	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High	@6/30/23 Low	@6/30/23 High
Department	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
DDS (Department of Developmental Services)	17,672,606	20,766,715	165,596	194,589	17,838,203	20,961,304	3,516,794	4,111,806	14,321,408	16,849,498
DMH (Department of Mental Health)	20,823,630	24,712,185	195,122	231,559	21,018,752	24,943,744	4,942,559	5,849,806	16,076,193	19,093,937
DOC (Department of Corrections)	25,579,285	30,156,578	239,684	282,574	25,818,969	30,439,152	5,019,376	5,878,787	20,799,593	24,560,365
UMassAmherst - (University of Massachusetts Amherst)	7,583,448	8,943,531	71,059	83,803	7,654,507	9,027,334	1,429,158	1,676,418	6,225,349	7,350,916
UMassMedical - (University of Massachusetts Medical Center)	1,995,628	2,329,660	18,700	21,829	2,014,327	2,351,489	576,625	670,644	1,437,703	1,680,845
Other C&U (Other Collages and Universities)	19,401,816	22,606,399	181,800	211,827	19,583,616	22,818,226	3,459,787	4,021,262	16,123,829	18,796,964
All Other - (All Other Agencies)	122,206,154	143,141,620	1,145,100	1,341,271	123,351,255	144,482,891	23,597,138	27,512,880	99,754,116	116,970,011
Total (Excluding MassDOT)	215,262,568	252,656,688	2,017,061	2,367,453	217,279,629	255,024,141	42,541,438	49,721,603	174,738,191	205,302,538
DOT (Department of Transportation)	19,741,579	23,277,144	184,983	218,112	19,926,563	23,495,257	4,134,518	4,852,260	15,792,044	18,642,996
Total (Including MassDOT)	235,004,147	275,933,833	2,202,044	2,585,565	237,206,191	278,519,397	46,675,956	54,573,864	190,530,235	223,945,534

Note: DOT amounts include Massachusetts Turnpike Authority (MTA)

(1) - (10) = Sum of Indemnity + Medical from Summary, Exhibit 1

Commonwealth of Massachusetts
All Combined
Overall Summary - by Fiscal Accident Year

Summary
Exhibit 3

Unpaid Claim Analysis as of 06/30/2023
($U.S.)

Net of Subrogation

	Ultimate Loss & ALAE		Ultimate Loss & ALAE		Current Less prior	
Fiscal Accident Period	@6/30/23 Low (1)	@6/30/23 High (2)	@6/30/22 Low (3)	@6/30/22 High (4)	Low (5)	High (6)
Prior to 7/1/1993	660,080,636	668,129,871	660,841,960	669,788,905	(761,324)	(1,659,034)
7/1/93 - 6/30/94	37,919,090	38,095,470	37,705,500	37,892,200	213,590	203,270
7/1/94 - 6/30/95	32,956,038	33,113,538	33,034,738	33,205,838	(78,700)	(92,300)
7/1/95 - 6/30/96	31,775,689	31,948,489	31,815,889	31,999,189	(40,200)	(50,700)
7/1/96 - 6/30/97	33,659,900	33,873,000	33,354,800	33,578,600	305,100	294,400
7/1/97 - 6/30/98	36,570,700	36,795,800	36,400,200	36,638,700	170,500	157,100
7/1/98 - 6/30/99	34,773,500	35,015,700	34,815,600	35,072,400	(42,100)	(56,700)
7/1/99 - 6/30/00	38,619,400	38,907,100	38,600,800	38,905,700	18,600	1,400
7/1/00 - 6/30/01	45,761,800	46,103,400	45,666,800	46,027,400	95,000	76,000
7/1/01 - 6/30/02	39,277,492	39,576,892	39,284,992	39,600,192	(7,500)	(23,300)
7/1/02 - 6/30/03	39,618,900	39,971,600	39,786,600	40,163,000	(167,700)	(191,400)
7/1/03 - 6/30/04	39,629,613	39,968,213	39,706,365	40,069,965	(76,753)	(101,753)
7/1/04 - 6/30/05	42,081,528	42,501,128	42,158,128	42,604,928	(76,600)	(103,800)
7/1/05 - 6/30/06	37,693,200	38,123,300	37,867,600	38,329,900	(174,400)	(206,600)
7/1/06 - 6/30/07	37,254,300	37,704,900	36,867,200	37,347,100	387,100	357,800
7/1/07 - 6/30/08	43,365,500	43,968,200	43,339,900	43,984,600	25,600	(16,400)
7/1/08 - 6/30/09	43,002,600	43,633,500	43,277,600	43,961,900	(275,000)	(328,400)
7/1/09 - 6/30/10	45,353,800	46,094,100	45,331,000	46,123,800	22,800	(29,700)
7/1/10 - 6/30/11	47,858,800	48,664,500	48,200,300	49,073,600	(341,500)	(409,100)
7/1/11 - 6/30/12	49,416,900	50,318,800	49,724,500	50,701,900	(307,600)	(383,100)
7/1/12 - 6/30/13	44,782,700	45,639,500	44,998,500	45,927,900	(215,800)	(288,400)
7/1/13 - 6/30/14	52,616,000	53,676,000	52,896,700	54,045,600	(280,700)	(369,600)
7/1/14 - 6/30/15	62,080,800	63,411,000	62,144,500	64,162,900	(63,700)	(751,900)
7/1/15 - 6/30/16	67,484,500	69,666,200	66,632,300	68,994,900	852,200	671,300
7/1/16 - 6/30/17	63,765,900	65,975,900	63,882,300	66,393,200	(116,400)	(417,300)
7/1/17 - 6/30/18	63,155,600	65,692,900	62,812,300	65,754,100	343,300	(61,200)
7/1/18 - 6/30/19	54,714,400	57,312,500	55,502,500	58,711,300	(788,100)	(1,398,800)
7/1/19 - 6/30/20	57,650,900	61,056,700	57,078,000	63,224,000	572,900	(2,167,300)
7/1/20 - 6/30/21	59,129,000	65,415,000	58,458,000	66,221,000	671,000	(806,000)
7/1/21 - 6/30/22	61,311,000	69,852,000	62,465,000	73,857,000	(1,154,000)	(4,005,000)
7/1/22 - 6/30/23	60,887,000	71,918,000				
Total (Including MassDOT)	2,064,247,185	2,122,123,200	2,004,650,572	2,062,361,717	(1,290,386)	(12,156,516)

Commonwealth of Massachusetts

Deloitte Emergence 06/30/2022 to 06/30/2023 - Paid Amounts

Unpaid Claim Analysis as of 06/30/2023
(000)'s

Net of Subrogation

Accident Year	Selected Ultimate Low @06/30/2022	Selected Ultimate High @06/30/2022	Paid @06/30/2022	Unpaid Low @06/30/2022	Unpaid High @06/30/2022	Period Expected Paid Low	Period Expected Paid High	Period Actual Paid	Actual Less Expected Low	Actual Less Expected High	Selected Ultimate Low @06/30/2023	Selected Ultimate High @06/30/2023	Change in Ultimate Low	Change in Ultimate High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Prior to 7/1/1993	660,841,960	669,788,905	619,861,016	40,980,944	49,927,889	4,002,066	4,875,816	3,998,064	(4,002)	(877,752)	660,080,636	668,129,871	(761,324)	(1,659,034)
7/1/93 - 6/30/94	37,705,500	37,892,200	35,930,197	1,775,303	1,962,003	95,919	106,005	314,224	218,306	208,220	37,919,090	38,095,470	213,590	203,270
7/1/94 - 6/30/95	33,034,738	33,205,838	31,406,314	1,628,424	1,799,524	115,440	127,569	53,250	(62,190)	(74,319)	32,956,038	33,113,538	(78,700)	(92,300)
7/1/95 - 6/30/96	31,815,889	31,999,189	30,075,287	1,740,602	1,923,902	124,988	138,151	59,049	(65,939)	(79,101)	31,775,689	31,948,489	(40,200)	(50,700)
7/1/96 - 6/30/97	33,354,800	33,578,600	31,227,360	2,127,440	2,351,240	148,048	163,618	408,650	260,602	245,032	33,659,900	33,873,000	305,100	294,400
7/1/97 - 6/30/98	36,400,200	36,638,700	34,134,038	2,266,162	2,504,662	155,907	172,321	299,123	143,216	126,802	36,570,700	36,795,800	170,500	157,100
7/1/98 - 6/30/99	34,815,600	35,072,400	32,372,414	2,443,186	2,699,986	156,025	172,425	102,582	(53,443)	(69,843)	34,773,500	35,015,700	(42,100)	(56,700)
7/1/99 - 6/30/00	38,600,800	38,905,700	35,704,791	2,896,009	3,200,909	175,521	193,999	182,106	6,586	(11,893)	38,619,400	38,907,100	18,600	1,400
7/1/00 - 6/30/01	45,666,800	46,027,400	42,241,141	3,425,659	3,786,259	201,923	223,169	274,967	73,044	51,798	45,761,800	46,103,400	95,000	76,000
7/1/01 - 6/30/02	39,284,992	39,600,192	36,289,430	2,995,562	3,310,762	186,822	206,475	144,342	(42,479)	(62,133)	39,277,492	39,576,892	(7,500)	(23,300)
7/1/02 - 6/30/03	39,786,600	40,163,000	36,211,256	3,575,344	3,951,744	253,090	279,746	57,202	(195,888)	(222,544)	39,618,900	39,971,600	(167,700)	(191,400)
7/1/03 - 6/30/04	39,706,365	40,069,965	36,251,162	3,455,203	3,818,803	240,949	266,310	162,222	(78,727)	(104,088)	39,629,613	39,968,213	(76,753)	(101,753)
7/1/04 - 6/30/05	42,158,128	42,604,928	37,912,004	4,246,124	4,692,924	280,987	310,551	182,739	(98,248)	(127,812)	42,081,528	42,501,128	(76,600)	(103,800)
7/1/05 - 6/30/06	37,867,600	38,329,900	33,474,844	4,392,756	4,855,056	295,790	326,917	134,355	(161,434)	(192,562)	37,693,200	38,123,300	(174,400)	(206,600)
7/1/06 - 6/30/07	36,867,200	37,347,100	32,307,842	4,559,358	5,039,258	307,686	340,070	664,105	356,419	324,035	37,254,300	37,704,900	387,100	357,800
7/1/07 - 6/30/08	43,339,900	43,984,600	37,213,120	6,126,780	6,771,480	362,655	400,813	426,294	63,638	25,481	43,365,500	43,968,200	25,600	(16,400)
7/1/08 - 6/30/09	43,277,600	43,961,900	36,776,777	6,500,823	7,185,123	381,775	421,969	230,401	(151,374)	(191,568)	43,002,600	43,633,500	(275,000)	(328,400)
7/1/09 - 6/30/10	45,331,000	46,123,800	37,795,531	7,535,469	8,328,269	408,526	451,499	525,675	117,149	74,176	45,353,800	46,094,100	22,800	(29,700)
7/1/10 - 6/30/11	48,200,300	49,073,600	39,905,518	8,294,782	9,168,082	441,314	487,776	302,115	(139,199)	(185,661)	47,858,800	48,664,500	(341,500)	(409,100)
7/1/11 - 6/30/12	49,724,500	50,701,900	40,438,872	9,285,628	10,263,028	512,433	566,369	410,329	(102,104)	(156,040)	49,416,900	50,318,800	(307,600)	(383,100)
7/1/12 - 6/30/13	44,998,500	45,927,900	36,167,434	8,831,066	9,760,466	508,232	561,718	476,304	(31,928)	(85,414)	44,782,700	45,639,500	(215,800)	(288,400)
7/1/13 - 6/30/14	52,896,700	54,045,600	41,982,117	10,914,583	12,063,483	595,767	658,475	565,141	(30,626)	(93,334)	52,616,000	53,676,000	(280,700)	(369,600)
7/1/14 - 6/30/15	62,144,500	64,162,900	48,735,347	13,409,153	15,427,553	838,555	964,774	838,829	275	(125,944)	62,080,800	63,411,000	(63,700)	(751,900)
7/1/15 - 6/30/16	66,632,300	68,994,900	50,936,087	15,696,213	18,058,813	1,213,742	1,396,436	2,057,264	843,522	660,828	67,484,500	69,666,200	852,200	671,300
7/1/16 - 6/30/17	63,882,300	66,393,200	47,202,935	16,679,365	19,190,265	1,855,724	2,135,090	1,880,333	24,609	(254,758)	63,765,900	65,975,900	(116,400)	(417,300)
7/1/17 - 6/30/18	62,812,300	65,754,100	43,270,518	19,541,782	22,483,582	2,665,729	3,067,033	3,029,983	364,254	(37,050)	63,155,600	65,692,900	343,300	(61,200)
7/1/18 - 6/30/19	55,502,500	58,711,300	34,187,288	21,315,212	24,524,012	3,686,278	4,241,194	3,268,981	(417,297)	(972,213)	54,714,400	57,312,500	(788,100)	(1,398,800)
7/1/19 - 6/30/20	57,078,000	63,224,000	29,412,796	27,665,204	33,811,204	5,344,378	6,531,615	5,613,861	269,483	(917,754)	57,650,900	61,056,700	572,900	(2,167,300)
7/1/20 - 6/30/21	58,458,000	66,221,000	23,509,187	34,948,813	42,711,813	7,204,837	8,805,138	7,323,600	118,763	(1,481,539)	59,129,000	65,415,000	671,000	(806,000)
7/1/21 - 6/30/22	62,465,000	73,857,000	11,189,565	51,275,435	62,667,435	12,711,972	15,536,011	11,688,627	(1,023,346)	(3,847,384)	61,311,000	69,852,000	(1,154,000)	(4,005,000)
7/1/22 - 6/30/23								11,237,661			60,887,000	71,918,000		
Total Loss & DCC	2,004,650,572	2,062,361,717	1,664,122,188	340,528,384	398,239,529	45,473,076	54,129,053	56,912,379	201,643	(8,454,334)	2,064,247,185	2,122,123,200	(1,290,386)	(12,156,516)
													-0.4%	-3.0%
										Unpaid Loss & ALAE:	343,212,619	401,088,633		-1.8%
Unpaid ULAE:				3,387,234	3,961,287					Unpaid ULAE:	3,215,983	3,758,295		
Unpaid Loss & LAE:				343,915,618	402,200,816					Unpaid Loss & LAE:	346,428,602	404,846,928		

Breakdown of 2022 & Prior

DDS - Indemnity (Including Lump Sum)	220,823,703	223,973,002	202,774,301	18,049,402	21,198,701	2,718,175	3,231,887	3,133,438	415,263	(98,449)	221,327,217	223,876,662	503,514	(96,340)
DDS - Medical	59,093,848	60,046,698	52,966,327	6,127,522	7,080,372	809,059	956,758	640,951	(168,107)	(315,807)	59,220,759	60,075,933	126,911	29,234
DMH - Indemnity (Including Lump Sum)	174,676,458	178,684,821	153,407,204	21,269,254	25,277,618	3,811,145	4,551,484	3,212,163	(598,983)	(1,339,321)	173,416,740	176,425,559	(1,259,718)	(2,259,263)
DMH - Medical	40,508,244	41,445,689	34,733,658	5,774,586	6,712,031	806,618	956,402	548,198	(258,419)	(408,204)	40,359,933	41,138,688	(148,311)	(307,001)
DOC - Indemnity (Including Lump Sum)	246,203,190	250,520,764	220,503,621	25,699,568	30,017,142	3,746,047	4,480,432	4,362,885	616,838	(117,547)	247,125,589	250,781,207	922,399	260,444
DOC - Medical	67,390,905	68,779,257	59,035,091	8,355,814	9,744,166	1,119,159	1,339,469	1,437,834	318,675	98,365	67,968,893	69,186,717	577,989	407,460
UMassAmherst - Indemnity (Including L	47,347,605	48,903,789	38,667,250	8,680,355	10,236,538	1,148,558	1,368,669	560,495	(588,063)	(808,174)	46,644,081	47,916,933	(703,524)	(986,855)
UMassAmherst - Medical	14,341,044	14,650,844	12,362,039	1,979,005	2,288,805	291,934	345,616	157,994	(133,940)	(187,623)	14,112,619	14,337,419	(228,425)	(313,425)
UMassMedical - Indemnity (Including Lu	40,267,417	40,607,017	38,244,021	2,023,396	2,362,996	435,186	519,534	720,195	285,009	200,661	40,552,984	40,783,584	285,567	176,567
UMassMedical - Medical	12,684,585	12,806,885	11,954,179	730,406	852,706	176,979	211,661	86,189	(90,790)	(125,472)	12,478,881	12,539,481	(205,704)	(267,404)
Other C&U - Indemnity (Including Lump	98,559,690	102,244,572	76,209,164	22,350,526	26,035,408	2,635,350	3,105,827	2,607,555	(27,795)	(498,272)	98,818,030	101,920,132	258,340	(324,440)
Other C&U - Medical	31,987,022	32,922,169	26,011,209	5,975,814	6,910,961	751,029	893,433	452,596	(298,433)	(440,837)	31,803,775	32,584,969	(183,247)	(337,200)
All Other - Indemnity (Including Lump S	704,623,222	730,366,476	551,624,212	152,999,010	178,742,264	18,520,690	22,027,598	18,784,097	263,407	(3,243,501)	702,991,461	724,000,593	(1,631,761)	(6,365,883)
All Other - Medical	162,546,779	167,566,110	131,609,197	30,937,582	35,956,913	4,449,557	5,298,458	3,649,431	(800,126)	(1,649,027)	161,526,950	165,421,884	(1,019,829)	(2,144,226)
DOT - Indemnity (Including Lump Sum)	64,348,380	68,592,428	40,590,848	23,757,532	28,001,580	3,115,716	3,718,357	4,014,478	898,763	296,121	65,338,484	68,769,372	990,105	176,945
DOT - Medical	19,248,479	20,251,196	13,429,866	5,818,613	6,821,330	937,874	1,123,468	1,306,219	368,345	182,751	19,673,788	20,446,068	425,309	194,872
Total Loss & DCC	2,004,650,572	2,062,361,717	1,664,122,188	340,528,384	398,239,529	45,473,076	54,129,053	45,674,719	201,643	(8,454,334)	2,003,360,185	2,050,205,200	(1,290,386)	(12,156,516)
														-1.8%

Commonwealth of Massachusetts
All Combined
Indemnity (Including Lump Sum) & Medical

Diagnostic
Total - Low
Sheet 1

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	660,080,636	623,859,080	36,221,556					
7/1/93 - 6/30/94	37,919,090	36,244,421	1,674,669					
7/1/94 - 6/30/95	32,956,038	31,459,564	1,496,474					
7/1/95 - 6/30/96	31,775,689	30,134,336	1,641,353					
7/1/96 - 6/30/97	33,659,900	31,636,010	2,023,890					
7/1/97 - 6/30/98	36,570,700	34,433,161	2,137,539					
7/1/98 - 6/30/99	34,773,500	32,474,997	2,298,503					
7/1/99 - 6/30/00	38,619,400	35,886,897	2,732,503					
7/1/00 - 6/30/01	45,761,800	42,516,108	3,245,692			43,774,780		1.05
7/1/01 - 6/30/02	39,277,492	36,433,772	2,843,720			45,110,040		0.87
7/1/02 - 6/30/03	39,618,900	36,268,458	3,350,442			44,924,320		0.88
7/1/03 - 6/30/04	39,629,613	36,413,384	3,216,229			45,525,360		0.87
7/1/04 - 6/30/05	42,081,528	38,094,742	3,986,786			47,121,810		0.89
7/1/05 - 6/30/06	37,693,200	33,609,200	4,084,000			50,127,500		0.75
7/1/06 - 6/30/07	37,254,300	32,971,947	4,282,353			52,599,680		0.71
7/1/07 - 6/30/08	43,365,500	37,639,414	5,726,086			55,856,450		0.78
7/1/08 - 6/30/09	43,002,600	37,007,179	5,995,421			55,184,480		0.78
7/1/09 - 6/30/10	45,353,800	38,321,206	7,032,594			55,963,500		0.81
7/1/10 - 6/30/11	47,858,800	40,207,633	7,651,167			57,792,150		0.83
7/1/11 - 6/30/12	49,416,900	40,849,201	8,567,699			59,488,070		0.83
7/1/12 - 6/30/13	44,782,700	36,643,738	8,138,962	1,401	31,965	62,310,870	1.7	0.72
7/1/13 - 6/30/14	52,616,000	42,547,258	10,068,742	1,449	36,312	65,145,240	1.7	0.81
7/1/14 - 6/30/15	62,080,800	49,574,176	12,506,624	1,630	38,086	68,294,540	1.9	0.91
7/1/15 - 6/30/16	67,484,500	52,993,351	14,491,149	1,537	43,907	69,066,540	1.8	0.98
7/1/16 - 6/30/17	63,765,900	49,083,268	14,682,632	1,416	45,032	66,930,320	1.8	0.95
7/1/17 - 6/30/18	63,155,600	46,300,502	16,855,098	1,420	44,476	67,550,430	1.8	0.93
7/1/18 - 6/30/19	54,714,400	37,456,269	17,258,131	1,215	45,023	70,687,230	1.5	0.77
7/1/19 - 6/30/20	57,650,900	35,026,657	22,624,243	1,188	48,536	72,967,030	1.5	0.79
7/1/20 - 6/30/21	59,129,000	30,832,787	28,296,213	1,299	45,520	71,678,062	1.7	0.82
7/1/21 - 6/30/22	61,311,000	22,878,192	38,432,808	1,036	59,183	75,241,647	1.3	0.81
7/1/22 - 6/30/23	60,887,000	11,237,661	49,649,339	974	62,501	79,097,469	1.2	0.77
Total	2,064,247,185	1,721,034,567	343,212,619					

Commonwealth of Massachusetts
Department of Developmental Services (DDS)
Indemnity (Including Lump Sum) & Medical

Diagnostic
Total - Low
Sheet 2

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	154,051,977	149,911,445	4,140,532					
7/1/93 - 6/30/94	4,906,100	4,772,266	133,834			2,570,620		1.91
7/1/94 - 6/30/95	3,102,000	3,009,689	92,311			2,558,540		1.21
7/1/95 - 6/30/96	4,317,800	4,182,076	135,724			2,555,390		1.69
7/1/96 - 6/30/97	3,467,700	3,349,690	118,010			2,700,710		1.28
7/1/97 - 6/30/98	3,849,600	3,710,687	138,913			2,453,670		1.57
7/1/98 - 6/30/99	3,170,300	3,044,846	125,454			2,514,530		1.26
7/1/99 - 6/30/00	3,623,000	3,473,200	149,800			2,556,410		1.42
7/1/00 - 6/30/01	5,633,400	5,385,199	248,201			2,639,180		2.13
7/1/01 - 6/30/02	3,501,000	3,334,809	166,191			2,675,980		1.31
7/1/02 - 6/30/03	4,167,500	3,945,104	222,396			2,744,650		1.52
7/1/03 - 6/30/04	5,002,800	4,703,994	298,806			2,723,840		1.84
7/1/04 - 6/30/05	4,011,000	3,710,686	300,314			2,736,470		1.47
7/1/05 - 6/30/06	4,531,100	4,147,345	383,755			2,851,390		1.59
7/1/06 - 6/30/07	4,644,200	4,227,272	416,928			2,985,160		1.56
7/1/07 - 6/30/08	3,487,700	3,132,385	355,315			3,142,310		1.11
7/1/08 - 6/30/09	4,210,000	3,776,846	433,154			3,029,980		1.39
7/1/09 - 6/30/10	5,368,600	4,790,214	578,386			2,972,520		1.81
7/1/10 - 6/30/11	4,654,800	4,134,132	520,668			2,924,320		1.59
7/1/11 - 6/30/12	5,129,800	4,498,565	631,235			2,959,080		1.73
7/1/12 - 6/30/13	4,559,700	3,939,652	620,048	230	19,825	3,015,410	5.7	1.51
7/1/13 - 6/30/14	5,188,100	4,455,625	732,475	258	20,109	3,099,100	6.4	1.67
7/1/14 - 6/30/15	6,036,100	5,148,889	887,211	230	26,244	3,165,520	5.7	1.91
7/1/15 - 6/30/16	4,286,500	3,584,281	702,219	211	20,315	3,165,650	5.4	1.35
7/1/16 - 6/30/17	4,915,200	3,996,567	918,633	206	23,860	2,924,030	5.9	1.68
7/1/17 - 6/30/18	4,325,700	3,404,603	921,097	185	23,382	2,929,560	5.4	1.48
7/1/18 - 6/30/19	4,302,700	3,158,802	1,143,898	174	24,728	3,080,020	5.0	1.40
7/1/19 - 6/30/20	4,049,600	2,542,416	1,507,184	138	29,345	3,110,580	4.1	1.30
7/1/20 - 6/30/21	4,379,000	2,517,860	1,861,140	140	31,237	3,039,520	4.3	1.44
7/1/21 - 6/30/22	3,675,000	1,525,874	2,149,126	95	38,867	3,074,331	3.0	1.20
7/1/22 - 6/30/23	3,411,000	606,800	2,804,200	91	37,462	3,253,214	2.8	1.05
Total	283,958,977	260,121,818	23,837,159					

Commonwealth of Massachusetts
Department of Mental Health (DMH)
Indemnity (Including Lump Sum) & Medical

Diagnostic
Total - Low
Sheet 3

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	92,916,273	88,899,240	4,017,032					
7/1/93 - 6/30/94	3,475,200	3,402,205	72,995			1,730,750		2.01
7/1/94 - 6/30/95	3,761,200	3,672,221	88,979			1,783,170		2.11
7/1/95 - 6/30/96	2,819,400	2,740,388	79,012			1,759,960		1.60
7/1/96 - 6/30/97	2,224,200	2,159,583	64,617			1,900,830		1.17
7/1/97 - 6/30/98	3,514,900	3,420,225	94,675			1,772,780		1.98
7/1/98 - 6/30/99	2,718,900	2,627,579	91,321			1,890,800		1.44
7/1/99 - 6/30/00	3,009,500	2,916,057	93,443			1,944,940		1.55
7/1/00 - 6/30/01	4,191,100	4,053,775	137,325			2,015,680		2.08
7/1/01 - 6/30/02	3,344,000	3,225,444	118,556			2,031,050		1.65
7/1/02 - 6/30/03	2,817,600	2,695,587	122,014			2,025,150		1.39
7/1/03 - 6/30/04	4,977,600	4,747,933	229,667			1,895,880		2.63
7/1/04 - 6/30/05	3,846,700	3,663,484	183,216			1,869,900		2.06
7/1/05 - 6/30/06	2,968,100	2,802,197	165,903			1,932,540		1.54
7/1/06 - 6/30/07	3,062,800	2,893,235	169,565			2,033,590		1.51
7/1/07 - 6/30/08	2,462,700	2,305,502	157,198			2,120,830		1.16
7/1/08 - 6/30/09	3,190,400	2,965,169	225,231			2,046,790		1.56
7/1/09 - 6/30/10	2,021,700	1,862,295	159,405			1,846,880		1.09
7/1/10 - 6/30/11	3,735,700	3,423,122	312,578			1,696,890		2.20
7/1/11 - 6/30/12	2,621,700	2,384,162	237,538			1,773,990		1.48
7/1/12 - 6/30/13	3,752,300	3,400,257	352,043	163	23,020	1,892,520	6.4	1.98
7/1/13 - 6/30/14	4,694,500	4,203,430	491,070	199	23,590	1,998,760	7.6	2.35
7/1/14 - 6/30/15	6,316,800	5,563,271	753,529	280	22,560	2,137,000	10.3	2.96
7/1/15 - 6/30/16	7,772,500	6,662,594	1,109,906	251	30,966	2,118,290	9.6	3.67
7/1/16 - 6/30/17	7,266,900	6,074,433	1,192,467	218	33,334	2,030,850	9.0	3.58
7/1/17 - 6/30/18	5,645,400	4,521,998	1,123,402	228	24,761	2,039,250	9.6	2.77
7/1/18 - 6/30/19	6,409,200	4,835,921	1,573,279	209	30,666	2,180,600	8.5	2.94
7/1/19 - 6/30/20	5,798,400	3,008,071	2,790,329	211	27,481	2,224,960	8.7	2.61
7/1/20 - 6/30/21	7,034,000	4,808,622	2,225,378	205	34,293	2,221,021	8.7	3.17
7/1/21 - 6/30/22	5,407,000	1,963,224	3,443,776	143	37,732	2,383,142	5.8	2.27
7/1/22 - 6/30/23	6,853,000	1,775,368	5,077,632	171	40,056	2,460,536	7.0	2.79
Total	220,629,673	193,676,590	26,953,083					

Commonwealth of Massachusetts
Department of Corrections (DOC)
Indemnity (Including Lump Sum) & Medical

Diagnostic
Total - Low
Sheet 4

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	84,840,483	77,572,797	7,267,686					
7/1/93 - 6/30/94	7,268,400	6,942,549	325,851			1,859,460		3.91
7/1/94 - 6/30/95	7,863,000	7,499,514	363,486			1,940,510		4.05
7/1/95 - 6/30/96	7,229,000	6,886,619	342,381			2,052,620		3.52
7/1/96 - 6/30/97	8,275,500	7,870,716	404,784			2,340,730		3.54
7/1/97 - 6/30/98	11,994,000	11,387,477	606,523			2,218,650		5.41
7/1/98 - 6/30/99	10,374,400	9,831,828	542,572			2,560,710		4.05
7/1/99 - 6/30/00	10,900,100	10,307,343	592,757			2,684,860		4.06
7/1/00 - 6/30/01	14,313,000	13,501,281	811,719			2,791,820		5.13
7/1/01 - 6/30/02	11,536,400	10,862,942	673,458			2,830,700		4.08
7/1/02 - 6/30/03	11,736,800	11,021,348	715,452			2,898,460		4.05
7/1/03 - 6/30/04	10,688,600	10,013,671	674,929			2,937,710		3.64
7/1/04 - 6/30/05	11,869,600	11,076,791	792,809			2,913,820		4.07
7/1/05 - 6/30/06	8,608,100	8,003,542	604,558			2,947,090		2.92
7/1/06 - 6/30/07	7,792,600	7,221,337	571,263			2,896,030		2.69
7/1/07 - 6/30/08	7,222,500	6,671,990	550,510			3,546,680		2.04
7/1/08 - 6/30/09	6,371,400	5,853,834	517,566			3,324,130		1.92
7/1/09 - 6/30/10	4,690,100	4,293,528	396,572			3,363,380		1.39
7/1/10 - 6/30/11	5,161,900	4,700,480	461,420			3,337,830		1.55
7/1/11 - 6/30/12	4,029,400	3,642,559	386,841			3,481,870		1.16
7/1/12 - 6/30/13	3,661,300	3,283,458	377,842	128	28,604	3,680,220	2.6	0.99
7/1/13 - 6/30/14	4,482,500	3,988,999	493,501	151	29,685	3,905,280	3.0	1.15
7/1/14 - 6/30/15	5,869,300	5,165,514	703,786	186	31,555	4,027,500	3.6	1.46
7/1/15 - 6/30/16	6,394,500	5,581,918	812,582	180	35,525	4,000,130	3.7	1.60
7/1/16 - 6/30/17	8,211,900	7,054,409	1,157,491	186	44,150	3,525,650	4.4	2.33
7/1/17 - 6/30/18	5,860,600	4,904,685	955,915	152	38,557	3,476,210	3.8	1.69
7/1/18 - 6/30/19	6,730,400	5,408,052	1,322,348	163	41,291	3,573,240	4.1	1.88
7/1/19 - 6/30/20	8,563,700	8,001,207	562,493	203	42,149	3,687,200	5.0	2.32
7/1/20 - 6/30/21	6,673,000	4,347,825	2,325,175	354	18,859	3,601,119	9.3	1.85
7/1/21 - 6/30/22	5,882,000	2,441,220	3,440,780	161	36,624	3,561,252	4.4	1.65
7/1/22 - 6/30/23	5,565,000	1,267,191	4,297,809	94	59,487	3,478,917	2.7	1.60
Total	320,659,483	286,606,623	34,052,860					

Commonwealth of Massachusetts
University of Massachusetts Amherst
Indemnity (Including Lump Sum) & Medical

Diagnostic
Total - Low
Sheet 5

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	22,376,300	20,367,265	2,009,035					
7/1/93 - 6/30/94	1,307,500	1,257,299	50,201			2,543,210		0.51
7/1/94 - 6/30/95	1,115,100	1,067,175	47,925			2,566,650		0.43
7/1/95 - 6/30/96	876,000	835,707	40,293			2,657,390		0.33
7/1/96 - 6/30/97	736,700	700,495	36,205			2,963,360		0.25
7/1/97 - 6/30/98	687,600	651,847	35,753			2,969,820		0.23
7/1/98 - 6/30/99	986,400	931,863	54,537			2,995,300		0.33
7/1/99 - 6/30/00	1,678,000	1,577,003	100,997			3,236,270		0.52
7/1/00 - 6/30/01	1,981,900	1,853,822	128,078			3,383,480		0.59
7/1/01 - 6/30/02	1,438,100	1,347,452	90,648			3,295,550		0.44
7/1/02 - 6/30/03	1,358,300	1,260,149	98,151			3,291,790		0.41
7/1/03 - 6/30/04	448,600	414,340	34,260			3,445,470		0.13
7/1/04 - 6/30/05	996,200	912,330	83,870			3,255,300		0.31
7/1/05 - 6/30/06	701,900	640,321	61,579			4,037,500		0.17
7/1/06 - 6/30/07	731,500	658,207	73,293			4,202,190		0.17
7/1/07 - 6/30/08	1,094,000	977,819	116,181			4,259,980		0.26
7/1/08 - 6/30/09	1,720,500	1,518,091	202,409			4,205,660		0.41
7/1/09 - 6/30/10	1,199,600	1,043,545	156,055			4,332,060		0.28
7/1/10 - 6/30/11	1,690,100	1,444,601	245,499			4,446,730		0.38
7/1/11 - 6/30/12	1,722,300	1,453,536	268,764			4,677,530		0.37
7/1/12 - 6/30/13	1,271,200	1,054,890	216,310	90	14,124	4,953,980	1.4	0.26
7/1/13 - 6/30/14	1,064,200	868,843	195,357	67	15,884	5,183,910	1.0	0.21
7/1/14 - 6/30/15	1,920,400	1,537,964	382,436	101	19,014	5,396,310	1.5	0.36
7/1/15 - 6/30/16	2,368,400	1,861,849	506,552	72	32,894	5,858,750	1.0	0.40
7/1/16 - 6/30/17	2,001,800	1,541,104	460,696	71	28,194	5,947,870	1.0	0.34
7/1/17 - 6/30/18	1,282,800	955,807	326,993	79	16,238	6,074,840	1.1	0.21
7/1/18 - 6/30/19	1,829,900	1,283,834	546,066	58	31,550	6,566,440	0.8	0.28
7/1/19 - 6/30/20	1,400,400	663,242	737,158	51	27,459	6,647,010	0.7	0.21
7/1/20 - 6/30/21	1,037,000	354,660	682,340	30	34,507	6,186,070	0.5	0.17
7/1/21 - 6/30/22	1,734,000	712,720	1,021,280	52	33,554	6,345,854	0.8	0.27
7/1/22 - 6/30/23	1,579,000	253,733	1,325,267	50	31,414	7,422,338	0.7	0.21
Total	62,335,700	52,001,510	10,334,190					

Commonwealth of Massachusetts
University of Massachusetts Medical Center
Indemnity (Including Lump Sum) & Medical

Diagnostic
Total - Low
Sheet 6

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	24,256,665	24,256,665	0					
7/1/93 - 6/30/94	2,782,400	2,743,212	39,188			1,771,840		1.57
7/1/94 - 6/30/95	954,900	941,417	13,483			1,883,910		0.51
7/1/95 - 6/30/96	888,300	874,675	13,625			2,017,510		0.44
7/1/96 - 6/30/97	632,700	621,812	10,888			2,318,720		0.27
7/1/97 - 6/30/98	1,062,000	1,043,829	18,171			2,322,370		0.46
7/1/98 - 6/30/99	959,900	940,822	19,078			2,320,750		0.41
7/1/99 - 6/30/00	893,400	872,749	20,651			2,118,190		0.42
7/1/00 - 6/30/01	967,800	943,387	24,413			2,150,990		0.45
7/1/01 - 6/30/02	605,300	590,020	15,280			2,277,970		0.27
7/1/02 - 6/30/03	1,385,000	1,341,977	43,023			2,420,080		0.57
7/1/03 - 6/30/04	1,303,100	1,259,443	43,657			2,767,580		0.47
7/1/04 - 6/30/05	381,100	368,222	12,878			2,603,780		0.15
7/1/05 - 6/30/06	1,214,900	1,167,806	47,094			3,177,410		0.38
7/1/06 - 6/30/07	631,500	605,124	26,376			3,259,220		0.19
7/1/07 - 6/30/08	1,912,200	1,820,411	91,789			3,541,300		0.54
7/1/08 - 6/30/09	1,026,600	975,481	51,119			3,623,090		0.28
7/1/09 - 6/30/10	911,500	859,910	51,590			3,832,980		0.24
7/1/10 - 6/30/11	1,093,900	1,025,472	68,428			3,949,240		0.28
7/1/11 - 6/30/12	1,514,200	1,407,329	106,871			3,819,430		0.40
7/1/12 - 6/30/13	734,500	681,542	52,958	56	13,116	3,847,630	1.1	0.19
7/1/13 - 6/30/14	1,197,600	1,102,951	94,649	35	34,217	3,645,820	0.7	0.33
7/1/14 - 6/30/15	778,100	705,839	72,261	24	32,421	3,705,430	0.5	0.21
7/1/15 - 6/30/16	1,183,200	1,061,918	121,282	31	38,168	3,826,020	0.7	0.31
7/1/16 - 6/30/17	529,800	470,096	59,704	22	24,082	3,953,240	0.5	0.13
7/1/17 - 6/30/18	596,000	515,645	80,355	28	21,286	3,987,220	0.6	0.15
7/1/18 - 6/30/19	1,124,200	927,489	196,711	31	36,265	4,108,260	0.7	0.27
7/1/19 - 6/30/20	410,100	182,229	227,871	23	17,830	4,245,650	0.5	0.10
7/1/20 - 6/30/21	572,000	365,109	206,891	18	31,778	4,355,634	0.4	0.13
7/1/21 - 6/30/22	529,000	332,003	196,997	14	37,222	4,584,348	0.3	0.12
7/1/22 - 6/30/23	871,000	194,598	676,402	21	41,799	5,124,373	0.4	0.17
Total	53,902,865	51,199,182	2,703,683					

Commonwealth of Massachusetts
Other Colleges & Universities
Indemnity (Including Lump Sum) & Medical

Diagnostic
Total - Low
Sheet 7

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	28,043,145	26,322,814	1,720,332					
7/1/93 - 6/30/94	2,213,500	2,129,629	83,871			5,848,530		0.38
7/1/94 - 6/30/95	2,390,138	2,390,138	0			5,877,010		0.41
7/1/95 - 6/30/96	1,850,889	1,850,889	0			6,148,680		0.30
7/1/96 - 6/30/97	2,222,300	2,108,003	114,297			7,006,860		0.32
7/1/97 - 6/30/98	3,217,200	3,058,010	159,190			6,844,150		0.47
7/1/98 - 6/30/99	2,126,500	2,002,881	123,619			7,077,960		0.30
7/1/99 - 6/30/00	1,794,600	1,669,139	125,461			7,604,770		0.24
7/1/00 - 6/30/01	2,663,500	2,453,836	209,664			8,116,000		0.33
7/1/01 - 6/30/02	3,233,092	3,233,092	0			8,350,380		0.39
7/1/02 - 6/30/03	2,311,300	2,075,696	235,604			8,253,400		0.28
7/1/03 - 6/30/04	2,192,613	2,192,613	0			8,492,160		0.26
7/1/04 - 6/30/05	1,683,528	1,683,528	0			9,925,080		0.17
7/1/05 - 6/30/06	2,970,800	2,560,413	410,387			9,628,780		0.31
7/1/06 - 6/30/07	1,944,400	1,652,063	292,337			10,329,300		0.19
7/1/07 - 6/30/08	4,706,500	3,928,195	778,305			10,635,970		0.44
7/1/08 - 6/30/09	4,053,500	3,335,297	718,203			10,738,050		0.38
7/1/09 - 6/30/10	6,050,100	4,879,921	1,170,179			10,847,490		0.56
7/1/10 - 6/30/11	4,575,600	3,642,349	933,251			11,341,640		0.40
7/1/11 - 6/30/12	4,130,100	3,223,024	907,076			12,026,740		0.34
7/1/12 - 6/30/13	4,122,400	3,152,213	970,187	111	37,139	12,847,410	0.6	0.32
7/1/13 - 6/30/14	4,686,100	3,519,100	1,167,000	106	44,208	13,469,020	0.6	0.35
7/1/14 - 6/30/15	4,490,800	3,300,413	1,190,387	107	41,970	14,040,930	0.6	0.32
7/1/15 - 6/30/16	6,546,900	4,682,951	1,863,949	109	60,063	14,546,120	0.6	0.45
7/1/16 - 6/30/17	5,326,700	3,653,528	1,673,172	93	57,276	14,615,880	0.5	0.36
7/1/17 - 6/30/18	5,317,400	3,479,331	1,838,069	137	38,813	14,577,400	0.8	0.36
7/1/18 - 6/30/19	4,068,600	2,488,234	1,580,366	88	46,095	15,002,050	0.5	0.27
7/1/19 - 6/30/20	3,624,600	1,643,162	1,981,438	65	55,521	15,086,780	0.4	0.24
7/1/20 - 6/30/21	4,015,000	1,810,323	2,204,677	61	65,292	14,138,618	0.4	0.28
7/1/21 - 6/30/22	4,050,000	1,159,741	2,890,259	57	70,835	15,119,517	0.4	0.27
7/1/22 - 6/30/23	4,618,000	781,253	3,836,747	61	75,404	15,459,627	0.4	0.30
Total	135,239,805	106,061,777	29,178,027					

Commonwealth of Massachusetts
All Other Agencies
Indemnity (Including Lump Sum) & Medical

Diagnostic
Total - Low
Sheet 8

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	248,299,411	232,529,319	15,770,092					
7/1/93 - 6/30/94	15,498,900	14,559,740	939,160					
7/1/94 - 6/30/95	13,677,200	12,792,279	884,921					
7/1/95 - 6/30/96	13,794,300	12,763,982	1,030,318					
7/1/96 - 6/30/97	15,124,900	13,923,776	1,201,124					
7/1/97 - 6/30/98	12,240,500	11,156,462	1,084,038					
7/1/98 - 6/30/99	13,758,800	12,479,706	1,279,094			19,448,360		0.71
7/1/99 - 6/30/00	16,335,400	14,710,468	1,624,932			20,693,510		0.79
7/1/00 - 6/30/01	15,677,600	14,029,317	1,648,283			20,558,590		0.76
7/1/01 - 6/30/02	15,522,700	13,753,390	1,769,310			21,523,690		0.72
7/1/02 - 6/30/03	15,566,300	13,677,709	1,888,591			21,202,840		0.73
7/1/03 - 6/30/04	14,845,900	12,930,976	1,914,924			21,185,340		0.70
7/1/04 - 6/30/05	18,856,000	16,303,898	2,552,102			21,640,500		0.87
7/1/05 - 6/30/06	16,410,900	14,039,354	2,371,546			23,243,030		0.71
7/1/06 - 6/30/07	16,803,200	14,287,748	2,515,452			24,554,310		0.68
7/1/07 - 6/30/08	21,424,200	17,925,154	3,499,046			26,150,540		0.82
7/1/08 - 6/30/09	21,420,400	17,746,525	3,673,875			25,704,510		0.83
7/1/09 - 6/30/10	22,066,200	18,077,598	3,988,602			26,029,100		0.85
7/1/10 - 6/30/11	25,318,100	20,524,163	4,793,937			27,458,630		0.92
7/1/11 - 6/30/12	26,319,000	21,078,041	5,240,959			27,995,990		0.94
7/1/12 - 6/30/13	21,703,900	17,184,812	4,519,088	532	40,797	29,200,210	1.4	0.74
7/1/13 - 6/30/14	26,472,400	20,636,502	5,835,898	536	49,389	30,801,820	1.3	0.86
7/1/14 - 6/30/15	27,714,600	21,281,120	6,433,480	601	46,114	32,591,780	1.5	0.85
7/1/15 - 6/30/16	31,375,500	23,822,301	7,553,199	595	52,732	32,518,420	1.5	0.96
7/1/16 - 6/30/17	29,398,100	21,800,891	7,597,209	546	53,843	31,362,360	1.5	0.94
7/1/17 - 6/30/18	33,514,600	23,943,688	9,570,912	539	62,179	31,972,210	1.5	1.05
7/1/18 - 6/30/19	24,503,700	15,208,453	9,295,247	426	57,520	33,600,390	1.1	0.73
7/1/19 - 6/30/20	28,188,700	16,190,800	11,997,900	435	64,750	35,047,860	1.1	0.80
7/1/20 - 6/30/21	29,630,000	13,973,858	15,656,142	434	68,273	35,216,283	1.2	0.84
7/1/21 - 6/30/22	33,057,000	12,334,907	20,722,093	445	74,336	37,107,388	1.2	0.89
7/1/22 - 6/30/23	31,836,000	5,507,763	26,328,237	437	72,929	38,502,230	1.1	0.83
Total	896,354,411	711,174,699	185,179,712					

Commonwealth of Massachusetts
Department of Transportation (DOT)
Indemnity (Including Lump Sum) & Medical

Diagnostic
Total - Low
Sheet 9

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	5,296,382	3,999,536	1,296,846					
7/1/93 - 6/30/94	467,090	437,521	29,569					
7/1/94 - 6/30/95	92,500	87,131	5,369					
7/1/95 - 6/30/96	0	0	0					
7/1/96 - 6/30/97	975,900	901,935	73,965					
7/1/97 - 6/30/98	4,900	4,625	275					
7/1/98 - 6/30/99	678,300	615,472	62,828					
7/1/99 - 6/30/00	385,400	360,938	24,462					
7/1/00 - 6/30/01	333,500	295,491	38,009			2,119,040		0.16
7/1/01 - 6/30/02	96,900	86,624	10,276			2,124,720		0.05
7/1/02 - 6/30/03	276,100	250,888	25,212			2,087,950		0.13
7/1/03 - 6/30/04	170,400	150,414	19,986			2,077,380		0.08
7/1/04 - 6/30/05	437,400	375,802	61,598			2,176,960		0.20
7/1/05 - 6/30/06	287,400	248,222	39,178			2,309,760		0.12
7/1/06 - 6/30/07	1,644,100	1,426,962	217,138			2,339,880		0.70
7/1/07 - 6/30/08	1,055,700	877,957	177,743			2,458,840		0.43
7/1/08 - 6/30/09	1,009,800	835,936	173,864			2,512,270		0.40
7/1/09 - 6/30/10	3,046,000	2,514,195	531,805			2,739,090		1.11
7/1/10 - 6/30/11	1,628,700	1,313,315	315,385			2,636,870		0.62
7/1/11 - 6/30/12	3,950,400	3,161,986	788,414			2,753,440		1.43
7/1/12 - 6/30/13	4,977,400	3,946,912	1,030,488	91	54,697	2,873,490	2.4	1.73
7/1/13 - 6/30/14	4,830,600	3,771,808	1,058,792	97	49,800	3,041,530	2.4	1.59
7/1/14 - 6/30/15	8,954,700	6,871,168	2,083,532	101	88,660	3,230,070	2.5	2.77
7/1/15 - 6/30/16	7,557,000	5,735,539	1,821,461	88	85,875	3,033,160	2.4	2.49
7/1/16 - 6/30/17	6,115,500	4,492,240	1,623,260	74	82,642	2,570,440	2.4	2.38
7/1/17 - 6/30/18	6,613,100	4,574,745	2,038,355	72	91,849	2,493,740	2.5	2.65
7/1/18 - 6/30/19	5,745,700	4,145,485	1,600,215	66	87,056	2,576,230	2.3	2.23
7/1/19 - 6/30/20	5,615,400	2,795,531	2,819,869	61	92,056	2,916,990	1.9	1.93
7/1/20 - 6/30/21	5,789,000	2,654,532	3,134,468	56	102,856	2,919,796	1.8	1.98
7/1/21 - 6/30/22	6,977,000	2,408,503	4,568,497	70	100,058	3,065,815	2.2	2.28
7/1/22 - 6/30/23	6,154,000	850,955	5,303,045	50	124,069	3,396,233	1.5	1.81
Total	91,166,272	60,192,367	30,973,906					

Commonwealth of Massachusetts
All Combined
Indemnity (Including Lump Sum)

Diagnostic
Indemnity - Low
Sheet 1

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	569,382,895	537,152,746	32,230,149					
7/1/93 - 6/30/94	28,897,100	27,565,657	1,331,443					
7/1/94 - 6/30/95	25,583,454	24,355,855	1,227,599					
7/1/95 - 6/30/96	24,876,647	23,502,975	1,373,672					
7/1/96 - 6/30/97	25,247,500	23,640,099	1,607,401					
7/1/97 - 6/30/98	29,255,200	27,485,030	1,770,170					
7/1/98 - 6/30/99	26,930,400	25,059,778	1,870,622					
7/1/99 - 6/30/00	29,858,200	27,647,824	2,210,376					
7/1/00 - 6/30/01	34,847,800	32,293,712	2,554,088			43,774,780		0.80
7/1/01 - 6/30/02	30,522,670	28,234,080	2,288,590			45,110,040		0.68
7/1/02 - 6/30/03	30,024,900	27,431,681	2,593,219			44,924,320		0.67
7/1/03 - 6/30/04	29,823,255	27,359,848	2,463,407			45,525,360		0.66
7/1/04 - 6/30/05	30,477,465	27,505,626	2,971,838			47,121,810		0.65
7/1/05 - 6/30/06	26,987,600	23,986,578	3,001,022			50,127,500		0.54
7/1/06 - 6/30/07	24,793,100	21,939,939	2,853,161			52,599,680		0.47
7/1/07 - 6/30/08	32,132,800	27,751,664	4,381,136			55,856,450		0.58
7/1/08 - 6/30/09	30,821,400	26,401,572	4,419,828			55,184,480		0.56
7/1/09 - 6/30/10	33,358,100	28,040,569	5,317,531			55,963,500		0.60
7/1/10 - 6/30/11	35,583,700	29,801,123	5,782,577			57,792,150		0.62
7/1/11 - 6/30/12	37,321,200	30,719,582	6,601,618			59,488,070		0.63
7/1/12 - 6/30/13	33,536,500	27,356,242	6,180,258	1,401	23,938	62,310,870	1.7	0.54
7/1/13 - 6/30/14	40,198,000	32,419,579	7,778,421	1,449	27,742	65,145,240	1.7	0.62
7/1/14 - 6/30/15	48,158,900	38,402,543	9,756,357	1,630	29,545	68,294,540	1.9	0.71
7/1/15 - 6/30/16	52,819,500	41,413,370	11,406,130	1,537	34,365	69,066,540	1.8	0.76
7/1/16 - 6/30/17	49,901,100	38,323,845	11,577,255	1,416	35,241	66,930,320	1.8	0.75
7/1/17 - 6/30/18	49,276,300	35,845,313	13,430,987	1,420	34,702	67,550,430	1.8	0.73
7/1/18 - 6/30/19	43,176,700	28,986,907	14,189,793	1,215	35,529	70,687,230	1.5	0.61
7/1/19 - 6/30/20	46,062,200	27,390,105	18,672,095	1,188	38,779	72,967,030	1.5	0.63
7/1/20 - 6/30/21	47,470,000	24,368,798	23,101,202	1,299	36,545	71,678,062	1.7	0.66
7/1/21 - 6/30/22	48,890,000	17,033,287	31,856,713	1,036	47,193	75,241,647	1.3	0.65
7/1/22 - 6/30/23	48,526,000	8,219,335	40,306,665	974	49,812	79,097,469	1.2	0.61
Total	1,644,740,587	1,367,635,263	277,105,324					

Commonwealth of Massachusetts
Department of Developmental Services (DDH)
Indemnity (Including Lump Sum)

Diagnostic
Indemnity - Low
Sheet 2

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	129,643,717	126,289,667	3,354,050					
7/1/93 - 6/30/94	3,588,000	3,498,323	89,677			2,570,620		1.40
7/1/94 - 6/30/95	2,139,300	2,081,529	57,771			2,558,540		0.84
7/1/95 - 6/30/96	3,270,700	3,175,274	95,426			2,555,390		1.28
7/1/96 - 6/30/97	2,547,200	2,467,027	80,173			2,700,710		0.94
7/1/97 - 6/30/98	3,021,000	2,918,440	102,560			2,453,670		1.23
7/1/98 - 6/30/99	2,504,500	2,410,298	94,203			2,514,530		1.00
7/1/99 - 6/30/00	2,705,800	2,599,165	106,635			2,556,410		1.06
7/1/00 - 6/30/01	3,835,300	3,675,833	159,467			2,639,180		1.45
7/1/01 - 6/30/02	2,341,100	2,237,723	103,377			2,675,980		0.87
7/1/02 - 6/30/03	3,215,100	3,053,235	161,865			2,744,650		1.17
7/1/03 - 6/30/04	3,906,600	3,692,819	213,781			2,723,840		1.43
7/1/04 - 6/30/05	2,853,700	2,658,617	195,083			2,736,470		1.04
7/1/05 - 6/30/06	3,091,700	2,856,558	235,142			2,851,390		1.08
7/1/06 - 6/30/07	3,272,300	3,009,239	263,061			2,985,160		1.10
7/1/07 - 6/30/08	1,823,600	1,663,170	160,430			3,142,310		0.58
7/1/08 - 6/30/09	2,817,200	2,554,928	262,272			3,029,980		0.93
7/1/09 - 6/30/10	3,811,300	3,428,901	382,399			2,972,520		1.28
7/1/10 - 6/30/11	3,464,900	3,100,190	364,710			2,924,320		1.18
7/1/11 - 6/30/12	3,498,700	3,100,541	398,159			2,959,080		1.18
7/1/12 - 6/30/13	3,186,600	2,778,064	408,536	230	13,855	3,015,410	5.7	1.06
7/1/13 - 6/30/14	3,934,700	3,399,831	534,869	258	15,251	3,099,100	6.4	1.27
7/1/14 - 6/30/15	4,583,700	3,934,412	649,288	230	19,929	3,165,520	5.7	1.45
7/1/15 - 6/30/16	2,983,000	2,516,307	466,693	211	14,137	3,165,650	5.4	0.94
7/1/16 - 6/30/17	3,609,900	2,941,829	668,071	206	17,524	2,924,030	5.9	1.23
7/1/17 - 6/30/18	3,204,500	2,513,472	691,028	185	17,322	2,929,560	5.4	1.09
7/1/18 - 6/30/19	3,211,100	2,321,985	889,115	174	18,455	3,080,020	5.0	1.04
7/1/19 - 6/30/20	3,061,000	1,876,073	1,184,927	138	22,181	3,110,580	4.1	0.98
7/1/20 - 6/30/21	3,437,000	2,002,506	1,434,494	140	24,517	3,039,520	4.3	1.13
7/1/21 - 6/30/22	2,764,000	1,151,785	1,612,215	95	29,232	3,074,331	3.0	0.90
7/1/22 - 6/30/23	2,573,000	455,469	2,117,531	91	28,258	3,253,214	2.8	0.79
Total	223,900,217	206,363,209	17,537,009					

Commonwealth of Massachusetts
Department of Mental Health (DMH)
Indemnity (Including Lump Sum)

Diagnostic
Indemnity - Low
Sheet 3

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	80,871,140	76,975,854	3,895,285					
7/1/93 - 6/30/94	2,797,700	2,750,757	46,943			1,730,750		1.62
7/1/94 - 6/30/95	2,870,200	2,818,005	52,195			1,783,170		1.61
7/1/95 - 6/30/96	1,965,600	1,924,351	41,249			1,759,960		1.12
7/1/96 - 6/30/97	1,606,900	1,571,537	35,363			1,900,830		0.85
7/1/97 - 6/30/98	2,980,600	2,912,109	68,491			1,772,780		1.68
7/1/98 - 6/30/99	1,720,600	1,679,133	41,467			1,890,800		0.91
7/1/99 - 6/30/00	2,374,000	2,313,702	60,298			1,944,940		1.22
7/1/00 - 6/30/01	3,391,700	3,299,797	91,903			2,015,680		1.68
7/1/01 - 6/30/02	2,684,000	2,606,204	77,796			2,031,050		1.32
7/1/02 - 6/30/03	1,858,900	1,801,061	57,839			2,025,150		0.92
7/1/03 - 6/30/04	3,356,300	3,243,956	112,344			1,895,880		1.77
7/1/04 - 6/30/05	2,826,000	2,723,645	102,355			1,869,900		1.51
7/1/05 - 6/30/06	1,937,100	1,860,494	76,606			1,932,540		1.00
7/1/06 - 6/30/07	2,321,700	2,221,812	99,888			2,033,590		1.14
7/1/07 - 6/30/08	1,723,000	1,641,555	81,445			2,120,830		0.81
7/1/08 - 6/30/09	2,192,100	2,078,249	113,851			2,046,790		1.07
7/1/09 - 6/30/10	1,364,000	1,285,402	78,598			1,846,880		0.74
7/1/10 - 6/30/11	2,678,400	2,508,771	169,629			1,696,890		1.58
7/1/11 - 6/30/12	1,905,000	1,773,539	131,461			1,773,990		1.07
7/1/12 - 6/30/13	3,044,200	2,809,096	235,104	163	18,676	1,892,520	6.4	1.61
7/1/13 - 6/30/14	3,789,300	3,465,359	323,941	199	19,042	1,998,760	7.6	1.90
7/1/14 - 6/30/15	4,997,600	4,512,847	484,753	280	17,849	2,137,000	10.3	2.34
7/1/15 - 6/30/16	6,120,100	5,372,051	748,049	251	24,383	2,118,290	9.6	2.89
7/1/16 - 6/30/17	5,698,000	4,881,087	816,913	218	26,138	2,030,850	9.0	2.81
7/1/17 - 6/30/18	4,421,300	3,617,686	803,614	228	19,392	2,039,250	9.6	2.17
7/1/18 - 6/30/19	5,098,300	3,900,039	1,198,261	209	24,394	2,180,600	8.5	2.34
7/1/19 - 6/30/20	4,789,000	2,483,166	2,305,834	211	22,697	2,224,960	8.7	2.15
7/1/20 - 6/30/21	5,691,000	4,017,085	1,673,915	205	27,745	2,221,021	8.7	2.56
7/1/21 - 6/30/22	4,343,000	1,571,016	2,771,984	143	30,307	2,383,142	5.8	1.82
7/1/22 - 6/30/23	5,610,000	1,459,624	4,150,376	171	32,790	2,460,536	7.0	2.28
Total	179,026,740	158,078,991	20,947,749					

Commonwealth of Massachusetts
Department of Corrections (DOC)
Indemnity (Including Lump Sum)

Diagnostic
Indemnity - Low
Sheet 4

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	67,564,189	62,655,959	4,908,230					
7/1/93 - 6/30/94	5,572,500	5,314,656	257,844			1,859,460		3.00
7/1/94 - 6/30/95	6,459,600	6,155,200	304,400			1,940,510		3.33
7/1/95 - 6/30/96	5,661,700	5,389,787	271,913			2,052,620		2.76
7/1/96 - 6/30/97	6,342,900	6,031,973	310,927			2,340,730		2.71
7/1/97 - 6/30/98	9,377,400	8,907,620	469,780			2,218,650		4.23
7/1/98 - 6/30/99	8,278,400	7,854,004	424,396			2,560,710		3.23
7/1/99 - 6/30/00	8,624,100	8,170,937	453,163			2,684,860		3.21
7/1/00 - 6/30/01	11,143,100	10,541,879	601,221			2,791,820		3.99
7/1/01 - 6/30/02	9,485,200	8,958,777	526,423			2,830,700		3.35
7/1/02 - 6/30/03	9,270,800	8,740,322	530,478			2,898,460		3.20
7/1/03 - 6/30/04	8,387,200	7,892,961	494,239			2,937,710		2.86
7/1/04 - 6/30/05	8,823,700	8,281,821	541,879			2,913,820		3.03
7/1/05 - 6/30/06	6,233,800	5,834,073	399,727			2,947,090		2.12
7/1/06 - 6/30/07	5,738,000	5,352,302	385,698			2,896,030		1.98
7/1/07 - 6/30/08	5,529,000	5,139,082	389,918			3,546,680		1.56
7/1/08 - 6/30/09	4,567,100	4,229,564	337,536			3,324,130		1.37
7/1/09 - 6/30/10	3,545,900	3,270,072	275,828			3,363,380		1.05
7/1/10 - 6/30/11	3,878,100	3,560,523	317,577			3,337,830		1.16
7/1/11 - 6/30/12	2,972,000	2,710,610	261,390			3,481,870		0.85
7/1/12 - 6/30/13	2,708,600	2,450,234	258,366	128	21,161	3,680,220	2.6	0.74
7/1/13 - 6/30/14	3,449,100	3,092,357	356,743	151	22,842	3,905,280	3.0	0.88
7/1/14 - 6/30/15	4,442,900	3,938,165	504,735	186	23,887	4,027,500	3.6	1.10
7/1/15 - 6/30/16	5,138,400	4,507,772	630,628	180	28,547	4,000,130	3.7	1.28
7/1/16 - 6/30/17	6,671,000	5,748,712	922,288	186	35,866	3,525,650	4.4	1.89
7/1/17 - 6/30/18	4,721,600	3,949,404	772,196	152	31,063	3,476,210	3.8	1.36
7/1/18 - 6/30/19	5,514,500	4,398,802	1,115,698	163	33,831	3,573,240	4.1	1.54
7/1/19 - 6/30/20	6,853,800	6,449,839	403,961	203	33,733	3,687,200	5.0	1.86
7/1/20 - 6/30/21	5,420,000	3,456,656	1,963,344	354	15,318	3,601,119	9.3	1.51
7/1/21 - 6/30/22	4,751,000	1,882,443	2,868,557	161	29,582	3,561,252	4.4	1.33
7/1/22 - 6/30/23	4,320,000	818,934	3,501,066	94	46,178	3,478,917	2.7	1.24
Total	251,445,589	225,685,441	25,760,148					

Commonwealth of Massachusetts
University of Massachusetts Amherst
Indemnity (Including Lump Sum)

Diagnostic
Indemnity - Low
Sheet 5

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	19,899,081	17,890,046	2,009,035					
7/1/93 - 6/30/94	742,700	710,933	31,767			2,543,210		0.29
7/1/94 - 6/30/95	798,600	761,806	36,794			2,566,650		0.31
7/1/95 - 6/30/96	622,500	591,722	30,778			2,657,390		0.23
7/1/96 - 6/30/97	541,200	512,528	28,672			2,963,360		0.18
7/1/97 - 6/30/98	491,800	463,804	27,996			2,969,820		0.17
7/1/98 - 6/30/99	714,200	670,684	43,516			2,995,300		0.24
7/1/99 - 6/30/00	1,301,100	1,216,150	84,950			3,236,270		0.40
7/1/00 - 6/30/01	1,566,800	1,457,179	109,621			3,383,480		0.46
7/1/01 - 6/30/02	838,100	775,348	62,752			3,295,550		0.25
7/1/02 - 6/30/03	983,500	904,511	78,989			3,291,790		0.30
7/1/03 - 6/30/04	293,500	268,295	25,205			3,445,470		0.09
7/1/04 - 6/30/05	688,200	624,705	63,495			3,255,300		0.21
7/1/05 - 6/30/06	391,800	353,027	38,773			4,037,500		0.10
7/1/06 - 6/30/07	496,700	442,770	53,930			4,202,190		0.12
7/1/07 - 6/30/08	588,800	519,052	69,748			4,259,980		0.14
7/1/08 - 6/30/09	1,029,900	897,582	132,318			4,205,660		0.24
7/1/09 - 6/30/10	746,800	641,797	105,003			4,332,060		0.17
7/1/10 - 6/30/11	1,250,700	1,059,913	190,787			4,446,730		0.28
7/1/11 - 6/30/12	1,160,900	969,391	191,509			4,677,530		0.25
7/1/12 - 6/30/13	836,900	687,544	149,356	90	9,299	4,953,980	1.4	0.17
7/1/13 - 6/30/14	654,300	528,763	125,538	67	9,766	5,183,910	1.0	0.13
7/1/14 - 6/30/15	1,255,800	997,528	258,272	101	12,434	5,396,310	1.5	0.23
7/1/15 - 6/30/16	1,805,000	1,411,139	393,861	72	25,069	5,858,750	1.0	0.31
7/1/16 - 6/30/17	1,536,300	1,176,532	359,768	71	21,638	5,947,870	1.0	0.26
7/1/17 - 6/30/18	898,900	661,455	237,445	79	11,378	6,074,840	1.1	0.15
7/1/18 - 6/30/19	1,367,200	939,133	428,067	58	23,572	6,566,440	0.8	0.21
7/1/19 - 6/30/20	1,049,800	409,486	640,314	51	20,584	6,647,010	0.7	0.16
7/1/20 - 6/30/21	804,000	258,784	545,216	30	26,754	6,186,070	0.5	0.13
7/1/21 - 6/30/22	1,289,000	426,140	862,860	52	24,943	6,345,854	0.8	0.20
7/1/22 - 6/30/23	1,187,000	171,445	1,015,555	50	23,615	7,422,338	0.7	0.16
Total	47,831,081	39,399,191	8,431,890					

Commonwealth of Massachusetts
University of Massachusetts Medical Center
Indemnity (Including Lump Sum)

Diagnostic
Indemnity - Low
Sheet 6

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	20,652,284	20,652,284	0					
7/1/93 - 6/30/94	2,061,300	2,029,326	31,974			1,771,840		1.16
7/1/94 - 6/30/95	530,000	521,127	8,873			1,883,910		0.28
7/1/95 - 6/30/96	500,800	491,723	9,077			2,017,510		0.25
7/1/96 - 6/30/97	430,900	422,390	8,510			2,318,720		0.19
7/1/97 - 6/30/98	557,600	545,727	11,873			2,322,370		0.24
7/1/98 - 6/30/99	646,500	631,601	14,899			2,320,750		0.28
7/1/99 - 6/30/00	705,400	687,583	17,817			2,118,190		0.33
7/1/00 - 6/30/01	758,900	737,973	20,927			2,150,990		0.35
7/1/01 - 6/30/02	354,800	344,140	10,660			2,277,970		0.16
7/1/02 - 6/30/03	1,144,200	1,106,166	38,034			2,420,080		0.47
7/1/03 - 6/30/04	999,600	962,971	36,629			2,767,580		0.36
7/1/04 - 6/30/05	209,500	201,102	8,398			2,603,780		0.08
7/1/05 - 6/30/06	814,400	778,823	35,577			3,177,410		0.26
7/1/06 - 6/30/07	387,200	368,698	18,502			3,259,220		0.12
7/1/07 - 6/30/08	1,381,900	1,308,936	72,964			3,541,300		0.39
7/1/08 - 6/30/09	575,100	541,635	33,465			3,623,090		0.16
7/1/09 - 6/30/10	593,000	555,149	37,851			3,832,980		0.15
7/1/10 - 6/30/11	747,000	695,093	51,907			3,949,240		0.19
7/1/11 - 6/30/12	1,191,600	1,101,780	89,820			3,819,430		0.31
7/1/12 - 6/30/13	442,800	406,699	36,101	56	7,907	3,847,630	1.1	0.12
7/1/13 - 6/30/14	721,700	657,315	64,385	35	20,620	3,645,820	0.7	0.20
7/1/14 - 6/30/15	619,900	558,986	60,914	24	25,829	3,705,430	0.5	0.17
7/1/15 - 6/30/16	880,100	784,362	95,738	31	28,390	3,826,020	0.7	0.23
7/1/16 - 6/30/17	295,600	259,030	36,570	22	13,436	3,953,240	0.5	0.07
7/1/17 - 6/30/18	407,900	348,871	59,029	28	14,568	3,987,220	0.6	0.10
7/1/18 - 6/30/19	931,800	759,960	171,840	31	30,058	4,108,260	0.7	0.23
7/1/19 - 6/30/20	240,200	68,807	171,393	23	10,443	4,245,650	0.5	0.06
7/1/20 - 6/30/21	390,000	205,283	184,717	18	21,667	4,355,634	0.4	0.09
7/1/21 - 6/30/22	381,000	230,676	150,324	14	26,808	4,584,348	0.3	0.08
7/1/22 - 6/30/23	661,000	119,020	541,980	21	31,721	5,124,373	0.4	0.13
Total	41,213,984	39,083,236	2,130,748					

Commonwealth of Massachusetts
Other Colleges & Universities
Indemnity (Including Lump Sum)

Diagnostic
Indemnity - Low
Sheet 7

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	23,766,439	22,061,830	1,704,608					
7/1/93 - 6/30/94	1,354,400	1,317,192	37,208			5,848,530		0.23
7/1/94 - 6/30/95	1,817,354	1,817,354	0			5,877,010		0.31
7/1/95 - 6/30/96	1,269,047	1,269,047	0			6,148,680		0.21
7/1/96 - 6/30/97	1,227,000	1,179,732	47,268			7,006,860		0.18
7/1/97 - 6/30/98	2,749,900	2,625,461	124,439			6,844,150		0.40
7/1/98 - 6/30/99	1,716,400	1,626,118	90,282			7,077,960		0.24
7/1/99 - 6/30/00	1,260,700	1,182,336	78,364			7,604,770		0.17
7/1/00 - 6/30/01	2,039,200	1,889,024	150,176			8,116,000		0.25
7/1/01 - 6/30/02	2,698,870	2,698,870	0			8,350,380		0.32
7/1/02 - 6/30/03	1,594,300	1,438,134	156,166			8,253,400		0.19
7/1/03 - 6/30/04	1,501,155	1,501,155	0			8,492,160		0.18
7/1/04 - 6/30/05	1,023,565	1,023,565	0			9,925,080		0.10
7/1/05 - 6/30/06	1,995,200	1,716,467	278,733			9,628,780		0.21
7/1/06 - 6/30/07	1,146,100	968,709	177,391			10,329,300		0.11
7/1/07 - 6/30/08	3,513,000	2,917,340	595,660			10,635,970		0.33
7/1/08 - 6/30/09	2,749,500	2,242,694	506,806			10,738,050		0.26
7/1/09 - 6/30/10	4,770,100	3,819,424	950,676			10,847,490		0.44
7/1/10 - 6/30/11	3,128,700	2,458,081	670,619			11,341,640		0.28
7/1/11 - 6/30/12	3,021,000	2,327,743	693,257			12,026,740		0.25
7/1/12 - 6/30/13	3,121,800	2,357,828	763,972	111	28,124	12,847,410	0.6	0.24
7/1/13 - 6/30/14	3,403,900	2,519,760	884,140	106	32,112	13,469,020	0.6	0.25
7/1/14 - 6/30/15	3,211,300	2,317,082	894,218	107	30,012	14,040,930	0.6	0.23
7/1/15 - 6/30/16	5,101,800	3,594,025	1,507,775	109	46,806	14,546,120	0.6	0.35
7/1/16 - 6/30/17	4,021,400	2,689,860	1,331,540	93	43,241	14,615,880	0.5	0.28
7/1/17 - 6/30/18	3,805,700	2,388,992	1,416,708	137	27,779	14,577,400	0.8	0.26
7/1/18 - 6/30/19	2,947,800	1,700,330	1,247,470	88	33,397	15,002,050	0.5	0.20
7/1/19 - 6/30/20	2,692,400	1,042,113	1,650,287	65	41,241	15,086,780	0.4	0.18
7/1/20 - 6/30/21	3,079,000	1,349,932	1,729,068	61	50,071	14,138,618	0.4	0.22
7/1/21 - 6/30/22	3,091,000	776,521	2,314,479	57	54,062	15,119,517	0.4	0.20
7/1/22 - 6/30/23	3,435,000	438,372	2,996,628	61	56,088	15,459,627	0.4	0.22
Total	102,253,030	79,255,091	22,997,939					

Commonwealth of Massachusetts
All Other Agencies
Indemnity (Including Lump Sum)

Diagnostic
Indemnity - Low
Sheet 8

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	221,704,461	206,642,368	15,062,093					
7/1/93 - 6/30/94	12,356,100	11,547,856	808,244					
7/1/94 - 6/30/95	10,917,100	10,153,089	764,011					
7/1/95 - 6/30/96	11,586,300	10,661,071	925,229					
7/1/96 - 6/30/97	11,880,500	10,842,645	1,037,855					
7/1/97 - 6/30/98	10,076,900	9,111,868	965,032					
7/1/98 - 6/30/99	10,821,300	9,713,565	1,107,735			19,448,360		0.56
7/1/99 - 6/30/00	12,880,900	11,472,474	1,408,426			20,693,510		0.62
7/1/00 - 6/30/01	11,800,700	10,416,510	1,384,190			20,558,590		0.57
7/1/01 - 6/30/02	12,061,600	10,561,383	1,500,217			21,523,690		0.56
7/1/02 - 6/30/03	11,940,700	10,373,156	1,567,544			21,202,840		0.56
7/1/03 - 6/30/04	11,297,800	9,727,856	1,569,944			21,185,340		0.53
7/1/04 - 6/30/05	13,676,600	11,671,149	2,005,451			21,640,500		0.63
7/1/05 - 6/30/06	12,363,200	10,451,514	1,911,686			23,243,030		0.53
7/1/06 - 6/30/07	11,123,700	9,318,885	1,804,815			24,554,310		0.45
7/1/07 - 6/30/08	16,607,200	13,761,809	2,845,391			26,150,540		0.64
7/1/08 - 6/30/09	16,110,100	13,216,694	2,893,406			25,704,510		0.63
7/1/09 - 6/30/10	16,806,300	13,642,977	3,163,323			26,029,100		0.65
7/1/10 - 6/30/11	18,973,000	15,243,243	3,729,757			27,458,630		0.69
7/1/11 - 6/30/12	20,438,500	16,245,336	4,193,164			27,995,990		0.73
7/1/12 - 6/30/13	16,610,900	13,050,411	3,560,489	532	31,223	29,200,210	1.4	0.57
7/1/13 - 6/30/14	20,694,100	16,009,156	4,684,944	536	38,608	30,801,820	1.3	0.67
7/1/14 - 6/30/15	21,811,900	16,627,544	5,184,356	601	36,293	32,591,780	1.5	0.67
7/1/15 - 6/30/16	24,736,700	18,660,468	6,076,232	595	41,574	32,518,420	1.5	0.76
7/1/16 - 6/30/17	23,255,500	17,124,211	6,131,289	546	42,592	31,362,360	1.5	0.74
7/1/17 - 6/30/18	26,855,500	19,003,726	7,851,774	539	49,825	31,972,210	1.5	0.84
7/1/18 - 6/30/19	19,604,100	11,696,090	7,908,010	426	46,019	33,600,390	1.1	0.58
7/1/19 - 6/30/20	23,066,800	13,082,044	9,984,756	435	52,985	35,047,860	1.1	0.66
7/1/20 - 6/30/21	24,119,000	11,096,484	13,022,516	434	55,574	35,216,283	1.2	0.68
7/1/21 - 6/30/22	26,814,000	9,282,726	17,531,274	445	60,297	37,107,388	1.2	0.72
7/1/22 - 6/30/23	25,741,000	4,093,933	21,647,067	437	58,966	38,502,230	1.1	0.67
Total	728,732,461	574,502,242	154,230,219					

Commonwealth of Massachusetts
Department of Transportation (DOT)
Indemnity (Including Lump Sum)

Diagnostic
Indemnity - Low
Sheet 9

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	5,281,584	3,984,738	1,296,846					
7/1/93 - 6/30/94	424,400	396,613	27,787					
7/1/94 - 6/30/95	51,300	47,745	3,555					
7/1/95 - 6/30/96	0	0	0					
7/1/96 - 6/30/97	670,900	612,267	58,633					
7/1/97 - 6/30/98	0	0	0					
7/1/98 - 6/30/99	528,500	474,376	54,124					
7/1/99 - 6/30/00	6,200	5,478	722					
7/1/00 - 6/30/01	312,100	275,517	36,583			2,119,040		0.15
7/1/01 - 6/30/02	59,000	51,635	7,365			2,124,720		0.03
7/1/02 - 6/30/03	17,400	15,095	2,305			2,087,950		0.01
7/1/03 - 6/30/04	81,100	69,834	11,266			2,077,380		0.04
7/1/04 - 6/30/05	376,200	321,022	55,178			2,176,960		0.17
7/1/05 - 6/30/06	160,400	135,621	24,779			2,309,760		0.07
7/1/06 - 6/30/07	307,400	257,524	49,876			2,339,880		0.13
7/1/07 - 6/30/08	966,300	800,721	165,579			2,458,840		0.39
7/1/08 - 6/30/09	780,400	640,226	140,174			2,512,270		0.31
7/1/09 - 6/30/10	1,720,700	1,396,847	323,853			2,739,090		0.63
7/1/10 - 6/30/11	1,462,900	1,175,310	287,590			2,636,870		0.55
7/1/11 - 6/30/12	3,133,500	2,490,642	642,858			2,753,440		1.14
7/1/12 - 6/30/13	3,584,700	2,816,365	768,335	91	39,392	2,873,490	2.4	1.25
7/1/13 - 6/30/14	3,550,900	2,747,039	803,861	97	36,607	3,041,530	2.4	1.17
7/1/14 - 6/30/15	7,235,800	5,515,979	1,719,821	101	71,642	3,230,070	2.5	2.24
7/1/15 - 6/30/16	6,054,400	4,567,246	1,487,154	88	68,800	3,033,160	2.4	2.00
7/1/16 - 6/30/17	4,813,400	3,502,585	1,310,815	74	65,046	2,570,440	2.4	1.87
7/1/17 - 6/30/18	4,960,900	3,361,707	1,599,193	72	68,901	2,493,740	2.5	1.99
7/1/18 - 6/30/19	4,501,900	3,270,569	1,231,331	66	68,211	2,576,230	2.3	1.75
7/1/19 - 6/30/20	4,309,200	1,978,578	2,330,622	61	70,643	2,916,990	1.9	1.48
7/1/20 - 6/30/21	4,530,000	1,982,067	2,547,933	56	80,486	2,919,796	1.8	1.55
7/1/21 - 6/30/22	5,457,000	1,711,981	3,745,019	70	78,260	3,065,815	2.2	1.78
7/1/22 - 6/30/23	4,999,000	662,536	4,336,464	50	100,784	3,396,233	1.5	1.47
Total	70,337,484	45,267,862	25,069,622					

Commonwealth of Massachusetts
All Combined
Medical

Diagnostic
Medical - Low
Sheet 1

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	90,697,741	86,706,333	3,991,407					
7/1/93 - 6/30/94	9,021,990	8,678,764	343,226					
7/1/94 - 6/30/95	7,372,584	7,103,709	268,875					
7/1/95 - 6/30/96	6,899,042	6,631,361	267,681					
7/1/96 - 6/30/97	8,412,400	7,995,912	416,488					
7/1/97 - 6/30/98	7,315,500	6,948,131	367,369					
7/1/98 - 6/30/99	7,843,100	7,415,218	427,882					
7/1/99 - 6/30/00	8,761,200	8,239,073	522,127					
7/1/00 - 6/30/01	10,914,000	10,222,396	691,604			43,774,780		0.25
7/1/01 - 6/30/02	8,754,821	8,199,692	555,130			45,110,040		0.19
7/1/02 - 6/30/03	9,594,000	8,836,778	757,222			44,924,320		0.21
7/1/03 - 6/30/04	9,806,358	9,053,536	752,821			45,525,360		0.22
7/1/04 - 6/30/05	11,604,063	10,589,116	1,014,947			47,121,810		0.25
7/1/05 - 6/30/06	10,705,600	9,622,622	1,082,978			50,127,500		0.21
7/1/06 - 6/30/07	12,461,200	11,032,008	1,429,192			52,599,680		0.24
7/1/07 - 6/30/08	11,232,700	9,887,749	1,344,951			55,856,450		0.20
7/1/08 - 6/30/09	12,181,200	10,605,607	1,575,593			55,184,480		0.22
7/1/09 - 6/30/10	11,995,700	10,280,637	1,715,063			55,963,500		0.21
7/1/10 - 6/30/11	12,275,100	10,406,510	1,868,590			57,792,150		0.21
7/1/11 - 6/30/12	12,095,700	10,129,620	1,966,080			59,488,070		0.20
7/1/12 - 6/30/13	11,246,200	9,287,496	1,958,704	1,401	8,027	62,310,870	1.7	0.18
7/1/13 - 6/30/14	12,418,000	10,127,678	2,290,322	1,449	8,570	65,145,240	1.7	0.19
7/1/14 - 6/30/15	13,921,900	11,171,634	2,750,266	1,630	8,541	68,294,540	1.9	0.20
7/1/15 - 6/30/16	14,665,000	11,579,981	3,085,019	1,537	9,541	69,066,540	1.8	0.21
7/1/16 - 6/30/17	13,864,800	10,759,422	3,105,378	1,416	9,792	66,930,320	1.8	0.21
7/1/17 - 6/30/18	13,879,300	10,455,189	3,424,111	1,420	9,774	67,550,430	1.8	0.21
7/1/18 - 6/30/19	11,537,700	8,469,362	3,068,338	1,215	9,494	70,687,230	1.5	0.16
7/1/19 - 6/30/20	11,588,700	7,636,552	3,952,148	1,188	9,756	72,967,030	1.5	0.16
7/1/20 - 6/30/21	11,659,000	6,463,989	5,195,011	1,299	8,976	71,678,062	1.7	0.16
7/1/21 - 6/30/22	12,421,000	5,844,905	6,576,095	1,036	11,990	75,241,647	1.3	0.17
7/1/22 - 6/30/23	12,361,000	3,018,326	9,342,674	974	12,689	79,097,469	1.2	0.16
Total	419,506,599	353,399,304	66,107,294					

Commonwealth of Massachusetts
Department of Developmental Services (DDH)
Medical

Diagnostic
Medical - Low
Sheet 2

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	24,408,259	23,621,778	786,482					
7/1/93 - 6/30/94	1,318,100	1,273,943	44,157			2,570,620		0.51
7/1/94 - 6/30/95	962,700	928,160	34,540			2,558,540		0.38
7/1/95 - 6/30/96	1,047,100	1,006,802	40,298			2,555,390		0.41
7/1/96 - 6/30/97	920,500	882,663	37,837			2,700,710		0.34
7/1/97 - 6/30/98	828,600	792,247	36,354			2,453,670		0.34
7/1/98 - 6/30/99	665,800	634,549	31,251			2,514,530		0.26
7/1/99 - 6/30/00	917,200	874,035	43,165			2,556,410		0.36
7/1/00 - 6/30/01	1,798,100	1,709,366	88,734			2,639,180		0.68
7/1/01 - 6/30/02	1,159,900	1,097,086	62,814			2,675,980		0.43
7/1/02 - 6/30/03	952,400	891,870	60,530			2,744,650		0.35
7/1/03 - 6/30/04	1,096,200	1,011,175	85,025			2,723,840		0.40
7/1/04 - 6/30/05	1,157,300	1,052,069	105,231			2,736,470		0.42
7/1/05 - 6/30/06	1,439,400	1,290,787	148,613			2,851,390		0.50
7/1/06 - 6/30/07	1,371,900	1,218,033	153,867			2,985,160		0.46
7/1/07 - 6/30/08	1,664,100	1,469,216	194,884			3,142,310		0.53
7/1/08 - 6/30/09	1,392,800	1,221,918	170,882			3,029,980		0.46
7/1/09 - 6/30/10	1,557,300	1,361,312	195,988			2,972,520		0.52
7/1/10 - 6/30/11	1,189,900	1,033,943	155,957			2,924,320		0.41
7/1/11 - 6/30/12	1,631,100	1,398,024	233,076			2,959,080		0.55
7/1/12 - 6/30/13	1,373,100	1,161,588	211,512	230	5,970	3,015,410	5.7	0.46
7/1/13 - 6/30/14	1,253,400	1,055,794	197,606	258	4,858	3,099,100	6.4	0.40
7/1/14 - 6/30/15	1,452,400	1,214,477	237,923	230	6,315	3,165,520	5.7	0.46
7/1/15 - 6/30/16	1,303,500	1,067,974	235,526	211	6,178	3,165,650	5.4	0.41
7/1/16 - 6/30/17	1,305,300	1,054,737	250,563	206	6,336	2,924,030	5.9	0.45
7/1/17 - 6/30/18	1,121,200	891,132	230,068	185	6,061	2,929,560	5.4	0.38
7/1/18 - 6/30/19	1,091,600	836,817	254,783	174	6,274	3,080,020	5.0	0.35
7/1/19 - 6/30/20	988,600	666,342	322,258	138	7,164	3,110,580	4.1	0.32
7/1/20 - 6/30/21	942,000	515,353	426,647	140	6,720	3,039,520	4.3	0.31
7/1/21 - 6/30/22	911,000	374,090	536,910	95	9,635	3,074,331	3.0	0.30
7/1/22 - 6/30/23	838,000	151,331	686,669	91	9,203	3,253,214	2.8	0.26
Total	60,058,759	53,758,609	6,300,150					

Commonwealth of Massachusetts
Department of Mental Health (DMH)
Medical

Diagnostic
Medical - Low
Sheet 3

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	12,045,133	11,923,386	121,747					
7/1/93 - 6/30/94	677,500	651,447	26,053			1,730,750		0.39
7/1/94 - 6/30/95	891,000	854,216	36,784			1,783,170		0.50
7/1/95 - 6/30/96	853,800	816,037	37,763			1,759,960		0.49
7/1/96 - 6/30/97	617,300	588,046	29,254			1,900,830		0.32
7/1/97 - 6/30/98	534,300	508,116	26,184			1,772,780		0.30
7/1/98 - 6/30/99	998,300	948,446	49,854			1,890,800		0.53
7/1/99 - 6/30/00	635,500	602,355	33,145			1,944,940		0.33
7/1/00 - 6/30/01	799,400	753,978	45,422			2,015,680		0.40
7/1/01 - 6/30/02	660,000	619,240	40,760			2,031,050		0.32
7/1/02 - 6/30/03	958,700	894,525	64,175			2,025,150		0.47
7/1/03 - 6/30/04	1,621,300	1,503,977	117,323			1,895,880		0.86
7/1/04 - 6/30/05	1,020,700	939,839	80,861			1,869,900		0.55
7/1/05 - 6/30/06	1,031,000	941,703	89,297			1,932,540		0.53
7/1/06 - 6/30/07	741,100	671,423	69,677			2,033,590		0.36
7/1/07 - 6/30/08	739,700	663,947	75,753			2,120,830		0.35
7/1/08 - 6/30/09	998,300	886,920	111,380			2,046,790		0.49
7/1/09 - 6/30/10	657,700	576,892	80,808			1,846,880		0.36
7/1/10 - 6/30/11	1,057,300	914,351	142,949			1,696,890		0.62
7/1/11 - 6/30/12	716,700	610,622	106,078			1,773,990		0.40
7/1/12 - 6/30/13	708,100	591,161	116,939	163	4,344	1,892,520	6.4	0.37
7/1/13 - 6/30/14	905,200	738,071	167,129	199	4,549	1,998,760	7.6	0.45
7/1/14 - 6/30/15	1,319,200	1,050,424	268,776	280	4,711	2,137,000	10.3	0.62
7/1/15 - 6/30/16	1,652,400	1,290,543	361,857	251	6,583	2,118,290	9.6	0.78
7/1/16 - 6/30/17	1,568,900	1,193,345	375,555	218	7,197	2,030,850	9.0	0.77
7/1/17 - 6/30/18	1,224,100	904,311	319,789	228	5,369	2,039,250	9.6	0.60
7/1/18 - 6/30/19	1,310,900	935,882	375,018	209	6,272	2,180,600	8.5	0.60
7/1/19 - 6/30/20	1,009,400	524,905	484,495	211	4,784	2,224,960	8.7	0.45
7/1/20 - 6/30/21	1,343,000	791,537	551,463	205	6,547	2,221,021	8.7	0.60
7/1/21 - 6/30/22	1,064,000	392,208	671,792	143	7,425	2,383,142	5.8	0.45
7/1/22 - 6/30/23	1,243,000	315,743	927,257	171	7,265	2,460,536	7.0	0.51
Total	41,602,933	35,597,599	6,005,334					

Commonwealth of Massachusetts
Department of Corrections (DOC)
Medical

Diagnostic
Medical - Low
Sheet 4

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	17,276,293	14,916,838	2,359,456					
7/1/93 - 6/30/94	1,695,900	1,627,894	68,006			1,859,460		0.91
7/1/94 - 6/30/95	1,403,400	1,344,313	59,087			1,940,510		0.72
7/1/95 - 6/30/96	1,567,300	1,496,832	70,468			2,052,620		0.76
7/1/96 - 6/30/97	1,932,600	1,838,743	93,857			2,340,730		0.83
7/1/97 - 6/30/98	2,616,600	2,479,856	136,744			2,218,650		1.18
7/1/98 - 6/30/99	2,096,000	1,977,824	118,176			2,560,710		0.82
7/1/99 - 6/30/00	2,276,000	2,136,406	139,594			2,684,860		0.85
7/1/00 - 6/30/01	3,169,900	2,959,402	210,498			2,791,820		1.14
7/1/01 - 6/30/02	2,051,200	1,904,165	147,035			2,830,700		0.72
7/1/02 - 6/30/03	2,466,000	2,281,025	184,975			2,898,460		0.85
7/1/03 - 6/30/04	2,301,400	2,120,710	180,690			2,937,710		0.78
7/1/04 - 6/30/05	3,045,900	2,794,970	250,930			2,913,820		1.05
7/1/05 - 6/30/06	2,374,300	2,169,468	204,832			2,947,090		0.81
7/1/06 - 6/30/07	2,054,600	1,869,035	185,565			2,896,030		0.71
7/1/07 - 6/30/08	1,693,500	1,532,908	160,592			3,546,680		0.48
7/1/08 - 6/30/09	1,804,300	1,624,270	180,030			3,324,130		0.54
7/1/09 - 6/30/10	1,144,200	1,023,456	120,744			3,363,380		0.34
7/1/10 - 6/30/11	1,283,800	1,139,957	143,843			3,337,830		0.38
7/1/11 - 6/30/12	1,057,400	931,950	125,450			3,481,870		0.30
7/1/12 - 6/30/13	952,700	833,224	119,476	128	7,443	3,680,220	2.6	0.26
7/1/13 - 6/30/14	1,033,400	896,642	136,758	151	6,844	3,905,280	3.0	0.26
7/1/14 - 6/30/15	1,426,400	1,227,349	199,051	186	7,669	4,027,500	3.6	0.35
7/1/15 - 6/30/16	1,256,100	1,074,146	181,954	180	6,978	4,000,130	3.7	0.31
7/1/16 - 6/30/17	1,540,900	1,305,697	235,203	186	8,284	3,525,650	4.4	0.44
7/1/17 - 6/30/18	1,139,000	955,281	183,719	152	7,493	3,476,210	3.8	0.33
7/1/18 - 6/30/19	1,215,900	1,009,250	206,650	163	7,460	3,573,240	4.1	0.34
7/1/19 - 6/30/20	1,709,900	1,551,368	158,532	203	8,416	3,687,200	5.0	0.46
7/1/20 - 6/30/21	1,253,000	891,169	361,831	354	3,541	3,601,119	9.3	0.35
7/1/21 - 6/30/22	1,131,000	558,777	572,223	161	7,042	3,561,252	4.4	0.32
7/1/22 - 6/30/23	1,245,000	448,257	796,743	94	13,308	3,478,917	2.7	0.36
Total	69,213,893	60,921,182	8,292,711					

Commonwealth of Massachusetts
University of Massachusetts Amherst
Medical

Diagnostic
Medical - Low
Sheet 5

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	2,477,219	2,477,219	0					
7/1/93 - 6/30/94	564,800	546,366	18,434			2,543,210		0.22
7/1/94 - 6/30/95	316,500	305,369	11,131			2,566,650		0.12
7/1/95 - 6/30/96	253,500	243,985	9,515			2,657,390		0.10
7/1/96 - 6/30/97	195,500	187,967	7,533			2,963,360		0.07
7/1/97 - 6/30/98	195,800	188,043	7,757			2,969,820		0.07
7/1/98 - 6/30/99	272,200	261,179	11,021			2,995,300		0.09
7/1/99 - 6/30/00	376,900	360,853	16,047			3,236,270		0.12
7/1/00 - 6/30/01	415,100	396,643	18,457			3,383,480		0.12
7/1/01 - 6/30/02	600,000	572,103	27,897			3,295,550		0.18
7/1/02 - 6/30/03	374,800	355,638	19,162			3,291,790		0.11
7/1/03 - 6/30/04	155,100	146,045	9,055			3,445,470		0.05
7/1/04 - 6/30/05	308,000	287,625	20,375			3,255,300		0.09
7/1/05 - 6/30/06	310,100	287,294	22,806			4,037,500		0.08
7/1/06 - 6/30/07	234,800	215,436	19,364			4,202,190		0.06
7/1/07 - 6/30/08	505,200	458,767	46,433			4,259,980		0.12
7/1/08 - 6/30/09	690,600	620,509	70,091			4,205,660		0.16
7/1/09 - 6/30/10	452,800	401,749	51,051			4,332,060		0.10
7/1/10 - 6/30/11	439,400	384,687	54,713			4,446,730		0.10
7/1/11 - 6/30/12	561,400	484,145	77,255			4,677,530		0.12
7/1/12 - 6/30/13	434,300	367,346	66,954	90	4,826	4,953,980	1.4	0.09
7/1/13 - 6/30/14	409,900	340,080	69,820	67	6,118	5,183,910	1.0	0.08
7/1/14 - 6/30/15	664,600	540,436	124,164	101	6,580	5,396,310	1.5	0.12
7/1/15 - 6/30/16	563,400	450,709	112,691	72	7,825	5,858,750	1.0	0.10
7/1/16 - 6/30/17	465,500	364,573	100,927	71	6,556	5,947,870	1.0	0.08
7/1/17 - 6/30/18	383,900	294,353	89,547	79	4,859	6,074,840	1.1	0.06
7/1/18 - 6/30/19	462,700	344,701	117,999	58	7,978	6,566,440	0.8	0.07
7/1/19 - 6/30/20	350,600	253,756	96,844	51	6,875	6,647,010	0.7	0.05
7/1/20 - 6/30/21	233,000	95,876	137,124	30	7,753	6,186,070	0.5	0.04
7/1/21 - 6/30/22	445,000	286,580	158,420	52	8,611	6,345,854	0.8	0.07
7/1/22 - 6/30/23	392,000	82,287	309,713	50	7,799	7,422,338	0.7	0.05
Total	14,504,619	12,602,319	1,902,299					

Commonwealth of Massachusetts
University of Massachusetts Medical Center
Medical

Diagnostic
Medical - Low
Sheet 6

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	3,604,381	3,604,381	0					
7/1/93 - 6/30/94	721,100	713,886	7,214			1,771,840		0.41
7/1/94 - 6/30/95	424,900	420,290	4,610			1,883,910		0.23
7/1/95 - 6/30/96	387,500	382,952	4,548			2,017,510		0.19
7/1/96 - 6/30/97	201,800	199,422	2,378			2,318,720		0.09
7/1/97 - 6/30/98	504,400	498,102	6,298			2,322,370		0.22
7/1/98 - 6/30/99	313,400	309,221	4,179			2,320,750		0.14
7/1/99 - 6/30/00	188,000	185,166	2,834			2,118,190		0.09
7/1/00 - 6/30/01	208,900	205,414	3,486			2,150,990		0.10
7/1/01 - 6/30/02	250,500	245,879	4,621			2,277,970		0.11
7/1/02 - 6/30/03	240,800	235,811	4,989			2,420,080		0.10
7/1/03 - 6/30/04	303,500	296,472	7,028			2,767,580		0.11
7/1/04 - 6/30/05	171,600	167,120	4,480			2,603,780		0.07
7/1/05 - 6/30/06	400,500	388,983	11,517			3,177,410		0.13
7/1/06 - 6/30/07	244,300	236,426	7,874			3,259,220		0.07
7/1/07 - 6/30/08	530,300	511,475	18,825			3,541,300		0.15
7/1/08 - 6/30/09	451,500	433,846	17,654			3,623,090		0.12
7/1/09 - 6/30/10	318,500	304,761	13,739			3,832,980		0.08
7/1/10 - 6/30/11	346,900	330,378	16,522			3,949,240		0.09
7/1/11 - 6/30/12	322,600	305,549	17,051			3,819,430		0.08
7/1/12 - 6/30/13	291,700	274,844	16,856	56	5,209	3,847,630	1.1	0.08
7/1/13 - 6/30/14	475,900	445,636	30,264	35	13,597	3,645,820	0.7	0.13
7/1/14 - 6/30/15	158,200	146,853	11,347	24	6,592	3,705,430	0.5	0.04
7/1/15 - 6/30/16	303,100	277,556	25,544	31	9,777	3,826,020	0.7	0.08
7/1/16 - 6/30/17	234,200	211,066	23,134	22	10,645	3,953,240	0.5	0.06
7/1/17 - 6/30/18	188,100	166,774	21,326	28	6,718	3,987,220	0.6	0.05
7/1/18 - 6/30/19	192,400	167,529	24,871	31	6,206	4,108,260	0.7	0.05
7/1/19 - 6/30/20	169,900	113,422	56,478	23	7,387	4,245,650	0.5	0.04
7/1/20 - 6/30/21	182,000	159,825	22,175	18	10,111	4,355,634	0.4	0.04
7/1/21 - 6/30/22	148,000	101,327	46,673	14	10,414	4,584,348	0.3	0.03
7/1/22 - 6/30/23	210,000	75,578	134,422	21	10,078	5,124,373	0.4	0.04
Total	12,688,881	12,115,947	572,934					

Commonwealth of Massachusetts
Other Colleges & Universities
Medical

Diagnostic
Medical - Low
Sheet 7

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	4,276,707	4,260,984	15,723					
7/1/93 - 6/30/94	859,100	812,437	46,663			5,848,530		0.15
7/1/94 - 6/30/95	572,784	572,784	0			5,877,010		0.10
7/1/95 - 6/30/96	581,842	581,842	0			6,148,680		0.09
7/1/96 - 6/30/97	995,300	928,271	67,029			7,006,860		0.14
7/1/97 - 6/30/98	467,300	432,549	34,751			6,844,150		0.07
7/1/98 - 6/30/99	410,100	376,763	33,337			7,077,960		0.06
7/1/99 - 6/30/00	533,900	486,803	47,097			7,604,770		0.07
7/1/00 - 6/30/01	624,300	564,812	59,488			8,116,000		0.08
7/1/01 - 6/30/02	534,221	534,221	0			8,350,380		0.06
7/1/02 - 6/30/03	717,000	637,562	79,438			8,253,400		0.09
7/1/03 - 6/30/04	691,458	691,458	0			8,492,160		0.08
7/1/04 - 6/30/05	659,963	659,963	0			9,925,080		0.07
7/1/05 - 6/30/06	975,600	843,946	131,654			9,628,780		0.10
7/1/06 - 6/30/07	798,300	683,354	114,946			10,329,300		0.08
7/1/07 - 6/30/08	1,193,500	1,010,855	182,645			10,635,970		0.11
7/1/08 - 6/30/09	1,304,000	1,092,604	211,396			10,738,050		0.12
7/1/09 - 6/30/10	1,280,000	1,060,498	219,502			10,847,490		0.12
7/1/10 - 6/30/11	1,446,900	1,184,268	262,632			11,341,640		0.13
7/1/11 - 6/30/12	1,109,100	895,280	213,820			12,026,740		0.09
7/1/12 - 6/30/13	1,000,600	794,386	206,214	111	9,014	12,847,410	0.6	0.08
7/1/13 - 6/30/14	1,282,200	999,340	282,860	106	12,096	13,469,020	0.6	0.10
7/1/14 - 6/30/15	1,279,500	983,330	296,170	107	11,958	14,040,930	0.6	0.09
7/1/15 - 6/30/16	1,445,100	1,088,926	356,174	109	13,258	14,546,120	0.6	0.10
7/1/16 - 6/30/17	1,305,300	963,668	341,632	93	14,035	14,615,880	0.5	0.09
7/1/17 - 6/30/18	1,511,700	1,090,338	421,362	137	11,034	14,577,400	0.8	0.10
7/1/18 - 6/30/19	1,120,800	787,904	332,896	88	12,698	15,002,050	0.5	0.07
7/1/19 - 6/30/20	932,200	601,049	331,151	65	14,279	15,086,780	0.4	0.06
7/1/20 - 6/30/21	936,000	460,390	475,610	61	15,221	14,138,618	0.4	0.07
7/1/21 - 6/30/22	959,000	383,220	575,780	57	16,773	15,119,517	0.4	0.06
7/1/22 - 6/30/23	1,183,000	342,881	840,119	61	19,316	15,459,627	0.4	0.08
Total	32,986,775	26,806,686	6,180,089					

Commonwealth of Massachusetts
All Other Agencies
Medical

Diagnostic
Medical - Low
Sheet 8

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	26,594,950	25,886,951	708,000					
7/1/93 - 6/30/94	3,142,800	3,011,884	130,916					
7/1/94 - 6/30/95	2,760,100	2,639,191	120,909					
7/1/95 - 6/30/96	2,208,000	2,102,910	105,090					
7/1/96 - 6/30/97	3,244,400	3,081,132	163,269					
7/1/97 - 6/30/98	2,163,600	2,044,594	119,006					
7/1/98 - 6/30/99	2,937,500	2,766,141	171,359			19,448,360		0.15
7/1/99 - 6/30/00	3,454,500	3,237,995	216,505			20,693,510		0.17
7/1/00 - 6/30/01	3,876,900	3,612,807	264,093			20,558,590		0.19
7/1/01 - 6/30/02	3,461,100	3,192,007	269,093			21,523,690		0.16
7/1/02 - 6/30/03	3,625,600	3,304,553	321,047			21,202,840		0.17
7/1/03 - 6/30/04	3,548,100	3,203,120	344,980			21,185,340		0.17
7/1/04 - 6/30/05	5,179,400	4,632,749	546,651			21,640,500		0.24
7/1/05 - 6/30/06	4,047,700	3,587,839	459,861			23,243,030		0.17
7/1/06 - 6/30/07	5,679,500	4,968,863	710,637			24,554,310		0.23
7/1/07 - 6/30/08	4,817,000	4,163,345	653,655			26,150,540		0.18
7/1/08 - 6/30/09	5,310,300	4,529,830	780,470			25,704,510		0.21
7/1/09 - 6/30/10	5,259,900	4,434,621	825,279			26,029,100		0.20
7/1/10 - 6/30/11	6,345,100	5,280,920	1,064,180			27,458,630		0.23
7/1/11 - 6/30/12	5,880,500	4,832,705	1,047,795			27,995,990		0.21
7/1/12 - 6/30/13	5,093,000	4,134,401	958,599	532	9,573	29,200,210	1.4	0.17
7/1/13 - 6/30/14	5,778,300	4,627,346	1,150,954	536	10,780	30,801,820	1.3	0.19
7/1/14 - 6/30/15	5,902,700	4,653,576	1,249,124	601	9,821	32,591,780	1.5	0.18
7/1/15 - 6/30/16	6,638,800	5,161,833	1,476,967	595	11,158	32,518,420	1.5	0.20
7/1/16 - 6/30/17	6,142,600	4,676,680	1,465,920	546	11,250	31,362,360	1.5	0.20
7/1/17 - 6/30/18	6,659,100	4,939,962	1,719,138	539	12,355	31,972,210	1.5	0.21
7/1/18 - 6/30/19	4,899,600	3,512,363	1,387,237	426	11,501	33,600,390	1.1	0.15
7/1/19 - 6/30/20	5,121,900	3,108,756	2,013,144	435	11,765	35,047,860	1.1	0.15
7/1/20 - 6/30/21	5,511,000	2,877,374	2,633,626	434	12,698	35,216,283	1.2	0.16
7/1/21 - 6/30/22	6,243,000	3,052,180	3,190,820	445	14,039	37,107,388	1.2	0.17
7/1/22 - 6/30/23	6,095,000	1,413,829	4,681,171	437	13,962	38,502,230	1.1	0.16
Total	167,621,950	136,672,457	30,949,493					

Commonwealth of Massachusetts
Department of Transportation (DOT)
Medical

Diagnostic
Medical - Low
Sheet 9

Unpaid Claim Analysis as of 06/30/2023 - Low Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	14,798	14,798	0					
7/1/93 - 6/30/94	42,690	40,908	1,782					
7/1/94 - 6/30/95	41,200	39,386	1,814					
7/1/95 - 6/30/96	0	0	0					
7/1/96 - 6/30/97	305,000	289,668	15,332					
7/1/97 - 6/30/98	4,900	4,625	275					
7/1/98 - 6/30/99	149,800	141,096	8,704					
7/1/99 - 6/30/00	379,200	355,460	23,740					
7/1/00 - 6/30/01	21,400	19,974	1,426			2,119,040		0.01
7/1/01 - 6/30/02	37,900	34,990	2,910			2,124,720		0.02
7/1/02 - 6/30/03	258,700	235,793	22,907			2,087,950		0.12
7/1/03 - 6/30/04	89,300	80,580	8,720			2,077,380		0.04
7/1/04 - 6/30/05	61,200	54,781	6,419			2,176,960		0.03
7/1/05 - 6/30/06	127,000	112,601	14,399			2,309,760		0.05
7/1/06 - 6/30/07	1,336,700	1,169,438	167,262			2,339,880		0.57
7/1/07 - 6/30/08	89,400	77,236	12,164			2,458,840		0.04
7/1/08 - 6/30/09	229,400	195,709	33,691			2,512,270		0.09
7/1/09 - 6/30/10	1,325,300	1,117,348	207,952			2,739,090		0.48
7/1/10 - 6/30/11	165,800	138,005	27,795			2,636,870		0.06
7/1/11 - 6/30/12	816,900	671,344	145,556			2,753,440		0.30
7/1/12 - 6/30/13	1,392,700	1,130,547	262,153	91	15,304	2,873,490	2.4	0.48
7/1/13 - 6/30/14	1,279,700	1,024,770	254,930	97	13,193	3,041,530	2.4	0.42
7/1/14 - 6/30/15	1,718,900	1,355,189	363,711	101	17,019	3,230,070	2.5	0.53
7/1/15 - 6/30/16	1,502,600	1,168,293	334,307	88	17,075	3,033,160	2.4	0.50
7/1/16 - 6/30/17	1,302,100	989,655	312,445	74	17,596	2,570,440	2.4	0.51
7/1/17 - 6/30/18	1,652,200	1,213,038	439,162	72	22,947	2,493,740	2.5	0.66
7/1/18 - 6/30/19	1,243,800	874,916	368,884	66	18,845	2,576,230	2.3	0.48
7/1/19 - 6/30/20	1,306,200	816,953	489,247	61	21,413	2,916,990	1.9	0.45
7/1/20 - 6/30/21	1,259,000	672,464	586,536	56	22,369	2,919,796	1.8	0.43
7/1/21 - 6/30/22	1,520,000	696,522	823,478	70	21,799	3,065,815	2.2	0.50
7/1/22 - 6/30/23	1,155,000	188,419	966,581	50	23,286	3,396,233	1.5	0.34
Total	20,828,788	14,924,504	5,904,284					

Commonwealth of Massachusetts
All Combined
Indemnity (Including Lump Sum) & Medical

Diagnostic
Total - High
Sheet 1

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	668,129,871	623,859,080	44,270,791					
7/1/93 - 6/30/94	38,095,470	36,244,421	1,851,049					
7/1/94 - 6/30/95	33,113,538	31,459,564	1,653,974					
7/1/95 - 6/30/96	31,948,489	30,134,336	1,814,153					
7/1/96 - 6/30/97	33,873,000	31,636,010	2,236,990					
7/1/97 - 6/30/98	36,795,800	34,433,161	2,362,639					
7/1/98 - 6/30/99	35,015,700	32,474,997	2,540,703					
7/1/99 - 6/30/00	38,907,100	35,886,897	3,020,203					
7/1/00 - 6/30/01	46,103,400	42,516,108	3,587,292			43,774,780		1.05
7/1/01 - 6/30/02	39,576,892	36,433,772	3,143,120			45,110,040		0.88
7/1/02 - 6/30/03	39,971,600	36,268,458	3,703,142			44,924,320		0.89
7/1/03 - 6/30/04	39,968,213	36,413,384	3,554,829			45,525,360		0.88
7/1/04 - 6/30/05	42,501,128	38,094,742	4,406,386			47,121,810		0.90
7/1/05 - 6/30/06	38,123,300	33,609,200	4,514,100			50,127,500		0.76
7/1/06 - 6/30/07	37,704,900	32,971,947	4,732,953			52,599,680		0.72
7/1/07 - 6/30/08	43,968,200	37,639,414	6,328,786			55,856,450		0.79
7/1/08 - 6/30/09	43,633,500	37,007,179	6,626,321			55,184,480		0.79
7/1/09 - 6/30/10	46,094,100	38,321,206	7,772,894			55,963,500		0.82
7/1/10 - 6/30/11	48,664,500	40,207,633	8,456,867			57,792,150		0.84
7/1/11 - 6/30/12	50,318,800	40,849,201	9,469,599			59,488,070		0.85
7/1/12 - 6/30/13	45,639,500	36,643,738	8,995,762	1,401	32,576	62,310,870	1.7	0.73
7/1/13 - 6/30/14	53,676,000	42,547,258	11,128,742	1,449	37,043	65,145,240	1.7	0.82
7/1/14 - 6/30/15	63,411,000	49,574,176	13,836,824	1,630	38,902	68,294,540	1.9	0.93
7/1/15 - 6/30/16	69,666,200	52,993,351	16,672,849	1,537	45,326	69,066,540	1.8	1.01
7/1/16 - 6/30/17	65,975,900	49,083,268	16,892,632	1,416	46,593	66,930,320	1.8	0.99
7/1/17 - 6/30/18	65,692,900	46,300,502	19,392,398	1,420	46,263	67,550,430	1.8	0.97
7/1/18 - 6/30/19	57,312,500	37,456,269	19,856,231	1,215	47,160	70,687,230	1.5	0.81
7/1/19 - 6/30/20	61,056,700	35,026,657	26,030,043	1,188	51,403	72,967,030	1.5	0.84
7/1/20 - 6/30/21	65,415,000	30,832,787	34,582,213	1,299	50,359	71,678,062	1.7	0.91
7/1/21 - 6/30/22	69,852,000	22,878,192	46,973,808	1,036	67,428	75,241,647	1.3	0.93
7/1/22 - 6/30/23	71,918,000	11,237,661	60,680,339	974	73,825	79,097,469	1.2	0.91
Total	2,122,123,200	1,721,034,567	401,088,633					

Commonwealth of Massachusetts
Department of Developmental Services (DDH)
Indemnity (Including Lump Sum) & Medical

Diagnostic
Total - High
Sheet 2

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	154,972,095	149,911,445	5,060,650					
7/1/93 - 6/30/94	4,920,300	4,772,266	148,034			2,570,620		1.91
7/1/94 - 6/30/95	3,111,800	3,009,689	102,111			2,558,540		1.22
7/1/95 - 6/30/96	4,332,100	4,182,076	150,024			2,555,390		1.70
7/1/96 - 6/30/97	3,480,200	3,349,690	130,510			2,700,710		1.29
7/1/97 - 6/30/98	3,864,300	3,710,687	153,613			2,453,670		1.57
7/1/98 - 6/30/99	3,183,400	3,044,846	138,554			2,514,530		1.27
7/1/99 - 6/30/00	3,638,700	3,473,200	165,500			2,556,410		1.42
7/1/00 - 6/30/01	5,659,500	5,385,199	274,301			2,639,180		2.14
7/1/01 - 6/30/02	3,518,500	3,334,809	183,691			2,675,980		1.31
7/1/02 - 6/30/03	4,191,000	3,945,104	245,896			2,744,650		1.53
7/1/03 - 6/30/04	5,034,300	4,703,994	330,306			2,723,840		1.85
7/1/04 - 6/30/05	4,042,500	3,710,686	331,814			2,736,470		1.48
7/1/05 - 6/30/06	4,571,600	4,147,345	424,255			2,851,390		1.60
7/1/06 - 6/30/07	4,688,100	4,227,272	460,828			2,985,160		1.57
7/1/07 - 6/30/08	3,525,200	3,132,385	392,815			3,142,310		1.12
7/1/08 - 6/30/09	4,255,500	3,776,846	478,654			3,029,980		1.40
7/1/09 - 6/30/10	5,429,500	4,790,214	639,286			2,972,520		1.83
7/1/10 - 6/30/11	4,709,600	4,134,132	575,468			2,924,320		1.61
7/1/11 - 6/30/12	5,196,200	4,498,565	697,635			2,959,080		1.76
7/1/12 - 6/30/13	4,625,000	3,939,652	685,348	230	20,109	3,015,410	5.7	1.53
7/1/13 - 6/30/14	5,265,200	4,455,625	809,575	258	20,408	3,099,100	6.4	1.70
7/1/14 - 6/30/15	6,129,500	5,148,889	980,611	230	26,650	3,165,520	5.7	1.94
7/1/15 - 6/30/16	4,392,100	3,584,281	807,819	211	20,816	3,165,650	5.4	1.39
7/1/16 - 6/30/17	5,053,500	3,996,567	1,056,933	206	24,532	2,924,030	5.9	1.73
7/1/17 - 6/30/18	4,464,500	3,404,603	1,059,897	185	24,132	2,929,560	5.4	1.52
7/1/18 - 6/30/19	4,474,900	3,158,802	1,316,098	174	25,718	3,080,020	5.0	1.45
7/1/19 - 6/30/20	4,276,500	2,542,416	1,734,084	138	30,989	3,110,580	4.1	1.37
7/1/20 - 6/30/21	4,793,000	2,517,860	2,275,140	140	34,190	3,039,520	4.3	1.58
7/1/21 - 6/30/22	4,154,000	1,525,874	2,628,126	95	43,933	3,074,331	3.0	1.35
7/1/22 - 6/30/23	4,033,000	606,800	3,426,200	91	44,293	3,253,214	2.8	1.24
Total	287,985,595	260,121,818	27,863,777					

Commonwealth of Massachusetts
Department of Mental Health (DMH)
Indemnity (Including Lump Sum) & Medical

Diagnostic
Total - High
Sheet 3

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	93,808,947	88,899,240	4,909,706					
7/1/93 - 6/30/94	3,482,800	3,402,205	80,595			1,730,750		2.01
7/1/94 - 6/30/95	3,770,600	3,672,221	98,379			1,783,170		2.11
7/1/95 - 6/30/96	2,827,700	2,740,388	87,312			1,759,960		1.61
7/1/96 - 6/30/97	2,231,000	2,159,583	71,417			1,900,830		1.17
7/1/97 - 6/30/98	3,525,000	3,420,225	104,775			1,772,780		1.99
7/1/98 - 6/30/99	2,728,600	2,627,579	101,021			1,890,800		1.44
7/1/99 - 6/30/00	3,019,400	2,916,057	103,343			1,944,940		1.55
7/1/00 - 6/30/01	4,205,500	4,053,775	151,725			2,015,680		2.09
7/1/01 - 6/30/02	3,356,500	3,225,444	131,056			2,031,050		1.65
7/1/02 - 6/30/03	2,830,300	2,695,587	134,714			2,025,150		1.40
7/1/03 - 6/30/04	5,001,700	4,747,933	253,767			1,895,880		2.64
7/1/04 - 6/30/05	3,866,000	3,663,484	202,516			1,869,900		2.07
7/1/05 - 6/30/06	2,985,500	2,802,197	183,303			1,932,540		1.54
7/1/06 - 6/30/07	3,080,600	2,893,235	187,365			2,033,590		1.51
7/1/07 - 6/30/08	2,479,300	2,305,502	173,798			2,120,830		1.17
7/1/08 - 6/30/09	3,214,200	2,965,169	249,031			2,046,790		1.57
7/1/09 - 6/30/10	2,038,500	1,862,295	176,205			1,846,880		1.10
7/1/10 - 6/30/11	3,768,700	3,423,122	345,578			1,696,890		2.22
7/1/11 - 6/30/12	2,646,700	2,384,162	262,538			1,773,990		1.49
7/1/12 - 6/30/13	3,789,400	3,400,257	389,143	163	23,248	1,892,520	6.4	2.00
7/1/13 - 6/30/14	4,746,200	4,203,430	542,770	199	23,850	1,998,760	7.6	2.37
7/1/14 - 6/30/15	6,396,200	5,563,271	832,929	280	22,844	2,137,000	10.3	2.99
7/1/15 - 6/30/16	7,939,600	6,662,594	1,277,006	251	31,632	2,118,290	9.6	3.75
7/1/16 - 6/30/17	7,446,400	6,074,433	1,371,967	218	34,158	2,030,850	9.0	3.67
7/1/17 - 6/30/18	5,814,400	4,521,998	1,292,402	228	25,502	2,039,250	9.6	2.85
7/1/18 - 6/30/19	6,646,000	4,835,921	1,810,079	209	31,799	2,180,600	8.5	3.05
7/1/19 - 6/30/20	6,218,500	3,008,071	3,210,429	211	29,472	2,224,960	8.7	2.79
7/1/20 - 6/30/21	7,527,000	4,808,622	2,718,378	205	36,696	2,221,021	8.7	3.39
7/1/21 - 6/30/22	6,173,000	1,963,224	4,209,776	143	43,077	2,383,142	5.8	2.59
7/1/22 - 6/30/23	7,981,000	1,775,368	6,205,632	171	46,649	2,460,536	7.0	3.24
Total	225,545,247	193,676,590	31,868,656					

Commonwealth of Massachusetts
Department of Corrections (DOC)
Indemnity (Including Lump Sum) & Medical

Diagnostic
Total - High
Sheet 4

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	86,455,524	77,572,797	8,882,728					
7/1/93 - 6/30/94	7,302,800	6,942,549	360,251			1,859,460		3.93
7/1/94 - 6/30/95	7,901,200	7,499,514	401,686			1,940,510		4.07
7/1/95 - 6/30/96	7,265,000	6,886,619	378,381			2,052,620		3.54
7/1/96 - 6/30/97	8,318,100	7,870,716	447,384			2,340,730		3.55
7/1/97 - 6/30/98	12,057,800	11,387,477	670,323			2,218,650		5.43
7/1/98 - 6/30/99	10,431,500	9,831,828	599,672			2,560,710		4.07
7/1/99 - 6/30/00	10,962,500	10,307,343	655,157			2,684,860		4.08
7/1/00 - 6/30/01	14,398,400	13,501,281	897,119			2,791,820		5.16
7/1/01 - 6/30/02	11,607,300	10,862,942	744,358			2,830,700		4.10
7/1/02 - 6/30/03	11,812,100	11,021,348	790,752			2,898,460		4.08
7/1/03 - 6/30/04	10,759,600	10,013,671	745,929			2,937,710		3.66
7/1/04 - 6/30/05	11,953,100	11,076,791	876,309			2,913,820		4.10
7/1/05 - 6/30/06	8,671,800	8,003,542	668,258			2,947,090		2.94
7/1/06 - 6/30/07	7,852,700	7,221,337	631,363			2,896,030		2.71
7/1/07 - 6/30/08	7,280,500	6,671,990	608,510			3,546,680		2.05
7/1/08 - 6/30/09	6,426,000	5,853,834	572,166			3,324,130		1.93
7/1/09 - 6/30/10	4,731,800	4,293,528	438,272			3,363,380		1.41
7/1/10 - 6/30/11	5,210,500	4,700,480	510,020			3,337,830		1.56
7/1/11 - 6/30/12	4,070,200	3,642,559	427,641			3,481,870		1.17
7/1/12 - 6/30/13	3,701,100	3,283,458	417,642	128	28,915	3,680,220	2.6	1.01
7/1/13 - 6/30/14	4,534,500	3,988,999	545,501	151	30,030	3,905,280	3.0	1.16
7/1/14 - 6/30/15	5,943,400	5,165,514	777,886	186	31,954	4,027,500	3.6	1.48
7/1/15 - 6/30/16	6,516,900	5,581,918	934,982	180	36,205	4,000,130	3.7	1.63
7/1/16 - 6/30/17	8,386,200	7,054,409	1,331,791	186	45,087	3,525,650	4.4	2.38
7/1/17 - 6/30/18	6,004,500	4,904,685	1,099,815	152	39,503	3,476,210	3.8	1.73
7/1/18 - 6/30/19	6,929,500	5,408,052	1,521,448	163	42,512	3,573,240	4.1	1.94
7/1/19 - 6/30/20	8,648,400	8,001,207	647,193	203	42,566	3,687,200	5.0	2.35
7/1/20 - 6/30/21	7,189,000	4,347,825	2,841,175	354	20,317	3,601,119	9.3	2.00
7/1/21 - 6/30/22	6,646,000	2,441,220	4,204,780	161	41,381	3,561,252	4.4	1.87
7/1/22 - 6/30/23	6,519,000	1,267,191	5,251,809	94	69,684	3,478,917	2.7	1.87
Total	326,486,924	286,606,623	39,880,301					

Commonwealth of Massachusetts
University of Massachusetts Amherst
Indemnity (Including Lump Sum) & Medical

Diagnostic
Total - High
Sheet 5

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	22,822,752	20,367,265	2,455,488					
7/1/93 - 6/30/94	1,312,800	1,257,299	55,501			2,543,210		0.52
7/1/94 - 6/30/95	1,120,000	1,067,175	52,825			2,566,650		0.44
7/1/95 - 6/30/96	880,200	835,707	44,493			2,657,390		0.33
7/1/96 - 6/30/97	740,600	700,495	40,105			2,963,360		0.25
7/1/97 - 6/30/98	691,300	651,847	39,453			2,969,820		0.23
7/1/98 - 6/30/99	992,200	931,863	60,337			2,995,300		0.33
7/1/99 - 6/30/00	1,688,700	1,577,003	111,697			3,236,270		0.52
7/1/00 - 6/30/01	1,995,300	1,853,822	141,478			3,383,480		0.59
7/1/01 - 6/30/02	1,447,800	1,347,452	100,348			3,295,550		0.44
7/1/02 - 6/30/03	1,368,600	1,260,149	108,451			3,291,790		0.42
7/1/03 - 6/30/04	452,300	414,340	37,960			3,445,470		0.13
7/1/04 - 6/30/05	1,005,000	912,330	92,670			3,255,300		0.31
7/1/05 - 6/30/06	708,400	640,321	68,079			4,037,500		0.18
7/1/06 - 6/30/07	739,200	658,207	80,993			4,202,190		0.18
7/1/07 - 6/30/08	1,106,200	977,819	128,381			4,259,980		0.26
7/1/08 - 6/30/09	1,741,700	1,518,091	223,609			4,205,660		0.41
7/1/09 - 6/30/10	1,215,900	1,043,545	172,355			4,332,060		0.28
7/1/10 - 6/30/11	1,716,000	1,444,601	271,399			4,446,730		0.39
7/1/11 - 6/30/12	1,750,700	1,453,536	297,164			4,677,530		0.37
7/1/12 - 6/30/13	1,293,900	1,054,890	239,010	90	14,377	4,953,980	1.4	0.26
7/1/13 - 6/30/14	1,084,800	868,843	215,957	67	16,191	5,183,910	1.0	0.21
7/1/14 - 6/30/15	1,960,700	1,537,964	422,736	101	19,413	5,396,310	1.5	0.36
7/1/15 - 6/30/16	2,444,700	1,861,849	582,852	72	33,954	5,858,750	1.0	0.42
7/1/16 - 6/30/17	2,071,000	1,541,104	529,896	71	29,169	5,947,870	1.0	0.35
7/1/17 - 6/30/18	1,332,000	955,807	376,193	79	16,861	6,074,840	1.1	0.22
7/1/18 - 6/30/19	1,912,200	1,283,834	628,366	58	32,969	6,566,440	0.8	0.29
7/1/19 - 6/30/20	1,511,400	663,242	848,158	51	29,635	6,647,010	0.7	0.23
7/1/20 - 6/30/21	1,188,000	354,660	833,340	30	39,532	6,186,070	0.5	0.19
7/1/21 - 6/30/22	1,960,000	712,720	1,247,280	52	37,927	6,345,854	0.8	0.31
7/1/22 - 6/30/23	1,874,000	253,733	1,620,267	50	37,283	7,422,338	0.7	0.25
Total	64,128,352	52,001,510	12,126,842					

Commonwealth of Massachusetts
University of Massachusetts Medical Center
Indemnity (Including Lump Sum) & Medical

Diagnostic
Total - High
Sheet 6

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	24,256,665	24,256,665	0					
7/1/93 - 6/30/94	2,786,400	2,743,212	43,188			1,771,840		1.57
7/1/94 - 6/30/95	956,400	941,417	14,983			1,883,910		0.51
7/1/95 - 6/30/96	889,800	874,675	15,125			2,017,510		0.44
7/1/96 - 6/30/97	633,800	621,812	11,988			2,318,720		0.27
7/1/97 - 6/30/98	1,064,000	1,043,829	20,171			2,322,370		0.46
7/1/98 - 6/30/99	962,000	940,822	21,178			2,320,750		0.41
7/1/99 - 6/30/00	895,600	872,749	22,851			2,118,190		0.42
7/1/00 - 6/30/01	970,400	943,387	27,013			2,150,990		0.45
7/1/01 - 6/30/02	606,900	590,020	16,880			2,277,970		0.27
7/1/02 - 6/30/03	1,389,700	1,341,977	47,723			2,420,080		0.57
7/1/03 - 6/30/04	1,307,700	1,259,443	48,257			2,767,580		0.47
7/1/04 - 6/30/05	382,400	368,222	14,178			2,603,780		0.15
7/1/05 - 6/30/06	1,219,800	1,167,806	51,994			3,177,410		0.38
7/1/06 - 6/30/07	634,300	605,124	29,176			3,259,220		0.19
7/1/07 - 6/30/08	1,921,800	1,820,411	101,389			3,541,300		0.54
7/1/08 - 6/30/09	1,031,900	975,481	56,419			3,623,090		0.28
7/1/09 - 6/30/10	916,900	859,910	56,990			3,832,980		0.24
7/1/10 - 6/30/11	1,101,200	1,025,472	75,728			3,949,240		0.28
7/1/11 - 6/30/12	1,525,300	1,407,329	117,971			3,819,430		0.40
7/1/12 - 6/30/13	740,100	681,542	58,558	56	13,216	3,847,630	1.1	0.19
7/1/13 - 6/30/14	1,207,600	1,102,951	104,649	35	34,503	3,645,820	0.7	0.33
7/1/14 - 6/30/15	785,800	705,839	79,961	24	32,742	3,705,430	0.5	0.21
7/1/15 - 6/30/16	1,201,600	1,061,918	139,682	31	38,761	3,826,020	0.7	0.31
7/1/16 - 6/30/17	538,700	470,096	68,604	22	24,486	3,953,240	0.5	0.14
7/1/17 - 6/30/18	608,100	515,645	92,455	28	21,718	3,987,220	0.6	0.15
7/1/18 - 6/30/19	1,153,800	927,489	226,311	31	37,219	4,108,260	0.7	0.28
7/1/19 - 6/30/20	444,400	182,229	262,171	23	19,322	4,245,650	0.5	0.10
7/1/20 - 6/30/21	618,000	365,109	252,891	18	34,333	4,355,634	0.4	0.14
7/1/21 - 6/30/22	572,000	332,003	239,997	14	40,247	4,584,348	0.3	0.12
7/1/22 - 6/30/23	1,021,000	194,598	826,402	21	48,997	5,124,373	0.4	0.20
Total	54,344,065	51,199,182	3,144,883					

Commonwealth of Massachusetts
Other Colleges & Universities
Indemnity (Including Lump Sum) & Medical

Diagnostic
Total - High
Sheet 7

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	28,425,441	26,322,814	2,102,628					
7/1/93 - 6/30/94	2,222,400	2,129,629	92,771			5,848,530		0.38
7/1/94 - 6/30/95	2,390,138	2,390,138	0			5,877,010		0.41
7/1/95 - 6/30/96	1,850,889	1,850,889	0			6,148,680		0.30
7/1/96 - 6/30/97	2,234,400	2,108,003	126,397			7,006,860		0.32
7/1/97 - 6/30/98	3,233,900	3,058,010	175,890			6,844,150		0.47
7/1/98 - 6/30/99	2,139,500	2,002,881	136,619			7,077,960		0.30
7/1/99 - 6/30/00	1,807,800	1,669,139	138,661			7,604,770		0.24
7/1/00 - 6/30/01	2,685,600	2,453,836	231,764			8,116,000		0.33
7/1/01 - 6/30/02	3,233,092	3,233,092	0			8,350,380		0.39
7/1/02 - 6/30/03	2,336,100	2,075,696	260,404			8,253,400		0.28
7/1/03 - 6/30/04	2,192,613	2,192,613	0			8,492,160		0.26
7/1/04 - 6/30/05	1,683,528	1,683,528	0			9,925,080		0.17
7/1/05 - 6/30/06	3,014,000	2,560,413	453,587			9,628,780		0.31
7/1/06 - 6/30/07	1,975,100	1,652,063	323,037			10,329,300		0.19
7/1/07 - 6/30/08	4,788,400	3,928,195	860,205			10,635,970		0.45
7/1/08 - 6/30/09	4,129,000	3,335,297	793,703			10,738,050		0.38
7/1/09 - 6/30/10	6,173,400	4,879,921	1,293,479			10,847,490		0.57
7/1/10 - 6/30/11	4,673,800	3,642,349	1,031,451			11,341,640		0.41
7/1/11 - 6/30/12	4,225,600	3,223,024	1,002,576			12,026,740		0.35
7/1/12 - 6/30/13	4,224,500	3,152,213	1,072,287	111	38,059	12,847,410	0.6	0.33
7/1/13 - 6/30/14	4,809,000	3,519,100	1,289,900	106	45,368	13,469,020	0.6	0.36
7/1/14 - 6/30/15	4,629,500	3,300,413	1,329,087	107	43,266	14,040,930	0.6	0.33
7/1/15 - 6/30/16	6,827,500	4,682,951	2,144,549	109	62,638	14,546,120	0.6	0.47
7/1/16 - 6/30/17	5,578,500	3,653,528	1,924,972	93	59,984	14,615,880	0.5	0.38
7/1/17 - 6/30/18	5,594,100	3,479,331	2,114,769	137	40,833	14,577,400	0.8	0.38
7/1/18 - 6/30/19	4,306,500	2,488,234	1,818,266	88	48,790	15,002,050	0.5	0.29
7/1/19 - 6/30/20	3,922,800	1,643,162	2,279,638	65	60,088	15,086,780	0.4	0.26
7/1/20 - 6/30/21	4,505,000	1,810,323	2,694,677	61	73,260	14,138,618	0.4	0.32
7/1/21 - 6/30/22	4,693,000	1,159,741	3,533,259	57	82,081	15,119,517	0.4	0.31
7/1/22 - 6/30/23	5,471,000	781,253	4,689,747	61	89,333	15,459,627	0.4	0.35
Total	139,976,101	106,061,777	33,914,323					

Commonwealth of Massachusetts
All Other Agencies
Indemnity (Including Lump Sum) & Medical

Diagnostic
Total - High
Sheet 8

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	251,803,876	232,529,319	19,274,557					
7/1/93 - 6/30/94	15,597,800	14,559,740	1,038,060					
7/1/94 - 6/30/95	13,770,300	12,792,279	978,021					
7/1/95 - 6/30/96	13,902,800	12,763,982	1,138,818					
7/1/96 - 6/30/97	15,251,300	13,923,776	1,327,524					
7/1/97 - 6/30/98	12,354,600	11,156,462	1,198,138					
7/1/98 - 6/30/99	13,893,500	12,479,706	1,413,794			19,448,360		0.71
7/1/99 - 6/30/00	16,506,500	14,710,468	1,796,032			20,693,510		0.80
7/1/00 - 6/30/01	15,851,100	14,029,317	1,821,783			20,558,590		0.77
7/1/01 - 6/30/02	15,708,900	13,753,390	1,955,510			21,523,690		0.73
7/1/02 - 6/30/03	15,765,100	13,677,709	2,087,391			21,202,840		0.74
7/1/03 - 6/30/04	15,047,500	12,930,976	2,116,524			21,185,340		0.71
7/1/04 - 6/30/05	19,124,700	16,303,898	2,820,802			21,640,500		0.88
7/1/05 - 6/30/06	16,660,600	14,039,354	2,621,246			23,243,030		0.72
7/1/06 - 6/30/07	17,068,000	14,287,748	2,780,252			24,554,310		0.70
7/1/07 - 6/30/08	21,792,500	17,925,154	3,867,346			26,150,540		0.83
7/1/08 - 6/30/09	21,807,100	17,746,525	4,060,575			25,704,510		0.85
7/1/09 - 6/30/10	22,486,100	18,077,598	4,408,502			26,029,100		0.86
7/1/10 - 6/30/11	25,822,800	20,524,163	5,298,637			27,458,630		0.94
7/1/11 - 6/30/12	26,870,700	21,078,041	5,792,659			27,995,990		0.96
7/1/12 - 6/30/13	22,179,600	17,184,812	4,994,788	532	41,691	29,200,210	1.4	0.76
7/1/13 - 6/30/14	27,086,600	20,636,502	6,450,098	536	50,535	30,801,820	1.3	0.88
7/1/14 - 6/30/15	28,391,800	21,281,120	7,110,680	601	47,241	32,591,780	1.5	0.87
7/1/15 - 6/30/16	32,512,600	23,822,301	8,690,299	595	54,643	32,518,420	1.5	1.00
7/1/16 - 6/30/17	30,541,800	21,800,891	8,740,909	546	55,937	31,362,360	1.5	0.97
7/1/17 - 6/30/18	34,955,400	23,943,688	11,011,712	539	64,852	31,972,210	1.5	1.09
7/1/18 - 6/30/19	25,903,000	15,208,453	10,694,547	426	60,805	33,600,390	1.1	0.77
7/1/19 - 6/30/20	29,994,900	16,190,800	13,804,100	435	68,899	35,047,860	1.1	0.86
7/1/20 - 6/30/21	33,109,000	13,973,858	19,135,142	434	76,289	35,216,283	1.2	0.94
7/1/21 - 6/30/22	37,662,000	12,334,907	25,327,093	445	84,691	37,107,388	1.2	1.01
7/1/22 - 6/30/23	37,687,000	5,507,763	32,179,237	437	86,332	38,502,230	1.1	0.98
Total	927,109,476	711,174,699	215,934,777					

Commonwealth of Massachusetts
Department of Transportation (DOT)
Indemnity (Including Lump Sum) & Medical

Diagnostic
Total - High
Sheet 9

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	5,584,570	3,999,536	1,585,035					
7/1/93 - 6/30/94	470,170	437,521	32,649					
7/1/94 - 6/30/95	93,100	87,131	5,969					
7/1/95 - 6/30/96	0	0	0					
7/1/96 - 6/30/97	983,600	901,935	81,665					
7/1/97 - 6/30/98	4,900	4,625	275					
7/1/98 - 6/30/99	685,000	615,472	69,528					
7/1/99 - 6/30/00	387,900	360,938	26,962					
7/1/00 - 6/30/01	337,600	295,491	42,109			2,119,040		0.16
7/1/01 - 6/30/02	97,900	86,624	11,276			2,124,720		0.05
7/1/02 - 6/30/03	278,700	250,888	27,812			2,087,950		0.13
7/1/03 - 6/30/04	172,500	150,414	22,086			2,077,380		0.08
7/1/04 - 6/30/05	443,900	375,802	68,098			2,176,960		0.20
7/1/05 - 6/30/06	291,600	248,222	43,378			2,309,760		0.13
7/1/06 - 6/30/07	1,666,900	1,426,962	239,938			2,339,880		0.71
7/1/07 - 6/30/08	1,074,300	877,957	196,343			2,458,840		0.44
7/1/08 - 6/30/09	1,028,100	835,936	192,164			2,512,270		0.41
7/1/09 - 6/30/10	3,102,000	2,514,195	587,805			2,739,090		1.13
7/1/10 - 6/30/11	1,661,900	1,313,315	348,585			2,636,870		0.63
7/1/11 - 6/30/12	4,033,400	3,161,986	871,414			2,753,440		1.46
7/1/12 - 6/30/13	5,085,900	3,946,912	1,138,988	91	55,889	2,873,490	2.4	1.77
7/1/13 - 6/30/14	4,942,100	3,771,808	1,170,292	97	50,949	3,041,530	2.4	1.62
7/1/14 - 6/30/15	9,174,100	6,871,168	2,302,932	101	90,833	3,230,070	2.5	2.84
7/1/15 - 6/30/16	7,831,200	5,735,539	2,095,661	88	88,991	3,033,160	2.4	2.58
7/1/16 - 6/30/17	6,359,800	4,492,240	1,867,560	74	85,943	2,570,440	2.4	2.47
7/1/17 - 6/30/18	6,919,900	4,574,745	2,345,155	72	96,110	2,493,740	2.5	2.77
7/1/18 - 6/30/19	5,986,600	4,145,485	1,841,115	66	90,706	2,576,230	2.3	2.32
7/1/19 - 6/30/20	6,039,800	2,795,531	3,244,269	61	99,013	2,916,990	1.9	2.07
7/1/20 - 6/30/21	6,486,000	2,654,532	3,831,468	56	115,239	2,919,796	1.8	2.22
7/1/21 - 6/30/22	7,992,000	2,408,503	5,583,497	70	114,614	3,065,815	2.2	2.61
7/1/22 - 6/30/23	7,332,000	850,955	6,481,045	50	147,819	3,396,233	1.5	2.16
Total	96,547,440	60,192,367	36,355,074					

Commonwealth of Massachusetts
All Combined
Indemnity (Including Lump Sum)

Diagnostic
Indemnity - High
Sheet 1

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	576,545,151	537,152,746	39,392,405					
7/1/93 - 6/30/94	29,037,300	27,565,657	1,471,643					
7/1/94 - 6/30/95	25,712,654	24,355,855	1,356,799					
7/1/95 - 6/30/96	25,021,247	23,502,975	1,518,272					
7/1/96 - 6/30/97	25,416,800	23,640,099	1,776,701					
7/1/97 - 6/30/98	29,441,600	27,485,030	1,956,570					
7/1/98 - 6/30/99	27,127,400	25,059,778	2,067,622					
7/1/99 - 6/30/00	30,091,000	27,647,824	2,443,176					
7/1/00 - 6/30/01	35,116,600	32,293,712	2,822,888			43,774,780		0.80
7/1/01 - 6/30/02	30,763,570	28,234,080	2,529,490			45,110,040		0.68
7/1/02 - 6/30/03	30,297,900	27,431,681	2,866,219			44,924,320		0.67
7/1/03 - 6/30/04	30,082,555	27,359,848	2,722,707			45,525,360		0.66
7/1/04 - 6/30/05	30,790,265	27,505,626	3,284,638			47,121,810		0.65
7/1/05 - 6/30/06	27,303,600	23,986,578	3,317,022			50,127,500		0.54
7/1/06 - 6/30/07	25,093,400	21,939,939	3,153,461			52,599,680		0.48
7/1/07 - 6/30/08	32,594,000	27,751,664	4,842,336			55,856,450		0.58
7/1/08 - 6/30/09	31,286,600	26,401,572	4,885,028			55,184,480		0.57
7/1/09 - 6/30/10	33,917,800	28,040,569	5,877,231			55,963,500		0.61
7/1/10 - 6/30/11	36,192,600	29,801,123	6,391,477			57,792,150		0.63
7/1/11 - 6/30/12	38,016,300	30,719,582	7,296,718			59,488,070		0.64
7/1/12 - 6/30/13	34,187,100	27,356,242	6,830,858	1,401	24,402	62,310,870	1.7	0.55
7/1/13 - 6/30/14	41,017,000	32,419,579	8,597,421	1,449	28,307	65,145,240	1.7	0.63
7/1/14 - 6/30/15	49,186,000	38,402,543	10,783,457	1,630	30,175	68,294,540	1.9	0.72
7/1/15 - 6/30/16	54,536,700	41,413,370	13,123,330	1,537	35,483	69,066,540	1.8	0.79
7/1/16 - 6/30/17	51,643,800	38,323,845	13,319,955	1,416	36,472	66,930,320	1.8	0.77
7/1/17 - 6/30/18	51,298,200	35,845,313	15,452,887	1,420	36,125	67,550,430	1.8	0.76
7/1/18 - 6/30/19	45,312,900	28,986,907	16,325,993	1,215	37,286	70,687,230	1.5	0.64
7/1/19 - 6/30/20	48,873,000	27,390,105	21,482,895	1,188	41,146	72,967,030	1.5	0.67
7/1/20 - 6/30/21	52,603,000	24,368,798	28,234,202	1,299	40,496	71,678,062	1.7	0.73
7/1/21 - 6/30/22	55,968,000	17,033,287	38,934,713	1,036	54,026	75,241,647	1.3	0.74
7/1/22 - 6/30/23	57,481,000	8,219,335	49,261,665	974	59,005	79,097,469	1.2	0.73
Total	1,691,955,042	1,367,635,263	324,319,779					

Commonwealth of Massachusetts
Department of Developmental Services (DDH)
Indemnity (Including Lump Sum)

Diagnostic
Indemnity - High
Sheet 2

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	130,389,062	126,289,667	4,099,395					
7/1/93 - 6/30/94	3,597,500	3,498,323	99,177			2,570,620		1.40
7/1/94 - 6/30/95	2,145,400	2,081,529	63,871			2,558,540		0.84
7/1/95 - 6/30/96	3,280,800	3,175,274	105,526			2,555,390		1.28
7/1/96 - 6/30/97	2,555,700	2,467,027	88,673			2,700,710		0.95
7/1/97 - 6/30/98	3,031,800	2,918,440	113,360			2,453,670		1.24
7/1/98 - 6/30/99	2,514,400	2,410,298	104,103			2,514,530		1.00
7/1/99 - 6/30/00	2,717,000	2,599,165	117,835			2,556,410		1.06
7/1/00 - 6/30/01	3,852,100	3,675,833	176,267			2,639,180		1.46
7/1/01 - 6/30/02	2,352,000	2,237,723	114,277			2,675,980		0.88
7/1/02 - 6/30/03	3,232,200	3,053,235	178,965			2,744,650		1.18
7/1/03 - 6/30/04	3,929,100	3,692,819	236,281			2,723,840		1.44
7/1/04 - 6/30/05	2,874,200	2,658,617	215,583			2,736,470		1.05
7/1/05 - 6/30/06	3,116,500	2,856,558	259,942			2,851,390		1.09
7/1/06 - 6/30/07	3,300,000	3,009,239	290,761			2,985,160		1.11
7/1/07 - 6/30/08	1,840,500	1,663,170	177,330			3,142,310		0.59
7/1/08 - 6/30/09	2,844,800	2,554,928	289,872			3,029,980		0.94
7/1/09 - 6/30/10	3,851,500	3,428,901	422,599			2,972,520		1.30
7/1/10 - 6/30/11	3,503,300	3,100,190	403,110			2,924,320		1.20
7/1/11 - 6/30/12	3,540,600	3,100,541	440,059			2,959,080		1.20
7/1/12 - 6/30/13	3,229,600	2,778,064	451,536	230	14,042	3,015,410	5.7	1.07
7/1/13 - 6/30/14	3,991,000	3,399,831	591,169	258	15,469	3,099,100	6.4	1.29
7/1/14 - 6/30/15	4,652,000	3,934,412	717,588	230	20,226	3,165,520	5.7	1.47
7/1/15 - 6/30/16	3,053,200	2,516,307	536,893	211	14,470	3,165,650	5.4	0.96
7/1/16 - 6/30/17	3,710,500	2,941,829	768,671	206	18,012	2,924,030	5.9	1.27
7/1/17 - 6/30/18	3,308,600	2,513,472	795,128	185	17,884	2,929,560	5.4	1.13
7/1/18 - 6/30/19	3,344,900	2,321,985	1,022,915	174	19,224	3,080,020	5.0	1.09
7/1/19 - 6/30/20	3,239,400	1,876,073	1,363,327	138	23,474	3,110,580	4.1	1.04
7/1/20 - 6/30/21	3,756,000	2,002,506	1,753,494	140	26,793	3,039,520	4.3	1.24
7/1/21 - 6/30/22	3,123,000	1,151,785	1,971,215	95	33,029	3,074,331	3.0	1.02
7/1/22 - 6/30/23	3,043,000	455,469	2,587,531	91	33,420	3,253,214	2.8	0.94
Total	226,919,662	206,363,209	20,556,453					

Commonwealth of Massachusetts
Department of Mental Health (DMH)
Indemnity (Including Lump Sum)

Diagnostic
Indemnity - High
Sheet 3

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	81,736,759	76,975,854	4,760,904					
7/1/93 - 6/30/94	2,802,600	2,750,757	51,843			1,730,750		1.62
7/1/94 - 6/30/95	2,875,700	2,818,005	57,695			1,783,170		1.61
7/1/95 - 6/30/96	1,969,900	1,924,351	45,549			1,759,960		1.12
7/1/96 - 6/30/97	1,610,600	1,571,537	39,063			1,900,830		0.85
7/1/97 - 6/30/98	2,987,900	2,912,109	75,791			1,772,780		1.69
7/1/98 - 6/30/99	1,725,000	1,679,133	45,867			1,890,800		0.91
7/1/99 - 6/30/00	2,380,400	2,313,702	66,698			1,944,940		1.22
7/1/00 - 6/30/01	3,401,400	3,299,797	101,603			2,015,680		1.69
7/1/01 - 6/30/02	2,692,200	2,606,204	85,996			2,031,050		1.33
7/1/02 - 6/30/03	1,864,900	1,801,061	63,839			2,025,150		0.92
7/1/03 - 6/30/04	3,368,100	3,243,956	124,144			1,895,880		1.78
7/1/04 - 6/30/05	2,836,800	2,723,645	113,155			1,869,900		1.52
7/1/05 - 6/30/06	1,945,100	1,860,494	84,606			1,932,540		1.01
7/1/06 - 6/30/07	2,332,200	2,221,812	110,388			2,033,590		1.15
7/1/07 - 6/30/08	1,731,600	1,641,555	90,045			2,120,830		0.82
7/1/08 - 6/30/09	2,204,100	2,078,249	125,851			2,046,790		1.08
7/1/09 - 6/30/10	1,372,300	1,285,402	86,898			1,846,880		0.74
7/1/10 - 6/30/11	2,696,300	2,508,771	187,529			1,696,890		1.59
7/1/11 - 6/30/12	1,918,900	1,773,539	145,361			1,773,990		1.08
7/1/12 - 6/30/13	3,069,000	2,809,096	259,904	163	18,828	1,892,520	6.4	1.62
7/1/13 - 6/30/14	3,823,400	3,465,359	358,041	199	19,213	1,998,760	7.6	1.91
7/1/14 - 6/30/15	5,048,700	4,512,847	535,853	280	18,031	2,137,000	10.3	2.36
7/1/15 - 6/30/16	6,232,700	5,372,051	860,649	251	24,831	2,118,290	9.6	2.94
7/1/16 - 6/30/17	5,821,000	4,881,087	939,913	218	26,702	2,030,850	9.0	2.87
7/1/17 - 6/30/18	4,542,200	3,617,686	924,514	228	19,922	2,039,250	9.6	2.23
7/1/18 - 6/30/19	5,278,700	3,900,039	1,378,661	209	25,257	2,180,600	8.5	2.42
7/1/19 - 6/30/20	5,136,100	2,483,166	2,652,934	211	24,342	2,224,960	8.7	2.31
7/1/20 - 6/30/21	6,062,000	4,017,085	2,044,915	205	29,554	2,221,021	8.7	2.73
7/1/21 - 6/30/22	4,959,000	1,571,016	3,387,984	143	34,606	2,383,142	5.8	2.08
7/1/22 - 6/30/23	6,532,000	1,459,624	5,072,376	171	38,179	2,460,536	7.0	2.65
Total	182,957,559	158,078,991	24,878,567					

Commonwealth of Massachusetts
Department of Corrections (DOC)
Indemnity (Including Lump Sum)

Diagnostic
Indemnity - High
Sheet 4

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	68,654,907	62,655,959	5,998,948					
7/1/93 - 6/30/94	5,599,700	5,314,656	285,044			1,859,460		3.01
7/1/94 - 6/30/95	6,491,600	6,155,200	336,400			1,940,510		3.35
7/1/95 - 6/30/96	5,690,300	5,389,787	300,513			2,052,620		2.77
7/1/96 - 6/30/97	6,375,600	6,031,973	343,627			2,340,730		2.72
7/1/97 - 6/30/98	9,426,800	8,907,620	519,180			2,218,650		4.25
7/1/98 - 6/30/99	8,323,100	7,854,004	469,096			2,560,710		3.25
7/1/99 - 6/30/00	8,671,800	8,170,937	500,863			2,684,860		3.23
7/1/00 - 6/30/01	11,206,300	10,541,879	664,421			2,791,820		4.01
7/1/01 - 6/30/02	9,540,600	8,958,777	581,823			2,830,700		3.37
7/1/02 - 6/30/03	9,326,600	8,740,322	586,278			2,898,460		3.22
7/1/03 - 6/30/04	8,439,200	7,892,961	546,239			2,937,710		2.87
7/1/04 - 6/30/05	8,880,700	8,281,821	598,879			2,913,820		3.05
7/1/05 - 6/30/06	6,275,900	5,834,073	441,827			2,947,090		2.13
7/1/06 - 6/30/07	5,778,600	5,352,302	426,298			2,896,030		2.00
7/1/07 - 6/30/08	5,570,100	5,139,082	431,018			3,546,680		1.57
7/1/08 - 6/30/09	4,602,700	4,229,564	373,136			3,324,130		1.38
7/1/09 - 6/30/10	3,574,900	3,270,072	304,828			3,363,380		1.06
7/1/10 - 6/30/11	3,911,500	3,560,523	350,977			3,337,830		1.17
7/1/11 - 6/30/12	2,999,600	2,710,610	288,990			3,481,870		0.86
7/1/12 - 6/30/13	2,735,800	2,450,234	285,566	128	21,373	3,680,220	2.6	0.74
7/1/13 - 6/30/14	3,486,700	3,092,357	394,343	151	23,091	3,905,280	3.0	0.89
7/1/14 - 6/30/15	4,496,000	3,938,165	557,835	186	24,172	4,027,500	3.6	1.12
7/1/15 - 6/30/16	5,233,400	4,507,772	725,628	180	29,074	4,000,130	3.7	1.31
7/1/16 - 6/30/17	6,809,800	5,748,712	1,061,088	186	36,612	3,525,650	4.4	1.93
7/1/17 - 6/30/18	4,837,900	3,949,404	888,496	152	31,828	3,476,210	3.8	1.39
7/1/18 - 6/30/19	5,682,500	4,398,802	1,283,698	163	34,862	3,573,240	4.1	1.59
7/1/19 - 6/30/20	6,914,600	6,449,839	464,761	203	34,032	3,687,200	5.0	1.88
7/1/20 - 6/30/21	5,856,000	3,456,656	2,399,344	354	16,550	3,601,119	9.3	1.63
7/1/21 - 6/30/22	5,388,000	1,882,443	3,505,557	161	33,548	3,561,252	4.4	1.51
7/1/22 - 6/30/23	5,097,000	818,934	4,278,066	94	54,484	3,478,917	2.7	1.47
Total	255,878,207	225,685,441	30,192,766					

Commonwealth of Massachusetts
University of Massachusetts Amherst
Indemnity (Including Lump Sum)

Diagnostic
Indemnity - High
Sheet 5

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	20,345,533	17,890,046	2,455,488					
7/1/93 - 6/30/94	746,100	710,933	35,167			2,543,210		0.29
7/1/94 - 6/30/95	802,400	761,806	40,594			2,566,650		0.31
7/1/95 - 6/30/96	625,700	591,722	33,978			2,657,390		0.24
7/1/96 - 6/30/97	544,300	512,528	31,772			2,963,360		0.18
7/1/97 - 6/30/98	494,700	463,804	30,896			2,969,820		0.17
7/1/98 - 6/30/99	718,800	670,684	48,116			2,995,300		0.24
7/1/99 - 6/30/00	1,310,100	1,216,150	93,950			3,236,270		0.40
7/1/00 - 6/30/01	1,578,300	1,457,179	121,121			3,383,480		0.47
7/1/01 - 6/30/02	844,800	775,348	69,452			3,295,550		0.26
7/1/02 - 6/30/03	991,800	904,511	87,289			3,291,790		0.30
7/1/03 - 6/30/04	296,200	268,295	27,905			3,445,470		0.09
7/1/04 - 6/30/05	694,900	624,705	70,195			3,255,300		0.21
7/1/05 - 6/30/06	395,900	353,027	42,873			4,037,500		0.10
7/1/06 - 6/30/07	502,400	442,770	59,630			4,202,190		0.12
7/1/07 - 6/30/08	596,100	519,052	77,048			4,259,980		0.14
7/1/08 - 6/30/09	1,043,800	897,582	146,218			4,205,660		0.25
7/1/09 - 6/30/10	757,800	641,797	116,003			4,332,060		0.17
7/1/10 - 6/30/11	1,270,800	1,059,913	210,887			4,446,730		0.29
7/1/11 - 6/30/12	1,181,100	969,391	211,709			4,677,530		0.25
7/1/12 - 6/30/13	852,600	687,544	165,056	90	9,473	4,953,980	1.4	0.17
7/1/13 - 6/30/14	667,600	528,763	138,838	67	9,964	5,183,910	1.0	0.13
7/1/14 - 6/30/15	1,283,000	997,528	285,472	101	12,703	5,396,310	1.5	0.24
7/1/15 - 6/30/16	1,864,300	1,411,139	453,161	72	25,893	5,858,750	1.0	0.32
7/1/16 - 6/30/17	1,590,400	1,176,532	413,868	71	22,400	5,947,870	1.0	0.27
7/1/17 - 6/30/18	934,600	661,455	273,145	79	11,830	6,074,840	1.1	0.15
7/1/18 - 6/30/19	1,431,700	939,133	492,567	58	24,684	6,566,440	0.8	0.22
7/1/19 - 6/30/20	1,146,200	409,486	736,714	51	22,475	6,647,010	0.7	0.17
7/1/20 - 6/30/21	925,000	258,784	666,216	30	30,781	6,186,070	0.5	0.15
7/1/21 - 6/30/22	1,480,000	426,140	1,053,860	52	28,639	6,345,854	0.8	0.23
7/1/22 - 6/30/23	1,413,000	171,445	1,241,555	50	28,112	7,422,338	0.7	0.19
Total	49,329,933	39,399,191	9,930,743					

Commonwealth of Massachusetts
University of Massachusetts Medical Center
Indemnity (Including Lump Sum)

Diagnostic
Indemnity - High
Sheet 6

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	20,652,284	20,652,284	0					
7/1/93 - 6/30/94	2,064,600	2,029,326	35,274			1,771,840		1.17
7/1/94 - 6/30/95	531,000	521,127	9,873			1,883,910		0.28
7/1/95 - 6/30/96	501,800	491,723	10,077			2,017,510		0.25
7/1/96 - 6/30/97	431,800	422,390	9,410			2,318,720		0.19
7/1/97 - 6/30/98	558,900	545,727	13,173			2,322,370		0.24
7/1/98 - 6/30/99	648,100	631,601	16,499			2,320,750		0.28
7/1/99 - 6/30/00	707,300	687,583	19,717			2,118,190		0.33
7/1/00 - 6/30/01	761,100	737,973	23,127			2,150,990		0.35
7/1/01 - 6/30/02	355,900	344,140	11,760			2,277,970		0.16
7/1/02 - 6/30/03	1,148,300	1,106,166	42,134			2,420,080		0.47
7/1/03 - 6/30/04	1,003,400	962,971	40,429			2,767,580		0.36
7/1/04 - 6/30/05	210,400	201,102	9,298			2,603,780		0.08
7/1/05 - 6/30/06	818,100	778,823	39,277			3,177,410		0.26
7/1/06 - 6/30/07	389,200	368,698	20,502			3,259,220		0.12
7/1/07 - 6/30/08	1,389,600	1,308,936	80,664			3,541,300		0.39
7/1/08 - 6/30/09	578,600	541,635	36,965			3,623,090		0.16
7/1/09 - 6/30/10	597,000	555,149	41,851			3,832,980		0.16
7/1/10 - 6/30/11	752,500	695,093	57,407			3,949,240		0.19
7/1/11 - 6/30/12	1,201,000	1,101,780	99,220			3,819,430		0.31
7/1/12 - 6/30/13	446,600	406,699	39,901	56	7,975	3,847,630	1.1	0.12
7/1/13 - 6/30/14	728,500	657,315	71,185	35	20,814	3,645,820	0.7	0.20
7/1/14 - 6/30/15	626,400	558,986	67,414	24	26,100	3,705,430	0.5	0.17
7/1/15 - 6/30/16	894,600	784,362	110,238	31	28,858	3,826,020	0.7	0.23
7/1/16 - 6/30/17	301,100	259,030	42,070	22	13,686	3,953,240	0.5	0.08
7/1/17 - 6/30/18	416,800	348,871	67,929	28	14,886	3,987,220	0.6	0.10
7/1/18 - 6/30/19	957,700	759,960	197,740	31	30,894	4,108,260	0.7	0.23
7/1/19 - 6/30/20	266,000	68,807	197,193	23	11,565	4,245,650	0.5	0.06
7/1/20 - 6/30/21	431,000	205,283	225,717	18	23,944	4,355,634	0.4	0.10
7/1/21 - 6/30/22	414,000	230,676	183,324	14	29,130	4,584,348	0.3	0.09
7/1/22 - 6/30/23	781,000	119,020	661,980	21	37,480	5,124,373	0.4	0.15
Total	41,564,584	39,083,236	2,481,348					

Commonwealth of Massachusetts
Other Colleges & Universities
Indemnity (Including Lump Sum)

Diagnostic
Indemnity - High
Sheet 7

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	24,145,240	22,061,830	2,083,410					
7/1/93 - 6/30/94	1,358,300	1,317,192	41,108			5,848,530		0.23
7/1/94 - 6/30/95	1,817,354	1,817,354	0			5,877,010		0.31
7/1/95 - 6/30/96	1,269,047	1,269,047	0			6,148,680		0.21
7/1/96 - 6/30/97	1,232,000	1,179,732	52,268			7,006,860		0.18
7/1/97 - 6/30/98	2,763,000	2,625,461	137,539			6,844,150		0.40
7/1/98 - 6/30/99	1,725,900	1,626,118	99,782			7,077,960		0.24
7/1/99 - 6/30/00	1,269,000	1,182,336	86,664			7,604,770		0.17
7/1/00 - 6/30/01	2,055,000	1,889,024	165,976			8,116,000		0.25
7/1/01 - 6/30/02	2,698,870	2,698,870	0			8,350,380		0.32
7/1/02 - 6/30/03	1,610,800	1,438,134	172,666			8,253,400		0.20
7/1/03 - 6/30/04	1,501,155	1,501,155	0			8,492,160		0.18
7/1/04 - 6/30/05	1,023,565	1,023,565	0			9,925,080		0.10
7/1/05 - 6/30/06	2,024,600	1,716,467	308,133			9,628,780		0.21
7/1/06 - 6/30/07	1,164,700	968,709	195,991			10,329,300		0.11
7/1/07 - 6/30/08	3,575,700	2,917,340	658,360			10,635,970		0.34
7/1/08 - 6/30/09	2,802,800	2,242,694	560,106			10,738,050		0.26
7/1/09 - 6/30/10	4,870,200	3,819,424	1,050,776			10,847,490		0.45
7/1/10 - 6/30/11	3,199,300	2,458,081	741,219			11,341,640		0.28
7/1/11 - 6/30/12	3,094,000	2,327,743	766,257			12,026,740		0.26
7/1/12 - 6/30/13	3,202,200	2,357,828	844,372	111	28,849	12,847,410	0.6	0.25
7/1/13 - 6/30/14	3,497,000	2,519,760	977,240	106	32,991	13,469,020	0.6	0.26
7/1/14 - 6/30/15	3,305,400	2,317,082	988,318	107	30,892	14,040,930	0.6	0.24
7/1/15 - 6/30/16	5,328,800	3,594,025	1,734,775	109	48,888	14,546,120	0.6	0.37
7/1/16 - 6/30/17	4,221,800	2,689,860	1,531,940	93	45,396	14,615,880	0.5	0.29
7/1/17 - 6/30/18	4,019,000	2,388,992	1,630,008	137	29,336	14,577,400	0.8	0.28
7/1/18 - 6/30/19	3,135,600	1,700,330	1,435,270	88	35,524	15,002,050	0.5	0.21
7/1/19 - 6/30/20	2,940,800	1,042,113	1,898,687	65	45,046	15,086,780	0.4	0.19
7/1/20 - 6/30/21	3,463,000	1,349,932	2,113,068	61	56,315	14,138,618	0.4	0.24
7/1/21 - 6/30/22	3,606,000	776,521	2,829,479	57	63,070	15,119,517	0.4	0.24
7/1/22 - 6/30/23	4,101,000	438,372	3,662,628	61	66,963	15,459,627	0.4	0.27
Total	106,021,132	79,255,091	26,766,041					

Commonwealth of Massachusetts
All Other Agencies
Indemnity (Including Lump Sum)

Diagnostic
Indemnity - High
Sheet 8

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	225,051,593	206,642,368	18,409,225					
7/1/93 - 6/30/94	12,441,200	11,547,856	893,344					
7/1/94 - 6/30/95	10,997,500	10,153,089	844,411					
7/1/95 - 6/30/96	11,683,700	10,661,071	1,022,629					
7/1/96 - 6/30/97	11,989,800	10,842,645	1,147,155					
7/1/97 - 6/30/98	10,178,500	9,111,868	1,066,632					
7/1/98 - 6/30/99	10,937,900	9,713,565	1,224,335			19,448,360		0.56
7/1/99 - 6/30/00	13,029,200	11,472,474	1,556,726			20,693,510		0.63
7/1/00 - 6/30/01	11,946,400	10,416,510	1,529,890			20,558,590		0.58
7/1/01 - 6/30/02	12,219,500	10,561,383	1,658,117			21,523,690		0.57
7/1/02 - 6/30/03	12,105,700	10,373,156	1,732,544			21,202,840		0.57
7/1/03 - 6/30/04	11,463,100	9,727,856	1,735,244			21,185,340		0.54
7/1/04 - 6/30/05	13,887,700	11,671,149	2,216,551			21,640,500		0.64
7/1/05 - 6/30/06	12,564,500	10,451,514	2,112,986			23,243,030		0.54
7/1/06 - 6/30/07	11,313,700	9,318,885	1,994,815			24,554,310		0.46
7/1/07 - 6/30/08	16,906,700	13,761,809	3,144,891			26,150,540		0.65
7/1/08 - 6/30/09	16,414,700	13,216,694	3,198,006			25,704,510		0.64
7/1/09 - 6/30/10	17,139,300	13,642,977	3,496,323			26,029,100		0.66
7/1/10 - 6/30/11	19,365,700	15,243,243	4,122,457			27,458,630		0.71
7/1/11 - 6/30/12	20,879,900	16,245,336	4,634,564			27,995,990		0.75
7/1/12 - 6/30/13	16,985,700	13,050,411	3,935,289	532	31,928	29,200,210	1.4	0.58
7/1/13 - 6/30/14	21,187,200	16,009,156	5,178,044	536	39,528	30,801,820	1.3	0.69
7/1/14 - 6/30/15	22,357,600	16,627,544	5,730,056	601	37,201	32,591,780	1.5	0.69
7/1/15 - 6/30/16	25,651,400	18,660,468	6,990,932	595	43,112	32,518,420	1.5	0.79
7/1/16 - 6/30/17	24,178,500	17,124,211	7,054,289	546	44,283	31,362,360	1.5	0.77
7/1/17 - 6/30/18	28,037,500	19,003,726	9,033,774	539	52,018	31,972,210	1.5	0.88
7/1/18 - 6/30/19	20,794,500	11,696,090	9,098,410	426	48,813	33,600,390	1.1	0.62
7/1/19 - 6/30/20	24,569,900	13,082,044	11,487,856	435	56,438	35,047,860	1.1	0.70
7/1/20 - 6/30/21	27,013,000	11,096,484	15,916,516	434	62,243	35,216,283	1.2	0.77
7/1/21 - 6/30/22	30,709,000	9,282,726	21,426,274	445	69,056	37,107,388	1.2	0.83
7/1/22 - 6/30/23	30,552,000	4,093,933	26,458,067	437	69,987	38,502,230	1.1	0.79
Total	754,552,593	574,502,242	180,050,351					

Commonwealth of Massachusetts
Department of Transportation (DOT)
Indemnity (Including Lump Sum)

Diagnostic
Indemnity - High
Sheet 9

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	5,569,772	3,984,738	1,585,035					
7/1/93 - 6/30/94	427,300	396,613	30,687					
7/1/94 - 6/30/95	51,700	47,745	3,955					
7/1/95 - 6/30/96	0	0	0					
7/1/96 - 6/30/97	677,000	612,267	64,733					
7/1/97 - 6/30/98	0	0	0					
7/1/98 - 6/30/99	534,200	474,376	59,824					
7/1/99 - 6/30/00	6,200	5,478	722					
7/1/00 - 6/30/01	316,000	275,517	40,483			2,119,040		0.15
7/1/01 - 6/30/02	59,700	51,635	8,065			2,124,720		0.03
7/1/02 - 6/30/03	17,600	15,095	2,505			2,087,950		0.01
7/1/03 - 6/30/04	82,300	69,834	12,466			2,077,380		0.04
7/1/04 - 6/30/05	382,000	321,022	60,978			2,176,960		0.18
7/1/05 - 6/30/06	163,000	135,621	27,379			2,309,760		0.07
7/1/06 - 6/30/07	312,600	257,524	55,076			2,339,880		0.13
7/1/07 - 6/30/08	983,700	800,721	182,979			2,458,840		0.40
7/1/08 - 6/30/09	795,100	640,226	154,874			2,512,270		0.32
7/1/09 - 6/30/10	1,754,800	1,396,847	357,953			2,739,090		0.64
7/1/10 - 6/30/11	1,493,200	1,175,310	317,890			2,636,870		0.57
7/1/11 - 6/30/12	3,201,200	2,490,642	710,558			2,753,440		1.16
7/1/12 - 6/30/13	3,665,600	2,816,365	849,235	91	40,281	2,873,490	2.4	1.28
7/1/13 - 6/30/14	3,635,600	2,747,039	888,561	97	37,480	3,041,530	2.4	1.20
7/1/14 - 6/30/15	7,416,900	5,515,979	1,900,921	101	73,435	3,230,070	2.5	2.30
7/1/15 - 6/30/16	6,278,300	4,567,246	1,711,054	88	71,344	3,033,160	2.4	2.07
7/1/16 - 6/30/17	5,010,700	3,502,585	1,508,115	74	67,712	2,570,440	2.4	1.95
7/1/17 - 6/30/18	5,201,600	3,361,707	1,839,893	72	72,244	2,493,740	2.5	2.09
7/1/18 - 6/30/19	4,687,300	3,270,569	1,416,731	66	71,020	2,576,230	2.3	1.82
7/1/19 - 6/30/20	4,660,000	1,978,578	2,681,422	61	76,393	2,916,990	1.9	1.60
7/1/20 - 6/30/21	5,097,000	1,982,067	3,114,933	56	90,560	2,919,796	1.8	1.75
7/1/21 - 6/30/22	6,289,000	1,711,981	4,577,019	70	90,191	3,065,815	2.2	2.05
7/1/22 - 6/30/23	5,962,000	662,536	5,299,464	50	120,199	3,396,233	1.5	1.76
Total	74,731,372	45,267,862	29,463,510					

Commonwealth of Massachusetts
All Combined
Medical

Diagnostic
Medical - High
Sheet 1

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	91,584,720	86,706,333	4,878,387					
7/1/93 - 6/30/94	9,058,170	8,678,764	379,406					
7/1/94 - 6/30/95	7,400,884	7,103,709	297,175					
7/1/95 - 6/30/96	6,927,242	6,631,361	295,881					
7/1/96 - 6/30/97	8,456,200	7,995,912	460,288					
7/1/97 - 6/30/98	7,354,200	6,948,131	406,069					
7/1/98 - 6/30/99	7,888,300	7,415,218	473,082					
7/1/99 - 6/30/00	8,816,100	8,239,073	577,027					
7/1/00 - 6/30/01	10,986,800	10,222,396	764,404			43,774,780		0.25
7/1/01 - 6/30/02	8,813,321	8,199,692	613,630			45,110,040		0.20
7/1/02 - 6/30/03	9,673,700	8,836,778	836,922			44,924,320		0.22
7/1/03 - 6/30/04	9,885,658	9,053,536	832,121			45,525,360		0.22
7/1/04 - 6/30/05	11,710,863	10,589,116	1,121,747			47,121,810		0.25
7/1/05 - 6/30/06	10,819,700	9,622,622	1,197,078			50,127,500		0.22
7/1/06 - 6/30/07	12,611,500	11,032,008	1,579,492			52,599,680		0.24
7/1/07 - 6/30/08	11,374,200	9,887,749	1,486,451			55,856,450		0.20
7/1/08 - 6/30/09	12,346,900	10,605,607	1,741,293			55,184,480		0.22
7/1/09 - 6/30/10	12,176,300	10,280,637	1,895,663			55,963,500		0.22
7/1/10 - 6/30/11	12,471,900	10,406,510	2,065,390			57,792,150		0.22
7/1/11 - 6/30/12	12,302,500	10,129,620	2,172,880			59,488,070		0.21
7/1/12 - 6/30/13	11,452,400	9,287,496	2,164,904	1,401	8,174	62,310,870	1.7	0.18
7/1/13 - 6/30/14	12,659,000	10,127,678	2,531,322	1,449	8,736	65,145,240	1.7	0.19
7/1/14 - 6/30/15	14,225,000	11,171,634	3,053,366	1,630	8,727	68,294,540	1.9	0.21
7/1/15 - 6/30/16	15,129,500	11,579,981	3,549,519	1,537	9,844	69,066,540	1.8	0.22
7/1/16 - 6/30/17	14,332,100	10,759,422	3,572,678	1,416	10,122	66,930,320	1.8	0.21
7/1/17 - 6/30/18	14,394,700	10,455,189	3,939,511	1,420	10,137	67,550,430	1.8	0.21
7/1/18 - 6/30/19	11,999,600	8,469,362	3,530,238	1,215	9,874	70,687,230	1.5	0.17
7/1/19 - 6/30/20	12,183,700	7,636,552	4,547,148	1,188	10,257	72,967,030	1.5	0.17
7/1/20 - 6/30/21	12,812,000	6,463,989	6,348,011	1,299	9,863	71,678,062	1.7	0.18
7/1/21 - 6/30/22	13,884,000	5,844,905	8,039,095	1,036	13,402	75,241,647	1.3	0.18
7/1/22 - 6/30/23	14,437,000	3,018,326	11,418,674	974	14,820	79,097,469	1.2	0.18
Total	430,168,158	353,399,304	76,768,854					

Commonwealth of Massachusetts
Department of Developmental Services (DDH)
Medical

Diagnostic
Medical - High
Sheet 2

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	24,583,033	23,621,778	961,255					
7/1/93 - 6/30/94	1,322,800	1,273,943	48,857			2,570,620		0.51
7/1/94 - 6/30/95	966,400	928,160	38,240			2,558,540		0.38
7/1/95 - 6/30/96	1,051,300	1,006,802	44,498			2,555,390		0.41
7/1/96 - 6/30/97	924,500	882,663	41,837			2,700,710		0.34
7/1/97 - 6/30/98	832,500	792,247	40,254			2,453,670		0.34
7/1/98 - 6/30/99	669,000	634,549	34,451			2,514,530		0.27
7/1/99 - 6/30/00	921,700	874,035	47,665			2,556,410		0.36
7/1/00 - 6/30/01	1,807,400	1,709,366	98,034			2,639,180		0.68
7/1/01 - 6/30/02	1,166,500	1,097,086	69,414			2,675,980		0.44
7/1/02 - 6/30/03	958,800	891,870	66,930			2,744,650		0.35
7/1/03 - 6/30/04	1,105,200	1,011,175	94,025			2,723,840		0.41
7/1/04 - 6/30/05	1,168,300	1,052,069	116,231			2,736,470		0.43
7/1/05 - 6/30/06	1,455,100	1,290,787	164,313			2,851,390		0.51
7/1/06 - 6/30/07	1,388,100	1,218,033	170,067			2,985,160		0.47
7/1/07 - 6/30/08	1,684,700	1,469,216	215,484			3,142,310		0.54
7/1/08 - 6/30/09	1,410,700	1,221,918	188,782			3,029,980		0.47
7/1/09 - 6/30/10	1,578,000	1,361,312	216,688			2,972,520		0.53
7/1/10 - 6/30/11	1,206,300	1,033,943	172,357			2,924,320		0.41
7/1/11 - 6/30/12	1,655,600	1,398,024	257,576			2,959,080		0.56
7/1/12 - 6/30/13	1,395,400	1,161,588	233,812	230	6,067	3,015,410	5.7	0.46
7/1/13 - 6/30/14	1,274,200	1,055,794	218,406	258	4,939	3,099,100	6.4	0.41
7/1/14 - 6/30/15	1,477,500	1,214,477	263,023	230	6,424	3,165,520	5.7	0.47
7/1/15 - 6/30/16	1,338,900	1,067,974	270,926	211	6,345	3,165,650	5.4	0.42
7/1/16 - 6/30/17	1,343,000	1,054,737	288,263	206	6,519	2,924,030	5.9	0.46
7/1/17 - 6/30/18	1,155,900	891,132	264,768	185	6,248	2,929,560	5.4	0.39
7/1/18 - 6/30/19	1,130,000	836,817	293,183	174	6,494	3,080,020	5.0	0.37
7/1/19 - 6/30/20	1,037,100	666,342	370,758	138	7,515	3,110,580	4.1	0.33
7/1/20 - 6/30/21	1,037,000	515,353	521,647	140	7,397	3,039,520	4.3	0.34
7/1/21 - 6/30/22	1,031,000	374,090	656,910	95	10,904	3,074,331	3.0	0.34
7/1/22 - 6/30/23	990,000	151,331	838,669	91	10,873	3,253,214	2.8	0.30
Total	61,065,933	53,758,609	7,307,324					

Commonwealth of Massachusetts
Department of Mental Health (DMH)
Medical

Diagnostic
Medical - High
Sheet 3

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	12,072,188	11,923,386	148,802					
7/1/93 - 6/30/94	680,200	651,447	28,753			1,730,750		0.39
7/1/94 - 6/30/95	894,900	854,216	40,684			1,783,170		0.50
7/1/95 - 6/30/96	857,800	816,037	41,763			1,759,960		0.49
7/1/96 - 6/30/97	620,400	588,046	32,354			1,900,830		0.33
7/1/97 - 6/30/98	537,100	508,116	28,984			1,772,780		0.30
7/1/98 - 6/30/99	1,003,600	948,446	55,154			1,890,800		0.53
7/1/99 - 6/30/00	639,000	602,355	36,645			1,944,940		0.33
7/1/00 - 6/30/01	804,100	753,978	50,122			2,015,680		0.40
7/1/01 - 6/30/02	664,300	619,240	45,060			2,031,050		0.33
7/1/02 - 6/30/03	965,400	894,525	70,875			2,025,150		0.48
7/1/03 - 6/30/04	1,633,600	1,503,977	129,623			1,895,880		0.86
7/1/04 - 6/30/05	1,029,200	939,839	89,361			1,869,900		0.55
7/1/05 - 6/30/06	1,040,400	941,703	98,697			1,932,540		0.54
7/1/06 - 6/30/07	748,400	671,423	76,977			2,033,590		0.37
7/1/07 - 6/30/08	747,700	663,947	83,753			2,120,830		0.35
7/1/08 - 6/30/09	1,010,100	886,920	123,180			2,046,790		0.49
7/1/09 - 6/30/10	666,200	576,892	89,308			1,846,880		0.36
7/1/10 - 6/30/11	1,072,400	914,351	158,049			1,696,890		0.63
7/1/11 - 6/30/12	727,800	610,622	117,178			1,773,990		0.41
7/1/12 - 6/30/13	720,400	591,161	129,239	163	4,420	1,892,520	6.4	0.38
7/1/13 - 6/30/14	922,800	738,071	184,729	199	4,637	1,998,760	7.6	0.46
7/1/14 - 6/30/15	1,347,500	1,050,424	297,076	280	4,813	2,137,000	10.3	0.63
7/1/15 - 6/30/16	1,706,900	1,290,543	416,357	251	6,800	2,118,290	9.6	0.81
7/1/16 - 6/30/17	1,625,400	1,193,345	432,055	218	7,456	2,030,850	9.0	0.80
7/1/17 - 6/30/18	1,272,200	904,311	367,889	228	5,580	2,039,250	9.6	0.62
7/1/18 - 6/30/19	1,367,300	935,882	431,418	209	6,542	2,180,600	8.5	0.63
7/1/19 - 6/30/20	1,082,400	524,905	557,495	211	5,130	2,224,960	8.7	0.49
7/1/20 - 6/30/21	1,465,000	791,537	673,463	205	7,142	2,221,021	8.7	0.66
7/1/21 - 6/30/22	1,214,000	392,208	821,792	143	8,472	2,383,142	5.8	0.51
7/1/22 - 6/30/23	1,449,000	315,743	1,133,257	171	8,469	2,460,536	7.0	0.59
Total	42,587,688	35,597,599	6,990,089					

Commonwealth of Massachusetts
Department of Corrections (DOC)
Medical

Diagnostic
Medical - High
Sheet 4

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	17,800,617	14,916,838	2,883,779					
7/1/93 - 6/30/94	1,703,100	1,627,894	75,206			1,859,460		0.92
7/1/94 - 6/30/95	1,409,600	1,344,313	65,287			1,940,510		0.73
7/1/95 - 6/30/96	1,574,700	1,496,832	77,868			2,052,620		0.77
7/1/96 - 6/30/97	1,942,500	1,838,743	103,757			2,340,730		0.83
7/1/97 - 6/30/98	2,631,000	2,479,856	151,144			2,218,650		1.19
7/1/98 - 6/30/99	2,108,400	1,977,824	130,576			2,560,710		0.82
7/1/99 - 6/30/00	2,290,700	2,136,406	154,294			2,684,860		0.85
7/1/00 - 6/30/01	3,192,100	2,959,402	232,698			2,791,820		1.14
7/1/01 - 6/30/02	2,066,700	1,904,165	162,535			2,830,700		0.73
7/1/02 - 6/30/03	2,485,500	2,281,025	204,475			2,898,460		0.86
7/1/03 - 6/30/04	2,320,400	2,120,710	199,690			2,937,710		0.79
7/1/04 - 6/30/05	3,072,400	2,794,970	277,430			2,913,820		1.05
7/1/05 - 6/30/06	2,395,900	2,169,468	226,432			2,947,090		0.81
7/1/06 - 6/30/07	2,074,100	1,869,035	205,065			2,896,030		0.72
7/1/07 - 6/30/08	1,710,400	1,532,908	177,492			3,546,680		0.48
7/1/08 - 6/30/09	1,823,300	1,624,270	199,030			3,324,130		0.55
7/1/09 - 6/30/10	1,156,900	1,023,456	133,444			3,363,380		0.34
7/1/10 - 6/30/11	1,299,000	1,139,957	159,043			3,337,830		0.39
7/1/11 - 6/30/12	1,070,600	931,950	138,650			3,481,870		0.31
7/1/12 - 6/30/13	965,300	833,224	132,076	128	7,541	3,680,220	2.6	0.26
7/1/13 - 6/30/14	1,047,800	896,642	151,158	151	6,939	3,905,280	3.0	0.27
7/1/14 - 6/30/15	1,447,400	1,227,349	220,051	186	7,782	4,027,500	3.6	0.36
7/1/15 - 6/30/16	1,283,500	1,074,146	209,354	180	7,131	4,000,130	3.7	0.32
7/1/16 - 6/30/17	1,576,400	1,305,697	270,703	186	8,475	3,525,650	4.4	0.45
7/1/17 - 6/30/18	1,166,600	955,281	211,319	152	7,675	3,476,210	3.8	0.34
7/1/18 - 6/30/19	1,247,000	1,009,250	237,750	163	7,650	3,573,240	4.1	0.35
7/1/19 - 6/30/20	1,733,800	1,551,368	182,432	203	8,533	3,687,200	5.0	0.47
7/1/20 - 6/30/21	1,333,000	891,169	441,831	354	3,767	3,601,119	9.3	0.37
7/1/21 - 6/30/22	1,258,000	558,777	699,223	161	7,833	3,561,252	4.4	0.35
7/1/22 - 6/30/23	1,422,000	448,257	973,743	94	15,200	3,478,917	2.7	0.41
Total	70,608,717	60,921,182	9,687,535					

Commonwealth of Massachusetts
University of Massachusetts Amherst
Medical

Diagnostic
Medical - High
Sheet 5

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	2,477,219	2,477,219	0					
7/1/93 - 6/30/94	566,700	546,366	20,334			2,543,210		0.22
7/1/94 - 6/30/95	317,600	305,369	12,231			2,566,650		0.12
7/1/95 - 6/30/96	254,500	243,985	10,515			2,657,390		0.10
7/1/96 - 6/30/97	196,300	187,967	8,333			2,963,360		0.07
7/1/97 - 6/30/98	196,600	188,043	8,557			2,969,820		0.07
7/1/98 - 6/30/99	273,400	261,179	12,221			2,995,300		0.09
7/1/99 - 6/30/00	378,600	360,853	17,747			3,236,270		0.12
7/1/00 - 6/30/01	417,000	396,643	20,357			3,383,480		0.12
7/1/01 - 6/30/02	603,000	572,103	30,897			3,295,550		0.18
7/1/02 - 6/30/03	376,800	355,638	21,162			3,291,790		0.11
7/1/03 - 6/30/04	156,100	146,045	10,055			3,445,470		0.05
7/1/04 - 6/30/05	310,100	287,625	22,475			3,255,300		0.10
7/1/05 - 6/30/06	312,500	287,294	25,206			4,037,500		0.08
7/1/06 - 6/30/07	236,800	215,436	21,364			4,202,190		0.06
7/1/07 - 6/30/08	510,100	458,767	51,333			4,259,980		0.12
7/1/08 - 6/30/09	697,900	620,509	77,391			4,205,660		0.17
7/1/09 - 6/30/10	458,100	401,749	56,351			4,332,060		0.11
7/1/10 - 6/30/11	445,200	384,687	60,513			4,446,730		0.10
7/1/11 - 6/30/12	569,600	484,145	85,455			4,677,530		0.12
7/1/12 - 6/30/13	441,300	367,346	73,954	90	4,903	4,953,980	1.4	0.09
7/1/13 - 6/30/14	417,200	340,080	77,120	67	6,227	5,183,910	1.0	0.08
7/1/14 - 6/30/15	677,700	540,436	137,264	101	6,710	5,396,310	1.5	0.13
7/1/15 - 6/30/16	580,400	450,709	129,691	72	8,061	5,858,750	1.0	0.10
7/1/16 - 6/30/17	480,600	364,573	116,027	71	6,769	5,947,870	1.0	0.08
7/1/17 - 6/30/18	397,400	294,353	103,047	79	5,030	6,074,840	1.1	0.07
7/1/18 - 6/30/19	480,500	344,701	135,799	58	8,284	6,566,440	0.8	0.07
7/1/19 - 6/30/20	365,200	253,756	111,444	51	7,161	6,647,010	0.7	0.05
7/1/20 - 6/30/21	263,000	95,876	167,124	30	8,752	6,186,070	0.5	0.04
7/1/21 - 6/30/22	480,000	286,580	193,420	52	9,288	6,345,854	0.8	0.08
7/1/22 - 6/30/23	461,000	82,287	378,713	50	9,172	7,422,338	0.7	0.06
Total	14,798,419	12,602,319	2,196,099					

Commonwealth of Massachusetts
University of Massachusetts Medical Center
Medical

Diagnostic
Medical - High
Sheet 6

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	3,604,381	3,604,381	0					
7/1/93 - 6/30/94	721,800	713,886	7,914			1,771,840		0.41
7/1/94 - 6/30/95	425,400	420,290	5,110			1,883,910		0.23
7/1/95 - 6/30/96	388,000	382,952	5,048			2,017,510		0.19
7/1/96 - 6/30/97	202,000	199,422	2,578			2,318,720		0.09
7/1/97 - 6/30/98	505,100	498,102	6,998			2,322,370		0.22
7/1/98 - 6/30/99	313,900	309,221	4,679			2,320,750		0.14
7/1/99 - 6/30/00	188,300	185,166	3,134			2,118,190		0.09
7/1/00 - 6/30/01	209,300	205,414	3,886			2,150,990		0.10
7/1/01 - 6/30/02	251,000	245,879	5,121			2,277,970		0.11
7/1/02 - 6/30/03	241,400	235,811	5,589			2,420,080		0.10
7/1/03 - 6/30/04	304,300	296,472	7,828			2,767,580		0.11
7/1/04 - 6/30/05	172,000	167,120	4,880			2,603,780		0.07
7/1/05 - 6/30/06	401,700	388,983	12,717			3,177,410		0.13
7/1/06 - 6/30/07	245,100	236,426	8,674			3,259,220		0.08
7/1/07 - 6/30/08	532,200	511,475	20,725			3,541,300		0.15
7/1/08 - 6/30/09	453,300	433,846	19,454			3,623,090		0.13
7/1/09 - 6/30/10	319,900	304,761	15,139			3,832,980		0.08
7/1/10 - 6/30/11	348,700	330,378	18,322			3,949,240		0.09
7/1/11 - 6/30/12	324,300	305,549	18,751			3,819,430		0.08
7/1/12 - 6/30/13	293,500	274,844	18,656	56	5,241	3,847,630	1.1	0.08
7/1/13 - 6/30/14	479,100	445,636	33,464	35	13,689	3,645,820	0.7	0.13
7/1/14 - 6/30/15	159,400	146,853	12,547	24	6,642	3,705,430	0.5	0.04
7/1/15 - 6/30/16	307,000	277,556	29,444	31	9,903	3,826,020	0.7	0.08
7/1/16 - 6/30/17	237,600	211,066	26,534	22	10,800	3,953,240	0.5	0.06
7/1/17 - 6/30/18	191,300	166,774	24,526	28	6,832	3,987,220	0.6	0.05
7/1/18 - 6/30/19	196,100	167,529	28,571	31	6,326	4,108,260	0.7	0.05
7/1/19 - 6/30/20	178,400	113,422	64,978	23	7,757	4,245,650	0.5	0.04
7/1/20 - 6/30/21	187,000	159,825	27,175	18	10,389	4,355,634	0.4	0.04
7/1/21 - 6/30/22	158,000	101,327	56,673	14	11,117	4,584,348	0.3	0.03
7/1/22 - 6/30/23	240,000	75,578	164,422	21	11,517	5,124,373	0.4	0.05
Total	12,779,481	12,115,947	663,534					

Commonwealth of Massachusetts
Other Colleges & Universities
Medical

Diagnostic
Medical - High
Sheet 7

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	4,280,201	4,260,984	19,217					
7/1/93 - 6/30/94	864,100	812,437	51,663			5,848,530		0.15
7/1/94 - 6/30/95	572,784	572,784	0			5,877,010		0.10
7/1/95 - 6/30/96	581,842	581,842	0			6,148,680		0.09
7/1/96 - 6/30/97	1,002,400	928,271	74,129			7,006,860		0.14
7/1/97 - 6/30/98	470,900	432,549	38,351			6,844,150		0.07
7/1/98 - 6/30/99	413,600	376,763	36,837			7,077,960		0.06
7/1/99 - 6/30/00	538,800	486,803	51,997			7,604,770		0.07
7/1/00 - 6/30/01	630,600	564,812	65,788			8,116,000		0.08
7/1/01 - 6/30/02	534,221	534,221	0			8,350,380		0.06
7/1/02 - 6/30/03	725,300	637,562	87,738			8,253,400		0.09
7/1/03 - 6/30/04	691,458	691,458	0			8,492,160		0.08
7/1/04 - 6/30/05	659,963	659,963	0			9,925,080		0.07
7/1/05 - 6/30/06	989,400	843,946	145,454			9,628,780		0.10
7/1/06 - 6/30/07	810,400	683,354	127,046			10,329,300		0.08
7/1/07 - 6/30/08	1,212,700	1,010,855	201,845			10,635,970		0.11
7/1/08 - 6/30/09	1,326,200	1,092,604	233,596			10,738,050		0.12
7/1/09 - 6/30/10	1,303,200	1,060,498	242,702			10,847,490		0.12
7/1/10 - 6/30/11	1,474,500	1,184,268	290,232			11,341,640		0.13
7/1/11 - 6/30/12	1,131,600	895,280	236,320			12,026,740		0.09
7/1/12 - 6/30/13	1,022,300	794,386	227,914	111	9,210	12,847,410	0.6	0.08
7/1/13 - 6/30/14	1,312,000	999,340	312,660	106	12,377	13,469,020	0.6	0.10
7/1/14 - 6/30/15	1,324,100	983,330	340,770	107	12,375	14,040,930	0.6	0.09
7/1/15 - 6/30/16	1,498,700	1,088,926	409,774	109	13,750	14,546,120	0.6	0.10
7/1/16 - 6/30/17	1,356,700	963,668	393,032	93	14,588	14,615,880	0.5	0.09
7/1/17 - 6/30/18	1,575,100	1,090,338	484,762	137	11,497	14,577,400	0.8	0.11
7/1/18 - 6/30/19	1,170,900	787,904	382,996	88	13,266	15,002,050	0.5	0.08
7/1/19 - 6/30/20	982,000	601,049	380,951	65	15,042	15,086,780	0.4	0.07
7/1/20 - 6/30/21	1,042,000	460,390	581,610	61	16,945	14,138,618	0.4	0.07
7/1/21 - 6/30/22	1,087,000	383,220	703,780	57	19,012	15,119,517	0.4	0.07
7/1/22 - 6/30/23	1,370,000	342,881	1,027,119	61	22,370	15,459,627	0.4	0.09
Total	33,954,969	26,806,686	7,148,283					

Commonwealth of Massachusetts
All Other Agencies
Medical

Diagnostic
Medical - High
Sheet 8

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	26,752,284	25,886,951	865,333					
7/1/93 - 6/30/94	3,156,600	3,011,884	144,716					
7/1/94 - 6/30/95	2,772,800	2,639,191	133,609					
7/1/95 - 6/30/96	2,219,100	2,102,910	116,190					
7/1/96 - 6/30/97	3,261,500	3,081,132	180,369					
7/1/97 - 6/30/98	2,176,100	2,044,594	131,506					
7/1/98 - 6/30/99	2,955,600	2,766,141	189,459			19,448,360		0.15
7/1/99 - 6/30/00	3,477,300	3,237,995	239,305			20,693,510		0.17
7/1/00 - 6/30/01	3,904,700	3,612,807	291,893			20,558,590		0.19
7/1/01 - 6/30/02	3,489,400	3,192,007	297,393			21,523,690		0.16
7/1/02 - 6/30/03	3,659,400	3,304,553	354,847			21,202,840		0.17
7/1/03 - 6/30/04	3,584,400	3,203,120	381,280			21,185,340		0.17
7/1/04 - 6/30/05	5,237,000	4,632,749	604,251			21,640,500		0.24
7/1/05 - 6/30/06	4,096,100	3,587,839	508,261			23,243,030		0.18
7/1/06 - 6/30/07	5,754,300	4,968,863	785,437			24,554,310		0.23
7/1/07 - 6/30/08	4,885,800	4,163,345	722,455			26,150,540		0.19
7/1/08 - 6/30/09	5,392,400	4,529,830	862,570			25,704,510		0.21
7/1/09 - 6/30/10	5,346,800	4,434,621	912,179			26,029,100		0.21
7/1/10 - 6/30/11	6,457,100	5,280,920	1,176,180			27,458,630		0.24
7/1/11 - 6/30/12	5,990,800	4,832,705	1,158,095			27,995,990		0.21
7/1/12 - 6/30/13	5,193,900	4,134,401	1,059,499	532	9,763	29,200,210	1.4	0.18
7/1/13 - 6/30/14	5,899,400	4,627,346	1,272,054	536	11,006	30,801,820	1.3	0.19
7/1/14 - 6/30/15	6,034,200	4,653,576	1,380,624	601	10,040	32,591,780	1.5	0.19
7/1/15 - 6/30/16	6,861,200	5,161,833	1,699,367	595	11,531	32,518,420	1.5	0.21
7/1/16 - 6/30/17	6,363,300	4,676,680	1,686,620	546	11,654	31,362,360	1.5	0.20
7/1/17 - 6/30/18	6,917,900	4,939,962	1,977,938	539	12,835	31,972,210	1.5	0.22
7/1/18 - 6/30/19	5,108,500	3,512,363	1,596,137	426	11,992	33,600,390	1.1	0.15
7/1/19 - 6/30/20	5,425,000	3,108,756	2,316,244	435	12,461	35,047,860	1.1	0.15
7/1/20 - 6/30/21	6,096,000	2,877,374	3,218,626	434	14,046	35,216,283	1.2	0.17
7/1/21 - 6/30/22	6,953,000	3,052,180	3,900,820	445	15,635	37,107,388	1.2	0.19
7/1/22 - 6/30/23	7,135,000	1,413,829	5,721,171	437	16,345	38,502,230	1.1	0.19
Total	172,556,884	136,672,457	35,884,426					

Commonwealth of Massachusetts
Department of Transportation (DOT)
Medical

Diagnostic
Medical - High
Sheet 9

Unpaid Claim Analysis as of 06/30/2023 - High Estimates
($U.S.)

Net of Subrogation

Fiscal Accident Year	Selected Ultimate	Paid	Selected Unpaid Claims	Indemnity (Lost-Time) Counts	Cost Per Indemnity (Lost-Time) Claim	Payroll (in 00s)	Indemnity (Lost-Time) Claims Per $10M of Payroll	Cost Per $100 of Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	14,798	14,798	0					
7/1/93 - 6/30/94	42,870	40,908	1,962					
7/1/94 - 6/30/95	41,400	39,386	2,014					
7/1/95 - 6/30/96	0	0	0					
7/1/96 - 6/30/97	306,600	289,668	16,932					
7/1/97 - 6/30/98	4,900	4,625	275					
7/1/98 - 6/30/99	150,800	141,096	9,704					
7/1/99 - 6/30/00	381,700	355,460	26,240					
7/1/00 - 6/30/01	21,600	19,974	1,626			2,119,040		0.01
7/1/01 - 6/30/02	38,200	34,990	3,210			2,124,720		0.02
7/1/02 - 6/30/03	261,100	235,793	25,307			2,087,950		0.13
7/1/03 - 6/30/04	90,200	80,580	9,620			2,077,380		0.04
7/1/04 - 6/30/05	61,900	54,781	7,119			2,176,960		0.03
7/1/05 - 6/30/06	128,600	112,601	15,999			2,309,760		0.06
7/1/06 - 6/30/07	1,354,300	1,169,438	184,862			2,339,880		0.58
7/1/07 - 6/30/08	90,600	77,236	13,364			2,458,840		0.04
7/1/08 - 6/30/09	233,000	195,709	37,291			2,512,270		0.09
7/1/09 - 6/30/10	1,347,200	1,117,348	229,852			2,739,090		0.49
7/1/10 - 6/30/11	168,700	138,005	30,695			2,636,870		0.06
7/1/11 - 6/30/12	832,200	671,344	160,856			2,753,440		0.30
7/1/12 - 6/30/13	1,420,300	1,130,547	289,753	91	15,608	2,873,490	2.4	0.49
7/1/13 - 6/30/14	1,306,500	1,024,770	281,730	97	13,469	3,041,530	2.4	0.43
7/1/14 - 6/30/15	1,757,200	1,355,189	402,011	101	17,398	3,230,070	2.5	0.54
7/1/15 - 6/30/16	1,552,900	1,168,293	384,607	88	17,647	3,033,160	2.4	0.51
7/1/16 - 6/30/17	1,349,100	989,655	359,445	74	18,231	2,570,440	2.4	0.52
7/1/17 - 6/30/18	1,718,300	1,213,038	505,262	72	23,865	2,493,740	2.5	0.69
7/1/18 - 6/30/19	1,299,300	874,916	424,384	66	19,686	2,576,230	2.3	0.50
7/1/19 - 6/30/20	1,379,800	816,953	562,847	61	22,620	2,916,990	1.9	0.47
7/1/20 - 6/30/21	1,389,000	672,464	716,536	56	24,679	2,919,796	1.8	0.48
7/1/21 - 6/30/22	1,703,000	696,522	1,006,478	70	24,423	3,065,815	2.2	0.56
7/1/22 - 6/30/23	1,370,000	188,419	1,181,581	50	27,620	3,396,233	1.5	0.40
Total	21,816,068	14,924,504	6,891,564					

Commonwealth of Massachusetts
Summary of Reserve Estimates by College

Summary
Colleges Allocation
Sheet 1

Unpaid Claim Analysis as of 06/30/2023
($U.S.)

Net of Subrogation
Undiscounted

College or University	Total Unpaid Loss & ALAE @6/30/23 Low	Total Unpaid Loss & ALAE @6/30/23 High	Total Unpaid ULAE @6/30/23 Low	Total Unpaid ULAE @6/30/23 High	Total Unpaid Loss & LAE @6/30/23 Low	Total Unpaid Loss & LAE @6/30/23 High	Short-Term: Total Unpaid Loss & LAE @6/30/23 Low	Short-Term: Total Unpaid Loss & LAE @6/30/23 High	Long-Term: Total Unpaid Loss & LAE @6/30/23 Low	Long-Term: Total Unpaid Loss & LAE @6/30/23 High	Allocation Methodology Based On: Method 1 Loss Payments	Method 2 Payroll (00)	Method 3 Open LT Counts	Final Allocation	Prior Total Unpaid Loss & LAE @6/30/22 Undiscounted Low	High	Prior Final Allocation
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
Berkshire Community College	336,580	389,839	3,154	3,653	339,734	393,492	39,910	46,224	299,824	347,268	1.6%	1.0%	1.2%	1.2%	302,234	350,561	1.1%
Bridgewater State College	1,695,175	1,963,414	15,884	18,398	1,711,059	1,981,812	201,006	232,804	1,510,054	1,749,007	5.5%	6.8%	6.4%	5.8%	1,595,073	1,848,819	5.6%
Bristol Community College	571,466	661,893	5,355	6,202	576,821	668,095	67,762	78,481	509,059	589,613	1.7%	2.8%	1.7%	2.0%	607,867	704,567	2.1%
Bunker Hill Community College	620,608	719,621	5,815	6,743	626,424	726,364	73,589	85,326	552,835	641,038	1.4%	3.6%	2.9%	2.1%	554,674	643,168	1.9%
Cape Cod Community College	392,941	455,634	3,682	4,269	396,623	459,903	46,593	54,025	350,030	405,878	1.9%	1.4%	0.6%	1.3%	426,721	494,802	1.5%
Fitchburg State College	1,280,271	1,483,938	11,996	13,905	1,292,267	1,497,842	151,808	175,952	1,140,459	1,321,890	4.8%	3.1%	6.4%	4.4%	1,144,253	1,326,282	4.0%
Framingham State College	1,062,189	1,230,266	9,953	11,528	1,072,142	1,241,794	125,949	145,874	946,193	1,095,920	4.9%	3.3%	3.5%	3.6%	957,170	1,109,438	3.3%
Greenfield Community College	183,523	212,563	1,720	1,992	185,242	214,554	21,761	25,204	163,481	189,351	0.4%	1.0%	0.6%	0.6%	195,846	227,052	0.7%
Holyoke Community College	421,247	488,259	3,947	4,575	425,194	492,835	49,949	57,894	375,245	434,941	0.7%	2.4%	1.7%	1.4%	376,493	436,386	1.3%
Mass Bay Community College	225,938	261,880	2,117	2,454	228,055	264,334	26,791	31,051	201,264	233,283	0.5%	1.6%	0.0%	0.8%	245,361	284,393	0.9%
Mass College of Art	873,379	1,011,580	8,184	9,479	881,563	1,021,058	103,561	119,944	778,002	901,114	3.8%	2.3%	3.5%	3.0%	895,394	1,037,834	3.1%
Mass Maritime Academy	763,664	884,503	7,156	8,288	770,819	892,791	90,551	104,877	680,268	787,915	3.3%	1.6%	3.5%	2.6%	763,935	885,462	2.7%
Mass College of Liberal Arts	691,720	801,176	6,482	7,507	698,202	808,683	82,021	94,996	616,181	713,686	2.0%	1.6%	4.0%	2.4%	680,790	789,497	2.4%
Massasoit Community College	911,443	1,056,921	8,540	9,904	919,983	1,066,824	108,074	125,320	811,909	941,504	4.3%	2.6%	3.5%	3.1%	814,609	944,632	2.8%
Middlesex Community College	860,984	998,510	8,068	9,356	869,052	1,007,866	102,091	118,395	766,961	889,472	2.7%	3.0%	4.6%	2.9%	769,512	892,427	2.7%
Mt Wachusett Community College	335,441	388,520	3,143	3,641	338,584	392,161	39,775	46,067	298,809	346,094	1.2%	1.9%	0.6%	1.1%	331,610	384,363	1.2%
North Essex Community College	322,189	373,601	3,019	3,501	325,208	377,102	38,204	44,298	287,004	332,803	0.6%	2.3%	0.0%	1.1%	349,885	405,717	1.2%
North Shore Community College	508,921	590,225	4,769	5,531	513,690	595,756	60,345	69,984	453,344	525,772	2.0%	2.4%	1.2%	1.7%	552,670	640,964	1.9%
Quinsigamond Community College	801,823	929,917	7,513	8,714	809,336	938,631	95,076	110,261	714,260	828,369	3.2%	3.0%	1.7%	2.7%	870,752	1,009,857	3.0%
Roxbury Community College	238,482	276,640	2,235	2,592	240,717	279,233	28,278	32,802	212,439	246,431	1.1%	1.0%	1.2%	0.8%	213,146	247,250	0.7%
Salem State College	1,826,369	2,115,367	17,114	19,821	1,843,482	2,135,189	216,562	250,822	1,626,920	1,884,367	5.4%	6.0%	8.7%	6.2%	1,784,370	2,068,229	6.2%
Springfield Tech Community Coll	1,056,592	1,224,675	9,901	11,475	1,066,492	1,236,151	125,285	145,211	941,207	1,090,940	5.1%	2.3%	1.7%	3.6%	1,147,421	1,329,954	4.0%
UMass (Boston)	2,452,422	2,840,485	22,980	26,616	2,475,402	2,867,101	290,796	336,800	2,184,606	2,530,301	6.8%	14.4%	5.8%	8.4%	2,583,445	2,994,422	9.0%
UMass (Dartmouth)	2,286,672	2,648,508	21,427	24,817	2,308,099	2,673,325	271,142	314,037	2,036,957	2,359,288	7.6%	7.7%	9.8%	7.8%	2,053,992	2,380,743	7.2%
UMass (Lowell)	5,303,994	6,252,094	49,700	58,584	5,353,693	6,310,677	628,922	741,318	4,724,772	5,569,359	13.2%	13.6%	12.7%	18.3%	5,096,090	6,017,368	18.0%
Westfield State College	1,707,034	1,977,150	15,995	18,526	1,723,030	1,995,676	202,412	234,433	1,520,618	1,761,243	8.0%	3.8%	6.9%	5.8%	1,723,442	1,998,580	6.0%
Worcester State College	1,446,961	1,677,145	13,558	15,715	1,460,519	1,692,860	171,574	198,861	1,288,946	1,493,999	6.4%	3.4%	5.8%	5.0%	1,571,348	1,821,320	5.5%
Total	29,178,027	33,914,323	273,405	317,785	29,451,432	34,232,109	3,459,787	4,021,262	25,991,645	30,210,847	100.0%	100.0%	100.0%	100.0%	28,608,101	33,274,086	100.0%

(1), (2) Selected by Deloitte
(3), (4) Selected by Deloitte
(5) = (1) + (3)
(6) = (2) + (4)
(7) = [(1) x (Short-Term Portion from Sheet 2 of each Exhibit)] + [(3) x (Short-Term ULAE Portion)]
(8) = [(2) x (Short-Term Portion from Sheet 2 of each Exhibit)] + [(4) x (Short-Term ULAE Portion)]
(9) = [(1) x (Long-Term Portion from Sheet 2 of each Exhibit)] + [(3) x (Long-Term ULAE Portion)]
(10) = [(2) x (Long-Term Portion from Sheet 2 of each Exhibit)] + [(4) x (Long-Term ULAE Portion)]
(11) - (13) From Summary, C & U Allocation Sheets
(14) Selected by Deloitte
(15) - (17) From Prior Report as of June 30, 2022

Commonwealth of Massachusetts
Summary of Reserve Estimates by College

Summary
Colleges Allocation
Sheet 2

Unpaid Claim Analysis as of 06/30/2023
($U.S.)

Net of Subrogation
Discounted at 4%

College or University	Total Unpaid Loss & ALAE @6/30/23 Low	Total Unpaid Loss & ALAE @6/30/23 High	Total Unpaid ULAE @6/30/23 Low	Total Unpaid ULAE @6/30/23 High	Total Unpaid Loss & LAE @6/30/23 Low	Total Unpaid Loss & LAE @6/30/23 High	Short-Term Total Unpaid Loss & LAE @6/30/23 Low	Short-Term Total Unpaid Loss & LAE @6/30/23 High	Long-Term Total Unpaid Loss & LAE @6/30/23 Low	Long-Term Total Unpaid Loss & LAE @6/30/23 High	Prior Total Unpaid Loss & LAE @6/30/22 **Discounted at 4%** Low	Prior Total Unpaid Loss & LAE @6/30/22 **Discounted at 4%** High
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Berkshire Community College	251,412	291,635	2,356	2,733	253,768	294,368	39,910	46,224	213,858	248,144	225,222	261,694
Bridgewater State College	1,266,231	1,468,813	11,865	13,763	1,278,096	1,482,576	201,006	232,804	1,077,090	1,249,771	1,188,635	1,380,142
Bristol Community College	426,863	495,156	4,000	4,640	430,863	499,796	67,762	78,481	363,101	421,314	452,977	525,959
Bunker Hill Community College	463,571	538,342	4,344	5,044	467,914	543,387	73,589	85,326	394,326	458,060	413,338	480,124
Cape Cod Community College	293,512	340,856	2,750	3,194	296,263	344,050	46,593	54,025	249,669	290,025	317,989	369,370
Fitchburg State College	956,313	1,110,121	8,961	10,402	965,274	1,120,523	151,808	175,952	813,466	944,571	852,688	990,069
Framingham State College	793,415	920,351	7,434	8,624	800,849	928,975	125,949	145,874	674,900	783,101	713,275	828,195
Greenfield Community College	137,084	159,016	1,285	1,490	138,369	160,506	21,761	25,204	116,608	135,302	145,943	169,494
Holyoke Community College	314,655	365,263	2,948	3,423	317,604	368,685	49,949	57,894	267,654	310,792	280,560	325,762
Mass Bay Community College	168,767	195,910	1,581	1,836	170,348	197,746	26,791	31,051	143,558	166,695	182,841	212,299
Mass College of Art	652,381	756,754	6,113	7,091	658,494	763,845	103,561	119,944	554,933	643,901	667,240	774,743
Mass Maritime Academy	570,428	661,689	5,345	6,200	575,773	667,889	90,551	104,877	485,221	563,013	569,278	660,997
Mass College of Liberal Arts	516,688	599,352	4,841	5,616	521,530	604,968	82,021	94,996	439,509	509,972	507,319	589,359
Massasoit Community College	680,813	790,673	6,379	7,409	687,192	798,082	108,074	125,320	579,118	672,762	607,040	705,167
Middlesex Community College	643,122	746,976	6,026	6,999	649,149	753,976	102,091	118,395	547,057	635,581	573,434	666,196
Mt Wachusett Community College	250,562	290,649	2,348	2,723	252,910	293,372	39,775	46,067	213,135	247,305	247,113	286,927
North Essex Community College	240,663	279,487	2,255	2,619	242,918	282,106	38,204	44,298	204,714	237,808	260,732	302,868
North Shore Community College	380,144	441,542	3,562	4,137	383,707	445,680	60,345	69,984	323,361	375,696	411,845	478,479
Quinsigamond Community College	598,931	695,663	5,612	6,519	604,543	702,181	95,076	110,261	509,467	591,920	648,877	753,858
Roxbury Community College	178,137	206,952	1,669	1,939	179,806	208,891	28,278	32,802	151,528	176,090	158,834	184,572
Salem State College	1,364,228	1,582,488	12,783	14,828	1,377,011	1,597,316	216,562	250,822	1,160,449	1,346,494	1,329,698	1,543,932
Springfield Tech Community Coll	789,234	916,169	7,395	8,585	796,629	924,754	125,285	145,211	671,343	779,542	855,049	992,810
UMass (Boston)	1,831,866	2,124,942	17,165	19,911	1,849,031	2,144,853	290,796	336,800	1,558,234	1,808,053	1,925,162	2,235,335
UMass (Dartmouth)	1,708,057	1,981,325	16,005	18,565	1,724,062	1,999,891	271,142	314,037	1,452,919	1,685,854	1,530,618	1,777,224
UMass (Lowell)	3,961,880	4,677,136	37,124	43,826	3,999,004	4,720,962	628,922	741,318	3,370,083	3,979,644	3,797,564	4,491,962
Westfield State College	1,275,089	1,479,088	11,948	13,859	1,287,037	1,492,948	202,412	234,433	1,084,625	1,258,515	1,284,295	1,491,939
Worcester State College	1,080,824	1,254,657	10,128	11,756	1,090,952	1,266,414	171,574	198,861	919,379	1,067,553	1,170,956	1,359,614
Total	21,794,871	25,371,007	204,223	237,732	21,999,094	25,608,740	3,459,787	4,021,262	18,539,307	21,587,478	21,318,522	24,839,087

(1) - (4) Selected by Deloitte
(5) = (1) + (3)
(6) = (2) + (4)
(7) = [(1) x (Short-Term Portion from Sheet 2 of each Exhibit)] + [(3) x (Short-Term ULAE Portion)]
(8) = [(2) x (Short-Term Portion from Sheet 2 of each Exhibit)] + [(4) x (Short-Term ULAE Portion)]
(9) = [(1) x (Long-Term Portion from Sheet 2 of each Exhibit)] + [(3) x (Long-Term ULAE Portion)]
(10) = [(2) x (Long-Term Portion from Sheet 2 of each Exhibit)] + [(4) x (Long-Term ULAE Portion)]
(11), (12) From Prior Report as of June 30, 2022

Commonwealth of Massachusetts
Summary of Reserve Estimates by College

Summary
Colleges Allocation
Sheet 3

Unpaid Claim Analysis as of 06/30/2023
($U.S.)

Net of Subrogation
Discounted at 6%

College or University	Total Unpaid Loss & ALAE @6/30/23 Low	Total Unpaid Loss & ALAE @6/30/23 High	Total Unpaid ULAE @6/30/23 Low	Total Unpaid ULAE @6/30/23 High	Total Unpaid Loss & LAE @6/30/23 Low	Total Unpaid Loss & LAE @6/30/23 High	Short-Term Total Unpaid Loss & LAE @6/30/23 Low	Short-Term Total Unpaid Loss & LAE @6/30/23 High	Long-Term Total Unpaid Loss & LAE @6/30/23 Low	Long-Term Total Unpaid Loss & LAE @6/30/23 High	Prior Total Unpaid Loss & LAE @6/30/22 **Discounted at 6%** Low	Prior Total Unpaid Loss & LAE @6/30/22 **Discounted at 6%** High
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Berkshire Community College	223,808	259,857	2,097	2,435	225,905	262,292	39,910	46,224	185,995	216,068	200,424	233,122
Bridgewater State College	1,127,200	1,308,760	10,562	12,263	1,137,762	1,321,024	201,006	232,804	936,757	1,088,219	1,057,762	1,229,457
Bristol Community College	379,994	441,200	3,561	4,134	383,555	445,334	67,762	78,481	315,793	366,853	403,103	468,534
Bunker Hill Community College	412,671	479,681	3,867	4,495	416,538	484,175	73,589	85,326	342,949	398,849	367,828	427,704
Cape Cod Community College	261,285	303,714	2,448	2,846	263,733	306,559	46,593	54,025	217,140	252,534	282,977	329,042
Fitchburg State College	851,311	989,154	7,977	9,269	859,288	998,423	151,808	175,952	707,480	822,470	758,804	881,972
Framingham State College	706,298	820,063	6,618	7,684	712,917	827,747	125,949	145,874	586,967	681,873	634,741	737,772
Greenfield Community College	122,033	141,689	1,143	1,328	123,176	143,016	21,761	25,204	101,415	117,813	129,874	150,989
Holyoke Community College	280,107	325,461	2,625	3,050	282,731	328,511	49,949	57,894	232,782	270,617	249,669	290,195
Mass Bay Community College	150,237	174,563	1,408	1,636	151,644	176,198	26,791	31,051	124,854	145,147	162,709	189,120
Mass College of Art	580,750	674,292	5,442	6,318	586,192	680,611	103,561	119,944	482,631	560,667	593,775	690,156
Mass Maritime Academy	507,795	589,587	4,758	5,525	512,553	595,111	90,551	104,877	422,002	490,235	506,598	588,829
Mass College of Liberal Arts	459,957	534,043	4,310	5,004	464,266	539,047	82,021	94,996	382,246	444,050	451,462	525,012
Massasoit Community College	606,060	704,516	5,679	6,601	611,739	711,117	108,074	125,320	503,665	585,797	540,203	628,177
Middlesex Community College	572,508	665,580	5,365	6,237	577,873	671,817	102,091	118,395	475,781	553,423	510,297	593,460
Mt Wachusett Community College	223,050	258,978	2,090	2,427	225,140	261,404	39,775	46,067	185,365	215,337	219,905	255,600
North Essex Community College	214,238	249,032	2,007	2,333	216,245	251,366	38,204	44,298	178,042	207,068	232,024	269,800
North Shore Community College	338,405	393,429	3,171	3,687	341,576	397,115	60,345	69,984	281,231	327,131	366,500	426,238
Quinsigamond Community College	533,169	619,858	4,996	5,808	538,165	625,667	95,076	110,261	443,089	515,405	577,433	671,551
Roxbury Community College	158,578	184,401	1,486	1,728	160,064	186,129	28,278	32,802	131,786	153,328	141,346	164,420
Salem State College	1,214,437	1,410,048	11,380	13,212	1,225,816	1,423,261	216,562	250,822	1,009,254	1,172,439	1,183,293	1,375,365
Springfield Tech Community Coll	702,576	816,336	6,583	7,649	709,160	823,986	125,285	145,211	583,874	678,775	760,905	884,414
UMass (Boston)	1,630,729	1,893,393	15,280	17,742	1,646,009	1,911,134	290,796	336,800	1,355,213	1,574,335	1,713,195	1,991,280
UMass (Dartmouth)	1,520,514	1,765,426	14,248	16,542	1,534,762	1,781,968	271,142	314,037	1,263,619	1,467,932	1,362,091	1,583,185
UMass (Lowell)	3,526,870	4,167,482	33,048	39,050	3,559,918	4,206,532	628,922	741,318	2,930,996	3,465,214	3,379,438	4,001,527
Westfield State College	1,135,086	1,317,916	10,636	12,349	1,145,722	1,330,265	202,412	234,433	943,310	1,095,832	1,142,889	1,329,048
Worcester State College	962,151	1,117,941	9,016	10,475	971,167	1,128,416	171,574	198,861	799,593	929,555	1,042,029	1,211,171
Total	19,401,816	22,606,399	181,800	211,827	19,583,616	22,818,226	3,459,787	4,021,262	16,123,829	18,796,964	18,971,275	22,127,143

(1) - (4) Selected by Deloitte
(5) = (1) + (3)
(6) = (2) + (4)
(7) = [(1) x (Short-Term Portion from Sheet 2 of each Exhibit)] + [(3) x (Short-Term ULAE Portion)]
(8) = [(2) x (Short-Term Portion from Sheet 2 of each Exhibit)] + [(4) x (Short-Term ULAE Portion)]
(9) = [(1) x (Long-Term Portion from Sheet 2 of each Exhibit)] + [(3) x (Long-Term ULAE Portion)]
(10) = [(2) x (Long-Term Portion from Sheet 2 of each Exhibit)] + [(4) x (Long-Term ULAE Portion)]
(11), (12) From Prior Report as of June 30, 2022

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Indemnity (Including Lump Sum)

Section I
Exhibit I
Sheet 1

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Unpaid Loss Estimates

Accident Year	Payroll (00)'s	Retention	Unlimited Paid Loss @ 06/30/2023	Unlimited Reported Loss @ 06/30/2023	Ultimate Loss Low	Ultimate Loss High	Indicated Total Unpaid Loss Estimates Low	Indicated Total Unpaid Loss Estimates High	Case Reserves	Indicated IBNR Estimate Low	Indicated IBNR Estimate High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993		Unlimited	126,289,667	126,289,667	129,643,717	130,389,062	3,354,050	4,099,395	0	3,354,050	4,099,395
7/1/93 - 6/30/94	2,570,620	Unlimited	3,498,323	3,498,323	3,588,000	3,597,500	89,677	99,177	0	89,677	99,177
7/1/94 - 6/30/95	2,558,540	Unlimited	2,081,529	2,081,529	2,139,300	2,145,400	57,771	63,871	0	57,771	63,871
7/1/95 - 6/30/96	2,555,390	Unlimited	3,175,274	3,175,274	3,270,700	3,280,800	95,426	105,526	0	95,426	105,526
7/1/96 - 6/30/97	2,700,710	Unlimited	2,467,027	2,467,027	2,547,200	2,555,700	80,173	88,673	0	80,173	88,673
7/1/97 - 6/30/98	2,453,670	Unlimited	2,918,440	2,918,440	3,021,000	3,031,800	102,560	113,360	0	102,560	113,360
7/1/98 - 6/30/99	2,514,530	Unlimited	2,410,298	2,410,298	2,504,500	2,514,400	94,203	104,103	0	94,203	104,103
7/1/99 - 6/30/00	2,556,410	Unlimited	2,599,165	2,599,165	2,705,800	2,717,000	106,635	117,835	0	106,635	117,835
7/1/00 - 6/30/01	2,639,180	Unlimited	3,675,833	3,675,833	3,835,300	3,852,100	159,467	176,267	0	159,467	176,267
7/1/01 - 6/30/02	2,675,980	Unlimited	2,237,723	2,237,723	2,341,100	2,352,000	103,377	114,277	0	103,377	114,277
7/1/02 - 6/30/03	2,744,650	Unlimited	3,053,235	3,053,235	3,215,100	3,232,200	161,865	178,965	0	161,865	178,965
7/1/03 - 6/30/04	2,723,840	Unlimited	3,692,819	3,692,819	3,906,600	3,929,100	213,781	236,281	0	213,781	236,281
7/1/04 - 6/30/05	2,736,470	Unlimited	2,658,617	2,658,617	2,853,700	2,874,200	195,083	215,583	0	195,083	215,583
7/1/05 - 6/30/06	2,851,390	Unlimited	2,856,558	2,856,558	3,091,700	3,116,500	235,142	259,942	0	235,142	259,942
7/1/06 - 6/30/07	2,985,160	Unlimited	3,009,239	3,009,239	3,272,300	3,300,000	263,061	290,761	0	263,061	290,761
7/1/07 - 6/30/08	3,142,310	Unlimited	1,663,170	1,663,170	1,823,600	1,840,500	160,430	177,330	0	160,430	177,330
7/1/08 - 6/30/09	3,029,980	Unlimited	2,554,928	2,554,928	2,817,200	2,844,800	262,272	289,872	0	262,272	289,872
7/1/09 - 6/30/10	2,972,520	Unlimited	3,428,901	3,428,901	3,811,300	3,851,500	382,399	422,599	0	382,399	422,599
7/1/10 - 6/30/11	2,924,320	Unlimited	3,100,190	3,100,190	3,464,900	3,503,300	364,710	403,110	0	364,710	403,110
7/1/11 - 6/30/12	2,959,080	Unlimited	3,100,541	3,100,541	3,498,700	3,540,600	398,159	440,059	0	398,159	440,059
7/1/12 - 6/30/13	3,015,410	Unlimited	2,778,064	2,778,064	3,186,600	3,229,600	408,536	451,536	0	408,536	451,536
7/1/13 - 6/30/14	3,099,100	Unlimited	3,399,831	3,399,831	3,934,700	3,991,000	534,869	591,169	0	534,869	591,169
7/1/14 - 6/30/15	3,165,520	Unlimited	3,934,412	3,934,412	4,583,700	4,652,000	649,288	717,588	0	649,288	717,588
7/1/15 - 6/30/16	3,165,650	Unlimited	2,516,307	2,516,307	2,983,000	3,053,200	466,693	536,893	0	466,693	536,893
7/1/16 - 6/30/17	2,924,030	Unlimited	2,941,829	2,941,829	3,609,900	3,710,500	668,071	768,671	0	668,071	768,671
7/1/17 - 6/30/18	2,929,560	Unlimited	2,513,472	2,513,472	3,204,500	3,308,600	691,028	795,128	0	691,028	795,128
7/1/18 - 6/30/19	3,080,020	Unlimited	2,321,985	2,321,985	3,211,100	3,344,900	889,115	1,022,915	0	889,115	1,022,915
7/1/19 - 6/30/20	3,110,580	Unlimited	1,876,073	1,876,073	3,061,000	3,239,400	1,184,927	1,363,327	0	1,184,927	1,363,327
7/1/20 - 6/30/21	3,039,520	Unlimited	2,002,506	2,002,506	3,437,000	3,756,000	1,434,494	1,753,494	0	1,434,494	1,753,494
7/1/21 - 6/30/22	3,074,331	Unlimited	1,151,785	1,151,785	2,764,000	3,123,000	1,612,215	1,971,215	0	1,612,215	1,971,215
7/1/22 - 6/30/23	3,253,214	Unlimited	455,469	455,469	2,573,000	3,043,000	2,117,531	2,587,531	0	2,117,531	2,587,531
Total	86,151,685		206,363,209	206,363,209	223,900,217	226,919,662	17,537,009	20,556,453	0	17,537,009	20,556,453

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	Provided by Entity
(6)	From Section I, Exhibit I, Sheet 6, Column (11)
(7)	From Section I, Exhibit I, Sheet 6, Column (12)
(8)	= (6) - (4)
(9)	= (7) - (4)
(10)	= (5) - (4)
(11)	= (8) - (10)
(12)	= (9) - (10)

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Short-Term Portion

Accident Year	Age of Losses @ 06/30/2023	Selected Paid Test LDF @ 06/30/2023	Implied Paid LDF	Paid LDF	Cumulative Percent Paid	Incremental Percent Paid	Average Total Unpaid Loss Estimate	Undiscounted Cash Flow of Payments 2024
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
						0.24%		
Prior to 7/1/1993	372.0	1.025	1.030	1.025	97.57%	0.20%	3,726,723	368,562
7/1/93 - 6/30/94	360.0	1.027	1.027	1.027	97.37%	0.21%	94,427	7,167
7/1/94 - 6/30/95	348.0	1.029	1.029	1.029	97.16%	0.23%	60,821	4,544
7/1/95 - 6/30/96	336.0	1.032	1.032	1.032	96.93%	0.24%	100,476	7,413
7/1/96 - 6/30/97	324.0	1.034	1.034	1.034	96.69%	0.26%	84,423	6,169
7/1/97 - 6/30/98	312.0	1.037	1.037	1.037	96.43%	0.38%	107,960	7,836
7/1/98 - 6/30/99	300.0	1.041	1.041	1.041	96.05%	0.19%	99,153	9,640
7/1/99 - 6/30/00	288.0	1.043	1.043	1.043	95.86%	0.23%	112,235	5,060
7/1/00 - 6/30/01	276.0	1.046	1.046	1.046	95.63%	0.27%	167,867	8,822
7/1/01 - 6/30/02	264.0	1.049	1.049	1.049	95.36%	0.65%	108,827	6,321
7/1/02 - 6/30/03	252.0	1.056	1.056	1.056	94.71%	0.46%	170,415	20,916
7/1/03 - 6/30/04	240.0	1.061	1.061	1.061	94.26%	1.42%	225,031	17,974
7/1/04 - 6/30/05	228.0	1.077	1.077	1.077	92.83%	0.81%	205,333	40,788
7/1/05 - 6/30/06	216.0	1.087	1.087	1.087	92.03%	0.45%	247,542	24,999
7/1/06 - 6/30/07	204.0	1.092	1.092	1.092	91.57%	0.79%	276,911	14,863
7/1/07 - 6/30/08	192.0	1.102	1.102	1.102	90.78%	0.53%	168,880	14,476
7/1/08 - 6/30/09	180.0	1.108	1.108	1.108	90.25%	0.75%	276,072	15,125
7/1/09 - 6/30/10	168.0	1.117	1.117	1.117	89.49%	0.51%	402,499	28,918
7/1/10 - 6/30/11	156.0	1.124	1.124	1.124	88.98%	0.89%	383,910	17,882
7/1/11 - 6/30/12	144.0	1.135	1.135	1.135	88.09%	1.50%	419,109	31,275
7/1/12 - 6/30/13	132.0	1.155	1.155	1.155	86.60%	0.80%	430,036	48,057
7/1/13 - 6/30/14	120.0	1.166	1.166	1.166	85.79%	0.59%	563,019	31,830
7/1/14 - 6/30/15	108.0	1.174	1.174	1.174	85.20%	1.83%	683,438	27,333
7/1/15 - 6/30/16	96.0	1.199	1.199	1.199	83.37%	3.00%	501,793	55,101
7/1/16 - 6/30/17	84.0	1.244	1.244	1.244	80.37%	3.19%	718,371	109,832
7/1/17 - 6/30/18	72.0	1.296	1.296	1.296	77.18%	6.35%	743,078	103,936
7/1/18 - 6/30/19	60.0	1.412	1.412	1.412	70.84%	6.39%	956,015	208,033
7/1/19 - 6/30/20	48.0	1.552	1.679	1.552	64.44%	10.51%	1,274,127	229,085
7/1/20 - 6/30/21	36.0	1.854	1.796	1.854	53.93%	14.79%	1,593,994	363,740
7/1/21 - 6/30/22	24.0	2.555	2.556	2.555	39.14%	20.64%	1,791,715	435,435
7/1/22 - 6/30/23	12.0	5.405	6.165	5.405	18.50%	18.50%	2,352,531	595,715
Total							19,046,731	2,866,844

	Undiscounted	Discounted			
Short-Term Portion	15%	22%	(10)	Interest Rate	4%

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Age of (1) @ 06/30/2023
(3)	From Section I, Exhibit I, Sheet 10, Column (6)
(4)	Average Ultimate Loss Divided by Paid Loss From Section I, Exhibit I, Sheet 6
(5)	Selected
(6)	= 1 / (5)
(7)	= (6) from Current Age - (6) from Subsequent Age
(8)	From Section I, Exhibit I, Sheet 3
(9) - (9)	Based on (5)

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Indemnity (Including Lump Sum)

Section I
Exhibit I
Sheet 3

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Discounted at (4%) Unpaid Loss Estimate

Accident Year	Indicated Total Unpaid Loss Estimate Low	Indicated Total Unpaid Loss Estimate High	Discount Factor	Discounted Total Unpaid Loss Estimate Low	Discounted Total Unpaid Loss Estimate High
(1)	(2)	(3)	(4)	(5)	(6)
Prior to 7/1/1993	3,354,050	4,099,395	1.000	3,354,050	4,099,395
7/1/93 - 6/30/94	89,677	99,177	0.981	87,935	97,251
7/1/94 - 6/30/95	57,771	63,871	0.946	54,633	60,402
7/1/95 - 6/30/96	95,426	105,526	0.915	87,274	96,511
7/1/96 - 6/30/97	80,173	88,673	0.887	71,096	78,634
7/1/97 - 6/30/98	102,560	113,360	0.862	88,403	97,712
7/1/98 - 6/30/99	94,203	104,103	0.844	79,466	87,817
7/1/99 - 6/30/00	106,635	117,835	0.819	87,309	96,479
7/1/00 - 6/30/01	159,467	176,267	0.797	127,164	140,560
7/1/01 - 6/30/02	103,377	114,277	0.779	80,549	89,042
7/1/02 - 6/30/03	161,865	178,965	0.778	125,868	139,165
7/1/03 - 6/30/04	213,781	236,281	0.766	163,820	181,062
7/1/04 - 6/30/05	195,083	215,583	0.785	153,188	169,286
7/1/05 - 6/30/06	235,142	259,942	0.778	182,898	202,188
7/1/06 - 6/30/07	263,061	290,761	0.760	200,030	221,093
7/1/07 - 6/30/08	160,430	177,330	0.753	120,729	133,446
7/1/08 - 6/30/09	262,272	289,872	0.738	193,469	213,828
7/1/09 - 6/30/10	382,399	422,599	0.729	278,686	307,983
7/1/10 - 6/30/11	364,710	403,110	0.714	260,326	287,735
7/1/11 - 6/30/12	398,159	440,059	0.708	282,013	311,691
7/1/12 - 6/30/13	408,536	451,536	0.715	291,908	322,633
7/1/13 - 6/30/14	534,869	591,169	0.704	376,353	415,968
7/1/14 - 6/30/15	649,288	717,588	0.689	447,185	494,226
7/1/15 - 6/30/16	466,693	536,893	0.697	325,378	374,321
7/1/16 - 6/30/17	668,071	768,671	0.718	479,547	551,759
7/1/17 - 6/30/18	691,028	795,128	0.731	505,015	581,093
7/1/18 - 6/30/19	889,115	1,022,915	0.763	678,550	780,663
7/1/19 - 6/30/20	1,184,927	1,363,327	0.778	922,096	1,060,925
7/1/20 - 6/30/21	1,434,494	1,753,494	0.801	1,149,421	1,405,027
7/1/21 - 6/30/22	1,612,215	1,971,215	0.822	1,324,469	1,619,395
7/1/22 - 6/30/23	2,117,531	2,587,531	0.838	1,774,920	2,168,875
Total	17,537,009	20,556,453		14,353,749	16,886,165

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From Section I, Exhibit I, Sheet 1, Column (8)
(3) From Section I, Exhibit I, Sheet 1, Column (9)
(4) From Section I, Exhibit I, Sheet 0, Column (8)
(5) = (2) x (4)
(6) = (3) x (4)

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Indemnity (Including Lump Sum)

Section I
Exhibit I
Sheet 4

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Actual vs Expected - Paid Loss Emergence

Accident Year	Selected Low Ultimate Loss @ 06/30/2022	Selected High Ultimate Loss @ 06/30/2022	Unlimited Paid Loss @ 06/30/2022	Unlimited Paid Loss @ 06/30/2023	Paid LDF @ 06/30/2022	Projected Paid LDF @ 06/30/2023	Method 1 Low Expected Paid Emergence Loss @ 06/30/2023	Method 1 High Expected Paid Emergence Loss @ 06/30/2023	Actual Paid Emergence Loss @ 06/30/2023	Actual - Expected Method 1 Low Paid	Actual - Expected Method 1 High Paid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993	129,774,303	130,630,402	125,865,934	126,289,667	1.027	1.024	386,218	470,816	423,733	37,515	(47,083)
7/1/93 - 6/30/94	3,594,400	3,604,600	3,498,323	3,498,323	1.029	1.027	7,168	7,929	0	(7,168)	(7,929)
7/1/94 - 6/30/95	2,143,400	2,149,900	2,081,529	2,081,529	1.031	1.029	4,557	5,036	0	(4,557)	(5,036)
7/1/95 - 6/30/96	3,277,300	3,288,100	3,175,274	3,175,274	1.034	1.031	7,442	8,230	0	(7,442)	(8,230)
7/1/96 - 6/30/97	2,552,800	2,561,800	2,467,027	2,467,027	1.037	1.034	6,214	6,867	0	(6,214)	(6,867)
7/1/97 - 6/30/98	2,894,600	2,905,100	2,794,757	2,918,440	1.038	1.037	2,654	2,933	123,683	121,029	120,750
7/1/98 - 6/30/99	2,500,700	2,510,200	2,410,298	2,410,298	1.039	1.038	4,111	4,543	0	(4,111)	(4,543)
7/1/99 - 6/30/00	2,703,100	2,714,000	2,599,165	2,599,165	1.042	1.039	6,168	6,814	0	(6,168)	(6,814)
7/1/00 - 6/30/01	3,823,100	3,840,100	3,661,210	3,675,833	1.047	1.042	14,922	16,489	14,623	(299)	(1,866)
7/1/01 - 6/30/02	2,351,700	2,363,600	2,237,723	2,237,723	1.054	1.047	14,324	15,820	0	(14,324)	(15,820)
7/1/02 - 6/30/03	3,229,400	3,247,900	3,053,235	3,053,235	1.061	1.054	19,627	21,689	0	(19,627)	(21,689)
7/1/03 - 6/30/04	3,873,200	3,899,600	3,622,149	3,692,819	1.073	1.061	39,677	43,849	70,670	30,994	26,821
7/1/04 - 6/30/05	2,873,900	2,896,500	2,658,617	2,658,617	1.085	1.073	28,884	31,916	0	(28,884)	(31,916)
7/1/05 - 6/30/06	3,111,600	3,138,500	2,856,558	2,856,558	1.094	1.085	21,953	24,269	0	(21,953)	(24,269)
7/1/06 - 6/30/07	3,306,700	3,338,000	3,009,239	3,009,239	1.104	1.094	26,250	29,012	0	(26,250)	(29,012)
7/1/07 - 6/30/08	1,839,300	1,857,900	1,663,170	1,663,170	1.111	1.104	10,658	11,784	0	(10,658)	(11,784)
7/1/08 - 6/30/09	2,806,900	2,837,700	2,514,422	2,554,928	1.122	1.111	23,561	26,042	40,506	16,945	14,464
7/1/09 - 6/30/10	3,850,200	3,894,500	3,428,900	3,428,901	1.129	1.122	19,948	22,045	1	(19,947)	(22,044)
7/1/10 - 6/30/11	3,460,300	3,502,600	3,058,135	3,100,190	1.138	1.129	23,379	25,838	42,055	18,676	16,217
7/1/11 - 6/30/12	3,531,900	3,580,400	3,071,351	3,100,541	1.158	1.138	49,776	55,018	29,189	(20,586)	(25,828)
7/1/12 - 6/30/13	3,228,900	3,276,700	2,774,864	2,778,064	1.172	1.158	32,795	36,248	3,200	(29,595)	(33,048)
7/1/13 - 6/30/14	3,974,000	4,036,000	3,385,147	3,399,831	1.183	1.172	29,793	32,930	14,685	(15,108)	(18,245)
7/1/14 - 6/30/15	4,537,700	4,646,100	3,818,035	3,934,412	1.203	1.183	58,795	67,651	116,377	57,582	48,726
7/1/15 - 6/30/16	2,760,900	2,835,200	2,267,272	2,516,307	1.234	1.203	55,095	63,387	249,035	193,940	185,647
7/1/16 - 6/30/17	3,418,800	3,523,500	2,723,456	2,941,829	1.275	1.234	82,963	95,455	218,374	135,411	122,919
7/1/17 - 6/30/18	3,246,700	3,375,800	2,389,278	2,513,472	1.386	1.275	194,116	223,344	124,194	(69,923)	(99,150)
7/1/18 - 6/30/19	3,235,900	3,396,300	2,170,273	2,321,985	1.528	1.386	206,889	238,030	151,712	(55,177)	(86,318)
7/1/19 - 6/30/20	2,936,000	3,243,000	1,552,039	1,876,073	1.843	1.528	338,647	413,768	324,035	(14,613)	(89,734)
7/1/20 - 6/30/21	3,162,000	3,557,000	1,384,026	2,002,506	2.440	1.843	399,798	488,619	618,480	218,682	129,861
7/1/21 - 6/30/22	2,824,000	3,322,000	582,897	1,151,785	5.177	2.440	601,793	735,518	568,888	(32,905)	(166,631)
Total	220,823,703	223,973,002	202,774,301	205,907,739			2,718,175	3,231,887	3,133,438	415,263	(98,449)

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Selected by Deloitte Consulting LLP @ 06/30/2022
(3)	Selected by Deloitte Consulting LLP @ 06/30/2022
(4)	Provided by Entity
(5)	Provided by Entity
(6)	Selected by Deloitte Consulting LLP @ 06/30/2022
(7)	Interpolated From (6)
(8)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((2) - (4))
(9)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((3) - (4))
(10)	= (5) - (4)
(11)	= (10) - (8)
(12)	= (10) - (9)

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Indemnity (Including Lump Sum)

Section I
Exhibit I
Sheet 5

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Ultimate Loss Runoff

Accident Year	Ultimate Loss @ 06/30/2022 Low	Ultimate Loss @ 06/30/2022 High	Ultimate Loss @ 06/30/2023 Low	Ultimate Loss @ 06/30/2023 High	Deloitte Change Low	Deloitte Change High	Paid Loss @ 06/30/2023	Reported Loss @ 06/30/2023
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	129,774,303	130,630,402	129,643,717	130,389,062	(130,586)	(241,340)	126,289,667	126,289,667
7/1/93 - 6/30/94	3,594,400	3,604,600	3,588,000	3,597,500	(6,400)	(7,100)	3,498,323	3,498,323
7/1/94 - 6/30/95	2,143,400	2,149,900	2,139,300	2,145,400	(4,100)	(4,500)	2,081,529	2,081,529
7/1/95 - 6/30/96	3,277,300	3,288,100	3,270,700	3,280,800	(6,600)	(7,300)	3,175,274	3,175,274
7/1/96 - 6/30/97	2,552,800	2,561,800	2,547,200	2,555,700	(5,600)	(6,100)	2,467,027	2,467,027
7/1/97 - 6/30/98	2,894,600	2,905,100	3,021,000	3,031,800	126,400	126,700	2,918,440	2,918,440
7/1/98 - 6/30/99	2,500,700	2,510,200	2,504,500	2,514,400	3,800	4,200	2,410,298	2,410,298
7/1/99 - 6/30/00	2,703,100	2,714,000	2,705,800	2,717,000	2,700	3,000	2,599,165	2,599,165
7/1/00 - 6/30/01	3,823,100	3,840,100	3,835,300	3,852,100	12,200	12,000	3,675,833	3,675,833
7/1/01 - 6/30/02	2,351,700	2,363,600	2,341,100	2,352,000	(10,600)	(11,600)	2,237,723	2,237,723
7/1/02 - 6/30/03	3,229,400	3,247,900	3,215,100	3,232,200	(14,300)	(15,700)	3,053,235	3,053,235
7/1/03 - 6/30/04	3,873,200	3,899,600	3,906,600	3,929,100	33,400	29,500	3,692,819	3,692,819
7/1/04 - 6/30/05	2,873,900	2,896,500	2,853,700	2,874,200	(20,200)	(22,300)	2,658,617	2,658,617
7/1/05 - 6/30/06	3,111,600	3,138,500	3,091,700	3,116,500	(19,900)	(22,000)	2,856,558	2,856,558
7/1/06 - 6/30/07	3,306,700	3,338,000	3,272,300	3,300,000	(34,400)	(38,000)	3,009,239	3,009,239
7/1/07 - 6/30/08	1,839,300	1,857,900	1,823,600	1,840,500	(15,700)	(17,400)	1,663,170	1,663,170
7/1/08 - 6/30/09	2,806,900	2,837,700	2,817,200	2,844,800	10,300	7,100	2,554,928	2,554,928
7/1/09 - 6/30/10	3,850,200	3,894,500	3,811,300	3,851,500	(38,900)	(43,000)	3,428,901	3,428,901
7/1/10 - 6/30/11	3,460,300	3,502,600	3,464,900	3,503,300	4,600	700	3,100,190	3,100,190
7/1/11 - 6/30/12	3,531,900	3,580,400	3,498,700	3,540,600	(33,200)	(39,800)	3,100,541	3,100,541
7/1/12 - 6/30/13	3,228,900	3,276,700	3,186,600	3,229,600	(42,300)	(47,100)	2,778,064	2,778,064
7/1/13 - 6/30/14	3,974,000	4,036,000	3,934,700	3,991,000	(39,300)	(45,000)	3,399,831	3,399,831
7/1/14 - 6/30/15	4,537,700	4,646,100	4,583,700	4,652,000	46,000	5,900	3,934,412	3,934,412
7/1/15 - 6/30/16	2,760,900	2,835,200	2,983,000	3,053,200	222,100	218,000	2,516,307	2,516,307
7/1/16 - 6/30/17	3,418,800	3,523,500	3,609,900	3,710,500	191,100	187,000	2,941,829	2,941,829
7/1/17 - 6/30/18	3,246,700	3,375,800	3,204,500	3,308,600	(42,200)	(67,200)	2,513,472	2,513,472
7/1/18 - 6/30/19	3,235,900	3,396,300	3,211,100	3,344,900	(24,800)	(51,400)	2,321,985	2,321,985
7/1/19 - 6/30/20	2,936,000	3,243,000	3,061,000	3,239,400	125,000	(3,600)	1,876,073	1,876,073
7/1/20 - 6/30/21	3,162,000	3,557,000	3,437,000	3,756,000	275,000	199,000	2,002,506	2,002,506
7/1/21 - 6/30/22	2,824,000	3,322,000	2,764,000	3,123,000	(60,000)	(199,000)	1,151,785	1,151,785
Total	220,823,703	223,973,002	221,327,217	223,876,662	503,514	(96,340)	205,907,739	205,907,739

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(3) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(4) From Section I, Exhibit I, Sheet 6, Column (11)
(5) From Section I, Exhibit I, Sheet 6, Column (12)
(6) = (4) - (2)
(7) = (5) - (3)
(8) Provided by Entity
(9) Provided by Entity

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Selection of Ultimate Loss

Accident Year	Payroll (00)'s	Unlimited Paid Loss @ 06/30/2023	Unlimited Reported Loss @ 06/30/2023	Ultimate Loss Indications: Paid LDM	Ultimate Loss Indications: Expected Loss	Ultimate Loss Indications: Paid B-F	Ultimate Loss Indications: Frequency Severity	Prior Selected Ultimate Loss: Low	Prior Selected Ultimate Loss: High	Selected Ultimate Loss: Low	Selected Ultimate Loss: High	Ultimate Loss Rates: Low	Ultimate Loss Rates: High	Ultimate Loss Severity: Low	Ultimate Loss Severity: High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Prior to 7/1/1993		126,289,667	126,289,667	129,433,360	0		0	129,774,303	130,630,402	129,643,717	130,389,062				
7/1/93 - 6/30/94	2,570,620	3,498,323	3,498,323	3,592,752	2,167,094	3,555,281	0	3,594,400	3,604,600	3,588,000	3,597,500	1.40	1.40		
7/1/94 - 6/30/95	2,558,540	2,081,529	2,081,529	2,142,384	2,186,955	2,143,650	0	2,143,400	2,149,900	2,139,300	2,145,400	0.84	0.84		
7/1/95 - 6/30/96	2,555,390	3,175,274	3,175,274	3,275,733	2,213,249	3,243,149	0	3,277,300	3,288,100	3,270,700	3,280,800	1.28	1.28		
7/1/96 - 6/30/97	2,700,710	2,467,027	2,467,027	2,551,442	2,374,552	2,545,590	0	2,552,800	2,561,800	2,547,200	2,555,700	0.94	0.95		
7/1/97 - 6/30/98	2,453,670	2,918,440	2,918,440	3,026,406	2,195,447	2,996,762	0	2,894,600	2,905,100	3,021,000	3,031,800	1.23	1.24		
7/1/98 - 6/30/99	2,514,530	2,410,298	2,410,298	2,509,463	2,292,483	2,500,888	0	2,500,700	2,510,200	2,504,500	2,514,400	1.00	1.00		
7/1/99 - 6/30/00	2,556,410	2,599,165	2,599,165	2,711,367	2,383,235	2,697,788	0	2,703,100	2,714,000	2,705,800	2,717,000	1.06	1.06		
7/1/00 - 6/30/01	2,639,180	3,675,833	3,675,833	3,843,717	2,530,615	3,786,364	0	3,823,100	3,840,100	3,835,300	3,852,100	1.45	1.46		
7/1/01 - 6/30/02	2,675,980	2,237,723	2,237,723	2,346,534	2,625,993	2,359,492	0	2,351,700	2,363,600	2,341,100	2,352,000	0.87	0.88		
7/1/02 - 6/30/03	2,744,650	3,053,235	3,053,235	3,223,630	2,718,895	3,196,951	0	3,229,400	3,247,900	3,215,100	3,232,200	1.17	1.18		
7/1/03 - 6/30/04	2,723,840	3,692,819	3,692,819	3,917,890	2,712,388	3,848,637	0	3,873,200	3,899,600	3,906,600	3,929,100	1.43	1.44		
7/1/04 - 6/30/05	2,736,470	2,658,617	2,658,617	2,863,923	2,754,238	2,856,060	0	2,873,900	2,896,500	2,853,700	2,874,200	1.04	1.05		
7/1/05 - 6/30/06	2,851,390	2,856,558	2,856,558	3,104,077	2,913,388	3,088,871	0	3,111,600	3,138,500	3,091,700	3,116,500	1.08	1.09		
7/1/06 - 6/30/07	2,985,160	3,009,239	3,009,239	3,286,137	3,098,586	3,270,333	0	3,306,700	3,338,000	3,272,300	3,300,000	1.10	1.11		
7/1/07 - 6/30/08	3,142,310	1,663,170	1,663,170	1,832,012	3,314,005	1,968,596	0	1,839,300	1,857,900	1,823,600	1,840,500	0.58	0.59		
7/1/08 - 6/30/09	3,029,980	2,554,928	2,554,928	2,830,958	3,243,537	2,871,187	0	2,806,900	2,837,700	2,817,200	2,844,800	0.93	0.94		
7/1/09 - 6/30/10	2,972,520	3,428,901	3,428,901	3,831,396	3,211,017	3,766,224	0	3,850,200	3,894,500	3,811,300	3,851,500	1.28	1.30		
7/1/10 - 6/30/11	2,924,320	3,100,190	3,100,190	3,484,080	3,175,465	3,450,076	0	3,460,300	3,502,600	3,464,900	3,503,300	1.18	1.20		
7/1/11 - 6/30/12	2,959,080	3,100,541	3,100,541	3,519,619	3,247,282	3,487,192	0	3,531,900	3,580,400	3,498,700	3,540,600	1.18	1.20		
7/1/12 - 6/30/13	3,015,410	2,778,064	2,778,064	3,208,109	3,353,005	3,227,533	3,817,655	3,228,900	3,276,700	3,186,600	3,229,600	1.06	1.07	13,855	14,042
7/1/13 - 6/30/14	3,099,100	3,399,831	3,399,831	3,962,887	3,479,671	3,894,230	4,453,901	3,974,000	4,036,000	3,934,700	3,991,000	1.27	1.29	15,251	15,469
7/1/14 - 6/30/15	3,165,520	3,934,412	3,934,412	4,617,860	3,590,232	4,465,770	4,131,052	4,537,700	4,646,100	4,583,700	4,652,000	1.45	1.47	19,929	20,226
7/1/15 - 6/30/16	3,165,650	2,516,307	2,516,307	3,018,086	3,635,315	3,120,705	3,952,339	2,760,900	2,835,200	2,983,000	3,053,200	0.94	0.96	14,137	14,470
7/1/16 - 6/30/17	2,924,030	2,941,829	2,941,829	3,660,195	3,401,986	3,609,518	4,026,686	3,418,800	3,523,500	3,609,900	3,710,500	1.23	1.27	17,524	18,012
7/1/17 - 6/30/18	2,929,560	2,513,472	2,513,472	3,256,553	3,456,639	3,302,208	3,777,378	3,246,700	3,375,800	3,204,500	3,308,600	1.09	1.13	17,322	17,884
7/1/18 - 6/30/19	3,080,020	2,321,985	2,321,985	3,277,987	3,688,329	3,397,660	3,713,895	3,235,900	3,396,300	3,211,100	3,344,900	1.04	1.09	18,455	19,224
7/1/19 - 6/30/20	3,110,580	1,876,073	1,876,073	2,911,234	3,781,374	3,220,633	3,079,846	2,936,000	3,243,000	3,061,000	3,239,400	0.98	1.04	22,181	23,474
7/1/20 - 6/30/21	3,039,520	2,002,506	2,002,506	3,713,190	3,766,280	3,737,649	3,284,707	3,162,000	3,557,000	3,437,000	3,756,000	1.13	1.24	24,517	26,793
7/1/21 - 6/30/22	3,074,331	1,151,785	1,151,785	2,942,836	3,921,116	3,538,231	2,348,840	2,824,000	3,322,000	2,764,000	3,123,000	0.90	1.02	29,232	33,029
7/1/22 - 6/30/23	3,253,214	455,469	455,469	2,461,831	4,252,065	3,920,850	2,387,452			2,573,000	3,043,000	0.79	0.94	28,258	33,420
Total	86,151,685	206,363,209	206,363,209	224,357,648	91,684,436	97,068,080	38,973,752	220,823,703	223,973,002	223,900,217	226,919,662				

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	From Section I, Exhibit I, Sheet 10, Column (7)
(6)	From Section I, Exhibit I, Sheet 7, Column (4)
(7)	From Section I, Exhibit I, Sheet 7, Column (10)
(8)	From Section I, Exhibit I, Sheet 9, Column (12)
(9)	From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(10)	From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(11)	Selected by Deloitte Consulting LLP
(12)	Selected by Deloitte Consulting LLP
(13)	= (11) / (2)
(14)	= (12) / (2)
(15)	(11) Divided by Ultimate Claims From Section I, Exhibit I, Sheet 13, Column (7)
(16)	(12) Divided by Ultimate Claims From Section I, Exhibit I, Sheet 13, Column (7)

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Indemnity (Including Lump Sum)

Section I
Exhibit I
Sheet 7

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Bornhuetter-Ferguson Method

Accident Year	Payroll (00)'s	Initial Expected Loss Rates	Initial Expected Loss	Expected % of Paid Loss	Expected Paid Loss	Unlimited Actual Paid Loss	Expected % of Unpaid Loss	Expected Unpaid Loss	Unlimited Indicated Ultimate Loss	Unlimited Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
7/1/93 - 6/30/94	2,570,620	0.84	2,167,094	97.4%	2,110,136	3,498,323	2.6%	56,958	3,555,281	1.38
7/1/94 - 6/30/95	2,558,540	0.85	2,186,955	97.2%	2,124,834	2,081,529	2.8%	62,121	2,143,650	0.84
7/1/95 - 6/30/96	2,555,390	0.87	2,213,249	96.9%	2,145,374	3,175,274	3.1%	67,876	3,243,149	1.27
7/1/96 - 6/30/97	2,700,710	0.88	2,374,552	96.7%	2,295,989	2,467,027	3.3%	78,563	2,545,590	0.94
7/1/97 - 6/30/98	2,453,670	0.89	2,195,447	96.4%	2,117,126	2,918,440	3.6%	78,322	2,996,762	1.22
7/1/98 - 6/30/99	2,514,530	0.91	2,292,483	96.0%	2,201,892	2,410,298	4.0%	90,591	2,500,888	0.99
7/1/99 - 6/30/00	2,556,410	0.93	2,383,235	95.9%	2,284,611	2,599,165	4.1%	98,623	2,697,788	1.06
7/1/00 - 6/30/01	2,639,180	0.96	2,530,615	95.6%	2,420,084	3,675,833	4.4%	110,531	3,786,364	1.43
7/1/01 - 6/30/02	2,675,980	0.98	2,625,993	95.4%	2,504,224	2,237,723	4.6%	121,769	2,359,492	0.88
7/1/02 - 6/30/03	2,744,650	0.99	2,718,895	94.7%	2,575,178	3,053,235	5.3%	143,716	3,196,951	1.16
7/1/03 - 6/30/04	2,723,840	1.00	2,712,388	94.3%	2,556,570	3,692,819	5.7%	155,818	3,848,637	1.41
7/1/04 - 6/30/05	2,736,470	1.01	2,754,238	92.8%	2,556,795	2,658,617	7.2%	197,443	2,856,060	1.04
7/1/05 - 6/30/06	2,851,390	1.02	2,913,388	92.0%	2,681,075	2,856,558	8.0%	232,313	3,088,871	1.08
7/1/06 - 6/30/07	2,985,160	1.04	3,098,586	91.6%	2,837,491	3,009,239	8.4%	261,095	3,270,333	1.10
7/1/07 - 6/30/08	3,142,310	1.05	3,314,005	90.8%	3,008,578	1,663,170	9.2%	305,427	1,968,596	0.63
7/1/08 - 6/30/09	3,029,980	1.07	3,243,537	90.2%	2,927,279	2,554,928	9.8%	316,258	2,871,187	0.95
7/1/09 - 6/30/10	2,972,520	1.08	3,211,017	89.5%	2,873,694	3,428,901	10.5%	337,323	3,766,224	1.27
7/1/10 - 6/30/11	2,924,320	1.09	3,175,465	89.0%	2,825,579	3,100,190	11.0%	349,886	3,450,076	1.18
7/1/11 - 6/30/12	2,959,080	1.10	3,247,282	88.1%	2,860,630	3,100,541	11.9%	386,652	3,487,192	1.18
7/1/12 - 6/30/13	3,015,410	1.11	3,353,005	86.6%	2,903,537	2,778,064	13.4%	449,469	3,227,533	1.07
7/1/13 - 6/30/14	3,099,100	1.12	3,479,671	85.8%	2,985,272	3,399,831	14.2%	494,399	3,894,230	1.26
7/1/14 - 6/30/15	3,165,520	1.13	3,590,232	85.2%	3,058,873	3,934,412	14.8%	531,358	4,465,770	1.41
7/1/15 - 6/30/16	3,165,650	1.15	3,635,315	83.4%	3,030,916	2,516,307	16.6%	604,398	3,120,705	0.99
7/1/16 - 6/30/17	2,924,030	1.16	3,401,986	80.4%	2,734,297	2,941,829	19.6%	667,688	3,609,518	1.23
7/1/17 - 6/30/18	2,929,560	1.18	3,456,639	77.2%	2,667,902	2,513,472	22.8%	788,737	3,302,208	1.13
7/1/18 - 6/30/19	3,080,020	1.20	3,688,329	70.8%	2,612,654	2,321,985	29.2%	1,075,675	3,397,660	1.10
7/1/19 - 6/30/20	3,110,580	1.22	3,781,374	64.4%	2,436,814	1,876,073	35.6%	1,344,560	3,220,633	1.04
7/1/20 - 6/30/21	3,039,520	1.24	3,766,280	53.9%	2,031,138	2,002,506	46.1%	1,735,143	3,737,649	1.23
7/1/21 - 6/30/22	3,074,331	1.28	3,921,116	39.1%	1,534,670	1,151,785	60.9%	2,386,446	3,538,231	1.15
7/1/22 - 6/30/23	3,253,214	1.31	4,252,065	18.5%	786,685	455,469	81.5%	3,465,380	3,920,850	1.21
Total	86,151,685		91,684,436		74,689,898	80,073,542		16,994,538	97,068,080	

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	From Section I, Exhibit I, Sheet 8, Column (13)
(4)	= (2) x (3)
(5)	= 1 / Section I, Exhibit I, Sheet 10, Column (6)
(6)	= (4) x (5)
(7)	Provided by Entity
(8)	= 1 - (5)
(9)	= (4) x (8)
(10)	= (7) + (9)
(11)	= (10) / (2)

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Calculation of Initial Expected Loss Rates

Accident Year	Payroll (00)'s	Payroll Trend	Loss Development Unlimited Indicated Ultimate Loss Paid	Reported	Selected Initial Ultimate Loss	Loss Trend Factor	Benefit Level Adjustment Factors	Trended Ultimate	On-level Loss Rates	Detrended Loss Rates	Prior Expected Loss Rates	Initial Expected Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
7/1/93 - 6/30/94	2,570,620	2.357	3,592,752	3,592,752	130,016,390	2.712	1.347	475,034,377	***78.42***	0.84	0.87	0.84
7/1/94 - 6/30/95	2,558,540	2.288	2,142,384	2,142,384	3,592,750	2.620	1.335	12,569,236	2.15	0.85	0.88	0.85
7/1/95 - 6/30/96	2,555,390	2.221	3,275,733	3,275,733	2,142,350	2.532	1.324	7,181,408	1.27	0.87	0.89	0.87
7/1/96 - 6/30/97	2,700,710	2.157	2,551,442	2,551,442	3,275,750	2.446	1.311	10,501,763	1.80	0.88	0.90	0.88
7/1/97 - 6/30/98	2,453,670	2.094	3,026,406	3,026,406	2,551,450	2.363	1.294	7,803,655	1.52	0.89	0.92	0.89
7/1/98 - 6/30/99	2,514,530	2.033	2,509,463	2,509,463	3,026,400	2.283	1.276	8,819,780	1.73	0.91	0.94	0.91
7/1/99 - 6/30/00	2,556,410	1.974	2,711,367	2,711,367	2,509,450	2.206	1.254	6,943,617	1.38	0.93	0.96	0.93
7/1/00 - 6/30/01	2,639,180	1.916	3,843,717	3,843,717	2,711,400	2.132	1.225	7,081,786	1.40	0.96	0.99	0.96
7/1/01 - 6/30/02	2,675,980	1.860	2,346,534	2,346,534	3,843,700	2.059	1.203	9,523,745	1.91	0.98	1.01	0.98
7/1/02 - 6/30/03	2,744,650	1.806	3,223,630	3,223,630	2,346,550	1.990	1.198	5,591,859	1.13	0.99	1.02	0.99
7/1/03 - 6/30/04	2,723,840	1.754	3,917,890	3,917,890	3,223,650	1.923	1.197	7,419,458	1.55	1.00	1.02	1.00
7/1/04 - 6/30/05	2,736,470	1.702	2,863,923	2,863,923	3,917,850	1.857	1.190	8,661,526	1.86	1.01	1.04	1.01
7/1/05 - 6/30/06	2,851,390	1.653	3,104,077	3,104,077	2,863,950	1.795	1.178	6,055,414	1.28	1.02	1.05	1.02
7/1/06 - 6/30/07	2,985,160	1.605	3,286,137	3,286,137	3,104,100	1.734	1.165	6,272,240	1.31	1.04	1.07	1.04
7/1/07 - 6/30/08	3,142,310	1.558	1,832,012	1,832,012	3,286,150	1.675	1.152	6,344,961	1.30	1.05	1.09	1.05
7/1/08 - 6/30/09	3,029,980	1.513	2,830,958	2,830,958	1,832,050	1.619	1.141	3,383,503	0.74	1.07	1.10	1.07
7/1/09 - 6/30/10	2,972,520	1.469	3,831,396	3,831,396	2,831,000	1.564	1.136	5,030,293	1.15	1.08	1.11	1.08
7/1/10 - 6/30/11	2,924,320	1.426	3,484,080	3,484,080	3,831,400	1.511	1.136	6,575,201	1.58	1.09	1.12	1.09
7/1/11 - 6/30/12	2,959,080	1.384	3,519,619	3,519,619	3,484,100	1.460	1.129	5,744,127	1.40	1.10	1.13	1.10
7/1/12 - 6/30/13	3,015,410	1.344	3,208,109	3,208,109	3,519,650	1.411	1.120	5,559,953	1.37	1.11	1.14	1.11
7/1/13 - 6/30/14	3,099,100	1.305	3,962,887	3,962,887	3,208,100	1.363	1.114	4,872,676	1.21	1.12	1.16	1.12
7/1/14 - 6/30/15	3,165,520	1.267	4,617,860	4,617,860	3,962,850	1.317	1.109	5,785,159	1.44	1.13	1.17	1.13
7/1/15 - 6/30/16	3,165,650	1.230	3,018,086	3,018,086	4,617,850	1.272	1.100	6,464,108	1.66	1.15	1.18	1.15
7/1/16 - 6/30/17	2,924,030	1.194	3,660,195	3,660,195	3,018,100	1.229	1.091	4,048,495	1.16	1.16	1.20	1.16
7/1/17 - 6/30/18	2,929,560	1.159	3,256,553	3,256,553	3,660,200	1.188	1.081	4,700,312	1.38	1.18	1.21	1.18
7/1/18 - 6/30/19	3,080,020	1.126	3,277,987	3,277,987	3,256,550	1.148	1.071	4,000,533	1.15	1.20	1.23	1.20
7/1/19 - 6/30/20	3,110,580	1.093	2,911,234	2,911,234	3,278,000	1.109	1.060	3,851,231	1.13	1.22	1.25	1.22
7/1/20 - 6/30/21	3,039,520	1.061	3,713,190	3,713,190	3,713,190	1.071	1.045	4,155,289	***1.29***	1.24	1.27	1.24
7/1/21 - 6/30/22	3,074,331	1.030	2,942,836	2,942,836	2,942,836	1.035	1.020	3,106,215	***0.98***	1.28	1.31	1.28
7/1/22 - 6/30/23	3,253,214	1.000	2,461,831	2,461,831	2,461,831	1.000	1.000	2,461,831	***0.76***	1.31		1.31
			94,924,288	94,924,288				Last 3 Wtd Avg	1.22			
								Last 4 Wtd Avg	1.21			
								Last 5 Wtd Avg	1.31			
								All Per Wtd Avg	1.44			

(Note: numbers in bold and italics and with borders are excluded from the calculated averages)

Selected (14) 1.31

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Selected by Deloitte Consulting LLP
(4) From Section I, Exhibit I, Sheet 10, Column (7)
(5) From Section I, Exhibit I, Sheet 0, Column (7)
(6) Selected by Deloitte Consulting LLP
(7) Selected by Deloitte Consulting LLP
(8) Based on industry sources
(9) = (6) x (7) x (8)
(10) = (9) / [(2) x (3)]
(11) = (14) / (7) / (8) * (3)
(12) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(13) Selected for by Deloitte Consulting LLP Based on (14)
(14) Selected by Deloitte Consulting LLP

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Frequency Severity Method

Accident Year	Payroll (00)'s	Ultimate Reported Severity	Include For Fit	Exponential Fitted Reported Severity	Initial Selected Ultimate Severity	Selected Ultimate Claim Counts	Benefit Level Adjustment Factor	Selected Severity Trend	Trended Severity	On-Level Selected Ultimate Severity	Indicated Ultimate Loss	Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Prior to 7/1/1993			Exclude	5,722		0					0	
7/1/93 - 6/30/94	2,570,620		Exclude	6,024		0	1.347	2.712	0,000		0	0.00
7/1/94 - 6/30/95	2,558,540		Exclude	6,341		0	1.335	2.620	0,000		0	0.00
7/1/95 - 6/30/96	2,555,390		Exclude	6,675		0	1.324	2.532	0,000		0	0.00
7/1/96 - 6/30/97	2,700,710		Exclude	7,027		0	1.311	2.446	0,000		0	0.00
7/1/97 - 6/30/98	2,453,670		Exclude	7,397		0	1.294	2.363	0,000		0	0.00
7/1/98 - 6/30/99	2,514,530		Exclude	7,787		0	1.276	2.283	0,000		0	0.00
7/1/99 - 6/30/00	2,556,410		Exclude	8,197		0	1.254	2.206	0,000		0	0.00
7/1/00 - 6/30/01	2,639,180		Exclude	8,629		0	1.225	2.132	0,000		0	0.00
7/1/01 - 6/30/02	2,675,980		Exclude	9,084		0	1.203	2.059	0,000		0	0.00
7/1/02 - 6/30/03	2,744,650		Exclude	9,562		0	1.198	1.990	0,000		0	0.00
7/1/03 - 6/30/04	2,723,840		Exclude	10,066		0	1.197	1.923	0,000		0	0.00
7/1/04 - 6/30/05	2,736,470		Exclude	10,596		0	1.190	1.857	0,000		0	0.00
7/1/05 - 6/30/06	2,851,390		Exclude	11,155		0	1.178	1.795	0,000		0	0.00
7/1/06 - 6/30/07	2,985,160		Exclude	11,742		0	1.165	1.734	0,000		0	0.00
7/1/07 - 6/30/08	3,142,310		Exclude	12,361		0	1.152	1.675	0,000		0	0.00
7/1/08 - 6/30/09	3,029,980		Exclude	13,012		0	1.141	1.619	0,000		0	0.00
7/1/09 - 6/30/10	2,972,520		Exclude	13,698		0	1.136	1.564	0,000		0	0.00
7/1/10 - 6/30/11	2,924,320		Exclude	14,419		0	1.136	1.511	0,000		0	0.00
7/1/11 - 6/30/12	2,959,080		Exclude	15,179		0	1.129	1.460	0,000		0	0.00
7/1/12 - 6/30/13	3,015,410	13,948	Include	15,979	15,303	230	1.120	1.411	24,174	26,220	3,817,655	1.27
7/1/13 - 6/30/14	3,099,100	15,360	Include	16,821	12,434	258	1.114	1.363	18,886	26,220	4,453,901	1.44
7/1/14 - 6/30/15	3,165,520	20,078	Include	17,707	17,230	230	1.109	1.317	25,153	26,220	4,131,052	1.31
7/1/15 - 6/30/16	3,165,650	14,304	Include	18,640	21,886	211	1.100	1.272	30,636	26,220	3,952,339	1.25
7/1/16 - 6/30/17	2,924,030	17,768	Include	19,622	14,651	206	1.091	1.229	19,653	26,220	4,026,686	1.38
7/1/17 - 6/30/18	2,929,560	17,603	Include	20,656	19,785	185	1.081	1.188	25,407	26,220	3,777,378	1.29
7/1/18 - 6/30/19	3,080,020	18,839	Include	21,744	18,716	174	1.071	1.148	22,992	26,220	3,713,895	1.21
7/1/19 - 6/30/20	3,110,580	21,096	Include	22,890	23,754	138	1.060	1.109	27,907	26,220	3,079,846	0.99
7/1/20 - 6/30/21	3,039,520	26,487	Include	24,096	26,487	140	1.045	1.071	29,641	26,220	3,284,707	1.08
7/1/21 - 6/30/22	3,074,331	31,123	Exclude	25,365	31,123	95	1.020	1.035	***32,851***	26,220	2,348,840	0.76
7/1/22 - 6/30/23	3,253,214	27,037	Exclude	26,701	27,037	91	1.000	1.000	***27,037***	26,220	2,387,452	0.73
			Implied Trend	5.3%	-13.1%			Last 5 Wtd Avg	24,616			
								Last 4 Wtd Avg	26,220			
								Last 3 Wtd Avg	26,553			
Total	86,151,685					1,958		Last 3 Avg	26,847		38,973,752	
								Selected	26,220			

Reported Exponential Regressio	
Constant	10.244
X Coefficient	(0.051)
R Squared	0.581

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Section I, Exhibit I, Sheet 0, Column (7) / Section I, Exhibit I, Sheet 13, Column (7) x 1
(4) Years included for purposes of fit
(5) Result of Exponential fit of Column (3) * Column (8)
(6) Selected by Deloitte Consulting LLP
(7) From Section I, Exhibit I, Sheet 13, Column (7)
(8) Based on industry sources
(9) Selected by Deloitte Consulting LLP
(10) = (6) x (8) x (9)
(11) Selected by Deloitte Consulting, LLP
(12) Selected in column (11) x (7) / (8) / (9)
(13) = (12) / (3)

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Indemnity (Including Lump Sum)

Section I
Exhibit I
Sheet 10

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss Development Method

Accident Year	Age of Losses @ 06/30/2023	Retention	Payroll (00)'s	Unlimited Paid Loss @ 06/30/2023	Paid LDF	Indicated Ultimate Loss	Unlimited Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Prior to 7/1/1993	372.0	Unlimited		126,289,667	1.025	129,433,360	
7/1/93 - 6/30/94	360.0	Unlimited	2,570,620	3,498,323	1.027	3,592,752	1.40
7/1/94 - 6/30/95	348.0	Unlimited	2,558,540	2,081,529	1.029	2,142,384	0.84
7/1/95 - 6/30/96	336.0	Unlimited	2,555,390	3,175,274	1.032	3,275,733	1.28
7/1/96 - 6/30/97	324.0	Unlimited	2,700,710	2,467,027	1.034	2,551,442	0.94
7/1/97 - 6/30/98	312.0	Unlimited	2,453,670	2,918,440	1.037	3,026,406	1.23
7/1/98 - 6/30/99	300.0	Unlimited	2,514,530	2,410,298	1.041	2,509,463	1.00
7/1/99 - 6/30/00	288.0	Unlimited	2,556,410	2,599,165	1.043	2,711,367	1.06
7/1/00 - 6/30/01	276.0	Unlimited	2,639,180	3,675,833	1.046	3,843,717	1.46
7/1/01 - 6/30/02	264.0	Unlimited	2,675,980	2,237,723	1.049	2,346,534	0.88
7/1/02 - 6/30/03	252.0	Unlimited	2,744,650	3,053,235	1.056	3,223,630	1.17
7/1/03 - 6/30/04	240.0	Unlimited	2,723,840	3,692,819	1.061	3,917,890	1.44
7/1/04 - 6/30/05	228.0	Unlimited	2,736,470	2,658,617	1.077	2,863,923	1.05
7/1/05 - 6/30/06	216.0	Unlimited	2,851,390	2,856,558	1.087	3,104,077	1.09
7/1/06 - 6/30/07	204.0	Unlimited	2,985,160	3,009,239	1.092	3,286,137	1.10
7/1/07 - 6/30/08	192.0	Unlimited	3,142,310	1,663,170	1.102	1,832,012	0.58
7/1/08 - 6/30/09	180.0	Unlimited	3,029,980	2,554,928	1.108	2,830,958	0.93
7/1/09 - 6/30/10	168.0	Unlimited	2,972,520	3,428,901	1.117	3,831,396	1.29
7/1/10 - 6/30/11	156.0	Unlimited	2,924,320	3,100,190	1.124	3,484,080	1.19
7/1/11 - 6/30/12	144.0	Unlimited	2,959,080	3,100,541	1.135	3,519,619	1.19
7/1/12 - 6/30/13	132.0	Unlimited	3,015,410	2,778,064	1.155	3,208,109	1.06
7/1/13 - 6/30/14	120.0	Unlimited	3,099,100	3,399,831	1.166	3,962,887	1.28
7/1/14 - 6/30/15	108.0	Unlimited	3,165,520	3,934,412	1.174	4,617,860	1.46
7/1/15 - 6/30/16	96.0	Unlimited	3,165,650	2,516,307	1.199	3,018,086	0.95
7/1/16 - 6/30/17	84.0	Unlimited	2,924,030	2,941,829	1.244	3,660,195	1.25
7/1/17 - 6/30/18	72.0	Unlimited	2,929,560	2,513,472	1.296	3,256,553	1.11
7/1/18 - 6/30/19	60.0	Unlimited	3,080,020	2,321,985	1.412	3,277,987	1.06
7/1/19 - 6/30/20	48.0	Unlimited	3,110,580	1,876,073	1.552	2,911,234	0.94
7/1/20 - 6/30/21	36.0	Unlimited	3,039,520	2,002,506	1.854	3,713,190	1.22
7/1/21 - 6/30/22	24.0	Unlimited	3,074,331	1,151,785	2.555	2,942,836	0.96
7/1/22 - 6/30/23	12.0	Unlimited	3,253,214	455,469	5.405	2,461,831	0.76
Total			86,151,685	206,363,209		224,357,648	

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Age of (1)
(3)	Provided by Entity
(4)	Provided by Entity
(5)	Provided by Entity
(6)	From Section I, Exhibit I, Sheet 11
(7)	= (5) x (6)
(8)	= (7) / (4)

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development 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	348	360	372	As of 6/30/2023
Prior to 7/1/1993	297,817,634	87,548,925	93,849,753	99,861,959	103,855,559	106,110,592	108,321,465	110,407,380	111,848,115	112,990,808	113,720,251	114,452,828	115,118,069	115,770,818	116,430,496	117,240,541	117,838,205	118,416,283	118,891,870	119,360,479	120,241,035	121,074,561	121,861,862	122,521,536	123,159,680	123,745,677	124,348,708	124,926,340	125,421,087	125,865,934	126,289,667	126,289,667
7/1/93 - 6/30/94	943,816	1,709,460	2,335,750	2,716,251	2,800,141	2,961,955	3,067,910	3,132,066	3,216,528	3,279,132	3,308,742	3,349,553	3,385,922	3,421,325	3,456,054	3,493,187	3,496,223	3,496,223	3,496,223	3,496,223	3,496,223	3,496,223	3,496,223	3,496,223	3,496,223	3,498,323	3,498,323	3,498,323	3,498,323	3,498,323		3,498,323
7/1/94 - 6/30/95	688,696	1,269,050	1,738,827	2,026,064	2,057,591	2,058,546	2,061,982	2,072,072	2,074,287	2,080,932	2,080,932	2,081,529	2,081,529	2,081,529	2,081,529	2,081,529	2,081,529	2,081,529	2,081,529	2,081,529	2,081,529	2,081,529	2,081,529	2,081,529	2,081,529	2,081,529	2,081,529	2,081,529	2,081,529			2,081,529
7/1/95 - 6/30/96	714,860	1,592,327	2,129,764	2,373,386	2,566,242	2,653,195	2,737,664	2,784,114	2,887,910	2,923,485	2,949,530	2,949,530	2,929,530	2,934,067	2,940,800	2,955,076	2,977,888	3,005,015	3,034,291	3,065,953	3,095,576	3,135,425	3,168,106	3,175,274	3,175,274	3,175,274	3,175,274	3,175,274				3,175,274
7/1/96 - 6/30/97	734,635	1,429,599	1,890,595	2,241,561	2,392,533	2,453,227	2,467,988	2,467,171	2,464,882	2,464,667	2,464,820	2,467,177	2,467,027	2,467,027	2,467,027	2,467,027	2,467,027	2,467,027	2,467,027	2,467,027	2,467,027	2,467,027	2,467,027	2,467,027	2,467,027	2,467,027	2,467,027					2,467,027
7/1/97 - 6/30/98	583,338	1,204,702	1,772,622	2,037,338	2,181,695	2,237,727	2,280,222	2,318,555	2,350,583	2,389,441	2,434,441	2,492,867	2,514,405	2,535,852	2,558,030	2,580,494	2,603,112	2,625,999	2,649,264	2,672,496	2,696,148	2,720,159	2,744,675	2,769,644	2,794,757	2,918,440						2,918,440
7/1/98 - 6/30/99	474,980	1,184,686	1,660,880	1,949,575	2,092,395	2,173,247	2,236,822	2,256,997	2,256,997	2,257,247	2,257,288	2,258,009	2,258,009	2,268,046	2,345,298	2,410,298	2,410,298	2,410,298	2,410,298	2,410,298	2,410,298	2,410,298	2,410,298	2,410,298	2,410,298							2,410,298
7/1/99 - 6/30/00	567,123	1,076,164	1,416,667	1,635,301	1,783,202	1,815,098	1,930,608	2,015,459	2,057,785	2,098,336	2,132,814	2,205,985	2,267,234	2,303,047	2,339,128	2,375,630	2,412,735	2,449,705	2,487,342	2,525,665	2,564,701	2,599,165	2,599,165	2,599,165								2,599,165
7/1/00 - 6/30/01	744,941	1,360,799	1,868,412	2,160,423	2,413,356	2,589,010	2,742,088	2,882,098	2,944,070	2,996,470	3,049,506	3,106,854	3,162,180	3,216,895	3,268,994	3,322,018	3,376,054	3,425,276	3,479,691	3,598,950	3,626,971	3,661,210	3,675,833									3,675,833
7/1/01 - 6/30/02	660,993	1,171,123	1,498,874	1,796,951	1,990,002	2,107,482	2,187,474	2,217,531	2,218,242	2,221,536	2,229,461	2,229,482	2,229,482	2,229,482	2,229,482	2,229,482	2,229,482	2,231,075	2,237,473	2,237,473	2,237,723	2,237,723										2,237,723
7/1/02 - 6/30/03	681,649	1,386,238	1,978,785	2,381,397	2,585,082	2,722,804	2,774,318	2,812,256	2,847,398	2,902,035	2,927,127	2,951,875	2,976,919	3,002,429	3,032,849	3,053,235	3,053,235	3,053,235	3,053,235	3,053,235	3,053,235											3,053,235
7/1/03 - 6/30/04	615,642	1,250,196	1,797,057	2,193,677	2,494,524	2,668,732	2,793,214	2,870,679	2,931,797	2,994,067	3,057,255	3,150,398	3,214,517	3,278,544	3,344,569	3,411,466	3,483,456	3,552,395	3,622,149	3,692,819												3,692,819
7/1/04 - 6/30/05	629,880	1,278,794	1,792,965	2,206,170	2,396,953	2,572,419	2,609,377	2,622,417	2,658,617	2,658,617	2,658,617	2,658,617	2,658,617	2,658,617	2,658,617	2,658,617	2,658,617	2,658,617	2,658,617													2,658,617
7/1/05 - 6/30/06	562,846	1,171,932	1,629,876	1,946,569	2,150,886	2,291,230	2,397,522	2,485,890	2,586,031	2,671,658	2,731,972	2,748,862	2,760,967	2,773,292	2,785,839	2,798,618	2,856,558	2,856,558														2,856,558
7/1/06 - 6/30/07	526,806	1,063,327	1,606,705	1,983,786	2,264,609	2,405,339	2,546,806	2,667,438	2,830,275	2,864,217	2,886,626	2,909,439	2,932,669	2,956,316	3,009,239	3,009,239	3,009,239															3,009,239
7/1/07 - 6/30/08	492,006	877,226	1,081,922	1,230,051	1,350,780	1,414,271	1,447,068	1,474,819	1,491,274	1,514,757	1,546,966	1,633,170	1,663,170	1,663,170	1,663,170	1,663,170																1,663,170
7/1/08 - 6/30/09	609,589	1,069,186	1,446,431	1,718,834	1,893,320	2,068,457	2,162,468	2,262,432	2,308,961	2,349,492	2,392,793	2,433,410	2,473,916	2,514,422	2,554,928																	2,554,928
7/1/09 - 6/30/10	611,726	1,449,635	2,141,596	2,544,761	2,881,632	3,090,758	3,268,203	3,332,094	3,356,657	3,375,691	3,394,778	3,428,900	3,428,900	3,428,901																		3,428,901
7/1/10 - 6/30/11	714,837	1,346,424	1,748,162	2,107,303	2,410,860	2,638,913	2,790,727	2,887,947	2,931,855	2,974,025	3,016,080	3,058,135	3,100,190																			3,100,190
7/1/11 - 6/30/12	737,468	1,507,929	2,039,126	2,407,596	2,682,980	2,857,258	2,958,231	2,986,817	3,014,543	3,043,071	3,071,351	3,100,541																				3,100,541
7/1/12 - 6/30/13	748,452	1,424,794	1,856,028	2,290,429	2,541,884	2,650,734	2,698,391	2,771,876	2,771,876	2,774,864	2,778,064																					2,778,064
7/1/13 - 6/30/14	687,687	1,466,719	2,196,556	2,691,985	2,933,919	3,106,305	3,178,685	3,229,503	3,385,147	3,399,831																						3,399,831
7/1/14 - 6/30/15	685,778	1,348,003	1,988,408	2,502,849	3,005,697	3,493,973	3,668,492	3,818,035	3,934,412																							3,934,412
7/1/15 - 6/30/16	713,131	1,346,969	1,591,278	1,912,866	2,041,171	2,194,303	2,267,272	2,516,307																								2,516,307
7/1/16 - 6/30/17	719,027	1,459,040	1,889,040	2,333,638	2,507,706	2,723,456	2,941,829																									2,941,829
7/1/17 - 6/30/18	649,664	1,380,970	1,819,281	2,239,179	2,389,278	2,513,472																										2,513,472
7/1/18 - 6/30/19	670,450	1,442,052	1,962,220	2,170,273	2,321,985																											2,321,985
7/1/19 - 6/30/20	499,126	1,028,887	1,552,039	1,876,073																												1,876,073
7/1/20 - 6/30/21	617,407	1,384,026	2,002,506																													2,002,506
7/1/21 - 6/30/22	582,897	1,151,785																														1,151,785
7/1/22 - 6/30/23	455,469																															455,469
																																206,363,209

Accident Year	Age-to-Age Development Factors 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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993	***0.294***	***1.072***	***1.064***	***1.040***	***1.022***	***1.021***	***1.019***	***1.013***	***1.010***	***1.006***	***1.006***	***1.006***	***1.006***	***1.006***	***1.007***	***1.005***	***1.005***	***1.004***	***1.004***	***1.007***	***1.007***	***1.007***	***1.005***	***1.005***	***1.005***	***1.005***	***1.005***	***1.004***	***1.004***	***1.003***	
7/1/93 - 6/30/94	1.811	1.366	1.163	1.031	1.058	1.036	1.021	1.027	1.019	1.009	1.012	1.011	1.010	1.010	1.011	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000		
7/1/94 - 6/30/95	1.843	1.370	1.165	1.016	1.000	1.002	1.005	1.001	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	1.000	1.000	1.000	1.000	1.000	1.000			
7/1/95 - 6/30/96	2.227	1.338	1.114	1.081	1.034	1.032	1.017	1.037	1.012	1.009	1.000	0.993	1.002	1.002	1.005	1.008	1.009	1.010	1.010	1.010	1.013	1.010	1.002	1.000	1.000	1.000	1.000				
7/1/96 - 6/30/97	1.946	1.322	1.186	1.067	1.025	1.006	1.000	0.999	1.000	1.000	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	1.000	1.000	1.000					
7/1/97 - 6/30/98	2.065	1.471	1.149	1.071	1.026	1.019	1.017	1.014	1.017	1.019	1.024	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.044						
7/1/98 - 6/30/99	2.494	1.402	1.174	1.073	1.039	1.029	1.009	1.000	1.000	1.000	1.000	1.000	1.004	1.034	1.028	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
7/1/99 - 6/30/00	1.898	1.316	1.154	1.090	1.018	1.064	1.044	1.021	1.020	1.016	1.034	1.028	1.016	1.016	1.016	1.016	1.015	1.015	1.015	1.015	1.013	1.000	1.000								
7/1/00 - 6/30/01	1.827	1.373	1.156	1.117	1.073	1.059	1.051	1.022	1.018	1.018	1.019	1.018	1.017	1.016	1.016	1.016	1.015	1.016	1.034	1.008	1.009	1.004									
7/1/01 - 6/30/02	1.772	1.280	1.199	1.107	1.059	1.038	1.014	1.000	1.001	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.003	1.000	1.000	1.000										
7/1/02 - 6/30/03	2.034	1.427	1.203	1.086	1.053	1.019	1.014	1.012	1.019	1.009	1.008	1.008	1.009	1.010	1.007	1.000	1.000	1.000	1.000	1.000											
7/1/03 - 6/30/04	2.031	1.437	1.221	1.137	1.070	1.047	1.028	1.021	1.021	1.021	1.030	1.020	1.020	1.020	1.020	1.021	1.020	1.020	1.020												
7/1/04 - 6/30/05	2.030	1.402	1.230	1.086	1.073	1.014	1.005	1.014	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000													
7/1/05 - 6/30/06	2.082	1.391	1.194	1.105	1.065	1.046	1.037	1.040	1.033	1.023	1.006	1.004	1.004	1.005	1.005	1.021	1.000														
7/1/06 - 6/30/07	2.018	1.511	1.235	1.142	1.062	1.059	1.047	1.061	1.012	1.008	1.008	1.008	1.008	1.018	1.000	1.000															
7/1/07 - 6/30/08	1.783	1.233	1.137	1.098	1.047	1.023	1.019	1.011	1.016	1.021	1.056	1.018	1.000	1.000	1.000																
7/1/08 - 6/30/09	1.754	1.353	1.188	1.102	1.093	1.045	1.046	1.021	1.018	1.018	1.017	1.017	1.016	1.016																	
7/1/09 - 6/30/10	2.370	1.477	1.188	1.132	1.073	1.057	1.020	1.007	1.006	1.006	1.010	1.000	1.000																		
7/1/10 - 6/30/11	1.884	1.298	1.205	1.144	1.095	1.058	1.035	1.015	1.014	1.014	1.014	1.014																			
7/1/11 - 6/30/12	2.045	1.352	1.181	1.114	1.065	1.035	1.010	1.009	1.009	1.009	1.010																				
7/1/12 - 6/30/13	1.904	1.303	1.234	1.110	1.043	1.018	1.027	1.000	1.001	1.001																					
7/1/13 - 6/30/14	2.133	1.498	1.226	1.090	1.059	1.023	1.016	1.048	1.004																						
7/1/14 - 6/30/15	1.966	1.475	1.259	1.201	1.162	1.050	1.041	1.030																							
7/1/15 - 6/30/16	1.889	1.181	1.202	1.067	1.075	1.033	1.110																								
7/1/16 - 6/30/17	2.029	1.295	1.235	1.075	1.086	1.080																									
7/1/17 - 6/30/18	2.126	1.317	1.231	1.067	1.052																										
7/1/18 - 6/30/19	2.151	1.361	1.106	1.070																											
7/1/19 - 6/30/20	2.061	1.508	1.209																												
7/1/20 - 6/30/21	2.242	1.447																													
7/1/21 - 6/30/22	1.976																														
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																															
Last 3 Wtd Avg	2.098	1.431	1.178	1.071	1.071	1.055	1.049	1.028	1.005	1.008	1.011	1.009	1.005	1.013	1.002	1.007	1.008	1.008	1.008	1.003	1.008	1.002	1.003	1.003	1.015	1.000	1.000				
Last 5 Wtd Avg	2.115	1.378	1.195	1.099	1.090	1.041	1.037	1.022	1.007	1.009	1.017	1.010	1.006	1.008	1.006	1.009	1.005	1.009	1.015	1.005	1.007	1.003	1.002	1.002	1.009						
Last 9 Wtd Avg	2.061	1.373	1.209	1.106	1.080	1.045	1.034	1.023	1.012	1.010	1.015	1.009	1.007	1.010	1.008	1.009	1.007	1.008	1.011	1.005	1.005										
Last 12 Wtd Avg	2.029	1.374	1.205	1.108	1.078	1.045	1.033	1.024	1.012	1.011	1.014	1.011	1.008	1.012	1.009	1.008	1.006	1.007													
All Per Wtd Avg	2.005	1.375	1.191	1.096	1.062	1.038	1.027	1.020	1.012	1.010	1.012	1.008	1.007	1.010	1.008	1.007	1.006	1.007	1.009	1.004	1.005	1.003	1.002	1.002	1.009	1.000	1.000	1.000	1.000		
Industry																															
Age-to-Age	2.944	1.572	1.221	1.082	1.038	1.014	1.011	1.008	1.006	1.005	1.005	1.002	1.003	1.002	1.003	1.002	1.002	1.001	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	
Age-to-Ult	7.016	2.383	1.516	1.242	1.148	1.106	1.091	1.079	1.070	1.064	1.059	1.054	1.052	1.049	1.047	1.044	1.042	1.040	1.039	1.037	1.036	1.034	1.032	1.031	1.029	1.027	1.025	1.023	1.022	1.020	1.018
Prior Selected																															
Age-to-Age	2.122	1.324	1.206	1.103	1.087	1.033	1.026	1.017	1.009	1.012	1.017	1.008	1.006	1.010	1.007	1.009	1.008	1.011	1.012	1.007	1.007	1.004	1.002	1.002	1.001	1.003	1.002	1.002	1.002	1.002	
Age-to-Ult	5.177	2.440	1.843	1.528	1.386	1.275	1.234	1.203	1.183	1.172	1.158	1.138	1.129	1.122	1.111	1.104	1.094	1.085	1.073	1.061	1.054	1.047	1.042	1.039	1.038	1.037	1.034	1.031	1.029	1.027	1.025
Selected																															
Age-to-Age	2.115	1.378	1.195	1.099	1.090	1.041	1.037	1.022	1.007	1.009	1.017	1.010	1.006	1.008	1.006	1.009	1.005	1.009	1.015	1.005	1.007	1.003	1.002	1.002	1.004	1.003	1.003	1.002	1.002	1.002	
Age-to-Ult	5.405	2.555	1.854	1.552	1.412	1.296	1.244	1.199	1.174	1.166	1.155	1.135	1.124	1.117	1.108	1.102	1.092	1.087	1.077	1.061	1.056	1.049	1.046	1.043	1.041	1.037	1.034	1.032	1.029	1.027	1.025

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Indemnity (Including Lump Sum)

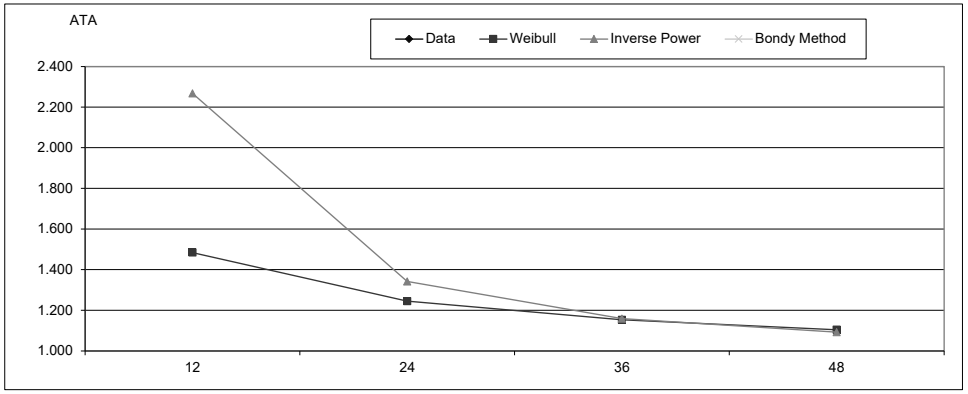
Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

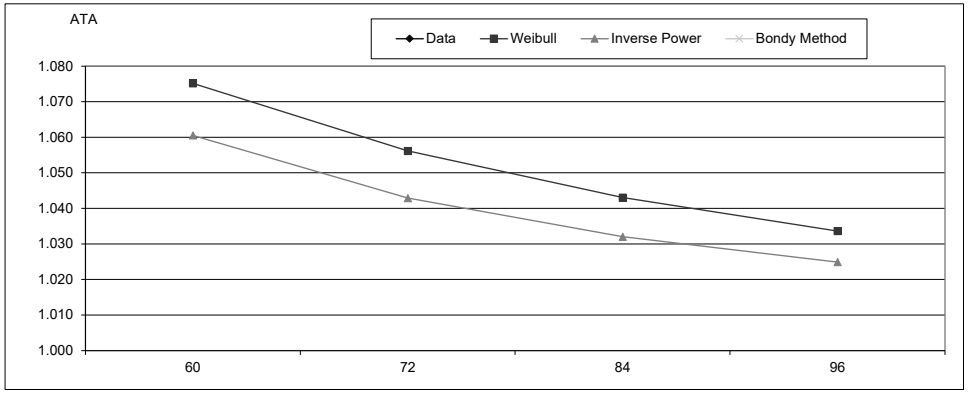
Curve Fitting Methods
Paid Loss

Tail at Period:	**31**	(To display in table)
Cut-off point:(<=Tail & <51)	**50**	(to run-out pattern)

Summary of Curve Fitting Methods

Method	Tail	R^2
Weibull	**1.007**	**0.893**
Inverse Power	**1.025**	**0.896**
Bondy Method		**N/A**





				Weibull		Inverse Power		Bondy Method			
									Sel. Decay Ratio=		
PERIOD	AGE	ATA	Use	**ATA***	**ATU***	**ATA***	**ATU***	Ln(ATA)	Decay	**ATA***	**ATU***
1	12	0.000	Exclude	**1.484**	3.380	**2.268**	5.330				
2	24	1.378	Include	**1.245**	2.277	**1.342**	2.351				
3	36	1.195	Include	**1.153**	1.829	**1.159**	1.752				
4	48	1.099	Include	**1.104**	1.587	**1.092**	1.511				
5	60	1.090	Include	**1.075**	1.437	**1.061**	1.384				
6	72	1.041	Include	**1.056**	1.337	**1.043**	1.305				
7	84	1.037	Include	**1.043**	1.265	**1.032**	1.251				
8	96	1.022	Include	**1.034**	1.213	**1.025**	1.212				
9	108	1.007	Include	**1.027**	1.174	**1.020**	1.183				
10	120	1.009	Include	**1.021**	1.143	**1.016**	1.160				
11	132	1.017	Include	**1.017**	1.119	**1.014**	1.141				
12	144	1.010	Include	**1.014**	1.100	**1.012**	1.126				
13	156	1.006	Include	**1.012**	1.084	**1.010**	1.113				
14	168	1.008	Include	**1.010**	1.072	**1.009**	1.102				
15	180	1.006	Include	**1.008**	1.061	**1.008**	1.092				
16	192	1.009	Include	**1.007**	1.052	**1.007**	1.084				
17	204	1.005	Include	**1.006**	1.045	**1.006**	1.077				
18	216	1.009	Include	**1.005**	1.039	**1.005**	1.070				
19	228	1.015	Include	**1.004**	1.034	**1.005**	1.065				
20	240	1.005	Include	**1.004**	1.029	**1.004**	1.060				
21	252	1.007	Include	**1.003**	1.026	**1.004**	1.055				
22	264	1.003	Include	**1.003**	1.022	**1.004**	1.051				
23	276	1.002	Include	**1.002**	1.020	**1.003**	1.047				
24	288	1.002	Include	**1.002**	1.017	**1.003**	1.043				
25	300	1.004	Include	**1.002**	1.015	**1.003**	1.040				
26	312	0.000	Exclude	**1.002**	1.013	**1.003**	1.037				
27	324	0.000	Exclude	**1.001**	1.012	**1.003**	1.034				
28	336	0.000	Exclude	**1.001**	1.010	**1.002**	1.032				
29	348	0.000	Exclude	**1.001**	1.009	**1.002**	1.029				
30	360	0.000	Exclude	**1.001**	1.008	**1.002**	1.027				
31	372	0.000	Exclude	**1.001**	1.007	**1.002**	1.025				
32	384	0.000	Exclude	**1.001**	1.006	**1.002**	1.023				
33	396	0.000	Exclude	**1.001**	1.005	**1.002**	1.021				
34	408	0.000	Exclude	**1.001**	1.005	**1.002**	1.019				
35	420	0.000	Exclude	**1.001**	1.004	**1.002**	1.018				
36	432	0.000	Exclude	**1.000**	1.004	**1.001**	1.016				
37	444	0.000	Exclude	**1.000**	1.003	**1.001**	1.015				
38	456	0.000	Exclude	**1.000**	1.003	**1.001**	1.013				
39	468	0.000	Exclude	**1.000**	1.002	**1.001**	1.012				
40	480	0.000	Exclude	**1.000**	1.002	**1.001**	1.011				
41	492	0.000	Exclude	**1.000**	1.002	**1.001**	1.009				
42	504	0.000	Exclude	**1.000**	1.001	**1.001**	1.008				
43	516	0.000	Exclude	**1.000**	1.001	**1.001**	1.007				
44	528	0.000	Exclude	**1.000**	1.001	**1.001**	1.006				
45	540	0.000	Exclude	**1.000**	1.001	**1.001**	1.005				
46	552	0.000	Exclude	**1.000**	1.001	**1.001**	1.004				
47	564	0.000	Exclude	**1.000**	1.000	**1.001**	1.003				
48	576	0.000	Exclude	**1.000**	1.000	**1.001**	1.002				
49	588	0.000	Exclude	**1.000**	1.000	**1.001**	1.002				
50	600	0.000	Exclude	**1.000**	1.000	**1.001**	1.001				

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Indemnity (Including Lump Sum)

Section I
Exhibit I
Sheet 13

Unpaid Claim Analysis as of 06/30/2023

Ultimate Claim Count Development

Accident Year	Age of Counts @ 06/30/2023	Payroll (00)'s	Reported Claim Counts @ 06/30/2023	Reported Count Dev Factor	Indicated Ultimate Claim Counts	Selected Ultimate Claim Counts	Selected Ultimate Frequency	Selected Ultimate Frequency (Inflation-Adjusted)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	372.0		46	1.000	46			
7/1/93 - 6/30/94	360.0	2,570,620	4	1.000	4		0.00%	0.00%
7/1/94 - 6/30/95	348.0	2,558,540	1	1.000	1		0.00%	0.00%
7/1/95 - 6/30/96	336.0	2,555,390	2	1.000	2		0.00%	0.00%
7/1/96 - 6/30/97	324.0	2,700,710	1	1.000	1		0.00%	0.00%
7/1/97 - 6/30/98	312.0	2,453,670	3	1.000	3		0.00%	0.00%
7/1/98 - 6/30/99	300.0	2,514,530	4	1.000	4		0.00%	0.00%
7/1/99 - 6/30/00	288.0	2,556,410	3	1.000	3		0.00%	0.00%
7/1/00 - 6/30/01	276.0	2,639,180	11	1.000	11		0.00%	0.00%
7/1/01 - 6/30/02	264.0	2,675,980	5	1.000	5		0.00%	0.00%
7/1/02 - 6/30/03	252.0	2,744,650	8	1.000	8		0.00%	0.00%
7/1/03 - 6/30/04	240.0	2,723,840	10	1.000	10		0.00%	0.00%
7/1/04 - 6/30/05	228.0	2,736,470	6	1.000	6		0.00%	0.00%
7/1/05 - 6/30/06	216.0	2,851,390	10	1.000	10		0.00%	0.00%
7/1/06 - 6/30/07	204.0	2,985,160	16	1.000	16		0.00%	0.00%
7/1/07 - 6/30/08	192.0	3,142,310	12	1.000	12		0.00%	0.00%
7/1/08 - 6/30/09	180.0	3,029,980	21	1.000	21		0.00%	0.00%
7/1/09 - 6/30/10	168.0	2,972,520	45	1.000	45		0.00%	0.00%
7/1/10 - 6/30/11	156.0	2,924,320	44	1.000	44		0.00%	0.00%
7/1/11 - 6/30/12	144.0	2,959,080	149	1.000	149		0.00%	0.00%
7/1/12 - 6/30/13	132.0	3,015,410	230	1.000	230	230	76.27%	56.76%
7/1/13 - 6/30/14	120.0	3,099,100	258	1.000	258	258	83.25%	63.80%
7/1/14 - 6/30/15	108.0	3,165,520	230	1.000	230	230	72.66%	57.36%
7/1/15 - 6/30/16	96.0	3,165,650	211	1.000	211	211	66.65%	54.19%
7/1/16 - 6/30/17	84.0	2,924,030	206	1.000	206	206	70.45%	59.00%
7/1/17 - 6/30/18	72.0	2,929,560	185	1.000	185	185	63.15%	54.47%
7/1/18 - 6/30/19	60.0	3,080,020	174	1.000	174	174	56.49%	50.19%
7/1/19 - 6/30/20	48.0	3,110,580	138	1.000	138	138	44.36%	40.60%
7/1/20 - 6/30/21	36.0	3,039,520	140	1.001	140	140	46.12%	43.47%
7/1/21 - 6/30/22	24.0	3,074,331	94	1.006	95	95	30.76%	29.86%
7/1/22 - 6/30/23	12.0	3,253,214	79	1.073	85	91	27.99%	27.99%
Total		86,151,685	2,346		2,353	1,958		

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Age of (1)
(3)	Provided by Entity
(4)	Provided by Entity
(5)	From Section I, Exhibit I, Sheet 14
(6)	= (4) x (5)
(7)	Selected by Deloitte Consulting LLP
(8)	= (7) / (3)
(9)	= (7) / [(3) x Section I, Exhibit I, Sheet 8, Column (3)]

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Reported Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																															46	46
7/1/93 - 6/30/94																														4		4
7/1/94 - 6/30/95																													1			1
7/1/95 - 6/30/96																												2				2
7/1/96 - 6/30/97																											1					1
7/1/97 - 6/30/98																										3						3
7/1/98 - 6/30/99																									4							4
7/1/99 - 6/30/00																								3								3
7/1/00 - 6/30/01																							11									11
7/1/01 - 6/30/02																						5										5
7/1/02 - 6/30/03																					8											8
7/1/03 - 6/30/04																				10												10
7/1/04 - 6/30/05																			6													6
7/1/05 - 6/30/06																		10														10
7/1/06 - 6/30/07																	16															16
7/1/07 - 6/30/08																12																12
7/1/08 - 6/30/09															21																	21
7/1/09 - 6/30/10														45																		45
7/1/10 - 6/30/11													44																			44
7/1/11 - 6/30/12												149																				149
7/1/12 - 6/30/13	215	228	230	230	230	230	230	230	230	230	230																					230
7/1/13 - 6/30/14	240	257	257	257	258	258	258	258	258	258																						258
7/1/14 - 6/30/15	218	229	230	230	230	230	230	230	230																							230
7/1/15 - 6/30/16	201	209	210	210	210	210	211	211																								211
7/1/16 - 6/30/17	194	204	206	206	206	206	206																									206
7/1/17 - 6/30/18	166	184	185	185	185	185																										185
7/1/18 - 6/30/19	165	173	173	173	174																											174
7/1/19 - 6/30/20	131	137	138	138																												138
7/1/20 - 6/30/21	120	140	140																													140
7/1/21 - 6/30/22	89	94																														94
7/1/22 - 6/30/23	79																															79
																																2,346

Accident Year	Age-to-Age Development Factors																															
	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
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7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	1.060	1.009	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000																						
7/1/13 - 6/30/14	1.071	1.000	1.000	1.004	1.000	1.000	1.000	1.000	1.000																							
7/1/14 - 6/30/15	1.050	1.004	1.000	1.000	1.000	1.000	1.000	1.000																								
7/1/15 - 6/30/16	1.040	1.005	1.000	1.000	1.000	1.005	1.000																									
7/1/16 - 6/30/17	1.052	1.010	1.000	1.000	1.000	1.000																										
7/1/17 - 6/30/18	1.108	1.005	1.000	1.000	1.000																											
7/1/18 - 6/30/19	1.048	1.000	1.000	1.006																												
7/1/19 - 6/30/20	1.046	1.007	1.000																													
7/1/20 - 6/30/21	1.167	1.000																														
7/1/21 - 6/30/22	1.056																															
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																																
Last 3 Wtd Avg	1.091	1.002	1.000	1.002	1.000	1.002	1.000	1.000																								
Last 4 Wtd Avg	1.077	1.003	1.000	1.001	1.000	1.001	1.000																									
Last 5 Wtd Avg	1.085	1.005	1.000	1.001	1.000	1.001																										
All Per Wtd Avg	1.067	1.005	1.000	1.001	1.000	1.001	1.000	1.000	1.000	1.000																						
Average ex Hi/Lo	1.062	1.004	1.000	1.001	1.000	1.000	1.000	1.000																								
Prior Selected																																
Age-to-Age	1.067	1.005	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	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		
Age-to-Ult	1.073	1.006	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	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	
Selected																																
Age-to-Age	1.067	1.005	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	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		
Age-to-Ult	1.073	1.006	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	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	

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Indemnity (Including Lump Sum)

Section I
Exhibit I
Sheet 15

Unpaid Claim Analysis as of 06/30/2023

Reported Counts to Payroll (00)'s

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02		2,570,620
7/1/94 - 6/30/95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			2,558,540
7/1/95 - 6/30/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01				2,555,390
7/1/96 - 6/30/97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					2,700,710
7/1/97 - 6/30/98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01						2,453,670
7/1/98 - 6/30/99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02							2,514,530
7/1/99 - 6/30/00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01								2,556,410
7/1/00 - 6/30/01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04									2,639,180
7/1/01 - 6/30/02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02										2,675,980
7/1/02 - 6/30/03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03											2,744,650
7/1/03 - 6/30/04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04												2,723,840
7/1/04 - 6/30/05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02													2,736,470
7/1/05 - 6/30/06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04														2,851,390
7/1/06 - 6/30/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05															2,985,160
7/1/07 - 6/30/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04																3,142,310
7/1/08 - 6/30/09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07																	3,029,980
7/1/09 - 6/30/10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15																		2,972,520
7/1/10 - 6/30/11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15																			2,924,320
7/1/11 - 6/30/12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50																				2,959,080
7/1/12 - 6/30/13	0.71	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76																					3,015,410
7/1/13 - 6/30/14	0.77	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83																						3,099,100
7/1/14 - 6/30/15	0.69	0.72	0.73	0.73	0.73	0.73	0.73	0.73	0.73																							3,165,520
7/1/15 - 6/30/16	0.63	0.66	0.66	0.66	0.66	0.66	0.67	0.67																								3,165,650
7/1/16 - 6/30/17	0.66	0.70	0.70	0.70	0.70	0.70	0.70																									2,924,030
7/1/17 - 6/30/18	0.57	0.63	0.63	0.63	0.63	0.63																										2,929,560
7/1/18 - 6/30/19	0.54	0.56	0.56	0.56	0.56																											3,080,020
7/1/19 - 6/30/20	0.42	0.44	0.44	0.44																												3,110,580
7/1/20 - 6/30/21	0.39	0.46	0.46																													3,039,520
7/1/21 - 6/30/22	0.29	0.31																														3,074,331
7/1/22 - 6/30/23	0.24																															3,253,214

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss Rates

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.37	0.66	0.91	1.06	1.09	1.15	1.19	1.22	1.25	1.28	1.29	1.30	1.32	1.33	1.34	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36		2,570,620
7/1/94 - 6/30/95	0.27	0.50	0.68	0.79	0.80	0.80	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81			2,558,540
7/1/95 - 6/30/96	0.28	0.62	0.83	0.93	1.00	1.04	1.07	1.09	1.13	1.14	1.15	1.15	1.15	1.15	1.15	1.16	1.17	1.18	1.19	1.20	1.21	1.23	1.24	1.24	1.24	1.24	1.24	1.24				2,555,390
7/1/96 - 6/30/97	0.27	0.53	0.70	0.83	0.89	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91					2,700,710
7/1/97 - 6/30/98	0.24	0.49	0.72	0.83	0.89	0.91	0.93	0.94	0.96	0.97	0.99	1.02	1.02	1.03	1.04	1.05	1.06	1.07	1.08	1.09	1.10	1.11	1.12	1.13	1.14	1.19						2,453,670
7/1/98 - 6/30/99	0.19	0.47	0.66	0.78	0.83	0.86	0.89	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.93	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96							2,514,530
7/1/99 - 6/30/00	0.22	0.42	0.55	0.64	0.70	0.71	0.76	0.79	0.80	0.82	0.83	0.86	0.89	0.90	0.92	0.93	0.94	0.96	0.97	0.99	1.00	1.02	1.02	1.02								2,556,410
7/1/00 - 6/30/01	0.28	0.52	0.71	0.82	0.91	0.98	1.04	1.09	1.12	1.14	1.16	1.18	1.20	1.22	1.24	1.26	1.28	1.30	1.32	1.36	1.37	1.39	1.39									2,639,180
7/1/01 - 6/30/02	0.25	0.44	0.56	0.67	0.74	0.79	0.82	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.84	0.84	0.84	0.84										2,675,980
7/1/02 - 6/30/03	0.25	0.51	0.72	0.87	0.94	0.99	1.01	1.02	1.04	1.06	1.07	1.08	1.08	1.09	1.11	1.11	1.11	1.11	1.11	1.11	1.11											2,744,650
7/1/03 - 6/30/04	0.23	0.46	0.66	0.81	0.92	0.98	1.03	1.05	1.08	1.10	1.12	1.16	1.18	1.20	1.23	1.25	1.28	1.30	1.33	1.36												2,723,840
7/1/04 - 6/30/05	0.23	0.47	0.66	0.81	0.88	0.94	0.95	0.96	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97													2,736,470
7/1/05 - 6/30/06	0.20	0.41	0.57	0.68	0.75	0.80	0.84	0.87	0.91	0.94	0.96	0.96	0.97	0.97	0.98	0.98	1.00	1.00														2,851,390
7/1/06 - 6/30/07	0.18	0.36	0.54	0.66	0.76	0.81	0.85	0.89	0.95	0.96	0.97	0.97	0.98	0.99	1.01	1.01	1.01															2,985,160
7/1/07 - 6/30/08	0.16	0.28	0.34	0.39	0.43	0.45	0.46	0.47	0.47	0.48	0.49	0.52	0.53	0.53	0.53	0.53																3,142,310
7/1/08 - 6/30/09	0.20	0.35	0.48	0.57	0.62	0.68	0.71	0.75	0.76	0.78	0.79	0.80	0.82	0.83	0.84																	3,029,980
7/1/09 - 6/30/10	0.21	0.49	0.72	0.86	0.97	1.04	1.10	1.12	1.13	1.14	1.14	1.15	1.15	1.15																		2,972,520
7/1/10 - 6/30/11	0.24	0.46	0.60	0.72	0.82	0.90	0.95	0.99	1.00	1.02	1.03	1.05	1.06																			2,924,320
7/1/11 - 6/30/12	0.25	0.51	0.69	0.81	0.91	0.97	1.00	1.01	1.02	1.03	1.04	1.05																				2,959,080
7/1/12 - 6/30/13	0.25	0.47	0.62	0.76	0.84	0.88	0.89	0.92	0.92	0.92	0.92																					3,015,410
7/1/13 - 6/30/14	0.22	0.47	0.71	0.87	0.95	1.00	1.03	1.04	1.09	1.10																						3,099,100
7/1/14 - 6/30/15	0.22	0.43	0.63	0.79	0.95	1.10	1.16	1.21	1.24																							3,165,520
7/1/15 - 6/30/16	0.23	0.43	0.50	0.60	0.64	0.69	0.72	0.79																								3,165,650
7/1/16 - 6/30/17	0.25	0.50	0.65	0.80	0.86	0.93	1.01																									2,924,030
7/1/17 - 6/30/18	0.22	0.47	0.62	0.76	0.82	0.86																										2,929,560
7/1/18 - 6/30/19	0.22	0.47	0.64	0.70	0.75																											3,080,020
7/1/19 - 6/30/20	0.16	0.33	0.50	0.60																												3,110,580
7/1/20 - 6/30/21	0.20	0.46	0.66																													3,039,520
7/1/21 - 6/30/22	0.19	0.37																														3,074,331
7/1/22 - 6/30/23	0.14																															3,253,214

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Settlement Rates (Closed Claim Count / Ultimate Claim Count)

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
7/1/98 - 6/30/99																																
7/1/99 - 6/30/00																																
7/1/00 - 6/30/01																																
7/1/01 - 6/30/02																																
7/1/02 - 6/30/03																																
7/1/03 - 6/30/04																																
7/1/04 - 6/30/05																																
7/1/05 - 6/30/06																																
7/1/06 - 6/30/07																																
7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	0.00	0.40	0.83	0.89	0.93	0.97	0.97	0.99	1.00	0.99	1.00																					1.00
7/1/13 - 6/30/14	0.00	0.48	0.83	0.90	0.90	0.95	0.97	0.97	0.97	0.98																						0.98
7/1/14 - 6/30/15	0.00	0.49	0.83	0.90	0.93	0.95	0.96	0.98	0.98																							0.98
7/1/15 - 6/30/16	0.00	0.49	0.82	0.91	0.94	0.94	0.96	0.96																								0.96
7/1/16 - 6/30/17	0.00	0.53	0.83	0.88	0.95	0.95	0.95																									0.95
7/1/17 - 6/30/18	0.00	0.48	0.81	0.86	0.95	0.94																										0.94
7/1/18 - 6/30/19	0.00	0.52	0.82	0.91	0.95																											0.95
7/1/19 - 6/30/20	0.00	0.64	0.86	0.91																												0.91
7/1/20 - 6/30/21	0.00	0.51	0.81																													0.81
7/1/21 - 6/30/22	0.00	0.58																														0.58
7/1/22 - 6/30/23	0.00																															0.00

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Open Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993	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	0	0	0	11	11
7/1/93 - 6/30/94	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	0	0	0		0
7/1/94 - 6/30/95	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	0	0			0
7/1/95 - 6/30/96	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	1				1
7/1/96 - 6/30/97	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					0
7/1/97 - 6/30/98	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	1						1
7/1/98 - 6/30/99	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
7/1/99 - 6/30/00	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
7/1/00 - 6/30/01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3									3
7/1/01 - 6/30/02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3										3
7/1/02 - 6/30/03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3											3
7/1/03 - 6/30/04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4												4
7/1/04 - 6/30/05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0													0
7/1/05 - 6/30/06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2														2
7/1/06 - 6/30/07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1															1
7/1/07 - 6/30/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																0
7/1/08 - 6/30/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4																	4
7/1/09 - 6/30/10	0	0	0	0	0	0	0	0	0	0	0	0	0	2																		2
7/1/10 - 6/30/11	0	0	0	0	0	0	0	0	0	0	0	0	4																			4
7/1/11 - 6/30/12	0	0	0	0	0	0	0	0	0	0	0	4																				4
7/1/12 - 6/30/13	215	137	40	26	15	7	6	3	0	2	1																					1
7/1/13 - 6/30/14	240	132	42	26	26	13	8	7	7	5																						5
7/1/14 - 6/30/15	218	116	40	22	15	11	9	5	5																							5
7/1/15 - 6/30/16	201	105	38	18	11	12	9	8																								8
7/1/16 - 6/30/17	194	94	34	25	11	10	10																									10
7/1/17 - 6/30/18	166	96	35	25	10	11																										11
7/1/18 - 6/30/19	165	82	30	14	8																											8
7/1/19 - 6/30/20	131	48	20	12																												12
7/1/20 - 6/30/21	120	69	27																													27
7/1/21 - 6/30/22	89	39																														39
7/1/22 - 6/30/23	79																															79
																																248

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Medical

Section I
Exhibit II
Sheet 1

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Unpaid Loss & ALAE Estimates

Accident Year	Payroll (00)'s	Retention	Unlimited Paid Loss & ALAE @ 06/30/2023	Unlimited Reported Loss & ALAE @ 06/30/2023	Ultimate Loss & ALAE Low	Ultimate Loss & ALAE High	Indicated Total Unpaid Loss & ALAE Estimates Low	Indicated Total Unpaid Loss & ALAE Estimates High	Case Reserves	Indicated IBNR Estimate Low	Indicated IBNR Estimate High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993		Unlimited	23,621,778	23,621,778	24,408,259	24,583,033	786,482	961,255	0	786,482	961,255
7/1/93 - 6/30/94	2,570,620	Unlimited	1,273,943	1,273,943	1,318,100	1,322,800	44,157	48,857	0	44,157	48,857
7/1/94 - 6/30/95	2,558,540	Unlimited	928,160	928,160	962,700	966,400	34,540	38,240	0	34,540	38,240
7/1/95 - 6/30/96	2,555,390	Unlimited	1,006,802	1,006,802	1,047,100	1,051,300	40,298	44,498	0	40,298	44,498
7/1/96 - 6/30/97	2,700,710	Unlimited	882,663	882,663	920,500	924,500	37,837	41,837	0	37,837	41,837
7/1/97 - 6/30/98	2,453,670	Unlimited	792,247	792,247	828,600	832,500	36,354	40,254	0	36,354	40,254
7/1/98 - 6/30/99	2,514,530	Unlimited	634,549	634,549	665,800	669,000	31,251	34,451	0	31,251	34,451
7/1/99 - 6/30/00	2,556,410	Unlimited	874,035	874,035	917,200	921,700	43,165	47,665	0	43,165	47,665
7/1/00 - 6/30/01	2,639,180	Unlimited	1,709,366	1,709,366	1,798,100	1,807,400	88,734	98,034	0	88,734	98,034
7/1/01 - 6/30/02	2,675,980	Unlimited	1,097,086	1,097,086	1,159,900	1,166,500	62,814	69,414	0	62,814	69,414
7/1/02 - 6/30/03	2,744,650	Unlimited	891,870	891,870	952,400	958,800	60,530	66,930	0	60,530	66,930
7/1/03 - 6/30/04	2,723,840	Unlimited	1,011,175	1,011,175	1,096,200	1,105,200	85,025	94,025	0	85,025	94,025
7/1/04 - 6/30/05	2,736,470	Unlimited	1,052,069	1,052,069	1,157,300	1,168,300	105,231	116,231	0	105,231	116,231
7/1/05 - 6/30/06	2,851,390	Unlimited	1,290,787	1,290,787	1,439,400	1,455,100	148,613	164,313	0	148,613	164,313
7/1/06 - 6/30/07	2,985,160	Unlimited	1,218,033	1,218,033	1,371,900	1,388,100	153,867	170,067	0	153,867	170,067
7/1/07 - 6/30/08	3,142,310	Unlimited	1,469,216	1,469,216	1,664,100	1,684,700	194,884	215,484	0	194,884	215,484
7/1/08 - 6/30/09	3,029,980	Unlimited	1,221,918	1,221,918	1,392,800	1,410,700	170,882	188,782	0	170,882	188,782
7/1/09 - 6/30/10	2,972,520	Unlimited	1,361,312	1,361,312	1,557,300	1,578,000	195,988	216,688	0	195,988	216,688
7/1/10 - 6/30/11	2,924,320	Unlimited	1,033,943	1,033,943	1,189,900	1,206,300	155,957	172,357	0	155,957	172,357
7/1/11 - 6/30/12	2,959,080	Unlimited	1,398,024	1,398,024	1,631,100	1,655,600	233,076	257,576	0	233,076	257,576
7/1/12 - 6/30/13	3,015,410	Unlimited	1,161,588	1,161,588	1,373,100	1,395,400	211,512	233,812	0	211,512	233,812
7/1/13 - 6/30/14	3,099,100	Unlimited	1,055,794	1,055,794	1,253,400	1,274,200	197,606	218,406	0	197,606	218,406
7/1/14 - 6/30/15	3,165,520	Unlimited	1,214,477	1,214,477	1,452,400	1,477,500	237,923	263,023	0	237,923	263,023
7/1/15 - 6/30/16	3,165,650	Unlimited	1,067,974	1,067,974	1,303,500	1,338,900	235,526	270,926	0	235,526	270,926
7/1/16 - 6/30/17	2,924,030	Unlimited	1,054,737	1,054,737	1,305,300	1,343,000	250,563	288,263	0	250,563	288,263
7/1/17 - 6/30/18	2,929,560	Unlimited	891,132	891,132	1,121,200	1,155,900	230,068	264,768	0	230,068	264,768
7/1/18 - 6/30/19	3,080,020	Unlimited	836,817	836,817	1,091,600	1,130,000	254,783	293,183	0	254,783	293,183
7/1/19 - 6/30/20	3,110,580	Unlimited	666,342	666,342	988,600	1,037,100	322,258	370,758	0	322,258	370,758
7/1/20 - 6/30/21	3,039,520	Unlimited	515,353	515,353	942,000	1,037,000	426,647	521,647	0	426,647	521,647
7/1/21 - 6/30/22	3,074,331	Unlimited	374,090	374,090	911,000	1,031,000	536,910	656,910	0	536,910	656,910
7/1/22 - 6/30/23	3,253,214	Unlimited	151,331	151,331	838,000	990,000	686,669	838,669	0	686,669	838,669
Total	86,151,685		53,758,609	53,758,609	60,058,759	61,065,933	6,300,150	7,307,324	0	6,300,150	7,307,324

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	Provided by Entity
(6)	From Section I, Exhibit II, Sheet 6, Column (11)
(7)	From Section I, Exhibit II, Sheet 6, Column (12)
(8)	= (6) - (4)
(9)	= (7) - (4)
(10)	= (5) - (4)
(11)	= (8) - (10)
(12)	= (9) - (10)

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Short-Term Portion

Accident Year	Age of Losses @ 06/30/2023	Selected Paid Test LDF @ 06/30/2023	Implied Paid LDF	Paid LDF	Cumulative Percent Paid	Incremental Percent Paid	Average Total Unpaid ss & ALAE Estimate	Undiscounted Cash Flow of Payments 2024
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
						0.32%		
Prior to 7/1/1993	372.0	1.034	1.037	1.034	96.72%	0.24%	873,868	86,081
7/1/93 - 6/30/94	360.0	1.036	1.037	1.036	96.48%	0.25%	46,507	3,182
7/1/94 - 6/30/95	348.0	1.039	1.039	1.039	96.23%	0.27%	36,390	2,435
7/1/95 - 6/30/96	336.0	1.042	1.042	1.042	95.96%	0.28%	42,398	2,783
7/1/96 - 6/30/97	324.0	1.045	1.045	1.045	95.68%	0.29%	39,837	2,573
7/1/97 - 6/30/98	312.0	1.048	1.048	1.048	95.39%	0.31%	38,304	2,441
7/1/98 - 6/30/99	300.0	1.052	1.052	1.052	95.08%	0.02%	32,851	2,071
7/1/99 - 6/30/00	288.0	1.052	1.052	1.052	95.06%	0.24%	45,415	182
7/1/00 - 6/30/01	276.0	1.055	1.055	1.055	94.82%	0.50%	93,384	4,300
7/1/01 - 6/30/02	264.0	1.060	1.060	1.060	94.32%	0.99%	66,114	5,849
7/1/02 - 6/30/03	252.0	1.071	1.071	1.071	93.33%	1.47%	63,730	9,421
7/1/03 - 6/30/04	240.0	1.089	1.089	1.089	91.86%	1.39%	89,525	16,140
7/1/04 - 6/30/05	228.0	1.105	1.105	1.105	90.48%	1.29%	110,731	16,135
7/1/05 - 6/30/06	216.0	1.121	1.121	1.121	89.19%	0.93%	156,463	18,640
7/1/06 - 6/30/07	204.0	1.133	1.133	1.133	88.26%	0.52%	161,967	12,797
7/1/07 - 6/30/08	192.0	1.140	1.140	1.140	87.75%	0.58%	205,184	8,628
7/1/08 - 6/30/09	180.0	1.147	1.147	1.147	87.17%	0.33%	179,832	8,072
7/1/09 - 6/30/10	168.0	1.152	1.152	1.152	86.84%	0.54%	206,338	5,210
7/1/10 - 6/30/11	156.0	1.159	1.159	1.159	86.30%	1.22%	164,157	6,496
7/1/11 - 6/30/12	144.0	1.175	1.175	1.175	85.07%	1.16%	245,326	20,121
7/1/12 - 6/30/13	132.0	1.192	1.192	1.192	83.91%	0.37%	222,662	16,038
7/1/13 - 6/30/14	120.0	1.197	1.197	1.197	83.54%	0.64%	208,006	4,665
7/1/14 - 6/30/15	108.0	1.206	1.206	1.206	82.90%	2.07%	250,473	9,382
7/1/15 - 6/30/16	96.0	1.237	1.237	1.237	80.83%	1.18%	253,226	27,345
7/1/16 - 6/30/17	84.0	1.255	1.255	1.255	79.65%	1.38%	269,413	15,605
7/1/17 - 6/30/18	72.0	1.278	1.278	1.278	78.27%	2.94%	247,418	15,768
7/1/18 - 6/30/19	60.0	1.327	1.327	1.327	75.33%	3.08%	273,983	32,612
7/1/19 - 6/30/20	48.0	1.384	1.520	1.384	72.25%	5.30%	346,508	38,514
7/1/20 - 6/30/21	36.0	1.494	1.920	1.494	66.95%	11.10%	474,147	75,985
7/1/21 - 6/30/22	24.0	1.790	2.596	1.790	55.86%	27.47%	596,910	150,047
7/1/22 - 6/30/23	12.0	3.522	6.040	3.522	28.39%	28.39%	762,669	292,527
Total							6,803,737	912,047

	Undiscounted	Discounted			
Short-Term Portion	13%	20%	(10)	Interest Rate	4%

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1) @ 06/30/2023
(3) From Section I, Exhibit II, Sheet 10, Column (6)
(4) Average Ultimate Loss Divided by Paid Loss From Section I, Exhibit II, Sheet 6
(5) Selected
(6) = 1 / (5)
(7) = (6) from Current Age - (6) from Subsequent Age
(8) From Section I, Exhibit II, Sheet 3
(9) - (9) Based on (5)

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Medical

Section I
Exhibit II
Sheet 3

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Discounted at (4%) Unpaid Loss & ALAE Estimate

Accident Year	Indicated Total Unpaid Loss & ALAE Estimate Low	Indicated Total Unpaid Loss & ALAE Estimate High	Discount Factor	Discounted Total Unpaid Loss & ALAE Estimate Low	Discounted Total Unpaid Loss & ALAE Estimate High
(1)	(2)	(3)	(4)	(5)	(6)
Prior to 7/1/1993	786,482	961,255	1.000	786,482	961,255
7/1/93 - 6/30/94	44,157	48,857	0.981	43,300	47,909
7/1/94 - 6/30/95	34,540	38,240	0.945	32,654	36,152
7/1/95 - 6/30/96	40,298	44,498	0.914	36,821	40,659
7/1/96 - 6/30/97	37,837	41,837	0.885	33,492	37,033
7/1/97 - 6/30/98	36,354	40,254	0.859	31,241	34,593
7/1/98 - 6/30/99	31,251	34,451	0.836	26,127	28,803
7/1/99 - 6/30/00	43,165	47,665	0.805	34,731	38,351
7/1/00 - 6/30/01	88,734	98,034	0.783	69,494	76,778
7/1/01 - 6/30/02	62,814	69,414	0.773	48,567	53,670
7/1/02 - 6/30/03	60,530	66,930	0.779	47,123	52,106
7/1/03 - 6/30/04	85,025	94,025	0.790	67,203	74,317
7/1/04 - 6/30/05	105,231	116,231	0.792	83,357	92,070
7/1/05 - 6/30/06	148,613	164,313	0.788	117,069	129,437
7/1/06 - 6/30/07	153,867	170,067	0.775	119,259	131,816
7/1/07 - 6/30/08	194,884	215,484	0.755	147,170	162,726
7/1/08 - 6/30/09	170,882	188,782	0.738	126,032	139,234
7/1/09 - 6/30/10	195,988	216,688	0.716	140,333	155,154
7/1/10 - 6/30/11	155,957	172,357	0.700	109,177	120,658
7/1/11 - 6/30/12	233,076	257,576	0.698	162,766	179,875
7/1/12 - 6/30/13	211,512	233,812	0.694	146,735	162,206
7/1/13 - 6/30/14	197,606	218,406	0.674	133,205	147,226
7/1/14 - 6/30/15	237,923	263,023	0.661	157,176	173,758
7/1/15 - 6/30/16	235,526	270,926	0.673	158,392	182,199
7/1/16 - 6/30/17	250,563	288,263	0.666	166,870	191,978
7/1/17 - 6/30/18	230,068	264,768	0.662	152,317	175,290
7/1/18 - 6/30/19	254,783	293,183	0.678	172,624	198,641
7/1/19 - 6/30/20	322,258	370,758	0.688	221,730	255,101
7/1/20 - 6/30/21	426,647	521,647	0.713	304,075	371,783
7/1/21 - 6/30/22	536,910	656,910	0.760	407,796	498,939
7/1/22 - 6/30/23	686,669	838,669	0.826	567,397	692,995
Total	6,300,150	7,307,324		4,850,718	5,642,712

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From Section I, Exhibit II, Sheet 1, Column (8)
(3) From Section I, Exhibit II, Sheet 1, Column (9)
(4) From Section I, Exhibit II, Sheet 0, Column (8)
(5) = (2) x (4)
(6) = (3) x (4)

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Medical

Section I
Exhibit II
Sheet 4

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Actual vs Expected - Paid Loss & ALAE Emergence

Accident Year	Selected Low Ultimate Loss & ALAE @ 06/30/2022	Selected High Ultimate Loss & ALAE @ 06/30/2022	Unlimited Paid Loss & ALAE @ 06/30/2022	Unlimited Paid Loss & ALAE @ 06/30/2023	Paid LDF @ 06/30/2022	Projected Paid LDF @ 06/30/2023	Method 1 Low Expected Paid Emergence Loss & ALAE @ 06/30/2023	Method 1 High Expected Paid Emergence Loss & ALAE @ 06/30/2023	Actual Paid Emergence Loss & ALAE @ 06/30/2023	Actual - Expected Method 1 Low Paid	Actual - Expected Method 1 High Paid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993	24,026,048	24,118,298	23,579,996	23,621,778	1.035	1.032	43,914	52,996	41,781	(2,132)	(11,214)
7/1/93 - 6/30/94	1,319,800	1,324,600	1,273,943	1,273,943	1.038	1.035	3,138	3,467	0	(3,138)	(3,467)
7/1/94 - 6/30/95	964,100	967,900	928,160	928,160	1.041	1.038	2,416	2,672	0	(2,416)	(2,672)
7/1/95 - 6/30/96	1,048,300	1,052,700	1,006,480	1,006,802	1.044	1.041	2,770	3,061	322	(2,448)	(2,739)
7/1/96 - 6/30/97	922,000	926,200	882,663	882,663	1.047	1.044	2,574	2,849	0	(2,574)	(2,849)
7/1/97 - 6/30/98	825,800	829,700	788,037	792,247	1.050	1.047	2,448	2,701	4,210	1,762	1,509
7/1/98 - 6/30/99	665,200	668,400	634,549	634,549	1.051	1.050	237	262	0	(237)	(262)
7/1/99 - 6/30/00	918,400	923,100	874,035	874,035	1.053	1.051	2,081	2,301	0	(2,081)	(2,301)
7/1/00 - 6/30/01	1,773,100	1,782,200	1,686,350	1,709,366	1.054	1.053	1,101	1,217	23,016	21,915	21,799
7/1/01 - 6/30/02	1,136,700	1,143,300	1,074,619	1,097,086	1.061	1.054	6,457	7,144	22,467	16,010	15,323
7/1/02 - 6/30/03	945,500	952,300	881,721	891,870	1.076	1.061	12,126	13,419	10,149	(1,978)	(3,270)
7/1/03 - 6/30/04	1,077,900	1,086,900	993,038	1,011,175	1.090	1.076	12,074	13,355	18,137	6,062	4,782
7/1/04 - 6/30/05	1,162,500	1,174,200	1,052,069	1,052,069	1.111	1.090	18,832	20,828	0	(18,832)	(20,828)
7/1/05 - 6/30/06	1,440,700	1,457,300	1,283,204	1,290,787	1.129	1.111	20,534	22,699	7,583	(12,951)	(15,115)
7/1/06 - 6/30/07	1,379,200	1,396,300	1,217,008	1,218,033	1.140	1.129	11,346	12,543	1,025	(10,322)	(11,518)
7/1/07 - 6/30/08	1,677,500	1,699,400	1,469,216	1,469,216	1.149	1.140	10,884	12,029	0	(10,884)	(12,029)
7/1/08 - 6/30/09	1,401,000	1,420,200	1,218,283	1,221,918	1.158	1.149	8,707	9,621	3,635	(5,072)	(5,986)
7/1/09 - 6/30/10	1,571,000	1,593,400	1,358,071	1,361,312	1.165	1.158	8,008	8,851	3,241	(4,768)	(5,610)
7/1/10 - 6/30/11	1,208,500	1,227,400	1,028,234	1,033,943	1.185	1.165	16,336	18,049	5,708	(10,627)	(12,340)
7/1/11 - 6/30/12	1,656,600	1,684,700	1,390,113	1,398,024	1.202	1.185	19,290	21,324	7,911	(11,379)	(13,414)
7/1/12 - 6/30/13	1,405,300	1,431,200	1,158,945	1,161,588	1.224	1.202	20,056	22,165	2,643	(17,413)	(19,522)
7/1/13 - 6/30/14	1,280,000	1,304,500	1,047,693	1,055,794	1.233	1.224	7,912	8,746	8,101	189	(645)
7/1/14 - 6/30/15	1,454,000	1,496,300	1,172,714	1,214,477	1.258	1.233	21,618	24,869	41,763	20,145	16,894
7/1/15 - 6/30/16	1,336,300	1,377,500	1,062,520	1,067,974	1.277	1.258	15,076	17,345	5,454	(9,622)	(11,891)
7/1/16 - 6/30/17	1,336,400	1,382,200	1,032,288	1,054,737	1.317	1.277	29,862	34,359	22,450	(7,412)	(11,909)
7/1/17 - 6/30/18	1,133,500	1,176,100	850,616	891,132	1.358	1.317	24,525	28,218	40,516	15,991	12,298
7/1/18 - 6/30/19	1,135,500	1,183,400	817,518	836,817	1.418	1.358	33,942	39,054	19,299	(14,643)	(19,756)
7/1/19 - 6/30/20	1,011,000	1,101,000	605,061	666,342	1.534	1.418	62,074	75,836	61,281	(793)	(14,555)
7/1/20 - 6/30/21	993,000	1,119,000	423,748	515,353	1.828	1.534	131,641	160,779	91,606	(40,035)	(69,173)
7/1/21 - 6/30/22	889,000	1,047,000	175,434	374,090	3.424	1.828	257,080	314,003	198,655	(58,425)	(115,348)
Total	59,093,848	60,046,698	52,966,327	53,607,278			809,059	956,758	640,951	(168,107)	(315,807)

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Selected by Deloitte Consulting LLP @ 06/30/2022
(3)	Selected by Deloitte Consulting LLP @ 06/30/2022
(4)	Provided by Entity
(5)	Provided by Entity
(6)	Selected by Deloitte Consulting LLP @ 06/30/2022
(7)	Interpolated From (6)
(8)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((2) - (4))
(9)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((3) - (4))
(10)	= (5) - (4)
(11)	= (10) - (8)
(12)	= (10) - (9)

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Medical

Section I
Exhibit II
Sheet 5

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Ultimate Loss & ALAE Runoff

Accident Year	Ultimate Loss & ALAE @ 06/30/2022 Low	Ultimate Loss & ALAE @ 06/30/2022 High	Ultimate Loss & ALAE @ 06/30/2023 Low	Ultimate Loss & ALAE @ 06/30/2023 High	Deloitte Change Low	Deloitte Change High	Paid Loss & ALAE @ 06/30/2023	Reported Loss & ALAE @ 06/30/2023
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	24,026,048	24,118,298	24,408,259	24,583,033	382,211	464,734	23,621,778	23,621,778
7/1/93 - 6/30/94	1,319,800	1,324,600	1,318,100	1,322,800	(1,700)	(1,800)	1,273,943	1,273,943
7/1/94 - 6/30/95	964,100	967,900	962,700	966,400	(1,400)	(1,500)	928,160	928,160
7/1/95 - 6/30/96	1,048,300	1,052,700	1,047,100	1,051,300	(1,200)	(1,400)	1,006,802	1,006,802
7/1/96 - 6/30/97	922,000	926,200	920,500	924,500	(1,500)	(1,700)	882,663	882,663
7/1/97 - 6/30/98	825,800	829,700	828,600	832,500	2,800	2,800	792,247	792,247
7/1/98 - 6/30/99	665,200	668,400	665,800	669,000	600	600	634,549	634,549
7/1/99 - 6/30/00	918,400	923,100	917,200	921,700	(1,200)	(1,400)	874,035	874,035
7/1/00 - 6/30/01	1,773,100	1,782,200	1,798,100	1,807,400	25,000	25,200	1,709,366	1,709,366
7/1/01 - 6/30/02	1,136,700	1,143,300	1,159,900	1,166,500	23,200	23,200	1,097,086	1,097,086
7/1/02 - 6/30/03	945,500	952,300	952,400	958,800	6,900	6,500	891,870	891,870
7/1/03 - 6/30/04	1,077,900	1,086,900	1,096,200	1,105,200	18,300	18,300	1,011,175	1,011,175
7/1/04 - 6/30/05	1,162,500	1,174,200	1,157,300	1,168,300	(5,200)	(5,900)	1,052,069	1,052,069
7/1/05 - 6/30/06	1,440,700	1,457,300	1,439,400	1,455,100	(1,300)	(2,200)	1,290,787	1,290,787
7/1/06 - 6/30/07	1,379,200	1,396,300	1,371,900	1,388,100	(7,300)	(8,200)	1,218,033	1,218,033
7/1/07 - 6/30/08	1,677,500	1,699,400	1,664,100	1,684,700	(13,400)	(14,700)	1,469,216	1,469,216
7/1/08 - 6/30/09	1,401,000	1,420,200	1,392,800	1,410,700	(8,200)	(9,500)	1,221,918	1,221,918
7/1/09 - 6/30/10	1,571,000	1,593,400	1,557,300	1,578,000	(13,700)	(15,400)	1,361,312	1,361,312
7/1/10 - 6/30/11	1,208,500	1,227,400	1,189,900	1,206,300	(18,600)	(21,100)	1,033,943	1,033,943
7/1/11 - 6/30/12	1,656,600	1,684,700	1,631,100	1,655,600	(25,500)	(29,100)	1,398,024	1,398,024
7/1/12 - 6/30/13	1,405,300	1,431,200	1,373,100	1,395,400	(32,200)	(35,800)	1,161,588	1,161,588
7/1/13 - 6/30/14	1,280,000	1,304,500	1,253,400	1,274,200	(26,600)	(30,300)	1,055,794	1,055,794
7/1/14 - 6/30/15	1,454,000	1,496,300	1,452,400	1,477,500	(1,600)	(18,800)	1,214,477	1,214,477
7/1/15 - 6/30/16	1,336,300	1,377,500	1,303,500	1,338,900	(32,800)	(38,600)	1,067,974	1,067,974
7/1/16 - 6/30/17	1,336,400	1,382,200	1,305,300	1,343,000	(31,100)	(39,200)	1,054,737	1,054,737
7/1/17 - 6/30/18	1,133,500	1,176,100	1,121,200	1,155,900	(12,300)	(20,200)	891,132	891,132
7/1/18 - 6/30/19	1,135,500	1,183,400	1,091,600	1,130,000	(43,900)	(53,400)	836,817	836,817
7/1/19 - 6/30/20	1,011,000	1,101,000	988,600	1,037,100	(22,400)	(63,900)	666,342	666,342
7/1/20 - 6/30/21	993,000	1,119,000	942,000	1,037,000	(51,000)	(82,000)	515,353	515,353
7/1/21 - 6/30/22	889,000	1,047,000	911,000	1,031,000	22,000	(16,000)	374,090	374,090
Total	59,093,848	60,046,698	59,220,759	60,075,933	126,911	29,234	53,607,278	53,607,278

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(3) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(4) From Section I, Exhibit II, Sheet 6, Column (11)
(5) From Section I, Exhibit II, Sheet 6, Column (12)
(6) = (4) - (2)
(7) = (5) - (3)
(8) Provided by Entity
(9) Provided by Entity

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Selection of Ultimate Loss & ALAE

Accident Year	Payroll (00)'s	Unlimited Paid Loss & ALAE @ 06/30/2023	Unlimited Reported Loss & ALAE @ 06/30/2023	Ultimate Loss & ALAE Indications: Paid LDM	Expected Loss & ALAE	Paid B-F	Frequency Severity	Prior Selected Ultimate Loss & ALAE: Low	High	Selected Ultimate Loss & ALAE: Low	High	Ultimate Loss & ALAE Rates: Low	High	Ultimate Loss & ALAE Severity: Low	High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Prior to 7/1/1993		23,621,778	23,621,778	24,422,918	0		0	24,026,048	24,118,298	24,408,259	24,583,033				
7/1/93 - 6/30/94	2,570,620	1,273,943	1,273,943	1,320,437	888,055	1,305,212	0	1,319,800	1,324,600	1,318,100	1,322,800	0.51	0.51		
7/1/94 - 6/30/95	2,558,540	928,160	928,160	964,559	893,730	961,886	0	964,100	967,900	962,700	966,400	0.38	0.38		
7/1/95 - 6/30/96	2,555,390	1,006,802	1,006,802	1,049,176	905,137	1,043,359	0	1,048,300	1,052,700	1,047,100	1,051,300	0.41	0.41		
7/1/96 - 6/30/97	2,700,710	882,663	882,663	922,493	965,936	924,369	0	922,000	926,200	920,500	924,500	0.34	0.34		
7/1/97 - 6/30/98	2,453,670	792,247	792,247	830,547	881,493	832,897	0	825,800	829,700	828,600	832,500	0.34	0.34		
7/1/98 - 6/30/99	2,514,530	634,549	634,549	667,397	903,357	679,010	0	665,200	668,400	665,800	669,000	0.26	0.27		
7/1/99 - 6/30/00	2,556,410	874,035	874,035	919,471	923,124	919,651	0	918,400	923,100	917,200	921,700	0.36	0.36		
7/1/00 - 6/30/01	2,639,180	1,709,366	1,709,366	1,802,750	967,634	1,759,491	0	1,773,100	1,782,200	1,798,100	1,807,400	0.68	0.68		
7/1/01 - 6/30/02	2,675,980	1,097,086	1,097,086	1,163,188	993,304	1,153,534	0	1,136,700	1,143,300	1,159,900	1,166,500	0.43	0.44		
7/1/02 - 6/30/03	2,744,650	891,870	891,870	955,596	1,044,669	961,536	0	945,500	952,300	952,400	958,800	0.35	0.35		
7/1/03 - 6/30/04	2,723,840	1,011,175	1,011,175	1,100,724	1,063,821	1,097,721	0	1,077,900	1,086,900	1,096,200	1,105,200	0.40	0.41		
7/1/04 - 6/30/05	2,736,470	1,052,069	1,052,069	1,162,804	1,076,201	1,154,557	0	1,162,500	1,174,200	1,157,300	1,168,300	0.42	0.43		
7/1/05 - 6/30/06	2,851,390	1,290,787	1,290,787	1,447,249	1,126,605	1,412,584	0	1,440,700	1,457,300	1,439,400	1,455,100	0.50	0.51		
7/1/06 - 6/30/07	2,985,160	1,218,033	1,218,033	1,380,027	1,179,459	1,356,483	0	1,379,200	1,396,300	1,371,900	1,388,100	0.46	0.47		
7/1/07 - 6/30/08	3,142,310	1,469,216	1,469,216	1,674,391	1,241,550	1,621,352	0	1,677,500	1,699,400	1,664,100	1,684,700	0.53	0.54		
7/1/08 - 6/30/09	3,029,980	1,221,918	1,221,918	1,401,758	1,211,363	1,377,331	0	1,401,000	1,420,200	1,392,800	1,410,700	0.46	0.47		
7/1/09 - 6/30/10	2,972,520	1,361,312	1,361,312	1,567,645	1,207,331	1,520,221	0	1,571,000	1,593,400	1,557,300	1,578,000	0.52	0.53		
7/1/10 - 6/30/11	2,924,320	1,033,943	1,033,943	1,198,139	1,192,394	1,197,352	0	1,208,500	1,227,400	1,189,900	1,206,300	0.41	0.41		
7/1/11 - 6/30/12	2,959,080	1,398,024	1,398,024	1,643,356	1,206,567	1,578,149	0	1,656,600	1,684,700	1,631,100	1,655,600	0.55	0.56		
7/1/12 - 6/30/13	3,015,410	1,161,588	1,161,588	1,384,285	1,229,536	1,359,390	1,365,209	1,405,300	1,431,200	1,373,100	1,395,400	0.46	0.46	5,970	6,067
7/1/13 - 6/30/14	3,099,100	1,055,794	1,055,794	1,263,766	1,263,661	1,263,749	1,577,351	1,280,000	1,304,500	1,253,400	1,274,200	0.40	0.41	4,858	4,939
7/1/14 - 6/30/15	3,165,520	1,214,477	1,214,477	1,464,937	1,290,743	1,435,156	1,448,351	1,454,000	1,496,300	1,452,400	1,477,500	0.46	0.47	6,315	6,424
7/1/15 - 6/30/16	3,165,650	1,067,974	1,067,974	1,321,207	1,290,796	1,315,378	1,368,565	1,336,300	1,377,500	1,303,500	1,338,900	0.41	0.42	6,178	6,345
7/1/16 - 6/30/17	2,924,030	1,054,737	1,054,737	1,324,136	1,192,276	1,297,309	1,376,219	1,336,400	1,382,200	1,305,300	1,343,000	0.45	0.46	6,336	6,519
7/1/17 - 6/30/18	2,929,560	891,132	891,132	1,138,537	1,194,531	1,150,704	1,273,003	1,133,500	1,176,100	1,121,200	1,155,900	0.38	0.39	6,061	6,248
7/1/18 - 6/30/19	3,080,020	836,817	836,817	1,110,809	1,255,881	1,146,593	1,233,230	1,135,500	1,183,400	1,091,600	1,130,000	0.35	0.37	6,274	6,494
7/1/19 - 6/30/20	3,110,580	666,342	666,342	922,279	1,268,342	1,018,313	1,007,421	1,011,000	1,101,000	988,600	1,037,100	0.32	0.33	7,164	7,515
7/1/20 - 6/30/21	3,039,520	515,353	515,353	769,717	1,239,367	924,920	1,054,094	993,000	1,119,000	942,000	1,037,000	0.31	0.34	6,720	7,397
7/1/21 - 6/30/22	3,074,331	374,090	374,090	669,723	1,253,561	927,445	732,293	889,000	1,047,000	911,000	1,031,000	0.30	0.34	9,635	10,904
7/1/22 - 6/30/23	3,253,214	151,331	151,331	533,018	1,326,501	1,101,220	726,336			838,000	990,000	0.26	0.30	9,203	10,873
Total	86,151,685	53,758,609	53,758,609	59,497,041	33,676,924	35,796,871	13,162,073	59,093,848	60,046,698	60,058,759	61,065,933				

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Provided by Entity
(4) Provided by Entity
(5) From Section I, Exhibit II, Sheet 10, Column (7)
(6) From Section I, Exhibit II, Sheet 7, Column (4)
(7) From Section I, Exhibit II, Sheet 7, Column (10)
(8) From Section I, Exhibit II, Sheet 9, Column (12)
(9) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(10) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(11) Selected by Deloitte Consulting LLP
(12) Selected by Deloitte Consulting LLP
(13) = (11) / (2)
(14) = (12) / (2)
(15) (11) Divided by Ultimate Claims From Section I, Exhibit II, Sheet 13, Column (7)
(16) (12) Divided by Ultimate Claims From Section I, Exhibit II, Sheet 13, Column (7)

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Medical

Section I
Exhibit II
Sheet 7

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Bornhuetter-Ferguson Method

Accident Year	Payroll (00)'s	Initial Expected Loss & ALAE Rates	Initial Expected Loss & ALAE	Expected % of Paid Loss & ALAE	Expected Paid Loss & ALAE	Unlimited Actual Paid Loss & ALAE	Expected % of Unpaid Loss & ALAE	Expected Unpaid Loss & ALAE	Unlimited Indicated Ultimate Loss & ALAE	Unlimited Indicated Ultimate Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
7/1/93 - 6/30/94	2,570,620	0.35	888,055	96.5%	856,785	1,273,943	3.5%	31,270	1,305,212	0.51
7/1/94 - 6/30/95	2,558,540	0.35	893,730	96.2%	860,003	928,160	3.8%	33,727	961,886	0.38
7/1/95 - 6/30/96	2,555,390	0.35	905,137	96.0%	868,580	1,006,802	4.0%	36,557	1,043,359	0.41
7/1/96 - 6/30/97	2,700,710	0.36	965,936	95.7%	924,230	882,663	4.3%	41,706	924,369	0.34
7/1/97 - 6/30/98	2,453,670	0.36	881,493	95.4%	840,843	792,247	4.6%	40,650	832,897	0.34
7/1/98 - 6/30/99	2,514,530	0.36	903,357	95.1%	858,896	634,549	4.9%	44,461	679,010	0.27
7/1/99 - 6/30/00	2,556,410	0.36	923,124	95.1%	877,507	874,035	4.9%	45,617	919,651	0.36
7/1/00 - 6/30/01	2,639,180	0.37	967,634	94.8%	917,510	1,709,366	5.2%	50,124	1,759,491	0.67
7/1/01 - 6/30/02	2,675,980	0.37	993,304	94.3%	936,856	1,097,086	5.7%	56,448	1,153,534	0.43
7/1/02 - 6/30/03	2,744,650	0.38	1,044,669	93.3%	975,003	891,870	6.7%	69,666	961,536	0.35
7/1/03 - 6/30/04	2,723,840	0.39	1,063,821	91.9%	977,275	1,011,175	8.1%	86,546	1,097,721	0.40
7/1/04 - 6/30/05	2,736,470	0.39	1,076,201	90.5%	973,714	1,052,069	9.5%	102,487	1,154,557	0.42
7/1/05 - 6/30/06	2,851,390	0.40	1,126,605	89.2%	1,004,808	1,290,787	10.8%	121,797	1,412,584	0.50
7/1/06 - 6/30/07	2,985,160	0.40	1,179,459	88.3%	1,041,009	1,218,033	11.7%	138,450	1,356,483	0.45
7/1/07 - 6/30/08	3,142,310	0.40	1,241,550	87.7%	1,089,414	1,469,216	12.3%	152,136	1,621,352	0.52
7/1/08 - 6/30/09	3,029,980	0.40	1,211,363	87.2%	1,055,950	1,221,918	12.8%	155,413	1,377,331	0.45
7/1/09 - 6/30/10	2,972,520	0.41	1,207,331	86.8%	1,048,423	1,361,312	13.2%	158,908	1,520,221	0.51
7/1/10 - 6/30/11	2,924,320	0.41	1,192,394	86.3%	1,028,985	1,033,943	13.7%	163,409	1,197,352	0.41
7/1/11 - 6/30/12	2,959,080	0.41	1,206,567	85.1%	1,026,442	1,398,024	14.9%	180,125	1,578,149	0.53
7/1/12 - 6/30/13	3,015,410	0.41	1,229,536	83.9%	1,031,734	1,161,588	16.1%	197,802	1,359,390	0.45
7/1/13 - 6/30/14	3,099,100	0.41	1,263,661	83.5%	1,055,705	1,055,794	16.5%	207,956	1,263,749	0.41
7/1/14 - 6/30/15	3,165,520	0.41	1,290,743	82.9%	1,070,065	1,214,477	17.1%	220,678	1,435,156	0.45
7/1/15 - 6/30/16	3,165,650	0.41	1,290,796	80.8%	1,043,393	1,067,974	19.2%	247,404	1,315,378	0.42
7/1/16 - 6/30/17	2,924,030	0.41	1,192,276	79.7%	949,704	1,054,737	20.3%	242,571	1,297,309	0.44
7/1/17 - 6/30/18	2,929,560	0.41	1,194,531	78.3%	934,958	891,132	21.7%	259,573	1,150,704	0.39
7/1/18 - 6/30/19	3,080,020	0.41	1,255,881	75.3%	946,105	836,817	24.7%	309,776	1,146,593	0.37
7/1/19 - 6/30/20	3,110,580	0.41	1,268,342	72.2%	916,371	666,342	27.8%	351,971	1,018,313	0.33
7/1/20 - 6/30/21	3,039,520	0.41	1,239,367	67.0%	829,801	515,353	33.0%	409,566	924,920	0.30
7/1/21 - 6/30/22	3,074,331	0.41	1,253,561	55.9%	700,206	374,090	44.1%	553,355	927,445	0.30
7/1/22 - 6/30/23	3,253,214	0.41	1,326,501	28.4%	376,611	151,331	71.6%	949,889	1,101,220	0.34
Total	86,151,685		33,676,924		28,016,885	30,136,831		5,660,040	35,796,871	

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	From Section I, Exhibit II, Sheet 8, Column (13)
(4)	= (2) x (3)
(5)	= 1 / Section I, Exhibit II, Sheet 10, Column (6)
(6)	= (4) x (5)
(7)	Provided by Entity
(8)	= 1 - (5)
(9)	= (4) x (8)
(10)	= (7) + (9)
(11)	= (10) / (2)

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Calculation of Initial Expected Loss & ALAE Rates

Accident Year	Payroll (00)'s	Payroll Trend	Loss Development Unlimited Indicated Ultimate Loss & ALAE Paid	Reported	Selected Initial Ultimate Loss & ALAE	Loss & ALAE Trend Factor	Benefit Level Adjustment Factors	Trended Ultimate	On-level Loss & ALAE Rates	Detrended Loss & ALAE Rates	Prior Expected Loss & ALAE Rates	Initial Expected Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
7/1/93 - 6/30/94	2,570,620	2.357	1,320,437	1,320,437	24,495,646	2.357	1.180	68,133,614	***11.25***	0.35	0.38	0.35
7/1/94 - 6/30/95	2,558,540	2.288	964,559	964,559	1,320,450	2.288	1.167	3,526,509	0.60	0.35	0.38	0.35
7/1/95 - 6/30/96	2,555,390	2.221	1,049,176	1,049,176	964,550	2.221	1.151	2,466,424	0.43	0.35	0.38	0.35
7/1/96 - 6/30/97	2,700,710	2.157	922,493	922,493	1,049,200	2.157	1.140	2,579,590	0.44	0.36	0.39	0.36
7/1/97 - 6/30/98	2,453,670	2.094	830,547	830,547	922,500	2.094	1.135	2,192,245	0.43	0.36	0.39	0.36
7/1/98 - 6/30/99	2,514,530	2.033	667,397	667,397	830,550	2.033	1.135	1,916,246	0.37	0.36	0.39	0.36
7/1/99 - 6/30/00	2,556,410	1.974	919,471	919,471	667,400	1.974	1.129	1,487,332	0.29	0.36	0.39	0.36
7/1/00 - 6/30/01	2,639,180	1.916	1,802,750	1,802,750	919,450	1.916	1.112	1,959,294	0.39	0.37	0.40	0.37
7/1/01 - 6/30/02	2,675,980	1.860	1,163,188	1,163,188	1,802,750	1.860	1.098	3,683,941	0.74	0.37	0.40	0.37
7/1/02 - 6/30/03	2,744,650	1.806	955,596	955,596	1,163,200	1.806	1.071	2,250,620	0.45	0.38	0.41	0.38
7/1/03 - 6/30/04	2,723,840	1.754	1,100,724	1,100,724	955,600	1.754	1.044	1,749,409	0.37	0.39	0.42	0.39
7/1/04 - 6/30/05	2,736,470	1.702	1,162,804	1,162,804	1,100,700	1.702	1.037	1,942,814	0.42	0.39	0.43	0.39
7/1/05 - 6/30/06	2,851,390	1.653	1,447,249	1,447,249	1,162,800	1.653	1.032	1,983,433	0.42	0.40	0.43	0.40
7/1/06 - 6/30/07	2,985,160	1.605	1,380,027	1,380,027	1,447,250	1.605	1.032	2,396,729	0.50	0.40	0.43	0.40
7/1/07 - 6/30/08	3,142,310	1.558	1,674,391	1,674,391	1,380,000	1.558	1.032	2,218,795	0.45	0.40	0.43	0.40
7/1/08 - 6/30/09	3,029,980	1.513	1,401,758	1,401,758	1,674,400	1.513	1.020	2,583,096	0.56	0.40	0.43	0.40
7/1/09 - 6/30/10	2,972,520	1.469	1,567,645	1,567,645	1,401,750	1.469	1.004	2,066,558	0.47	0.41	0.44	0.41
7/1/10 - 6/30/11	2,924,320	1.426	1,198,139	1,198,139	1,567,650	1.426	1.000	2,235,094	0.54	0.41	0.44	0.41
7/1/11 - 6/30/12	2,959,080	1.384	1,643,356	1,643,356	1,198,100	1.384	1.000	1,658,451	0.40	0.41	0.44	0.41
7/1/12 - 6/30/13	3,015,410	1.344	1,384,285	1,384,285	1,643,350	1.344	1.000	2,208,525	0.54	0.41	0.44	0.41
7/1/13 - 6/30/14	3,099,100	1.305	1,263,766	1,263,766	1,384,250	1.305	1.000	1,806,132	0.45	0.41	0.44	0.41
7/1/14 - 6/30/15	3,165,520	1.267	1,464,937	1,464,937	1,263,800	1.267	1.000	1,600,944	0.40	0.41	0.44	0.41
7/1/15 - 6/30/16	3,165,650	1.230	1,321,207	1,321,207	1,464,950	1.230	1.000	1,801,704	0.46	0.41	0.44	0.41
7/1/16 - 6/30/17	2,924,030	1.194	1,324,136	1,324,136	1,321,200	1.194	1.000	1,577,582	0.45	0.41	0.44	0.41
7/1/17 - 6/30/18	2,929,560	1.159	1,138,537	1,138,537	1,324,150	1.159	1.000	1,535,053	0.45	0.41	0.44	0.41
7/1/18 - 6/30/19	3,080,020	1.126	1,110,809	1,110,809	1,138,550	1.126	1.000	1,281,448	0.37	0.41	0.44	0.41
7/1/19 - 6/30/20	3,110,580	1.093	922,279	922,279	1,110,800	1.093	1.000	1,213,801	0.36	0.41	0.44	0.41
7/1/20 - 6/30/21	3,039,520	1.061	769,717	769,717	769,717	1.061	1.000	816,593	***0.25***	0.41	0.44	0.41
7/1/21 - 6/30/22	3,074,331	1.030	669,723	669,723	669,723	1.030	1.000	689,815	***0.22***	0.41	0.44	0.41
7/1/22 - 6/30/23	3,253,214	1.000	533,018	533,018	533,018	1.000	1.000	533,018	***0.16***	0.41		0.41
			35,074,123	35,074,123				Last 3 Wtd Avg	0.39			
								Last 4 Wtd Avg	0.41			
								Last 5 Wtd Avg	0.42			
								All Per Wtd Avg	0.46			

(Note: numbers in bold and italics and with borders are excluded from the calculated averages)

Selected (14) 0.41

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Selected by Deloitte Consulting LLP
(4) From Section I, Exhibit II, Sheet 10, Column (7)
(5) From Section I, Exhibit II, Sheet 0, Column (7)
(6) Selected by Deloitte Consulting LLP
(7) Selected by Deloitte Consulting LLP
(8) Based on industry sources
(9) = (6) x (7) x (8)
(10) = (9) / [(2) x (3)]
(11) = (14) / (7) / (8) * (3)
(12) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(13) Selected for by Deloitte Consulting LLP Based on (14)
(14) Selected by Deloitte Consulting LLP

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Frequency Severity Method

Accident Year	Payroll (00)'s	Ultimate Reported Severity	Include For Fit	Exponential Fitted Reported Severity	Initial Selected Ultimate Severity	Selected Ultimate Claim Counts	Benefit Level Adjustment Factor	Selected Severity Trend	Trended Severity	On-Level Selected Ultimate Severity	Indicated Ultimate Loss & ALAE	Indicated Ultimate Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Prior to 7/1/1993			Exclude	4,853		0					0	
7/1/93 - 6/30/94	2,570,620		Exclude	4,898		0	1.180	2.357	0,000		0	0.00
7/1/94 - 6/30/95	2,558,540		Exclude	4,943		0	1.167	2.288	0,000		0	0.00
7/1/95 - 6/30/96	2,555,390		Exclude	4,989		0	1.151	2.221	0,000		0	0.00
7/1/96 - 6/30/97	2,700,710		Exclude	5,035		0	1.140	2.157	0,000		0	0.00
7/1/97 - 6/30/98	2,453,670		Exclude	5,081		0	1.135	2.094	0,000		0	0.00
7/1/98 - 6/30/99	2,514,530		Exclude	5,128		0	1.135	2.033	0,000		0	0.00
7/1/99 - 6/30/00	2,556,410		Exclude	5,176		0	1.129	1.974	0,000		0	0.00
7/1/00 - 6/30/01	2,639,180		Exclude	5,224		0	1.112	1.916	0,000		0	0.00
7/1/01 - 6/30/02	2,675,980		Exclude	5,272		0	1.098	1.860	0,000		0	0.00
7/1/02 - 6/30/03	2,744,650		Exclude	5,321		0	1.071	1.806	0,000		0	0.00
7/1/03 - 6/30/04	2,723,840		Exclude	5,370		0	1.044	1.754	0,000		0	0.00
7/1/04 - 6/30/05	2,736,470		Exclude	5,420		0	1.037	1.702	0,000		0	0.00
7/1/05 - 6/30/06	2,851,390		Exclude	5,470		0	1.032	1.653	0,000		0	0.00
7/1/06 - 6/30/07	2,985,160		Exclude	5,520		0	1.032	1.605	0,000		0	0.00
7/1/07 - 6/30/08	3,142,310		Exclude	5,571		0	1.032	1.558	0,000		0	0.00
7/1/08 - 6/30/09	3,029,980		Exclude	5,623		0	1.020	1.513	0,000		0	0.00
7/1/09 - 6/30/10	2,972,520		Exclude	5,675		0	1.004	1.469	0,000		0	0.00
7/1/10 - 6/30/11	2,924,320		Exclude	5,727		0	1.000	1.426	0,000		0	0.00
7/1/11 - 6/30/12	2,959,080		Exclude	5,780		0	1.000	1.384	0,000		0	0.00
7/1/12 - 6/30/13	3,015,410	6,019	Include	5,834	7,145	230	1.000	1.344	9,602	7,977	1,365,209	0.45
7/1/13 - 6/30/14	3,099,100	4,898	Include	5,887	5,365	258	1.000	1.305	7,001	7,977	1,577,351	0.51
7/1/14 - 6/30/15	3,165,520	6,369	Include	5,942	5,495	230	1.000	1.267	6,961	7,977	1,448,351	0.46
7/1/15 - 6/30/16	3,165,650	6,262	Include	5,997	6,943	211	1.000	1.230	8,539	7,977	1,368,565	0.43
7/1/16 - 6/30/17	2,924,030	6,428	Include	6,052	6,414	206	1.000	1.194	7,658	7,977	1,376,219	0.47
7/1/17 - 6/30/18	2,929,560	6,154	Include	6,108	7,158	185	1.000	1.159	8,298	7,977	1,273,003	0.43
7/1/18 - 6/30/19	3,080,020	6,384	Include	6,165	6,543	174	1.000	1.126	7,365	7,977	1,233,230	0.40
7/1/19 - 6/30/20	3,110,580	6,683	Include	6,222	8,049	138	1.000	1.093	8,796	7,977	1,007,421	0.32
7/1/20 - 6/30/21	3,039,520	5,491	Include	6,279	5,491	140	1.000	1.061	***5,825***	7,977	1,054,094	0.35
7/1/21 - 6/30/22	3,074,331	7,083	Exclude	6,337	7,083	95	1.000	1.030	***7,295***	7,977	732,293	0.24
7/1/22 - 6/30/23	3,253,214	5,854	Exclude	6,396	5,854	91	1.000	1.000	***5,854***	7,977	726,336	0.22
			Implied Trend	0.9%	-17.4%			Last 5 Wtd Avg	8,107			
								Last 4 Wtd Avg	7,977			
								Last 3 Wtd Avg	8,109			
Total	86,151,685					1,958		Last 3 Avg	8,153		13,162,073	
								Selected	7,977			

Reported Exponential Regressio	
Constant	8.773
X Coefficient	(0.009)
R Squared	0.068

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Section I, Exhibit II, Sheet 0, Column (7) / Section I, Exhibit II, Sheet 13, Column (7) x 1
(4) Years included for purposes of fit
(5) Result of Exponential fit of Column (3) * Column (8)
(6) Selected by Deloitte Consulting LLP
(7) From Section I, Exhibit II, Sheet 13, Column (7)
(8) Based on industry sources
(9) Selected by Deloitte Consulting LLP
(10) = (6) x (8) x (9)
(11) Selected by Deloitte Consulting, LLP
(12) Selected in column (11) x (7) / (8) / (9)
(13) = (12) / (3)

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Medical

Section I
Exhibit II
Sheet 10

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss & ALAE Development Method

Accident Year	Age of Losses @ 06/30/2023	Retention	Payroll (00)'s	Unlimited Paid Loss & ALAE @ 06/30/2023	Paid LDF	Indicated Ultimate Loss & ALAE	Unlimited Indicated Ultimate Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Prior to 7/1/1993	372.0	Unlimited		23,621,778	1.034	24,422,918	
7/1/93 - 6/30/94	360.0	Unlimited	2,570,620	1,273,943	1.036	1,320,437	0.51
7/1/94 - 6/30/95	348.0	Unlimited	2,558,540	928,160	1.039	964,559	0.38
7/1/95 - 6/30/96	336.0	Unlimited	2,555,390	1,006,802	1.042	1,049,176	0.41
7/1/96 - 6/30/97	324.0	Unlimited	2,700,710	882,663	1.045	922,493	0.34
7/1/97 - 6/30/98	312.0	Unlimited	2,453,670	792,247	1.048	830,547	0.34
7/1/98 - 6/30/99	300.0	Unlimited	2,514,530	634,549	1.052	667,397	0.27
7/1/99 - 6/30/00	288.0	Unlimited	2,556,410	874,035	1.052	919,471	0.36
7/1/00 - 6/30/01	276.0	Unlimited	2,639,180	1,709,366	1.055	1,802,750	0.68
7/1/01 - 6/30/02	264.0	Unlimited	2,675,980	1,097,086	1.060	1,163,188	0.43
7/1/02 - 6/30/03	252.0	Unlimited	2,744,650	891,870	1.071	955,596	0.35
7/1/03 - 6/30/04	240.0	Unlimited	2,723,840	1,011,175	1.089	1,100,724	0.40
7/1/04 - 6/30/05	228.0	Unlimited	2,736,470	1,052,069	1.105	1,162,804	0.42
7/1/05 - 6/30/06	216.0	Unlimited	2,851,390	1,290,787	1.121	1,447,249	0.51
7/1/06 - 6/30/07	204.0	Unlimited	2,985,160	1,218,033	1.133	1,380,027	0.46
7/1/07 - 6/30/08	192.0	Unlimited	3,142,310	1,469,216	1.140	1,674,391	0.53
7/1/08 - 6/30/09	180.0	Unlimited	3,029,980	1,221,918	1.147	1,401,758	0.46
7/1/09 - 6/30/10	168.0	Unlimited	2,972,520	1,361,312	1.152	1,567,645	0.53
7/1/10 - 6/30/11	156.0	Unlimited	2,924,320	1,033,943	1.159	1,198,139	0.41
7/1/11 - 6/30/12	144.0	Unlimited	2,959,080	1,398,024	1.175	1,643,356	0.56
7/1/12 - 6/30/13	132.0	Unlimited	3,015,410	1,161,588	1.192	1,384,285	0.46
7/1/13 - 6/30/14	120.0	Unlimited	3,099,100	1,055,794	1.197	1,263,766	0.41
7/1/14 - 6/30/15	108.0	Unlimited	3,165,520	1,214,477	1.206	1,464,937	0.46
7/1/15 - 6/30/16	96.0	Unlimited	3,165,650	1,067,974	1.237	1,321,207	0.42
7/1/16 - 6/30/17	84.0	Unlimited	2,924,030	1,054,737	1.255	1,324,136	0.45
7/1/17 - 6/30/18	72.0	Unlimited	2,929,560	891,132	1.278	1,138,537	0.39
7/1/18 - 6/30/19	60.0	Unlimited	3,080,020	836,817	1.327	1,110,809	0.36
7/1/19 - 6/30/20	48.0	Unlimited	3,110,580	666,342	1.384	922,279	0.30
7/1/20 - 6/30/21	36.0	Unlimited	3,039,520	515,353	1.494	769,717	0.25
7/1/21 - 6/30/22	24.0	Unlimited	3,074,331	374,090	1.790	669,723	0.22
7/1/22 - 6/30/23	12.0	Unlimited	3,253,214	151,331	3.522	533,018	0.16
Total			86,151,685	53,758,609		59,497,041	

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Age of (1)
(3)	Provided by Entity
(4)	Provided by Entity
(5)	Provided by Entity
(6)	From Section I, Exhibit II, Sheet 11
(7)	= (5) x (6)
(8)	= (7) / (4)

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss & ALAE

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Months of Development

Accident Year	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	348	360	372	As of 6/30/2023
Prior to 7/1/1993	61,393,732	20,125,372	21,066,570	21,442,624	21,690,565	21,938,287	22,126,400	22,233,697	22,305,095	22,384,500	22,442,187	22,505,572	22,566,843	22,632,240	22,680,464	22,765,319	22,808,086	22,866,232	22,928,585	22,979,835	23,040,793	23,253,492	23,296,229	23,354,061	23,459,919	23,500,812	23,521,927	23,534,763	23,556,358	23,579,996	23,621,778	23,621,778
7/1/93 - 6/30/94	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	1,263,197	1,263,431	1,264,853	1,267,940	1,270,183	1,270,498	1,270,668	1,270,736	1,270,834	1,272,079	1,273,293	1,273,929	1,273,943	1,273,943		1,273,943
7/1/94 - 6/30/95	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	927,514	927,514	927,514	927,514	928,160	928,160	928,160	928,160	928,160	928,160	928,160	928,160	928,160	928,160			928,160
7/1/95 - 6/30/96	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	1,003,880	1,004,022	1,004,022	1,004,022	1,004,022	1,004,022	1,004,022	1,004,022	1,004,022	1,004,022	1,004,022	1,004,022	1,006,480	1,006,802				1,006,802
7/1/96 - 6/30/97	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	882,123	882,572	882,572	882,572	882,663	882,663	882,663	882,663	882,663	882,663	882,663	882,663	882,663	882,663					882,663
7/1/97 - 6/30/98	271,043	554,887	629,610	674,301	694,718	711,568	723,173	728,434	739,218	743,949	744,590	744,993	744,993	746,349	751,655	753,336	760,571	764,236	776,156	777,189	778,357	778,357	781,227	786,987	788,037	792,247						792,247
7/1/98 - 6/30/99	200,054	434,499	509,933	556,932	596,752	611,737	618,749	622,442	625,193	627,351	628,383	630,351	632,095	633,627	633,750	634,493	634,493	634,493	634,549	634,549	634,549	634,549	634,549	634,549	634,549							634,549
7/1/99 - 6/30/00	278,690	480,160	554,610	607,363	639,042	681,279	703,362	725,333	730,593	734,009	743,547	751,052	758,824	768,373	779,490	794,445	813,062	835,377	855,368	869,273	873,300	874,035	874,035	874,035								874,035
7/1/00 - 6/30/01	312,280	500,976	665,683	751,467	818,710	893,280	968,370	1,062,045	1,117,446	1,168,471	1,217,356	1,269,474	1,306,387	1,358,631	1,416,743	1,462,401	1,503,319	1,547,279	1,583,180	1,610,603	1,656,555	1,686,350	1,709,366									1,709,366
7/1/01 - 6/30/02	197,389	476,132	547,189	630,575	673,854	722,281	746,769	768,857	788,866	810,710	820,868	840,995	861,213	880,964	949,420	969,248	988,938	1,013,829	1,035,268	1,054,113	1,074,619	1,097,086										1,097,086
7/1/02 - 6/30/03	163,049	459,264	666,927	739,223	775,337	800,620	814,827	825,961	832,962	839,586	845,639	851,935	856,279	861,497	865,605	867,940	872,229	875,651	878,059	881,721	891,870											891,870
7/1/03 - 6/30/04	79,919	361,725	544,497	684,486	731,761	788,111	824,704	835,702	842,619	849,442	861,676	877,030	885,864	891,975	916,039	937,450	955,657	973,900	993,038	1,011,175												1,011,175
7/1/04 - 6/30/05	394,825	766,546	887,167	942,140	987,834	999,094	1,003,380	1,005,881	1,006,180	1,046,856	1,049,675	1,050,861	1,051,002	1,051,835	1,052,069	1,052,069	1,052,069	1,052,069	1,052,069													1,052,069
7/1/05 - 6/30/06	318,539	662,581	842,645	941,494	1,038,675	1,080,705	1,115,105	1,134,878	1,157,537	1,168,676	1,180,575	1,209,017	1,232,127	1,252,471	1,263,740	1,275,308	1,283,204	1,290,787														1,290,787
7/1/06 - 6/30/07	310,954	746,618	936,091	1,034,943	1,071,013	1,094,137	1,114,558	1,128,574	1,149,025	1,163,133	1,178,236	1,188,090	1,194,806	1,202,364	1,210,932	1,217,008	1,218,033															1,218,033
7/1/07 - 6/30/08	418,873	692,272	777,557	805,740	842,963	874,247	948,922	1,046,015	1,133,635	1,240,372	1,328,712	1,392,123	1,462,625	1,469,216	1,469,216	1,469,216																1,469,216
7/1/08 - 6/30/09	491,289	882,544	982,774	1,088,621	1,119,184	1,136,637	1,146,386	1,161,875	1,190,968	1,201,541	1,205,779	1,210,462	1,215,398	1,218,283	1,221,918																	1,221,918
7/1/09 - 6/30/10	412,961	823,720	1,038,592	1,144,478	1,184,531	1,238,527	1,294,215	1,315,456	1,327,324	1,338,719	1,347,200	1,357,044	1,358,071	1,361,312																		1,361,312
7/1/10 - 6/30/11	434,256	781,068	902,932	954,597	990,785	1,004,871	1,013,113	1,020,414	1,023,253	1,025,002	1,027,100	1,028,234	1,033,943																			1,033,943
7/1/11 - 6/30/12	463,779	898,857	984,852	1,038,783	1,099,319	1,145,644	1,243,216	1,268,498	1,359,911	1,380,602	1,390,113	1,398,024																				1,398,024
7/1/12 - 6/30/13	318,982	788,047	967,121	1,077,860	1,137,168	1,147,607	1,151,950	1,155,202	1,155,202	1,158,945	1,161,588																					1,161,588
7/1/13 - 6/30/14	339,571	739,287	849,381	922,545	955,465	1,006,793	1,028,650	1,038,890	1,047,693	1,055,794																						1,055,794
7/1/14 - 6/30/15	337,278	703,482	883,470	977,638	1,043,391	1,095,448	1,133,794	1,172,714	1,214,477																							1,214,477
7/1/15 - 6/30/16	441,825	810,844	955,308	1,007,585	1,040,520	1,055,082	1,062,520	1,067,974																								1,067,974
7/1/16 - 6/30/17	435,827	738,913	861,920	948,694	1,000,170	1,032,288	1,054,737																									1,054,737
7/1/17 - 6/30/18	286,984	621,841	751,503	824,716	850,616	891,132																										891,132
7/1/18 - 6/30/19	358,598	673,776	778,446	817,518	836,817																											836,817
7/1/19 - 6/30/20	237,193	471,913	605,061	666,342																												666,342
7/1/20 - 6/30/21	245,723	423,748	515,353																													515,353
7/1/21 - 6/30/22	175,434	374,090																														374,090
7/1/22 - 6/30/23	151,331																															151,331
																																53,758,609

Age-to-Age Development Factors

Accident Year	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993	***0.328***	***1.047***	***1.018***	***1.012***	***1.011***	***1.009***	***1.005***	***1.003***	***1.004***	***1.003***	***1.003***	***1.003***	***1.003***	***1.002***	***1.004***	***1.002***	***1.003***	***1.003***	***1.002***	***1.003***	***1.009***	***1.002***	***1.002***	***1.005***	***1.002***	***1.001***	***1.001***	***1.001***	***1.001***	***1.002***	
7/1/93 - 6/30/94	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	1.000	1.000	1.001	1.002	1.002	1.000	1.000	1.000	1.000	1.001	1.001	1.000	1.000	1.000		
7/1/94 - 6/30/95	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	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
7/1/95 - 6/30/96	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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.002	1.000				
7/1/96 - 6/30/97	1.810	1.171	1.029	1.036	1.007	1.009	1.010	1.002	1.004	1.003	1.002	1.001	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					
7/1/97 - 6/30/98	2.047	1.135	1.071	1.030	1.024	1.016	1.007	1.015	1.006	1.001	1.001	1.000	1.002	1.007	1.002	1.010	1.005	1.016	1.001	1.002	1.000	1.004	1.007	1.001	1.005						
7/1/98 - 6/30/99	2.172	1.174	1.092	1.071	1.025	1.011	1.006	1.004	1.003	1.002	1.003	1.003	1.002	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
7/1/99 - 6/30/00	1.723	1.155	1.095	1.052	1.066	1.032	1.031	1.007	1.005	1.013	1.010	1.010	1.013	1.014	1.019	1.023	1.027	1.024	1.016	1.005	1.001	1.000	1.000								
7/1/00 - 6/30/01	1.604	1.329	1.129	1.089	1.091	1.084	1.097	1.052	1.046	1.042	1.043	1.029	1.040	1.043	1.032	1.028	1.029	1.023	1.017	1.029	1.018	1.014									
7/1/01 - 6/30/02	2.412	1.149	1.152	1.069	1.072	1.034	1.030	1.026	1.028	1.013	1.025	1.024	1.023	1.078	1.021	1.020	1.025	1.021	1.018	1.019	1.021										
7/1/02 - 6/30/03	2.817	1.452	1.108	1.049	1.033	1.018	1.014	1.008	1.008	1.007	1.007	1.005	1.006	1.005	1.003	1.005	1.004	1.003	1.004	1.012											
7/1/03 - 6/30/04	4.526	1.505	1.257	1.069	1.077	1.046	1.013	1.008	1.008	1.014	1.018	1.010	1.007	1.027	1.023	1.019	1.019	1.020	1.018												
7/1/04 - 6/30/05	1.941	1.157	1.062	1.049	1.011	1.004	1.002	1.000	1.040	1.003	1.001	1.000	1.001	1.000	1.000	1.000	1.000	1.000													
7/1/05 - 6/30/06	2.080	1.272	1.117	1.103	1.040	1.032	1.018	1.020	1.010	1.010	1.024	1.019	1.017	1.009	1.009	1.006	1.006														
7/1/06 - 6/30/07	2.401	1.254	1.106	1.035	1.022	1.019	1.013	1.018	1.012	1.013	1.008	1.006	1.006	1.007	1.005	1.001															
7/1/07 - 6/30/08	1.653	1.123	1.036	1.046	1.037	1.085	1.102	1.084	1.094	1.071	1.048	1.051	1.005	1.000	1.000																
7/1/08 - 6/30/09	1.796	1.114	1.108	1.028	1.016	1.009	1.014	1.025	1.009	1.004	1.004	1.004	1.002	1.003																	
7/1/09 - 6/30/10	1.995	1.261	1.102	1.035	1.046	1.045	1.016	1.009	1.009	1.006	1.007	1.001	1.002																		
7/1/10 - 6/30/11	1.799	1.156	1.057	1.038	1.014	1.008	1.007	1.003	1.002	1.002	1.001	1.006																			
7/1/11 - 6/30/12	1.938	1.096	1.055	1.058	1.042	1.085	1.020	1.072	1.015	1.007	1.006																				
7/1/12 - 6/30/13	2.471	1.227	1.115	1.055	1.009	1.004	1.003	1.000	1.003	1.002																					
7/1/13 - 6/30/14	2.177	1.149	1.086	1.036	1.054	1.022	1.010	1.008	1.008																						
7/1/14 - 6/30/15	2.086	1.256	1.107	1.067	1.050	1.035	1.034	1.036																							
7/1/15 - 6/30/16	1.835	1.178	1.055	1.033	1.014	1.007	1.005																								
7/1/16 - 6/30/17	1.695	1.166	1.101	1.054	1.032	1.022																									
7/1/17 - 6/30/18	2.167	1.209	1.097	1.031	1.048																										
7/1/18 - 6/30/19	1.879	1.155	1.050	1.024																											
7/1/19 - 6/30/20	1.990	1.282	1.101																												
7/1/20 - 6/30/21	1.724	1.216																													
7/1/21 - 6/30/22	2.132																														
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																															
Last 3 Wtd Avg	1.929	1.210	1.081	1.037	1.030	1.021	1.017	1.015	1.009	1.004	1.005	1.003	1.003	1.003	1.004	1.003	1.008	1.007	1.014	1.022	1.015	1.007	1.003	1.000	1.002	1.001	1.000				
Last 5 Wtd Avg	1.967	1.199	1.079	1.043	1.039	1.018	1.015	1.026	1.008	1.004	1.014	1.014	1.006	1.004	1.007	1.006	1.011	1.014	1.015	1.016	1.011	1.005	1.001	1.000	1.001						
Last 9 Wtd Avg	1.944	1.200	1.084	1.045	1.034	1.027	1.022	1.029	1.018	1.014	1.013	1.012	1.007	1.018	1.012	1.012	1.014	1.013	1.010	1.009	1.006										
Last 12 Wtd Avg	1.969	1.191	1.086	1.042	1.031	1.031	1.020	1.024	1.018	1.013	1.016	1.015	1.011	1.016	1.010	1.010	1.011	1.010													
All Per Wtd Avg	1.980	1.191	1.088	1.047	1.034	1.027	1.020	1.020	1.016	1.012	1.012	1.011	1.008	1.012	1.008	1.008	1.010	1.010	1.008	1.008	1.006	1.003	1.001	1.000	1.001	1.001	1.000	1.000	1.000		
Industry																															
Age-to-Age	1.952	1.143	1.054	1.022	1.017	1.007	1.012	1.008	1.009	1.008	1.007	1.008	1.007	1.008	1.007	1.007	1.008	1.007	1.004	1.004	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.004	1.004	
Age-to-Ult	2.959	1.516	1.326	1.258	1.231	1.210	1.202	1.188	1.179	1.168	1.159	1.151	1.142	1.134	1.125	1.117	1.109	1.100	1.092	1.088	1.083	1.078	1.073	1.068	1.063	1.058	1.052	1.047	1.043	1.038	1.034
Prior Selected																															
Age-to-Age	1.873	1.191	1.082	1.045	1.031	1.031	1.015	1.020	1.008	1.018	1.015	1.017	1.006	1.008	1.008	1.010	1.017	1.019	1.013	1.014	1.006	1.001	1.003	1.000	1.003	1.003	1.003	1.003	1.003	1.002	
Age-to-Ult	3.424	1.828	1.534	1.418	1.358	1.317	1.277	1.258	1.233	1.224	1.202	1.185	1.165	1.158	1.149	1.140	1.129	1.111	1.090	1.076	1.061	1.054	1.053	1.051	1.050	1.047	1.044	1.041	1.038	1.035	1.033
Selected																															
Age-to-Age	1.967	1.199	1.079	1.043	1.039	1.018	1.015	1.026	1.008	1.004	1.014	1.014	1.006	1.004	1.007	1.006	1.011	1.014	1.015	1.016	1.011	1.005	1.003	1.000	1.003	1.003	1.003	1.003	1.003	1.002	
Age-to-Ult	3.522	1.790	1.494	1.384	1.327	1.278	1.255	1.237	1.206	1.197	1.192	1.175	1.159	1.152	1.147	1.140	1.133	1.121	1.105	1.089	1.071	1.060	1.055	1.052	1.052	1.048	1.045	1.042	1.039	1.036	1.034

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Medical

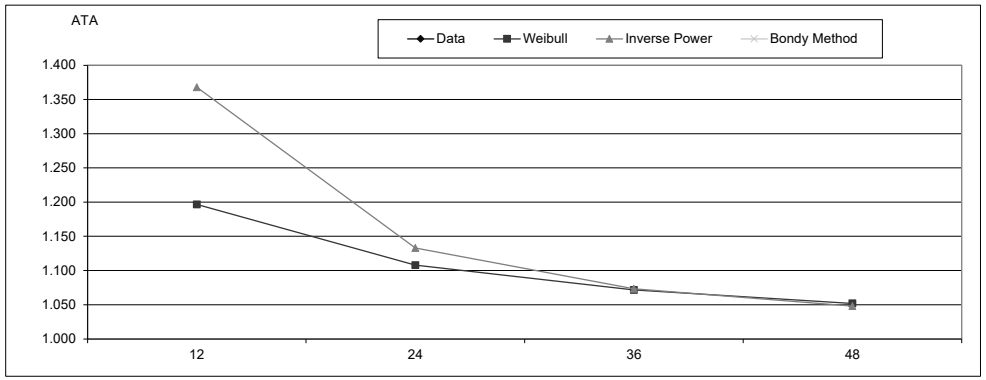
Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

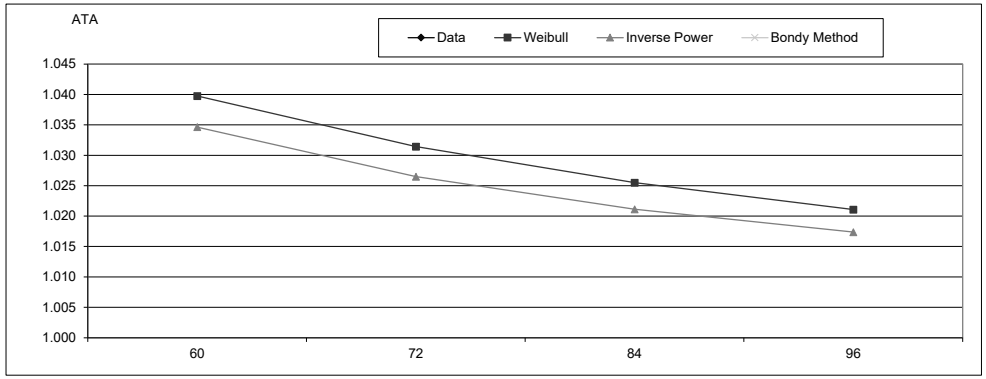
Curve Fitting Methods
Paid Loss & ALAE

Tail at Period: 31 (To display in table)
Cut-off point:(<=Tail & <51) 50 (to run-out pattern)

Summary of Curve Fitting Methods

Method	Tail	R^2
Weibull	**1.019**	**0.693**
Inverse Power	**1.034**	**0.581**
Bondy Method		**N/A**





				Weibull		Inverse Power		Bondy Method			
									Sel. Decay Ratio=		
PERIOD	AGE	ATA	Use	**ATA***	**ATU***	**ATA***	**ATU***	Ln(ATA)	Decay	**ATA***	**ATU***
1	12	0.000	Exclude	**1.197**	1.962	**1.368**	2.264				
2	24	1.199	Include	**1.108**	1.639	**1.133**	1.655				
3	36	1.079	Include	**1.072**	1.480	**1.073**	1.461				
4	48	1.043	Include	**1.052**	1.381	**1.048**	1.361				
5	60	1.039	Include	**1.040**	1.312	**1.035**	1.298				
6	72	1.018	Include	**1.031**	1.262	**1.027**	1.255				
7	84	1.015	Include	**1.026**	1.224	**1.021**	1.222				
8	96	1.026	Include	**1.021**	1.193	**1.017**	1.197				
9	108	1.008	Include	**1.018**	1.169	**1.015**	1.177				
10	120	1.004	Include	**1.015**	1.148	**1.013**	1.160				
11	132	1.014	Include	**1.013**	1.131	**1.011**	1.145				
12	144	1.014	Include	**1.011**	1.117	**1.010**	1.133				
13	156	1.006	Include	**1.010**	1.105	**1.009**	1.122				
14	168	1.004	Include	**1.009**	1.094	**1.008**	1.113				
15	180	1.007	Include	**1.008**	1.085	**1.007**	1.104				
16	192	1.006	Include	**1.007**	1.076	**1.006**	1.097				
17	204	1.011	Include	**1.006**	1.069	**1.006**	1.090				
18	216	1.014	Include	**1.005**	1.063	**1.005**	1.084				
19	228	1.015	Include	**1.005**	1.057	**1.005**	1.078				
20	240	1.016	Include	**1.004**	1.052	**1.005**	1.073				
21	252	1.011	Include	**1.004**	1.047	**1.004**	1.068				
22	264	1.005	Include	**1.004**	1.043	**1.004**	1.063				
23	276	1.003	Include	**1.003**	1.040	**1.004**	1.059				
24	288	1.000	Include	**1.003**	1.036	**1.003**	1.055				
25	300	0.000	Exclude	**1.003**	1.033	**1.003**	1.052				
26	312	0.000	Exclude	**1.003**	1.030	**1.003**	1.048				
27	324	0.000	Exclude	**1.002**	1.028	**1.003**	1.045				
28	336	0.000	Exclude	**1.002**	1.025	**1.003**	1.042				
29	348	0.000	Exclude	**1.002**	1.023	**1.003**	1.039				
30	360	0.000	Exclude	**1.002**	1.021	**1.002**	1.036				
31	372	0.000	Exclude	**1.002**	1.019	**1.002**	1.034				
32	384	0.000	Exclude	**1.002**	1.017	**1.002**	1.031				
33	396	0.000	Exclude	**1.001**	1.016	**1.002**	1.029				
34	408	0.000	Exclude	**1.001**	1.014	**1.002**	1.027				
35	420	0.000	Exclude	**1.001**	1.013	**1.002**	1.025				
36	432	0.000	Exclude	**1.001**	1.012	**1.002**	1.023				
37	444	0.000	Exclude	**1.001**	1.011	**1.002**	1.021				
38	456	0.000	Exclude	**1.001**	1.009	**1.002**	1.019				
39	468	0.000	Exclude	**1.001**	1.008	**1.002**	1.017				
40	480	0.000	Exclude	**1.001**	1.007	**1.002**	1.015				
41	492	0.000	Exclude	**1.001**	1.007	**1.002**	1.014				
42	504	0.000	Exclude	**1.001**	1.006	**1.002**	1.012				
43	516	0.000	Exclude	**1.001**	1.005	**1.001**	1.011				
44	528	0.000	Exclude	**1.001**	1.004	**1.001**	1.009				
45	540	0.000	Exclude	**1.001**	1.003	**1.001**	1.008				
46	552	0.000	Exclude	**1.001**	1.003	**1.001**	1.006				
47	564	0.000	Exclude	**1.001**	1.002	**1.001**	1.005				
48	576	0.000	Exclude	**1.001**	1.002	**1.001**	1.004				
49	588	0.000	Exclude	**1.001**	1.001	**1.001**	1.002				
50	600	0.000	Exclude	**1.000**	1.000	**1.001**	1.001				

Unpaid Claim Analysis as of 06/30/2023

Ultimate Claim Count Development

Accident Year	Age of Counts @ 06/30/2023	Payroll (00)'s	Reported Claim Counts @ 06/30/2023	Reported Count Dev Factor	Indicated Ultimate Claim Counts	Selected Ultimate Claim Counts	Selected Ultimate Frequency	Selected Ultimate Frequency (Inflation-Adjusted)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	372.0		46	1.000	46			
7/1/93 - 6/30/94	360.0	2,570,620	4	1.000	4		0.00%	0.00%
7/1/94 - 6/30/95	348.0	2,558,540	1	1.000	1		0.00%	0.00%
7/1/95 - 6/30/96	336.0	2,555,390	2	1.000	2		0.00%	0.00%
7/1/96 - 6/30/97	324.0	2,700,710	1	1.000	1		0.00%	0.00%
7/1/97 - 6/30/98	312.0	2,453,670	3	1.000	3		0.00%	0.00%
7/1/98 - 6/30/99	300.0	2,514,530	4	1.000	4		0.00%	0.00%
7/1/99 - 6/30/00	288.0	2,556,410	3	1.000	3		0.00%	0.00%
7/1/00 - 6/30/01	276.0	2,639,180	11	1.000	11		0.00%	0.00%
7/1/01 - 6/30/02	264.0	2,675,980	5	1.000	5		0.00%	0.00%
7/1/02 - 6/30/03	252.0	2,744,650	8	1.000	8		0.00%	0.00%
7/1/03 - 6/30/04	240.0	2,723,840	10	1.000	10		0.00%	0.00%
7/1/04 - 6/30/05	228.0	2,736,470	6	1.000	6		0.00%	0.00%
7/1/05 - 6/30/06	216.0	2,851,390	10	1.000	10		0.00%	0.00%
7/1/06 - 6/30/07	204.0	2,985,160	16	1.000	16		0.00%	0.00%
7/1/07 - 6/30/08	192.0	3,142,310	12	1.000	12		0.00%	0.00%
7/1/08 - 6/30/09	180.0	3,029,980	21	1.000	21		0.00%	0.00%
7/1/09 - 6/30/10	168.0	2,972,520	45	1.000	45		0.00%	0.00%
7/1/10 - 6/30/11	156.0	2,924,320	44	1.000	44		0.00%	0.00%
7/1/11 - 6/30/12	144.0	2,959,080	149	1.000	149		0.00%	0.00%
7/1/12 - 6/30/13	132.0	3,015,410	230	1.000	230	230	76.27%	56.76%
7/1/13 - 6/30/14	120.0	3,099,100	258	1.000	258	258	83.25%	63.80%
7/1/14 - 6/30/15	108.0	3,165,520	230	1.000	230	230	72.66%	57.36%
7/1/15 - 6/30/16	96.0	3,165,650	211	1.000	211	211	66.65%	54.19%
7/1/16 - 6/30/17	84.0	2,924,030	206	1.000	206	206	70.45%	59.00%
7/1/17 - 6/30/18	72.0	2,929,560	185	1.000	185	185	63.15%	54.47%
7/1/18 - 6/30/19	60.0	3,080,020	174	1.000	174	174	56.49%	50.19%
7/1/19 - 6/30/20	48.0	3,110,580	138	1.000	138	138	44.36%	40.60%
7/1/20 - 6/30/21	36.0	3,039,520	140	1.001	140	140	46.12%	43.47%
7/1/21 - 6/30/22	24.0	3,074,331	94	1.006	95	95	30.76%	29.86%
7/1/22 - 6/30/23	12.0	3,253,214	79	1.073	85	91	27.99%	27.99%
Total		86,151,685	2,346		2,353	1,958		

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Age of (1)
(3)	Provided by Entity
(4)	Provided by Entity
(5)	From Section I, Exhibit II, Sheet 14
(6)	= (4) x (5)
(7)	Selected by Deloitte Consulting LLP
(8)	= (7) / (3)
(9)	= (7) / [(3) x Section I, Exhibit II, Sheet 8, Column (3)]

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Medical

Unpaid Claim Analysis as of 06/30/2023

Reported Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																															46	46
7/1/93 - 6/30/94																														4		4
7/1/94 - 6/30/95																													1			1
7/1/95 - 6/30/96																												2				2
7/1/96 - 6/30/97																											1					1
7/1/97 - 6/30/98																										3						3
7/1/98 - 6/30/99																									4							4
7/1/99 - 6/30/00																								3								3
7/1/00 - 6/30/01																							11									11
7/1/01 - 6/30/02																						5										5
7/1/02 - 6/30/03																					8											8
7/1/03 - 6/30/04																				10												10
7/1/04 - 6/30/05																			6													6
7/1/05 - 6/30/06																		10														10
7/1/06 - 6/30/07																	16															16
7/1/07 - 6/30/08																12																12
7/1/08 - 6/30/09															21																	21
7/1/09 - 6/30/10														45																		45
7/1/10 - 6/30/11													44																			44
7/1/11 - 6/30/12												149																				149
7/1/12 - 6/30/13	215	228	230	230	230	230	230	230	230	230	230																					230
7/1/13 - 6/30/14	240	257	257	257	258	258	258	258	258	258																						258
7/1/14 - 6/30/15	218	229	230	230	230	230	230	230	230																							230
7/1/15 - 6/30/16	201	209	210	210	210	210	211	211																								211
7/1/16 - 6/30/17	194	204	206	206	206	206	206																									206
7/1/17 - 6/30/18	166	184	185	185	185	185																										185
7/1/18 - 6/30/19	165	173	173	173	174																											174
7/1/19 - 6/30/20	131	137	138	138																												138
7/1/20 - 6/30/21	120	140	140																													140
7/1/21 - 6/30/22	89	94																														94
7/1/22 - 6/30/23	79																															79
																																2,346

Accident Year	Age-to-Age Development Factors																															
	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
7/1/98 - 6/30/99																																
7/1/99 - 6/30/00																																
7/1/00 - 6/30/01																																
7/1/01 - 6/30/02																																
7/1/02 - 6/30/03																																
7/1/03 - 6/30/04																																
7/1/04 - 6/30/05																																
7/1/05 - 6/30/06																																
7/1/06 - 6/30/07																																
7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	1.060	1.009	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000																						
7/1/13 - 6/30/14	1.071	1.000	1.000	1.004	1.000	1.000	1.000	1.000	1.000																							
7/1/14 - 6/30/15	1.050	1.004	1.000	1.000	1.000	1.000	1.000	1.000																								
7/1/15 - 6/30/16	1.040	1.005	1.000	1.000	1.000	1.005	1.000																									
7/1/16 - 6/30/17	1.052	1.010	1.000	1.000	1.000	1.000																										
7/1/17 - 6/30/18	1.108	1.005	1.000	1.000	1.000																											
7/1/18 - 6/30/19	1.048	1.000	1.000	1.006																												
7/1/19 - 6/30/20	1.046	1.007	1.000																													
7/1/20 - 6/30/21	1.167	1.000																														
7/1/21 - 6/30/22	1.056																															
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																																
Last 3 Wtd Avg	1.091	1.002	1.000	1.002	1.000	1.002	1.000	1.000																								
Last 4 Wtd Avg	1.077	1.003	1.000	1.001	1.000	1.001	1.000																									
Last 5 Wtd Avg	1.085	1.005	1.000	1.001	1.000	1.001																										
All Per Wtd Avg	1.067	1.005	1.000	1.001	1.000	1.001	1.000	1.000	1.000	1.000																						
Average ex Hi/Lo	1.062	1.004	1.000	1.001	1.000	1.000	1.000	1.000																								
Prior Selected																																
Age-to-Age	1.067	1.005	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	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		
Age-to-Ult	1.074	1.007	1.002	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	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	
Selected																																
Age-to-Age	1.067	1.005	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	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		
Age-to-Ult	1.073	1.006	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	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	

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Medical

Unpaid Claim Analysis as of 06/30/2023

Reported Counts to Payroll (00)'s

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02		2,570,620
7/1/94 - 6/30/95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			2,558,540
7/1/95 - 6/30/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01				2,555,390
7/1/96 - 6/30/97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					2,700,710
7/1/97 - 6/30/98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01						2,453,670
7/1/98 - 6/30/99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02							2,514,530
7/1/99 - 6/30/00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01								2,556,410
7/1/00 - 6/30/01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04									2,639,180
7/1/01 - 6/30/02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02										2,675,980
7/1/02 - 6/30/03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03											2,744,650
7/1/03 - 6/30/04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04												2,723,840
7/1/04 - 6/30/05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02													2,736,470
7/1/05 - 6/30/06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04														2,851,390
7/1/06 - 6/30/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05															2,985,160
7/1/07 - 6/30/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04																3,142,310
7/1/08 - 6/30/09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07																	3,029,980
7/1/09 - 6/30/10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15																		2,972,520
7/1/10 - 6/30/11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15																			2,924,320
7/1/11 - 6/30/12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50																				2,959,080
7/1/12 - 6/30/13	0.71	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76																					3,015,410
7/1/13 - 6/30/14	0.77	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83																						3,099,100
7/1/14 - 6/30/15	0.69	0.72	0.73	0.73	0.73	0.73	0.73	0.73	0.73																							3,165,520
7/1/15 - 6/30/16	0.63	0.66	0.66	0.66	0.66	0.66	0.67	0.67																								3,165,650
7/1/16 - 6/30/17	0.66	0.70	0.70	0.70	0.70	0.70	0.70																									2,924,030
7/1/17 - 6/30/18	0.57	0.63	0.63	0.63	0.63	0.63																										2,929,560
7/1/18 - 6/30/19	0.54	0.56	0.56	0.56	0.56																											3,080,020
7/1/19 - 6/30/20	0.42	0.44	0.44	0.44																												3,110,580
7/1/20 - 6/30/21	0.39	0.46	0.46																													3,039,520
7/1/21 - 6/30/22	0.29	0.31																														3,074,331
7/1/22 - 6/30/23	0.24																															3,253,214

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Medical

Section I
Exhibit II
Sheet 16

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss & ALAE Rates

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														Payroll
	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	348	360	372	(00)'s
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.20	0.38	0.43	0.46	0.47	0.48	0.48	0.48	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.50	0.50	0.50	0.50		2,570,620
7/1/94 - 6/30/95	0.16	0.28	0.32	0.34	0.35	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36			2,558,540
7/1/95 - 6/30/96	0.15	0.31	0.34	0.36	0.38	0.38	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39				2,555,390
7/1/96 - 6/30/97	0.14	0.25	0.29	0.30	0.31	0.32	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33					2,700,710
7/1/97 - 6/30/98	0.11	0.23	0.26	0.27	0.28	0.29	0.29	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.31	0.31	0.31	0.31	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32						2,453,670
7/1/98 - 6/30/99	0.08	0.17	0.20	0.22	0.24	0.24	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25							2,514,530
7/1/99 - 6/30/00	0.11	0.19	0.22	0.24	0.25	0.27	0.28	0.28	0.29	0.29	0.29	0.29	0.30	0.30	0.30	0.31	0.32	0.33	0.33	0.34	0.34	0.34	0.34	0.34								2,556,410
7/1/00 - 6/30/01	0.12	0.19	0.25	0.28	0.31	0.34	0.37	0.40	0.42	0.44	0.46	0.48	0.49	0.51	0.54	0.55	0.57	0.59	0.60	0.61	0.63	0.64	0.65									2,639,180
7/1/01 - 6/30/02	0.07	0.18	0.20	0.24	0.25	0.27	0.28	0.29	0.29	0.30	0.31	0.31	0.32	0.33	0.35	0.36	0.37	0.38	0.39	0.39	0.40	0.41										2,675,980
7/1/02 - 6/30/03	0.06	0.17	0.24	0.27	0.28	0.29	0.30	0.30	0.30	0.31	0.31	0.31	0.31	0.31	0.32	0.32	0.32	0.32	0.32	0.32	0.32											2,744,650
7/1/03 - 6/30/04	0.03	0.13	0.20	0.25	0.27	0.29	0.30	0.31	0.31	0.31	0.32	0.32	0.33	0.33	0.34	0.34	0.35	0.36	0.36	0.37												2,723,840
7/1/04 - 6/30/05	0.14	0.28	0.32	0.34	0.36	0.37	0.37	0.37	0.37	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38													2,736,470
7/1/05 - 6/30/06	0.11	0.23	0.30	0.33	0.36	0.38	0.39	0.40	0.41	0.41	0.41	0.42	0.43	0.44	0.44	0.45	0.45	0.45														2,851,390
7/1/06 - 6/30/07	0.10	0.25	0.31	0.35	0.36	0.37	0.37	0.38	0.38	0.39	0.39	0.40	0.40	0.40	0.41	0.41	0.41															2,985,160
7/1/07 - 6/30/08	0.13	0.22	0.25	0.26	0.27	0.28	0.30	0.33	0.36	0.39	0.42	0.44	0.47	0.47	0.47	0.47																3,142,310
7/1/08 - 6/30/09	0.16	0.29	0.32	0.36	0.37	0.38	0.38	0.38	0.39	0.40	0.40	0.40	0.40	0.40	0.40																	3,029,980
7/1/09 - 6/30/10	0.14	0.28	0.35	0.39	0.40	0.42	0.44	0.44	0.45	0.45	0.45	0.46	0.46	0.46																		2,972,520
7/1/10 - 6/30/11	0.15	0.27	0.31	0.33	0.34	0.34	0.35	0.35	0.35	0.35	0.35	0.35	0.35																			2,924,320
7/1/11 - 6/30/12	0.16	0.30	0.33	0.35	0.37	0.39	0.42	0.43	0.46	0.47	0.47	0.47																				2,959,080
7/1/12 - 6/30/13	0.11	0.26	0.32	0.36	0.38	0.38	0.38	0.38	0.38	0.38	0.39																					3,015,410
7/1/13 - 6/30/14	0.11	0.24	0.27	0.30	0.31	0.32	0.33	0.34	0.34	0.34																						3,099,100
7/1/14 - 6/30/15	0.11	0.22	0.28	0.31	0.33	0.35	0.36	0.37	0.38																							3,165,520
7/1/15 - 6/30/16	0.14	0.26	0.30	0.32	0.33	0.33	0.34	0.34																								3,165,650
7/1/16 - 6/30/17	0.15	0.25	0.29	0.32	0.34	0.35	0.36																									2,924,030
7/1/17 - 6/30/18	0.10	0.21	0.26	0.28	0.29	0.30																										2,929,560
7/1/18 - 6/30/19	0.12	0.22	0.25	0.27	0.27																											3,080,020
7/1/19 - 6/30/20	0.08	0.15	0.19	0.21																												3,110,580
7/1/20 - 6/30/21	0.08	0.14	0.17																													3,039,520
7/1/21 - 6/30/22	0.06	0.12																														3,074,331
7/1/22 - 6/30/23	0.05																															3,253,214

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Medical

Section I
Exhibit II
Sheet 17

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Settlement Rates (Closed Claim Count / Ultimate Claim Count)

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
7/1/98 - 6/30/99																																
7/1/99 - 6/30/00																																
7/1/00 - 6/30/01																																
7/1/01 - 6/30/02																																
7/1/02 - 6/30/03																																
7/1/03 - 6/30/04																																
7/1/04 - 6/30/05																																
7/1/05 - 6/30/06																																
7/1/06 - 6/30/07																																
7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	0.00	0.40	0.83	0.89	0.93	0.97	0.97	0.99	1.00	0.99	1.00																					1.00
7/1/13 - 6/30/14	0.00	0.48	0.83	0.90	0.90	0.95	0.97	0.97	0.97	0.98																						0.98
7/1/14 - 6/30/15	0.00	0.49	0.83	0.90	0.93	0.95	0.96	0.98	0.98																							0.98
7/1/15 - 6/30/16	0.00	0.49	0.82	0.91	0.94	0.94	0.96	0.96																								0.96
7/1/16 - 6/30/17	0.00	0.53	0.83	0.88	0.95	0.95	0.95																									0.95
7/1/17 - 6/30/18	0.00	0.48	0.81	0.86	0.95	0.94																										0.94
7/1/18 - 6/30/19	0.00	0.52	0.82	0.91	0.95																											0.95
7/1/19 - 6/30/20	0.00	0.64	0.86	0.91																												0.91
7/1/20 - 6/30/21	0.00	0.51	0.81																													0.81
7/1/21 - 6/30/22	0.00	0.58																														0.58
7/1/22 - 6/30/23	0.00																															0.00

Commonwealth of Massachusetts
Department of Developmental Services
DDS - Medical

Unpaid Claim Analysis as of 06/30/2023

Open Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993	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	0	0	0	11	11
7/1/93 - 6/30/94	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	0	0	0		0
7/1/94 - 6/30/95	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	0	0			0
7/1/95 - 6/30/96	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	1				1
7/1/96 - 6/30/97	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					0
7/1/97 - 6/30/98	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	1						1
7/1/98 - 6/30/99	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
7/1/99 - 6/30/00	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
7/1/00 - 6/30/01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3									3
7/1/01 - 6/30/02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3										3
7/1/02 - 6/30/03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3											3
7/1/03 - 6/30/04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4												4
7/1/04 - 6/30/05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0													0
7/1/05 - 6/30/06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2														2
7/1/06 - 6/30/07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1															1
7/1/07 - 6/30/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																0
7/1/08 - 6/30/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4																	4
7/1/09 - 6/30/10	0	0	0	0	0	0	0	0	0	0	0	0	0	2																		2
7/1/10 - 6/30/11	0	0	0	0	0	0	0	0	0	0	0	0	4																			4
7/1/11 - 6/30/12	0	0	0	0	0	0	0	0	0	0	0	4																				4
7/1/12 - 6/30/13	215	137	40	26	15	7	6	3	0	2	1																					1
7/1/13 - 6/30/14	240	132	42	26	26	13	8	7	7	5																						5
7/1/14 - 6/30/15	218	116	40	22	15	11	9	5	5																							5
7/1/15 - 6/30/16	201	105	38	18	11	12	9	8																								8
7/1/16 - 6/30/17	194	94	34	25	11	10	10																									10
7/1/17 - 6/30/18	166	96	35	25	10	11																										11
7/1/18 - 6/30/19	165	82	30	14	8																											8
7/1/19 - 6/30/20	131	48	20	12																												12
7/1/20 - 6/30/21	120	69	27																													27
7/1/21 - 6/30/22	89	39																														39
7/1/22 - 6/30/23	79																															79
																																248

Commonwealth of Massachusetts
Department of Mental Health
DMH - Indemnity (Including Lump Sum)

Section II
Exhibit I
Sheet 1

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Unpaid Loss Estimates

Accident Year	Payroll (00)'s	Retention	Unlimited Paid Loss @ 06/30/2023	Unlimited Reported Loss @ 06/30/2023	Ultimate Loss Low	Ultimate Loss High	Indicated Total Unpaid Loss Estimates Low	Indicated Total Unpaid Loss Estimates High	Case Reserves	Indicated IBNR Estimate Low	Indicated IBNR Estimate High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993		Unlimited	76,975,854	76,975,854	80,871,140	81,736,759	3,895,285	4,760,904	0	3,895,285	4,760,904
7/1/93 - 6/30/94	1,730,750	Unlimited	2,750,757	2,750,757	2,797,700	2,802,600	46,943	51,843	0	46,943	51,843
7/1/94 - 6/30/95	1,783,170	Unlimited	2,818,005	2,818,005	2,870,200	2,875,700	52,195	57,695	0	52,195	57,695
7/1/95 - 6/30/96	1,759,960	Unlimited	1,924,351	1,924,351	1,965,600	1,969,900	41,249	45,549	0	41,249	45,549
7/1/96 - 6/30/97	1,900,830	Unlimited	1,571,537	1,571,537	1,606,900	1,610,600	35,363	39,063	0	35,363	39,063
7/1/97 - 6/30/98	1,772,780	Unlimited	2,912,109	2,912,109	2,980,600	2,987,900	68,491	75,791	0	68,491	75,791
7/1/98 - 6/30/99	1,890,800	Unlimited	1,679,133	1,679,133	1,720,600	1,725,000	41,467	45,867	0	41,467	45,867
7/1/99 - 6/30/00	1,944,940	Unlimited	2,313,702	2,313,702	2,374,000	2,380,400	60,298	66,698	0	60,298	66,698
7/1/00 - 6/30/01	2,015,680	Unlimited	3,299,797	3,299,797	3,391,700	3,401,400	91,903	101,603	0	91,903	101,603
7/1/01 - 6/30/02	2,031,050	Unlimited	2,606,204	2,606,204	2,684,000	2,692,200	77,796	85,996	0	77,796	85,996
7/1/02 - 6/30/03	2,025,150	Unlimited	1,801,061	1,801,061	1,858,900	1,864,900	57,839	63,839	0	57,839	63,839
7/1/03 - 6/30/04	1,895,880	Unlimited	3,243,956	3,243,956	3,356,300	3,368,100	112,344	124,144	0	112,344	124,144
7/1/04 - 6/30/05	1,869,900	Unlimited	2,723,645	2,723,645	2,826,000	2,836,800	102,355	113,155	0	102,355	113,155
7/1/05 - 6/30/06	1,932,540	Unlimited	1,860,494	1,860,494	1,937,100	1,945,100	76,606	84,606	0	76,606	84,606
7/1/06 - 6/30/07	2,033,590	Unlimited	2,221,812	2,221,812	2,321,700	2,332,200	99,888	110,388	0	99,888	110,388
7/1/07 - 6/30/08	2,120,830	Unlimited	1,641,555	1,641,555	1,723,000	1,731,600	81,445	90,045	0	81,445	90,045
7/1/08 - 6/30/09	2,046,790	Unlimited	2,078,249	2,078,249	2,192,100	2,204,100	113,851	125,851	0	113,851	125,851
7/1/09 - 6/30/10	1,846,880	Unlimited	1,285,402	1,285,402	1,364,000	1,372,300	78,598	86,898	0	78,598	86,898
7/1/10 - 6/30/11	1,696,890	Unlimited	2,508,771	2,508,771	2,678,400	2,696,300	169,629	187,529	0	169,629	187,529
7/1/11 - 6/30/12	1,773,990	Unlimited	1,773,539	1,773,539	1,905,000	1,918,900	131,461	145,361	0	131,461	145,361
7/1/12 - 6/30/13	1,892,520	Unlimited	2,809,096	2,809,096	3,044,200	3,069,000	235,104	259,904	0	235,104	259,904
7/1/13 - 6/30/14	1,998,760	Unlimited	3,465,359	3,465,359	3,789,300	3,823,400	323,941	358,041	0	323,941	358,041
7/1/14 - 6/30/15	2,137,000	Unlimited	4,512,847	4,512,847	4,997,600	5,048,700	484,753	535,853	0	484,753	535,853
7/1/15 - 6/30/16	2,118,290	Unlimited	5,372,051	5,372,051	6,120,100	6,232,700	748,049	860,649	0	748,049	860,649
7/1/16 - 6/30/17	2,030,850	Unlimited	4,881,087	4,881,087	5,698,000	5,821,000	816,913	939,913	0	816,913	939,913
7/1/17 - 6/30/18	2,039,250	Unlimited	3,617,686	3,617,686	4,421,300	4,542,200	803,614	924,514	0	803,614	924,514
7/1/18 - 6/30/19	2,180,600	Unlimited	3,900,039	3,900,039	5,098,300	5,278,700	1,198,261	1,378,661	0	1,198,261	1,378,661
7/1/19 - 6/30/20	2,224,960	Unlimited	2,483,166	2,483,166	4,789,000	5,136,100	2,305,834	2,652,934	0	2,305,834	2,652,934
7/1/20 - 6/30/21	2,221,021	Unlimited	4,017,085	4,017,085	5,691,000	6,062,000	1,673,915	2,044,915	0	1,673,915	2,044,915
7/1/21 - 6/30/22	2,383,142	Unlimited	1,571,016	1,571,016	4,343,000	4,959,000	2,771,984	3,387,984	0	2,771,984	3,387,984
7/1/22 - 6/30/23	2,460,536	Unlimited	1,459,624	1,459,624	5,610,000	6,532,000	4,150,376	5,072,376	0	4,150,376	5,072,376
Total	59,759,329		158,078,991	158,078,991	179,026,740	182,957,559	20,947,749	24,878,567	0	20,947,749	24,878,567

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	Provided by Entity
(6)	From Section II, Exhibit I, Sheet 6, Column (11)
(7)	From Section II, Exhibit I, Sheet 6, Column (12)
(8)	= (6) - (4)
(9)	= (7) - (4)
(10)	= (5) - (4)
(11)	= (8) - (10)
(12)	= (9) - (10)

Commonwealth of Massachusetts
Department of Mental Health
DMH - Indemnity (Including Lump Sum)

Section II
Exhibit I
Sheet 2

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Short-Term Portion

Accident Year	Age of Losses @ 06/30/2023	Selected Paid Test LDF @ 06/30/2023	Implied Paid LDF	Paid LDF	Cumulative Percent Paid	Incremental Percent Paid	Average Total Unpaid Loss Estimate	Undiscounted Cash Flow of Payments 2024
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
						0.16%		
Prior to 7/1/1993	372.0	1.017	1.056	1.017	98.37%	0.14%	4,328,095	429,624
7/1/93 - 6/30/94	360.0	1.018	1.018	1.018	98.24%	0.15%	49,393	3,875
7/1/94 - 6/30/95	348.0	1.019	1.019	1.019	98.09%	0.29%	54,945	4,252
7/1/95 - 6/30/96	336.0	1.023	1.023	1.023	97.79%	0.11%	43,399	5,773
7/1/96 - 6/30/97	324.0	1.024	1.024	1.024	97.69%	0.11%	37,213	1,700
7/1/97 - 6/30/98	312.0	1.025	1.025	1.025	97.58%	0.12%	72,141	3,161
7/1/98 - 6/30/99	300.0	1.026	1.026	1.026	97.47%	0.14%	43,667	2,022
7/1/99 - 6/30/00	288.0	1.027	1.027	1.027	97.33%	0.18%	63,498	3,240
7/1/00 - 6/30/01	276.0	1.029	1.029	1.029	97.15%	0.20%	96,753	6,045
7/1/01 - 6/30/02	264.0	1.031	1.031	1.031	96.95%	0.22%	81,896	5,342
7/1/02 - 6/30/03	252.0	1.034	1.034	1.034	96.73%	0.25%	60,839	4,090
7/1/03 - 6/30/04	240.0	1.036	1.036	1.036	96.48%	0.29%	118,244	8,425
7/1/04 - 6/30/05	228.0	1.040	1.040	1.040	96.19%	0.35%	107,755	8,175
7/1/05 - 6/30/06	216.0	1.043	1.043	1.043	95.85%	0.36%	80,606	6,731
7/1/06 - 6/30/07	204.0	1.047	1.047	1.047	95.48%	0.45%	105,138	8,473
7/1/07 - 6/30/08	192.0	1.052	1.052	1.052	95.04%	0.49%	85,745	7,703
7/1/08 - 6/30/09	180.0	1.058	1.058	1.058	94.55%	0.60%	119,851	10,767
7/1/09 - 6/30/10	168.0	1.064	1.064	1.064	93.95%	0.60%	82,748	8,148
7/1/10 - 6/30/11	156.0	1.071	1.071	1.071	93.35%	0.59%	178,579	16,025
7/1/11 - 6/30/12	144.0	1.078	1.078	1.078	92.76%	0.86%	138,411	11,343
7/1/12 - 6/30/13	132.0	1.088	1.088	1.088	91.90%	0.86%	247,504	26,276
7/1/13 - 6/30/14	120.0	1.098	1.098	1.098	91.04%	1.20%	340,991	32,740
7/1/14 - 6/30/15	108.0	1.113	1.113	1.113	89.84%	2.86%	510,303	60,322
7/1/15 - 6/30/16	96.0	1.150	1.150	1.150	86.98%	2.23%	804,349	176,874
7/1/16 - 6/30/17	84.0	1.180	1.180	1.180	84.75%	4.03%	878,413	128,342
7/1/17 - 6/30/18	72.0	1.239	1.239	1.239	80.72%	5.55%	864,064	180,547
7/1/18 - 6/30/19	60.0	1.330	1.330	1.330	75.17%	8.19%	1,288,461	288,165
7/1/19 - 6/30/20	48.0	1.493	1.998	1.493	66.97%	11.22%	2,479,384	614,987
7/1/20 - 6/30/21	36.0	1.793	1.463	1.793	55.76%	12.31%	1,859,415	471,382
7/1/21 - 6/30/22	24.0	2.301	2.961	2.301	43.45%	20.47%	3,079,984	670,245
7/1/22 - 6/30/23	12.0	4.351	4.159	4.351	22.98%	22.98%	4,611,376	1,225,643
Total							22,913,158	4,430,434

	Undiscounted	Discounted			
Short-Term Portion	19%	26%	(10)	Interest Rate	4%

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1) @ 06/30/2023
(3) From Section II, Exhibit I, Sheet 10, Column (6)
(4) Average Ultimate Loss Divided by Paid Loss From Section II, Exhibit I, Sheet 6
(5) Selected
(6) = 1 / (5)
(7) = (6) from Current Age - (6) from Subsequent Age
(8) From Section II, Exhibit I, Sheet 3
(9) - (9) Based on (5)

Commonwealth of Massachusetts
Department of Mental Health
DMH - Indemnity (Including Lump Sum)

Section II
Exhibit I
Sheet 3

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Discounted at (4%) Unpaid Loss Estimate

Accident Year	Indicated Total Unpaid Loss Estimate Low	Indicated Total Unpaid Loss Estimate High	Discount Factor	Discounted Total Unpaid Loss Estimate Low	Discounted Total Unpaid Loss Estimate High
(1)	(2)	(3)	(4)	(5)	(6)
Prior to 7/1/1993	3,895,285	4,760,904	1.000	3,895,285	4,760,904
7/1/93 - 6/30/94	46,943	51,843	0.981	46,031	50,836
7/1/94 - 6/30/95	52,195	57,695	0.946	49,365	54,567
7/1/95 - 6/30/96	41,249	45,549	0.919	37,903	41,854
7/1/96 - 6/30/97	35,363	39,063	0.888	31,401	34,687
7/1/97 - 6/30/98	68,491	75,791	0.859	58,859	65,132
7/1/98 - 6/30/99	41,467	45,867	0.833	34,561	38,228
7/1/99 - 6/30/00	60,298	66,698	0.811	48,874	54,062
7/1/00 - 6/30/01	91,903	101,603	0.792	72,782	80,464
7/1/01 - 6/30/02	77,796	85,996	0.776	60,352	66,713
7/1/02 - 6/30/03	57,839	63,839	0.762	44,056	48,627
7/1/03 - 6/30/04	112,344	124,144	0.750	84,269	93,120
7/1/04 - 6/30/05	102,355	113,155	0.741	75,837	83,838
7/1/05 - 6/30/06	76,606	84,606	0.735	56,291	62,169
7/1/06 - 6/30/07	99,888	110,388	0.729	72,782	80,432
7/1/07 - 6/30/08	81,445	90,045	0.726	59,110	65,351
7/1/08 - 6/30/09	113,851	125,851	0.723	82,343	91,022
7/1/09 - 6/30/10	78,598	86,898	0.724	56,866	62,871
7/1/10 - 6/30/11	169,629	187,529	0.721	122,344	135,254
7/1/11 - 6/30/12	131,461	145,361	0.717	94,262	104,228
7/1/12 - 6/30/13	235,104	259,904	0.720	169,359	187,224
7/1/13 - 6/30/14	323,941	358,041	0.720	233,335	257,897
7/1/14 - 6/30/15	484,753	535,853	0.727	352,240	389,371
7/1/15 - 6/30/16	748,049	860,649	0.761	569,024	654,676
7/1/16 - 6/30/17	816,913	939,913	0.768	627,245	721,688
7/1/17 - 6/30/18	803,614	924,514	0.789	633,986	729,366
7/1/18 - 6/30/19	1,198,261	1,378,661	0.808	968,468	1,114,272
7/1/19 - 6/30/20	2,305,834	2,652,934	0.828	1,908,314	2,195,575
7/1/20 - 6/30/21	1,673,915	2,044,915	0.843	1,410,479	1,723,092
7/1/21 - 6/30/22	2,771,984	3,387,984	0.847	2,348,670	2,870,599
7/1/22 - 6/30/23	4,150,376	5,072,376	0.859	3,564,297	4,356,101
Total	20,947,749	24,878,567		17,868,988	21,274,221

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From Section II, Exhibit I, Sheet 1, Column (8)
(3) From Section II, Exhibit I, Sheet 1, Column (9)
(4) From Section II, Exhibit I, Sheet 0, Column (8)
(5) = (2) x (4)
(6) = (3) x (4)

Commonwealth of Massachusetts
Department of Mental Health
DMH - Indemnity (Including Lump Sum)

Section II
Exhibit I
Sheet 4

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Actual vs Expected - Paid Loss Emergence

Accident Year	Selected Low Ultimate Loss @ 06/30/2022	Selected High Ultimate Loss @ 06/30/2022	Unlimited Paid Loss @ 06/30/2022	Unlimited Paid Loss @ 06/30/2023	Paid LDF @ 06/30/2022	Projected Paid LDF @ 06/30/2023	Method 1 Low Expected Paid Emergence Loss @ 06/30/2023	Method 1 High Expected Paid Emergence Loss @ 06/30/2023	Actual Paid Emergence Loss @ 06/30/2023	Actual - Expected Method 1 Low Paid	Actual - Expected Method 1 High Paid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993	81,617,658	82,725,821	76,594,518	76,975,854	1.019	1.017	498,043	607,917	381,336	(116,706)	(226,580)
7/1/93 - 6/30/94	2,768,100	2,773,700	2,714,474	2,750,757	1.021	1.019	4,186	4,624	36,284	32,097	31,660
7/1/94 - 6/30/95	2,878,400	2,884,800	2,818,005	2,818,005	1.023	1.021	4,667	5,162	0	(4,667)	(5,162)
7/1/95 - 6/30/96	1,969,200	1,973,900	1,924,351	1,924,351	1.025	1.023	3,518	3,887	0	(3,518)	(3,887)
7/1/96 - 6/30/97	1,611,400	1,615,600	1,571,537	1,571,537	1.027	1.025	3,175	3,510	0	(3,175)	(3,510)
7/1/97 - 6/30/98	2,993,000	3,001,500	2,912,109	2,912,109	1.029	1.027	6,798	7,512	0	(6,798)	(7,512)
7/1/98 - 6/30/99	1,730,000	1,735,300	1,679,133	1,679,133	1.032	1.029	4,089	4,515	0	(4,089)	(4,515)
7/1/99 - 6/30/00	2,389,800	2,397,900	2,313,702	2,313,702	1.035	1.032	5,920	6,550	0	(5,920)	(6,550)
7/1/00 - 6/30/01	3,419,800	3,432,400	3,299,797	3,299,797	1.038	1.035	10,993	12,147	0	(10,993)	(12,147)
7/1/01 - 6/30/02	2,710,300	2,721,200	2,606,204	2,606,204	1.042	1.038	8,988	9,930	0	(8,988)	(9,930)
7/1/02 - 6/30/03	1,879,100	1,887,300	1,800,607	1,801,061	1.046	1.042	6,287	6,944	454	(5,833)	(6,490)
7/1/03 - 6/30/04	3,397,800	3,413,900	3,243,956	3,243,956	1.050	1.046	11,911	13,157	0	(11,911)	(13,157)
7/1/04 - 6/30/05	2,864,900	2,879,700	2,723,645	2,723,645	1.055	1.050	11,509	12,715	0	(11,509)	(12,715)
7/1/05 - 6/30/06	1,966,500	1,977,600	1,860,494	1,860,494	1.060	1.055	9,031	9,977	0	(9,031)	(9,977)
7/1/06 - 6/30/07	2,360,800	2,375,400	2,221,812	2,221,812	1.066	1.060	11,698	12,927	0	(11,698)	(12,927)
7/1/07 - 6/30/08	1,754,600	1,766,500	1,641,555	1,641,555	1.072	1.066	9,708	10,730	0	(9,708)	(10,730)
7/1/08 - 6/30/09	2,211,500	2,227,900	2,055,852	2,078,249	1.080	1.072	13,150	14,536	22,397	9,247	7,861
7/1/09 - 6/30/10	1,391,700	1,402,900	1,285,402	1,285,402	1.087	1.080	8,301	9,175	0	(8,301)	(9,175)
7/1/10 - 6/30/11	2,705,900	2,729,600	2,481,290	2,508,771	1.095	1.087	17,946	19,840	27,481	9,535	7,641
7/1/11 - 6/30/12	1,949,300	1,967,800	1,773,539	1,773,539	1.104	1.095	13,849	15,307	0	(13,849)	(15,307)
7/1/12 - 6/30/13	3,089,300	3,121,200	2,785,634	2,809,096	1.115	1.104	24,978	27,602	23,462	(1,515)	(4,139)
7/1/13 - 6/30/14	3,792,300	3,835,300	3,383,647	3,465,359	1.127	1.115	35,741	39,501	81,712	45,971	42,211
7/1/14 - 6/30/15	5,018,800	5,116,700	4,368,363	4,512,847	1.160	1.127	118,847	136,735	144,484	25,637	7,748
7/1/15 - 6/30/16	6,331,700	6,484,200	5,319,067	5,372,051	1.205	1.160	190,259	218,911	52,983	(137,275)	(165,928)
7/1/16 - 6/30/17	5,762,200	5,930,900	4,641,844	4,881,087	1.260	1.205	196,423	226,000	239,243	42,820	13,243
7/1/17 - 6/30/18	4,579,400	4,750,700	3,441,358	3,617,686	1.356	1.260	244,074	280,812	176,328	(67,745)	(104,484)
7/1/18 - 6/30/19	5,129,000	5,357,100	3,614,155	3,900,039	1.522	1.356	356,923	410,668	285,884	(71,039)	(124,783)
7/1/19 - 6/30/20	4,733,000	5,289,000	2,232,236	2,483,166	1.848	1.522	630,511	770,693	250,930	(379,581)	(519,763)
7/1/20 - 6/30/21	5,167,000	5,608,000	3,179,454	4,017,085	2.425	1.848	435,742	532,425	837,632	401,890	305,207
7/1/21 - 6/30/22	4,504,000	5,301,000	919,465	1,571,016	4.735	2.425	913,880	1,117,076	651,552	(262,329)	(465,524)
Total	174,676,458	178,684,821	153,407,204	156,619,367			3,811,145	4,551,484	3,212,163	(598,983)	(1,339,321)

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Selected by Deloitte Consulting LLP @ 06/30/2022
(3)	Selected by Deloitte Consulting LLP @ 06/30/2022
(4)	Provided by Entity
(5)	Provided by Entity
(6)	Selected by Deloitte Consulting LLP @ 06/30/2022
(7)	Interpolated From (6)
(8)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((2) - (4))
(9)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((3) - (4))
(10)	= (5) - (4)
(11)	= (10) - (8)
(12)	= (10) - (9)

Commonwealth of Massachusetts
Department of Mental Health
DMH - Indemnity (Including Lump Sum)

Section II
Exhibit I
Sheet 5

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Ultimate Loss Runoff

Accident Year	Ultimate Loss @ 06/30/2022 Low	Ultimate Loss @ 06/30/2022 High	Ultimate Loss @ 06/30/2023 Low	Ultimate Loss @ 06/30/2023 High	Deloitte Change Low	Deloitte Change High	Paid Loss @ 06/30/2023	Reported Loss @ 06/30/2023
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	81,617,658	82,725,821	80,871,140	81,736,759	(746,518)	(989,063)	76,975,854	76,975,854
7/1/93 - 6/30/94	2,768,100	2,773,700	2,797,700	2,802,600	29,600	28,900	2,750,757	2,750,757
7/1/94 - 6/30/95	2,878,400	2,884,800	2,870,200	2,875,700	(8,200)	(9,100)	2,818,005	2,818,005
7/1/95 - 6/30/96	1,969,200	1,973,900	1,965,600	1,969,900	(3,600)	(4,000)	1,924,351	1,924,351
7/1/96 - 6/30/97	1,611,400	1,615,600	1,606,900	1,610,600	(4,500)	(5,000)	1,571,537	1,571,537
7/1/97 - 6/30/98	2,993,000	3,001,500	2,980,600	2,987,900	(12,400)	(13,600)	2,912,109	2,912,109
7/1/98 - 6/30/99	1,730,000	1,735,300	1,720,600	1,725,000	(9,400)	(10,300)	1,679,133	1,679,133
7/1/99 - 6/30/00	2,389,800	2,397,900	2,374,000	2,380,400	(15,800)	(17,500)	2,313,702	2,313,702
7/1/00 - 6/30/01	3,419,800	3,432,400	3,391,700	3,401,400	(28,100)	(31,000)	3,299,797	3,299,797
7/1/01 - 6/30/02	2,710,300	2,721,200	2,684,000	2,692,200	(26,300)	(29,000)	2,606,204	2,606,204
7/1/02 - 6/30/03	1,879,100	1,887,300	1,858,900	1,864,900	(20,200)	(22,400)	1,801,061	1,801,061
7/1/03 - 6/30/04	3,397,800	3,413,900	3,356,300	3,368,100	(41,500)	(45,800)	3,243,956	3,243,956
7/1/04 - 6/30/05	2,864,900	2,879,700	2,826,000	2,836,800	(38,900)	(42,900)	2,723,645	2,723,645
7/1/05 - 6/30/06	1,966,500	1,977,600	1,937,100	1,945,100	(29,400)	(32,500)	1,860,494	1,860,494
7/1/06 - 6/30/07	2,360,800	2,375,400	2,321,700	2,332,200	(39,100)	(43,200)	2,221,812	2,221,812
7/1/07 - 6/30/08	1,754,600	1,766,500	1,723,000	1,731,600	(31,600)	(34,900)	1,641,555	1,641,555
7/1/08 - 6/30/09	2,211,500	2,227,900	2,192,100	2,204,100	(19,400)	(23,800)	2,078,249	2,078,249
7/1/09 - 6/30/10	1,391,700	1,402,900	1,364,000	1,372,300	(27,700)	(30,600)	1,285,402	1,285,402
7/1/10 - 6/30/11	2,705,900	2,729,600	2,678,400	2,696,300	(27,500)	(33,300)	2,508,771	2,508,771
7/1/11 - 6/30/12	1,949,300	1,967,800	1,905,000	1,918,900	(44,300)	(48,900)	1,773,539	1,773,539
7/1/12 - 6/30/13	3,089,300	3,121,200	3,044,200	3,069,000	(45,100)	(52,200)	2,809,096	2,809,096
7/1/13 - 6/30/14	3,792,300	3,835,300	3,789,300	3,823,400	(3,000)	(11,900)	3,465,359	3,465,359
7/1/14 - 6/30/15	5,018,800	5,116,700	4,997,600	5,048,700	(21,200)	(68,000)	4,512,847	4,512,847
7/1/15 - 6/30/16	6,331,700	6,484,200	6,120,100	6,232,700	(211,600)	(251,500)	5,372,051	5,372,051
7/1/16 - 6/30/17	5,762,200	5,930,900	5,698,000	5,821,000	(64,200)	(109,900)	4,881,087	4,881,087
7/1/17 - 6/30/18	4,579,400	4,750,700	4,421,300	4,542,200	(158,100)	(208,500)	3,617,686	3,617,686
7/1/18 - 6/30/19	5,129,000	5,357,100	5,098,300	5,278,700	(30,700)	(78,400)	3,900,039	3,900,039
7/1/19 - 6/30/20	4,733,000	5,289,000	4,789,000	5,136,100	56,000	(152,900)	2,483,166	2,483,166
7/1/20 - 6/30/21	5,167,000	5,608,000	5,691,000	6,062,000	524,000	454,000	4,017,085	4,017,085
7/1/21 - 6/30/22	4,504,000	5,301,000	4,343,000	4,959,000	(161,000)	(342,000)	1,571,016	1,571,016
Total	174,676,458	178,684,821	173,416,740	176,425,559	(1,259,718)	(2,259,263)	156,619,367	156,619,367

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(3) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(4) From Section II, Exhibit I, Sheet 6, Column (11)
(5) From Section II, Exhibit I, Sheet 6, Column (12)
(6) = (4) - (2)
(7) = (5) - (3)
(8) Provided by Entity
(9) Provided by Entity

Commonwealth of Massachusetts
Department of Mental Health
DMH - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Selection of Ultimate Loss

Accident Year	Payroll (00)'s	Unlimited Paid Loss @ 06/30/2023	Unlimited Reported Loss @ 06/30/2023	Ultimate Loss Indications: Paid LDM	Ultimate Loss Indications: Expected Loss	Ultimate Loss Indications: Paid B-F	Ultimate Loss Indications: Frequency Severity	Prior Selected Ultimate Loss: Low	Prior Selected Ultimate Loss: High	Selected Ultimate Loss: Low	Selected Ultimate Loss: High	Ultimate Loss Rates: Low	Ultimate Loss Rates: High	Ultimate Loss Severity: Low	Ultimate Loss Severity: High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Prior to 7/1/1993		76,975,854	76,975,854	78,248,082	0		0	81,617,658	82,725,821	80,871,140	81,736,759				
7/1/93 - 6/30/94	1,730,750	2,750,757	2,750,757	2,800,161	2,505,363	2,794,960	0	2,768,100	2,773,700	2,797,700	2,802,600	1.62	1.62		
7/1/94 - 6/30/95	1,783,170	2,818,005	2,818,005	2,872,944	2,629,843	2,868,295	0	2,878,400	2,884,800	2,870,200	2,875,700	1.61	1.61		
7/1/95 - 6/30/96	1,759,960	1,924,351	1,924,351	1,967,753	2,642,764	1,982,642	0	1,969,200	1,973,900	1,965,600	1,969,900	1.12	1.12		
7/1/96 - 6/30/97	1,900,830	1,571,537	1,571,537	1,608,719	2,911,537	1,638,831	0	1,611,400	1,615,600	1,606,900	1,610,600	0.85	0.85		
7/1/97 - 6/30/98	1,772,780	2,912,109	2,912,109	2,984,244	2,776,708	2,979,227	0	2,993,000	3,001,500	2,980,600	2,987,900	1.68	1.69		
7/1/98 - 6/30/99	1,890,800	1,679,133	1,679,133	1,722,798	3,032,189	1,755,985	0	1,730,000	1,735,300	1,720,600	1,725,000	0.91	0.91		
7/1/99 - 6/30/00	1,944,940	2,313,702	2,313,702	2,377,192	3,204,770	2,399,295	0	2,389,800	2,397,900	2,374,000	2,380,400	1.22	1.22		
7/1/00 - 6/30/01	2,015,680	3,299,797	3,299,797	3,396,558	3,432,622	3,397,585	0	3,419,800	3,432,400	3,391,700	3,401,400	1.68	1.69		
7/1/01 - 6/30/02	2,031,050	2,606,204	2,606,204	2,688,127	3,556,900	2,714,604	0	2,710,300	2,721,200	2,684,000	2,692,200	1.32	1.33		
7/1/02 - 6/30/03	2,025,150	1,801,061	1,801,061	1,861,893	3,597,460	1,918,598	0	1,879,100	1,887,300	1,858,900	1,864,900	0.92	0.92		
7/1/03 - 6/30/04	1,895,880	3,243,956	3,243,956	3,362,235	3,401,790	3,363,626	0	3,397,800	3,413,900	3,356,300	3,368,100	1.77	1.78		
7/1/04 - 6/30/05	1,869,900	2,723,645	2,723,645	2,831,427	3,407,599	2,853,360	0	2,864,900	2,879,700	2,826,000	2,836,800	1.51	1.52		
7/1/05 - 6/30/06	1,932,540	1,860,494	1,860,494	1,941,118	3,592,382	2,009,702	0	1,966,500	1,977,600	1,937,100	1,945,100	1.00	1.01		
7/1/06 - 6/30/07	2,033,590	2,221,812	2,221,812	2,326,932	3,858,910	2,396,140	0	2,360,800	2,375,400	2,321,700	2,332,200	1.14	1.15		
7/1/07 - 6/30/08	2,120,830	1,641,555	1,641,555	1,727,287	4,108,736	1,845,488	0	1,754,600	1,766,500	1,723,000	1,731,600	0.81	0.82		
7/1/08 - 6/30/09	2,046,790	2,078,249	2,078,249	2,198,118	4,044,303	2,298,796	0	2,211,500	2,227,900	2,192,100	2,204,100	1.07	1.08		
7/1/09 - 6/30/10	1,846,880	1,285,402	1,285,402	1,368,161	3,700,332	1,509,231	0	1,391,700	1,402,900	1,364,000	1,372,300	0.74	0.74		
7/1/10 - 6/30/11	1,696,890	2,508,771	2,508,771	2,687,351	3,434,104	2,736,974	0	2,705,900	2,729,600	2,678,400	2,696,300	1.58	1.59		
7/1/11 - 6/30/12	1,773,990	1,773,539	1,773,539	1,911,933	3,645,732	2,037,432	0	1,949,300	1,967,800	1,905,000	1,918,900	1.07	1.08		
7/1/12 - 6/30/13	1,892,520	2,809,096	2,809,096	3,056,625	3,959,967	3,129,779	3,168,142	3,089,300	3,121,200	3,044,200	3,069,000	1.61	1.62	18,676	18,828
7/1/13 - 6/30/14	1,998,760	3,465,359	3,465,359	3,806,339	4,243,454	3,845,497	4,042,174	3,792,300	3,835,300	3,789,300	3,823,400	1.90	1.91	19,042	19,213
7/1/14 - 6/30/15	2,137,000	4,512,847	4,512,847	5,023,155	4,605,016	4,980,675	5,946,001	5,018,800	5,116,700	4,997,600	5,048,700	2.34	2.36	17,849	18,031
7/1/15 - 6/30/16	2,118,290	5,372,051	5,372,051	6,176,388	4,644,155	5,976,849	5,585,636	6,331,700	6,484,200	6,120,100	6,232,700	2.89	2.94	24,383	24,831
7/1/16 - 6/30/17	2,030,850	4,881,087	4,881,087	5,759,468	4,532,770	5,572,383	5,086,946	5,762,200	5,930,900	5,698,000	5,821,000	2.81	2.87	26,138	26,702
7/1/17 - 6/30/18	2,039,250	3,617,686	3,617,686	4,481,748	4,638,208	4,511,913	5,584,273	4,579,400	4,750,700	4,421,300	4,542,200	2.17	2.23	19,392	19,922
7/1/18 - 6/30/19	2,180,600	3,900,039	3,900,039	5,188,541	5,057,935	5,156,107	5,376,910	5,129,000	5,357,100	5,098,300	5,278,700	2.34	2.42	24,394	25,257
7/1/19 - 6/30/20	2,224,960	2,483,166	2,483,166	3,707,612	5,264,349	4,221,728	5,703,368	4,733,000	5,289,000	4,789,000	5,136,100	2.15	2.31	22,697	24,342
7/1/20 - 6/30/21	2,221,021	4,017,085	4,017,085	7,204,334	5,382,295	6,398,251	5,848,974	5,167,000	5,608,000	5,691,000	6,062,000	2.56	2.73	27,745	29,554
7/1/21 - 6/30/22	2,383,142	1,571,016	1,571,016	3,615,341	5,973,227	4,948,627	4,353,201	4,504,000	5,301,000	4,343,000	4,959,000	1.82	2.08	30,307	34,606
7/1/22 - 6/30/23	2,460,536	1,459,624	1,459,624	6,350,487	6,350,533	6,350,522	5,512,352			5,610,000	6,532,000	2.28	2.65	32,790	38,179
Total	59,759,329	158,078,991	158,078,991	177,253,071	118,135,956	100,593,103	56,207,976	174,676,458	178,684,821	179,026,740	182,957,559				

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	From Section II, Exhibit I, Sheet 10, Column (7)
(6)	From Section II, Exhibit I, Sheet 7, Column (4)
(7)	From Section II, Exhibit I, Sheet 7, Column (10)
(8)	From Section II, Exhibit I, Sheet 9, Column (12)
(9)	From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(10)	From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(11)	Selected by Deloitte Consulting LLP
(12)	Selected by Deloitte Consulting LLP
(13)	= (11) / (2)
(14)	= (12) / (2)
(15)	(11) Divided by Ultimate Claims From Section II, Exhibit I, Sheet 13, Column (7)
(16)	(12) Divided by Ultimate Claims From Section II, Exhibit I, Sheet 13, Column (7)

Commonwealth of Massachusetts
Department of Mental Health
DMH - Indemnity (Including Lump Sum)

Section II
Exhibit I
Sheet 7

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Bornhuetter-Ferguson Method

Accident Year	Payroll (00)'s	Initial Expected Loss Rates	Initial Expected Loss	Expected % of Paid Loss	Expected Paid Loss	Unlimited Actual Paid Loss	Expected % of Unpaid Loss	Expected Unpaid Loss	Unlimited Indicated Ultimate Loss	Unlimited Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
7/1/93 - 6/30/94	1,730,750	1.45	2,505,363	98.2%	2,461,161	2,750,757	1.8%	44,202	2,794,960	1.61
7/1/94 - 6/30/95	1,783,170	1.47	2,629,843	98.1%	2,579,553	2,818,005	1.9%	50,291	2,868,295	1.61
7/1/95 - 6/30/96	1,759,960	1.50	2,642,764	97.8%	2,584,473	1,924,351	2.2%	58,291	1,982,642	1.13
7/1/96 - 6/30/97	1,900,830	1.53	2,911,537	97.7%	2,844,243	1,571,537	2.3%	67,294	1,638,831	0.86
7/1/97 - 6/30/98	1,772,780	1.57	2,776,708	97.6%	2,709,589	2,912,109	2.4%	67,118	2,979,227	1.68
7/1/98 - 6/30/99	1,890,800	1.60	3,032,189	97.5%	2,955,337	1,679,133	2.5%	76,852	1,755,985	0.93
7/1/99 - 6/30/00	1,944,940	1.65	3,204,770	97.3%	3,119,177	2,313,702	2.7%	85,593	2,399,295	1.23
7/1/00 - 6/30/01	2,015,680	1.70	3,432,622	97.2%	3,334,834	3,299,797	2.8%	97,788	3,397,585	1.69
7/1/01 - 6/30/02	2,031,050	1.75	3,556,900	97.0%	3,448,501	2,606,204	3.0%	108,400	2,714,604	1.34
7/1/02 - 6/30/03	2,025,150	1.78	3,597,460	96.7%	3,479,923	1,801,061	3.3%	117,536	1,918,598	0.95
7/1/03 - 6/30/04	1,895,880	1.79	3,401,790	96.5%	3,282,120	3,243,956	3.5%	119,670	3,363,626	1.77
7/1/04 - 6/30/05	1,869,900	1.82	3,407,599	96.2%	3,277,884	2,723,645	3.8%	129,715	2,853,360	1.53
7/1/05 - 6/30/06	1,932,540	1.86	3,592,382	95.8%	3,443,174	1,860,494	4.2%	149,208	2,009,702	1.04
7/1/06 - 6/30/07	2,033,590	1.90	3,858,910	95.5%	3,684,583	2,221,812	4.5%	174,327	2,396,140	1.18
7/1/07 - 6/30/08	2,120,830	1.94	4,108,736	95.0%	3,904,803	1,641,555	5.0%	203,933	1,845,488	0.87
7/1/08 - 6/30/09	2,046,790	1.98	4,044,303	94.5%	3,823,756	2,078,249	5.5%	220,547	2,298,796	1.12
7/1/09 - 6/30/10	1,846,880	2.00	3,700,332	94.0%	3,476,504	1,285,402	6.0%	223,829	1,509,231	0.82
7/1/10 - 6/30/11	1,696,890	2.02	3,434,104	93.4%	3,205,901	2,508,771	6.6%	228,203	2,736,974	1.61
7/1/11 - 6/30/12	1,773,990	2.06	3,645,732	92.8%	3,381,839	1,773,539	7.2%	263,893	2,037,432	1.15
7/1/12 - 6/30/13	1,892,520	2.09	3,959,967	91.9%	3,639,284	2,809,096	8.1%	320,683	3,129,779	1.65
7/1/13 - 6/30/14	1,998,760	2.12	4,243,454	91.0%	3,863,316	3,465,359	9.0%	380,138	3,845,497	1.92
7/1/14 - 6/30/15	2,137,000	2.15	4,605,016	89.8%	4,137,188	4,512,847	10.2%	467,829	4,980,675	2.33
7/1/15 - 6/30/16	2,118,290	2.19	4,644,155	87.0%	4,039,357	5,372,051	13.0%	604,798	5,976,849	2.82
7/1/16 - 6/30/17	2,030,850	2.23	4,532,770	84.7%	3,841,474	4,881,087	15.3%	691,296	5,572,383	2.74
7/1/17 - 6/30/18	2,039,250	2.27	4,638,208	80.7%	3,743,982	3,617,686	19.3%	894,227	4,511,913	2.21
7/1/18 - 6/30/19	2,180,600	2.32	5,057,935	75.2%	3,801,867	3,900,039	24.8%	1,256,069	5,156,107	2.36
7/1/19 - 6/30/20	2,224,960	2.37	5,264,349	67.0%	3,525,787	2,483,166	33.0%	1,738,562	4,221,728	1.90
7/1/20 - 6/30/21	2,221,021	2.42	5,382,295	55.8%	3,001,129	4,017,085	44.2%	2,381,166	6,398,251	2.88
7/1/21 - 6/30/22	2,383,142	2.51	5,973,227	43.5%	2,595,616	1,571,016	56.5%	3,377,611	4,948,627	2.08
7/1/22 - 6/30/23	2,460,536	2.58	6,350,533	23.0%	1,459,635	1,459,624	77.0%	4,890,898	6,350,522	2.58
Total	59,759,329		118,135,956		98,645,990	81,103,137		19,489,966	100,593,103	

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	From Section II, Exhibit I, Sheet 8, Column (13)
(4)	= (2) x (3)
(5)	= 1 / Section II, Exhibit I, Sheet 10, Column (6)
(6)	= (4) x (5)
(7)	Provided by Entity
(8)	= 1 - (5)
(9)	= (4) x (8)
(10)	= (7) + (9)
(11)	= (10) / (2)

Commonwealth of Massachusetts
Department of Mental Health
DMH - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Calculation of Initial Expected Loss Rates

Accident Year	Payroll (00)'s	Payroll Trend	Loss Development Unlimited Indicated Ultimate Loss Paid	Loss Development Unlimited Indicated Ultimate Loss Reported	Selected Initial Ultimate Loss	Loss Trend Factor	Benefit Level Adjustment Factors	Trended Ultimate	On-level Loss Rates	Detrended Loss Rates	Prior Expected Loss Rates	Initial Expected Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
7/1/93 - 6/30/94	1,730,750	2.357	2,800,161	2,800,161	81,303,949	3.119	1.347	341,613,695	***83.76***	1.45	1.19	1.45
7/1/94 - 6/30/95	1,783,170	2.288	2,872,944	2,872,944	2,800,150	2.999	1.335	11,211,581	2.75	1.47	1.21	1.47
7/1/95 - 6/30/96	1,759,960	2.221	1,967,753	1,967,753	2,872,950	2.883	1.324	10,968,771	2.81	1.50	1.23	1.50
7/1/96 - 6/30/97	1,900,830	2.157	1,608,719	1,608,719	1,967,750	2.772	1.311	7,150,544	1.74	1.53	1.26	1.53
7/1/97 - 6/30/98	1,772,780	2.094	2,984,244	2,984,244	1,608,750	2.666	1.294	5,550,400	1.50	1.57	1.29	1.57
7/1/98 - 6/30/99	1,890,800	2.033	1,722,798	1,722,798	2,984,250	2.563	1.276	9,763,340	2.54	1.60	1.32	1.60
7/1/99 - 6/30/00	1,944,940	1.974	2,377,192	2,377,192	1,722,800	2.465	1.254	5,325,750	1.39	1.65	1.35	1.65
7/1/00 - 6/30/01	2,015,680	1.916	3,396,558	3,396,558	2,377,200	2.370	1.225	6,903,363	1.79	1.70	1.40	1.70
7/1/01 - 6/30/02	2,031,050	1.860	2,688,127	2,688,127	3,396,550	2.279	1.203	9,312,131	2.46	1.75	1.44	1.75
7/1/02 - 6/30/03	2,025,150	1.806	1,861,893	1,861,893	2,688,100	2.191	1.198	7,053,938	1.93	1.78	1.46	1.78
7/1/03 - 6/30/04	1,895,880	1.754	3,362,235	3,362,235	1,861,900	2.107	1.197	4,696,209	1.41	1.79	1.47	1.79
7/1/04 - 6/30/05	1,869,900	1.702	2,831,427	2,831,427	3,362,200	2.026	1.190	8,106,698	2.55	1.82	1.50	1.82
7/1/05 - 6/30/06	1,932,540	1.653	1,941,118	1,941,118	2,831,400	1.948	1.178	6,497,712	2.03	1.86	1.53	1.86
7/1/06 - 6/30/07	2,033,590	1.605	2,326,932	2,326,932	1,941,100	1.873	1.165	4,236,651	1.30	1.90	1.56	1.90
7/1/07 - 6/30/08	2,120,830	1.558	1,727,287	1,727,287	2,326,950	1.801	1.152	4,829,737	1.46	1.94	1.59	1.94
7/1/08 - 6/30/09	2,046,790	1.513	2,198,118	2,198,118	1,727,300	1.732	1.141	3,412,706	1.10	1.98	1.62	1.98
7/1/09 - 6/30/10	1,846,880	1.469	1,368,161	1,368,161	2,198,100	1.665	1.136	4,158,242	1.53	2.00	1.65	2.00
7/1/10 - 6/30/11	1,696,890	1.426	2,687,351	2,687,351	1,368,150	1.601	1.136	2,487,718	1.03	2.02	1.66	2.02
7/1/11 - 6/30/12	1,773,990	1.384	1,911,933	1,911,933	2,687,350	1.539	1.129	4,671,760	1.90	2.06	1.69	2.06
7/1/12 - 6/30/13	1,892,520	1.344	3,056,625	3,056,625	1,911,950	1.480	1.120	3,169,408	1.25	2.09	1.72	2.09
7/1/13 - 6/30/14	1,998,760	1.305	3,806,339	3,806,339	3,056,600	1.423	1.114	4,848,364	1.86	2.12	1.75	2.12
7/1/14 - 6/30/15	2,137,000	1.267	5,023,155	5,023,155	3,806,350	1.369	1.109	5,775,111	2.13	2.15	1.77	2.15
7/1/15 - 6/30/16	2,118,290	1.230	6,176,388	6,176,388	5,023,150	1.316	1.100	7,272,703	2.79	2.19	1.80	2.19
7/1/16 - 6/30/17	2,030,850	1.194	5,759,468	5,759,468	6,176,400	1.265	1.091	8,528,121	***3.52***	2.23	1.83	2.23
7/1/17 - 6/30/18	2,039,250	1.159	4,481,748	4,481,748	5,759,500	1.217	1.081	7,576,551	3.20	2.27	1.87	2.27
7/1/18 - 6/30/19	2,180,600	1.126	5,188,541	5,188,541	4,481,750	1.170	1.071	5,612,802	2.29	2.32	1.91	2.32
7/1/19 - 6/30/20	2,224,960	1.093	3,707,612	3,707,612	5,188,500	1.125	1.060	6,184,598	2.54	2.37	1.94	2.37
7/1/20 - 6/30/21	2,221,021	1.061	7,204,334	7,204,334	7,204,334	1.082	1.045	8,140,179	***3.45***	2.42	1.99	2.42
7/1/21 - 6/30/22	2,383,142	1.030	3,615,341	3,615,341	3,615,341	1.040	1.020	3,834,491	***1.56***	2.51	2.06	2.51
7/1/22 - 6/30/23	2,460,536	1.000	6,350,487	6,350,487	6,350,487	1.000	1.000	6,350,487	***2.58***	2.58		2.58
			99,004,989	99,004,989				Last 3 Wtd Avg	2.67			
								Last 4 Wtd Avg	2.70			
								Last 5 Wtd Avg	2.58			
								All Per Wtd Avg	1.97			

(Note: numbers in bold and italics and with borders are excluded from the calculated averages)

Selected (14) 2.58

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Selected by Deloitte Consulting LLP
(4) From Section II, Exhibit I, Sheet 10, Column (7)
(5) From Section II, Exhibit I, Sheet 0, Column (7)
(6) Selected by Deloitte Consulting LLP
(7) Selected by Deloitte Consulting LLP
(8) Based on industry sources
(9) = (6) x (7) x (8)
(10) = (9) / [(2) x (3)]
(11) = (14) / (7) / (8) * (3)
(12) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(13) Selected for by Deloitte Consulting LLP Based on (14)
(14) Selected by Deloitte Consulting LLP

Commonwealth of Massachusetts
Department of Mental Health
DMH - Indemnity (Including Lump Sum)

Section II
Exhibit I
Sheet 9

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Frequency Severity Method

Accident Year	Payroll (00)'s	Ultimate Reported Severity	Include For Fit	Exponential Fitted Reported Severity	Initial Selected Ultimate Severity	Selected Ultimate Claim Counts	Benefit Level Adjustment Factor	Selected Severity Trend	Trended Severity	On-Level Selected Ultimate Severity	Indicated Ultimate Loss	Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Prior to 7/1/1993			Exclude	10,116		0					0	
7/1/93 - 6/30/94	1,730,750		Exclude	10,487		0	1.347	3.119	0,000		0	0.00
7/1/94 - 6/30/95	1,783,170		Exclude	10,872		0	1.335	2.999	0,000		0	0.00
7/1/95 - 6/30/96	1,759,960		Exclude	11,272		0	1.324	2.883	0,000		0	0.00
7/1/96 - 6/30/97	1,900,830		Exclude	11,686		0	1.311	2.772	0,000		0	0.00
7/1/97 - 6/30/98	1,772,780		Exclude	12,115		0	1.294	2.666	0,000		0	0.00
7/1/98 - 6/30/99	1,890,800		Exclude	12,560		0	1.276	2.563	0,000		0	0.00
7/1/99 - 6/30/00	1,944,940		Exclude	13,021		0	1.254	2.465	0,000		0	0.00
7/1/00 - 6/30/01	2,015,680		Exclude	13,499		0	1.225	2.370	0,000		0	0.00
7/1/01 - 6/30/02	2,031,050		Exclude	13,995		0	1.203	2.279	0,000		0	0.00
7/1/02 - 6/30/03	2,025,150		Exclude	14,509		0	1.198	2.191	0,000		0	0.00
7/1/03 - 6/30/04	1,895,880		Exclude	15,042		0	1.197	2.107	0,000		0	0.00
7/1/04 - 6/30/05	1,869,900		Exclude	15,594		0	1.190	2.026	0,000		0	0.00
7/1/05 - 6/30/06	1,932,540		Exclude	16,167		0	1.178	1.948	0,000		0	0.00
7/1/06 - 6/30/07	2,033,590		Exclude	16,761		0	1.165	1.873	0,000		0	0.00
7/1/07 - 6/30/08	2,120,830		Exclude	17,376		0	1.152	1.801	0,000		0	0.00
7/1/08 - 6/30/09	2,046,790		Exclude	18,014		0	1.141	1.732	0,000		0	0.00
7/1/09 - 6/30/10	1,846,880		Exclude	18,676		0	1.136	1.665	0,000		0	0.00
7/1/10 - 6/30/11	1,696,890		Exclude	19,362		0	1.136	1.601	0,000		0	0.00
7/1/11 - 6/30/12	1,773,990		Exclude	20,073		0	1.129	1.539	0,000		0	0.00
7/1/12 - 6/30/13	1,892,520	18,752	Include	20,810	11,730	163	1.120	1.480	19,444	32,219	3,168,142	1.67
7/1/13 - 6/30/14	1,998,760	19,127	Include	21,575	15,360	199	1.114	1.423	24,364	32,219	4,042,174	2.02
7/1/14 - 6/30/15	2,137,000	17,940	Include	22,367	13,594	280	1.109	1.369	20,625	32,219	5,946,001	2.78
7/1/15 - 6/30/16	2,118,290	24,607	Include	23,188	20,013	251	1.100	1.316	28,975	32,219	5,585,636	2.64
7/1/16 - 6/30/17	2,030,850	26,420	Include	24,040	28,332	218	1.091	1.265	39,120	32,219	5,086,946	2.50
7/1/17 - 6/30/18	2,039,250	19,657	Include	24,923	25,261	228	1.081	1.217	33,230	32,219	5,584,273	2.74
7/1/18 - 6/30/19	2,180,600	24,826	Include	25,838	21,444	209	1.071	1.170	26,856	32,219	5,376,910	2.47
7/1/19 - 6/30/20	2,224,960	17,572	Include	26,787	24,590	211	1.060	1.125	29,311	32,219	5,703,368	2.56
7/1/20 - 6/30/21	2,221,021	35,123	Include	27,771	35,123	205	1.045	1.082	***39,686***	32,219	5,848,974	2.63
7/1/21 - 6/30/22	2,383,142	25,229	Exclude	28,791	25,229	143	1.020	1.040	***26,758***	32,219	4,353,201	1.83
7/1/22 - 6/30/23	2,460,536	37,118	Exclude	29,848	37,118	171	1.000	1.000	***37,118***	32,219	5,512,352	2.24
			Implied Trend	3.7%	47.1%			Last 5 Wtd Avg	31,490			
								Last 4 Wtd Avg	32,219			
								Last 3 Wtd Avg	29,898			
Total	59,759,329					2,279		Last 3 Avg	29,799		56,207,976	
								Selected	32,219			

Reported Exponential Regressio	
Constant	10.340
X Coefficient	(0.036)
R Squared	0.203

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Section II, Exhibit I, Sheet 0, Column (7) / Section II, Exhibit I, Sheet 13, Column (7) x 1
(4) Years included for purposes of fit
(5) Result of Exponential fit of Column (3) * Column (8)
(6) Selected by Deloitte Consulting LLP
(7) From Section II, Exhibit I, Sheet 13, Column (7)
(8) Based on industry sources
(9) Selected by Deloitte Consulting LLP
(10) = (6) x (8) x (9)
(11) Selected by Deloitte Consulting, LLP
(12) Selected in column (11) x (7) / (8) / (9)
(13) = (12) / (3)

Commonwealth of Massachusetts
Department of Mental Health
DMH - Indemnity (Including Lump Sum)

Section II
Exhibit I
Sheet 10

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss Development Method

Accident Year	Age of Losses @ 06/30/2023	Retention	Payroll (00)'s	Unlimited Paid Loss @ 06/30/2023	Paid LDF	Indicated Ultimate Loss	Unlimited Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Prior to 7/1/1993	372.0	Unlimited		76,975,854	1.017	78,248,082	
7/1/93 - 6/30/94	360.0	Unlimited	1,730,750	2,750,757	1.018	2,800,161	1.62
7/1/94 - 6/30/95	348.0	Unlimited	1,783,170	2,818,005	1.019	2,872,944	1.61
7/1/95 - 6/30/96	336.0	Unlimited	1,759,960	1,924,351	1.023	1,967,753	1.12
7/1/96 - 6/30/97	324.0	Unlimited	1,900,830	1,571,537	1.024	1,608,719	0.85
7/1/97 - 6/30/98	312.0	Unlimited	1,772,780	2,912,109	1.025	2,984,244	1.68
7/1/98 - 6/30/99	300.0	Unlimited	1,890,800	1,679,133	1.026	1,722,798	0.91
7/1/99 - 6/30/00	288.0	Unlimited	1,944,940	2,313,702	1.027	2,377,192	1.22
7/1/00 - 6/30/01	276.0	Unlimited	2,015,680	3,299,797	1.029	3,396,558	1.69
7/1/01 - 6/30/02	264.0	Unlimited	2,031,050	2,606,204	1.031	2,688,127	1.32
7/1/02 - 6/30/03	252.0	Unlimited	2,025,150	1,801,061	1.034	1,861,893	0.92
7/1/03 - 6/30/04	240.0	Unlimited	1,895,880	3,243,956	1.036	3,362,235	1.77
7/1/04 - 6/30/05	228.0	Unlimited	1,869,900	2,723,645	1.040	2,831,427	1.51
7/1/05 - 6/30/06	216.0	Unlimited	1,932,540	1,860,494	1.043	1,941,118	1.00
7/1/06 - 6/30/07	204.0	Unlimited	2,033,590	2,221,812	1.047	2,326,932	1.14
7/1/07 - 6/30/08	192.0	Unlimited	2,120,830	1,641,555	1.052	1,727,287	0.81
7/1/08 - 6/30/09	180.0	Unlimited	2,046,790	2,078,249	1.058	2,198,118	1.07
7/1/09 - 6/30/10	168.0	Unlimited	1,846,880	1,285,402	1.064	1,368,161	0.74
7/1/10 - 6/30/11	156.0	Unlimited	1,696,890	2,508,771	1.071	2,687,351	1.58
7/1/11 - 6/30/12	144.0	Unlimited	1,773,990	1,773,539	1.078	1,911,933	1.08
7/1/12 - 6/30/13	132.0	Unlimited	1,892,520	2,809,096	1.088	3,056,625	1.62
7/1/13 - 6/30/14	120.0	Unlimited	1,998,760	3,465,359	1.098	3,806,339	1.90
7/1/14 - 6/30/15	108.0	Unlimited	2,137,000	4,512,847	1.113	5,023,155	2.35
7/1/15 - 6/30/16	96.0	Unlimited	2,118,290	5,372,051	1.150	6,176,388	2.92
7/1/16 - 6/30/17	84.0	Unlimited	2,030,850	4,881,087	1.180	5,759,468	2.84
7/1/17 - 6/30/18	72.0	Unlimited	2,039,250	3,617,686	1.239	4,481,748	2.20
7/1/18 - 6/30/19	60.0	Unlimited	2,180,600	3,900,039	1.330	5,188,541	2.38
7/1/19 - 6/30/20	48.0	Unlimited	2,224,960	2,483,166	1.493	3,707,612	1.67
7/1/20 - 6/30/21	36.0	Unlimited	2,221,021	4,017,085	1.793	7,204,334	3.24
7/1/21 - 6/30/22	24.0	Unlimited	2,383,142	1,571,016	2.301	3,615,341	1.52
7/1/22 - 6/30/23	12.0	Unlimited	2,460,536	1,459,624	4.351	6,350,487	2.58
Total			59,759,329	158,078,991		177,253,071	

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1)
(3) Provided by Entity
(4) Provided by Entity
(5) Provided by Entity
(6) From Section II, Exhibit I, Sheet 11
(7) = (5) x (6)
(8) = (7) / (4)

Commonwealth of Massachusetts
Department of Mental Health
DMH - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Months of Development

Accident Year	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	348	360	372	As of 6/30/2023
Prior to 7/1/1993	131,961,174	44,897,640	49,148,578	52,081,997	54,326,358	56,407,634	58,374,862	60,219,005	61,670,102	62,732,129	63,687,213	64,528,049	65,276,907	66,076,302	66,829,149	67,617,061	68,570,962	69,261,716	69,753,188	70,251,618	71,097,218	71,917,754	72,735,805	73,439,614	74,092,942	74,715,208	75,232,850	75,705,436	76,159,288	76,594,518	76,975,854	76,975,854
7/1/93 - 6/30/94	382,925	799,441	1,069,474	1,280,549	1,449,134	1,522,746	1,663,147	1,790,569	1,877,682	1,938,398	1,999,299	2,059,683	2,126,905	2,191,389	2,245,329	2,275,004	2,304,895	2,334,661	2,365,441	2,396,620	2,428,813	2,475,733	2,508,027	2,540,274	2,575,204	2,610,632	2,644,662	2,679,319	2,714,474	2,750,757		2,750,757
7/1/94 - 6/30/95	586,439	1,072,079	1,518,023	1,908,508	2,060,240	2,148,140	2,251,765	2,325,362	2,462,237	2,509,533	2,573,404	2,635,127	2,704,351	2,756,007	2,812,068	2,813,055	2,817,095	2,817,398	2,817,550	2,817,853	2,817,853	2,818,005	2,818,005	2,818,005	2,818,005	2,818,005	2,818,005	2,818,005	2,818,005			2,818,005
7/1/95 - 6/30/96	465,550	856,030	1,199,496	1,442,248	1,704,654	1,767,357	1,771,566	1,884,238	1,884,813	1,902,253	1,922,253	1,922,253	1,922,253	1,922,253	1,922,253	1,922,253	1,922,991	1,924,351	1,924,351	1,924,351	1,924,351	1,924,351	1,924,351	1,924,351	1,924,351	1,924,351	1,924,351	1,924,351				1,924,351
7/1/96 - 6/30/97	368,317	790,820	1,067,772	1,266,509	1,338,181	1,379,341	1,424,038	1,468,340	1,487,059	1,487,447	1,571,537	1,571,537	1,571,537	1,571,537	1,571,537	1,571,537	1,571,537	1,571,537	1,571,537	1,571,537	1,571,537	1,571,537	1,571,537	1,571,537	1,571,537	1,571,537	1,571,537					1,571,537
7/1/97 - 6/30/98	545,431	1,098,371	1,670,089	1,856,359	2,081,803	2,357,421	2,424,602	2,467,374	2,569,354	2,608,539	2,649,255	2,712,714	2,820,343	2,912,109	2,912,109	2,912,109	2,912,109	2,912,109	2,912,109	2,912,109	2,912,109	2,912,109	2,912,109	2,912,109	2,912,109	2,912,109						2,912,109
7/1/98 - 6/30/99	567,180	927,896	1,226,508	1,457,710	1,516,644	1,568,212	1,633,538	1,667,310	1,667,310	1,669,520	1,669,520	1,674,660	1,674,660	1,674,660	1,674,660	1,674,660	1,674,660	1,674,660	1,674,780	1,674,780	1,674,780	1,676,633	1,679,133	1,679,133	1,679,133							1,679,133
7/1/99 - 6/30/00	442,312	1,129,733	1,606,237	1,813,509	1,999,514	2,112,728	2,223,925	2,286,450	2,313,702	2,313,702	2,313,702	2,313,702	2,313,702	2,313,702	2,313,702	2,313,702	2,313,702	2,313,702	2,313,702	2,313,702	2,313,702	2,313,702	2,313,702	2,313,702								2,313,702
7/1/00 - 6/30/01	774,752	1,609,099	2,162,567	2,536,587	2,735,434	2,909,511	3,002,606	3,099,936	3,191,097	3,213,573	3,236,662	3,265,709	3,289,151	3,299,797	3,299,797	3,299,797	3,299,797	3,299,797	3,299,797	3,299,797	3,299,797	3,299,797	3,299,797									3,299,797
7/1/01 - 6/30/02	623,060	1,274,282	1,612,081	1,839,503	2,013,845	2,212,049	2,448,489	2,521,640	2,578,717	2,606,204	2,606,204	2,606,204	2,606,204	2,606,204	2,606,204	2,606,204	2,606,204	2,606,204	2,606,204	2,606,204	2,606,204	2,606,204										2,606,204
7/1/02 - 6/30/03	618,151	1,080,113	1,365,133	1,586,681	1,766,302	1,791,993	1,815,440	1,823,422	1,833,038	1,901,611	1,901,724	1,902,075	1,795,408	1,795,653	1,796,375	1,796,796	1,797,354	1,799,490	1,800,151	1,800,607	1,801,061											1,801,061
7/1/03 - 6/30/04	770,179	1,522,135	2,041,406	2,449,994	2,768,308	3,088,905	3,149,936	3,242,897	3,242,897	3,242,897	3,243,734	3,243,734	3,243,734	3,243,956	3,243,956	3,243,956	3,243,956	3,243,956	3,243,956	3,243,956												3,243,956
7/1/04 - 6/30/05	665,795	1,325,721	1,841,901	2,208,908	2,430,257	2,512,584	2,600,842	2,718,828	2,718,828	2,718,828	2,721,593	2,721,593	2,722,143	2,723,645	2,723,645	2,723,645	2,723,645	2,723,645	2,723,645													2,723,645
7/1/05 - 6/30/06	602,391	1,061,862	1,492,332	1,746,209	1,813,487	1,853,077	1,855,810	1,857,197	1,857,339	1,858,384	1,859,244	1,859,383	1,859,383	1,859,638	1,859,638	1,860,494	1,860,494	1,860,494														1,860,494
7/1/06 - 6/30/07	599,461	1,045,901	1,415,657	1,681,850	1,910,454	1,982,868	2,053,156	2,221,812	2,221,812	2,221,812	2,221,812	2,221,812	2,221,812	2,221,812	2,221,812	2,221,812	2,221,812															2,221,812
7/1/07 - 6/30/08	637,017	1,147,042	1,310,776	1,431,458	1,507,306	1,530,128	1,575,670	1,609,635	1,641,555	1,641,555	1,641,555	1,641,555	1,641,555	1,641,555	1,641,555	1,641,555																1,641,555
7/1/08 - 6/30/09	668,064	1,191,264	1,514,444	1,617,302	1,720,723	1,806,321	1,847,519	1,921,312	1,960,394	1,979,475	1,998,556	2,017,689	2,036,770	2,055,852	2,078,249																	2,078,249
7/1/09 - 6/30/10	415,006	739,896	931,282	1,172,341	1,227,491	1,231,997	1,231,997	1,231,997	1,231,997	1,235,402	1,285,402	1,285,402	1,285,402	1,285,402																		1,285,402
7/1/10 - 6/30/11	660,804	1,136,164	1,469,654	1,746,801	1,844,303	1,956,888	2,144,361	2,282,187	2,402,644	2,428,416	2,454,664	2,481,290	2,508,771																			2,508,771
7/1/11 - 6/30/12	603,523	1,221,080	1,496,801	1,569,438	1,649,877	1,672,456	1,691,862	1,714,325	1,773,539	1,773,539	1,773,539	1,773,539																				1,773,539
7/1/12 - 6/30/13	652,867	1,330,857	1,750,421	2,028,377	2,273,495	2,405,919	2,573,647	2,664,828	2,762,172	2,785,634	2,809,096																					2,809,096
7/1/13 - 6/30/14	737,949	1,543,899	2,150,954	2,587,734	2,761,509	3,083,272	3,185,034	3,332,284	3,383,647	3,465,359																						3,465,359
7/1/14 - 6/30/15	1,026,870	1,834,888	2,494,779	2,985,881	3,488,252	3,880,516	4,235,138	4,368,363	4,512,847																							4,512,847
7/1/15 - 6/30/16	1,405,951	2,746,335	3,786,513	4,459,368	4,953,769	5,222,512	5,319,067	5,372,051																								5,372,051
7/1/16 - 6/30/17	1,172,336	2,413,106	3,173,677	3,897,400	4,394,145	4,641,844	4,881,087																									4,881,087
7/1/17 - 6/30/18	996,294	1,936,685	2,465,654	3,021,823	3,441,358	3,617,686																										3,617,686
7/1/18 - 6/30/19	1,147,072	2,105,484	2,891,338	3,614,155	3,900,039																											3,900,039
7/1/19 - 6/30/20	1,137,532	1,883,571	2,232,236	2,483,166																												2,483,166
7/1/20 - 6/30/21	1,446,664	3,179,454	4,017,085																													4,017,085
7/1/21 - 6/30/22	919,465	1,571,016																														1,571,016
7/1/22 - 6/30/23	1,459,624																															1,459,624
																																158,078,991

Age-to-Age Development Factors

Accident Year	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993	***0.340***	***1.095***	***1.060***	***1.043***	***1.038***	***1.035***	***1.032***	***1.024***	***1.017***	***1.015***	***1.013***	***1.012***	***1.012***	***1.011***	***1.012***	***1.014***	***1.010***	***1.007***	***1.007***	***1.012***	***1.012***	***1.011***	***1.010***	***1.009***	***1.008***	***1.007***	***1.006***	***1.006***	***1.006***	***1.005***	
7/1/93 - 6/30/94	2.088	1.338	1.197	1.132	1.051	1.092	1.077	1.049	1.032	1.031	1.030	1.033	1.030	1.025	1.013	1.013	1.013	1.013	1.013	1.013	1.019	1.013	1.013	1.014	1.014	1.013	1.013	1.013	1.013		
7/1/94 - 6/30/95	1.828	1.416	1.257	1.080	1.043	1.048	1.033	1.059	1.019	1.025	1.024	1.026	1.019	1.020	1.000	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			
7/1/95 - 6/30/96	1.839	1.401	1.202	1.182	1.037	1.002	1.064	1.000	1.009	1.011	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
7/1/96 - 6/30/97	2.147	1.350	1.186	1.057	1.031	1.032	1.031	1.013	1.000	1.057	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					
7/1/97 - 6/30/98	2.014	1.521	1.112	1.121	1.132	1.028	1.018	1.041	1.015	1.016	1.024	1.040	1.033	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
7/1/98 - 6/30/99	1.636	1.322	1.189	1.040	1.034	1.042	1.021	1.000	1.001	1.000	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.001	1.000	1.000							
7/1/99 - 6/30/00	2.554	1.422	1.129	1.103	1.057	1.053	1.028	1.012	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								
7/1/00 - 6/30/01	2.077	1.344	1.173	1.078	1.064	1.032	1.032	1.029	1.007	1.007	1.009	1.007	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000									
7/1/01 - 6/30/02	2.045	1.265	1.141	1.095	1.098	1.107	1.030	1.023	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										
7/1/02 - 6/30/03	1.747	1.264	1.162	1.113	1.015	1.013	1.004	1.005	1.037	1.000	1.000	0.944	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000											
7/1/03 - 6/30/04	1.976	1.341	1.200	1.130	1.116	1.020	1.030	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000												
7/1/04 - 6/30/05	1.991	1.389	1.199	1.100	1.034	1.035	1.045	1.000	1.000	1.001	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000													
7/1/05 - 6/30/06	1.763	1.405	1.170	1.039	1.022	1.001	1.001	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000														
7/1/06 - 6/30/07	1.745	1.354	1.188	1.136	1.038	1.035	1.082	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000															
7/1/07 - 6/30/08	1.801	1.143	1.092	1.053	1.015	1.030	1.022	1.020	1.000	1.000	1.000	1.000	1.000	1.000	1.000																
7/1/08 - 6/30/09	1.783	1.271	1.068	1.064	1.050	1.023	1.040	1.020	1.010	1.010	1.010	1.009	1.009	1.011																	
7/1/09 - 6/30/10	1.783	1.259	1.259	1.047	1.004	1.000	1.000	1.000	1.003	1.040	1.000	1.000	1.000																		
7/1/10 - 6/30/11	1.719	1.294	1.189	1.056	1.061	1.096	1.064	1.053	1.011	1.011	1.011	1.011																			
7/1/11 - 6/30/12	2.023	1.226	1.049	1.051	1.014	1.012	1.013	1.035	1.000	1.000	1.000																				
7/1/12 - 6/30/13	2.038	1.315	1.159	1.121	1.058	1.070	1.035	1.037	1.008	1.008																					
7/1/13 - 6/30/14	2.092	1.393	1.203	1.067	1.117	1.033	1.046	1.015	1.024																						
7/1/14 - 6/30/15	1.787	1.360	1.197	1.168	1.112	1.091	1.031	1.033																							
7/1/15 - 6/30/16	1.953	1.379	1.178	1.111	1.054	1.018	1.010																								
7/1/16 - 6/30/17	2.058	1.315	1.228	1.127	1.056	1.052																									
7/1/17 - 6/30/18	1.944	1.273	1.226	1.139	1.051																										
7/1/18 - 6/30/19	1.836	1.373	1.250	1.079																											
7/1/19 - 6/30/20	1.656	1.185	1.112																												
7/1/20 - 6/30/21	2.198	1.263																													
7/1/21 - 6/30/22	1.709																														
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																															
Last 3 Wtd Avg	1.893	1.275	1.202	1.114	1.054	1.050	1.026	1.028	1.013	1.007	1.005	1.008	1.004	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.005				
Last 5 Wtd Avg	1.891	1.283	1.201	1.122	1.074	1.050	1.026	1.033	1.012	1.012	1.005	1.005	1.002	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.003						
Last 9 Wtd Avg	1.923	1.316	1.187	1.108	1.064	1.047	1.029	1.025	1.008	1.007	1.002	0.997	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.002										
Last 12 Wtd Avg	1.923	1.308	1.183	1.101	1.060	1.042	1.032	1.019	1.008	1.005	1.003	0.999	1.001	1.001	1.000	1.000	1.000	1.001													
All Per Wtd Avg	1.921	1.324	1.178	1.100	1.060	1.042	1.032	1.021	1.009	1.009	1.006	1.005	1.006	1.004	1.001	1.001	1.001	1.001	1.001	1.001	1.002	1.002	1.002	1.003	1.003	1.004	1.005	1.006	1.013		
Industry																															
Age-to-Age	2.944	1.572	1.221	1.082	1.038	1.014	1.011	1.008	1.006	1.005	1.005	1.002	1.003	1.002	1.003	1.002	1.002	1.001	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	
Age-to-Ult	7.016	2.383	1.516	1.242	1.148	1.106	1.091	1.079	1.070	1.064	1.059	1.054	1.052	1.049	1.047	1.044	1.042	1.040	1.039	1.037	1.036	1.034	1.032	1.031	1.029	1.027	1.025	1.023	1.022	1.020	1.018
Prior Selected																															
Age-to-Age	1.952	1.313	1.214	1.123	1.076	1.046	1.038	1.029	1.011	1.009	1.008	1.008	1.007	1.007	1.006	1.006	1.005	1.004	1.004	1.004	1.004	1.004	1.003	1.003	1.002	1.002	1.002	1.002	1.002	1.002	
Age-to-Ult	4.735	2.425	1.848	1.522	1.356	1.260	1.205	1.160	1.127	1.115	1.104	1.095	1.087	1.080	1.072	1.066	1.060	1.055	1.050	1.046	1.042	1.038	1.035	1.032	1.029	1.027	1.025	1.023	1.021	1.019	1.018
Selected																															
Age-to-Age	1.891	1.283	1.201	1.122	1.074	1.050	1.026	1.033	1.013	1.009	1.009	1.006	1.006	1.006	1.005	1.005	1.004	1.004	1.003	1.003	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.003	1.002	1.001	
Age-to-Ult	4.351	2.301	1.793	1.493	1.330	1.239	1.180	1.150	1.113	1.098	1.088	1.078	1.071	1.064	1.058	1.052	1.047	1.043	1.040	1.036	1.034	1.031	1.029	1.027	1.026	1.025	1.024	1.023	1.019	1.018	1.017

Commonwealth of Massachusetts
Department of Mental Health
DMH - Indemnity (Including Lump Sum)

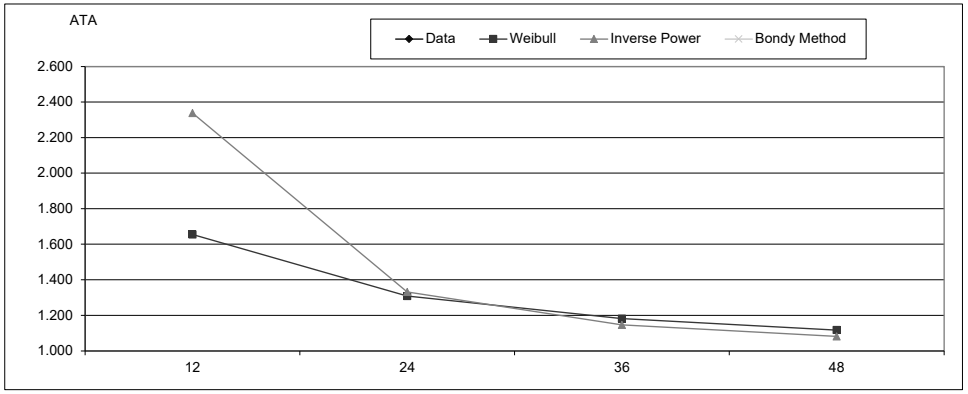
Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

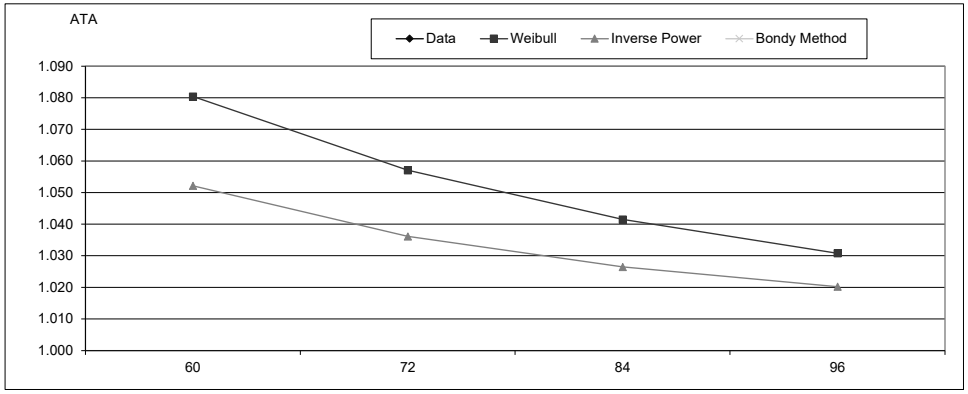
Curve Fitting Methods
Paid Loss

Tail at Period:	**31**	(To display in table)
Cut-off point:(<=Tail & <51)	**50**	(to run-out pattern)

Summary of Curve Fitting Methods

Method	Tail	R^2
Weibull	**1.001**	**0.962**
Inverse Power	**1.017**	**0.971**
Bondy Method		**N/A**





				Weibull		Inverse Power		Bondy Method			
									Sel. Decay Ratio=		
PERIOD	AGE	ATA	Use	**ATA***	**ATU***	**ATA***	**ATU***	Ln(ATA)	Decay	**ATA***	**ATU***
1	12	1.891	Include	**1.655**	3.907	**2.338**	4.991				
2	24	1.283	Include	**1.309**	2.361	**1.331**	2.134				
3	36	1.201	Include	**1.182**	1.804	**1.146**	1.604				
4	48	1.122	Include	**1.118**	1.527	**1.082**	1.399				
5	60	1.074	Include	**1.080**	1.366	**1.052**	1.293				
6	72	1.050	Include	**1.057**	1.265	**1.036**	1.229				
7	84	1.026	Include	**1.042**	1.196	**1.026**	1.186				
8	96	1.033	Include	**1.031**	1.149	**1.020**	1.156				
9	108	1.013	Include	**1.023**	1.114	**1.016**	1.133				
10	120	1.009	Include	**1.018**	1.089	**1.013**	1.115				
11	132	1.009	Include	**1.014**	1.070	**1.011**	1.101				
12	144	1.006	Include	**1.011**	1.056	**1.009**	1.089				
13	156	1.006	Include	**1.008**	1.044	**1.008**	1.080				
14	168	1.006	Include	**1.007**	1.036	**1.007**	1.071				
15	180	1.005	Include	**1.005**	1.029	**1.006**	1.064				
16	192	1.005	Include	**1.004**	1.023	**1.005**	1.058				
17	204	1.004	Include	**1.003**	1.019	**1.004**	1.053				
18	216	1.004	Include	**1.003**	1.016	**1.004**	1.049				
19	228	1.003	Include	**1.002**	1.013	**1.004**	1.044				
20	240	1.003	Include	**1.002**	1.011	**1.003**	1.041				
21	252	0.000	Exclude	**1.001**	1.009	**1.003**	1.037				
22	264	0.000	Exclude	**1.001**	1.007	**1.003**	1.034				
23	276	0.000	Exclude	**1.001**	1.006	**1.002**	1.032				
24	288	0.000	Exclude	**1.001**	1.005	**1.002**	1.029				
25	300	0.000	Exclude	**1.001**	1.004	**1.002**	1.027				
26	312	0.000	Exclude	**1.001**	1.004	**1.002**	1.025				
27	324	0.000	Exclude	**1.000**	1.003	**1.002**	1.023				
28	336	1.003	Include	**1.000**	1.003	**1.002**	1.021				
29	348	0.000	Exclude	**1.000**	1.002	**1.002**	1.019				
30	360	0.000	Exclude	**1.000**	1.002	**1.001**	1.018				
31	372	0.000	Exclude	**1.000**	1.001	**1.001**	1.017				
32	384	0.000	Exclude	**1.000**	1.001	**1.001**	1.015				
33	396	0.000	Exclude	**1.000**	1.001	**1.001**	1.014				
34	408	0.000	Exclude	**1.000**	1.001	**1.001**	1.013				
35	420	0.000	Exclude	**1.000**	1.001	**1.001**	1.012				
36	432	0.000	Exclude	**1.000**	1.001	**1.001**	1.011				
37	444	0.000	Exclude	**1.000**	1.001	**1.001**	1.010				
38	456	0.000	Exclude	**1.000**	1.000	**1.001**	1.009				
39	468	0.000	Exclude	**1.000**	1.000	**1.001**	1.008				
40	480	0.000	Exclude	**1.000**	1.000	**1.001**	1.007				
41	492	0.000	Exclude	**1.000**	1.000	**1.001**	1.006				
42	504	0.000	Exclude	**1.000**	1.000	**1.001**	1.005				
43	516	0.000	Exclude	**1.000**	1.000	**1.001**	1.005				
44	528	0.000	Exclude	**1.000**	1.000	**1.001**	1.004				
45	540	0.000	Exclude	**1.000**	1.000	**1.001**	1.003				
46	552	0.000	Exclude	**1.000**	1.000	**1.001**	1.003				
47	564	0.000	Exclude	**1.000**	1.000	**1.001**	1.002				
48	576	0.000	Exclude	**1.000**	1.000	**1.001**	1.002				
49	588	0.000	Exclude	**1.000**	1.000	**1.001**	1.001				
50	600	0.000	Exclude	**1.000**	1.000	**1.001**	1.001				

Commonwealth of Massachusetts
Department of Mental Health
DMH - Indemnity (Including Lump Sum)

Section II
Exhibit I
Sheet 13

Unpaid Claim Analysis as of 06/30/2023

Ultimate Claim Count Development

Accident Year	Age of Counts @ 06/30/2023	Payroll (00)'s	Reported Claim Counts @ 06/30/2023	Reported Count Dev Factor	Indicated Ultimate Claim Counts	Selected Ultimate Claim Counts	Selected Ultimate Frequency	Selected Ultimate Frequency (Inflation-Adjusted)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	372.0		42	1.000	42			
7/1/93 - 6/30/94	360.0	1,730,750	4	1.000	4		0.00%	0.00%
7/1/94 - 6/30/95	348.0	1,783,170	3	1.000	3		0.00%	0.00%
7/1/95 - 6/30/96	336.0	1,759,960	2	1.000	2		0.00%	0.00%
7/1/96 - 6/30/97	324.0	1,900,830	4	1.000	4		0.00%	0.00%
7/1/97 - 6/30/98	312.0	1,772,780	2	1.000	2		0.00%	0.00%
7/1/98 - 6/30/99	300.0	1,890,800	2	1.000	2		0.00%	0.00%
7/1/99 - 6/30/00	288.0	1,944,940	3	1.000	3		0.00%	0.00%
7/1/00 - 6/30/01	276.0	2,015,680	3	1.000	3		0.00%	0.00%
7/1/01 - 6/30/02	264.0	2,031,050	3	1.000	3		0.00%	0.00%
7/1/02 - 6/30/03	252.0	2,025,150	4	1.000	4		0.00%	0.00%
7/1/03 - 6/30/04	240.0	1,895,880	6	1.000	6		0.00%	0.00%
7/1/04 - 6/30/05	228.0	1,869,900	9	1.000	9		0.00%	0.00%
7/1/05 - 6/30/06	216.0	1,932,540	5	1.000	5		0.00%	0.00%
7/1/06 - 6/30/07	204.0	2,033,590	6	1.000	6		0.00%	0.00%
7/1/07 - 6/30/08	192.0	2,120,830	10	1.000	10		0.00%	0.00%
7/1/08 - 6/30/09	180.0	2,046,790	7	1.000	7		0.00%	0.00%
7/1/09 - 6/30/10	168.0	1,846,880	13	1.000	13		0.00%	0.00%
7/1/10 - 6/30/11	156.0	1,696,890	20	1.000	20		0.00%	0.00%
7/1/11 - 6/30/12	144.0	1,773,990	76	1.000	76		0.00%	0.00%
7/1/12 - 6/30/13	132.0	1,892,520	163	1.000	163	163	86.13%	64.09%
7/1/13 - 6/30/14	120.0	1,998,760	199	1.000	199	199	99.56%	76.31%
7/1/14 - 6/30/15	108.0	2,137,000	280	1.000	280	280	131.02%	103.43%
7/1/15 - 6/30/16	96.0	2,118,290	251	1.000	251	251	118.49%	96.34%
7/1/16 - 6/30/17	84.0	2,030,850	218	1.000	218	218	107.34%	89.90%
7/1/17 - 6/30/18	72.0	2,039,250	228	1.000	228	228	111.81%	96.44%
7/1/18 - 6/30/19	60.0	2,180,600	209	1.000	209	209	95.85%	85.16%
7/1/19 - 6/30/20	48.0	2,224,960	211	1.000	211	211	94.83%	86.79%
7/1/20 - 6/30/21	36.0	2,221,021	205	1.001	205	205	92.35%	87.05%
7/1/21 - 6/30/22	24.0	2,383,142	143	1.002	143	143	60.13%	58.38%
7/1/22 - 6/30/23	12.0	2,460,536	159	1.056	168	171	69.53%	69.53%
Total		59,759,329	2,490		2,499	2,279		

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1)
(3) Provided by Entity
(4) Provided by Entity
(5) From Section II, Exhibit I, Sheet 14
(6) = (4) x (5)
(7) Selected by Deloitte Consulting LLP
(8) = (7) / (3)
(9) = (7) / [(3) x Section II, Exhibit I, Sheet 8, Column (3)]

Commonwealth of Massachusetts
Department of Mental Health
DMH - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Reported Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																															As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																															42	42
7/1/93 - 6/30/94																														4		4
7/1/94 - 6/30/95																													3			3
7/1/95 - 6/30/96																												2				2
7/1/96 - 6/30/97																											4					4
7/1/97 - 6/30/98																										2						2
7/1/98 - 6/30/99																									2							2
7/1/99 - 6/30/00																								3								3
7/1/00 - 6/30/01																							3									3
7/1/01 - 6/30/02																						3										3
7/1/02 - 6/30/03																					4											4
7/1/03 - 6/30/04																				6												6
7/1/04 - 6/30/05																			9													9
7/1/05 - 6/30/06																		5														5
7/1/06 - 6/30/07																	6															6
7/1/07 - 6/30/08																10																10
7/1/08 - 6/30/09															7																	7
7/1/09 - 6/30/10														13																		13
7/1/10 - 6/30/11													20																			20
7/1/11 - 6/30/12												76																				76
7/1/12 - 6/30/13	156	164	164	164	163	163	163	163	163	163	163																					163
7/1/13 - 6/30/14	185	198	198	198	198	198	198	199	199	199																						199
7/1/14 - 6/30/15	265	277	278	279	280	280	280	280	280																							280
7/1/15 - 6/30/16	244	251	251	251	251	251	251	251																								251
7/1/16 - 6/30/17	207	216	217	217	217	218	218																									218
7/1/17 - 6/30/18	212	227	228	228	228	228																										228
7/1/18 - 6/30/19	199	208	208	208	209																											209
7/1/19 - 6/30/20	199	211	211	211																												211
7/1/20 - 6/30/21	188	205	205																													205
7/1/21 - 6/30/22	137	143																														143
7/1/22 - 6/30/23	159																															159
																																2,490

Accident Year	Age-to-Age Development Factors																															
	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
7/1/98 - 6/30/99																																
7/1/99 - 6/30/00																																
7/1/00 - 6/30/01																																
7/1/01 - 6/30/02																																
7/1/02 - 6/30/03																																
7/1/03 - 6/30/04																																
7/1/04 - 6/30/05																																
7/1/05 - 6/30/06																																
7/1/06 - 6/30/07																																
7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	1.051	1.000	1.000	0.994	1.000	1.000	1.000	1.000	1.000	1.000																						
7/1/13 - 6/30/14	1.070	1.000	1.000	1.000	1.000	1.000	1.005	1.000	1.000																							
7/1/14 - 6/30/15	1.045	1.004	1.004	1.004	1.000	1.000	1.000	1.000																								
7/1/15 - 6/30/16	1.029	1.000	1.000	1.000	1.000	1.000	1.000																									
7/1/16 - 6/30/17	1.043	1.005	1.000	1.000	1.005	1.000																										
7/1/17 - 6/30/18	1.071	1.004	1.000	1.000	1.000																											
7/1/18 - 6/30/19	1.045	1.000	1.000	1.005																												
7/1/19 - 6/30/20	1.060	1.000	1.000																													
7/1/20 - 6/30/21	1.090	1.000																														
7/1/21 - 6/30/22	1.044																															
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																																
Last 3 Wtd Avg	1.067	1.000	1.000	1.002	1.001	1.000	1.001	1.000																								
Last 4 Wtd Avg	1.061	1.001	1.000	1.001	1.001	1.000	1.001																									
Last 5 Wtd Avg	1.063	1.002	1.000	1.002	1.001	1.000																										
All Per Wtd Avg	1.054	1.002	1.001	1.001	1.001	1.000	1.001	1.000	1.000	1.000																						
Average ex Hi/Lo	1.054	1.001	1.000	1.001	1.000	1.000	1.000	1.000																								
Prior Selected																																
Age-to-Age	1.055	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	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		
Age-to-Ult	1.057	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	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	
Selected																																
Age-to-Age	1.054	1.002	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	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		
Age-to-Ult	1.056	1.002	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	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	

Commonwealth of Massachusetts
Department of Mental Health
DMH - Indemnity (Including Lump Sum)

Section II
Exhibit I
Sheet 15

Unpaid Claim Analysis as of 06/30/2023

Reported Counts to Payroll (00)'s

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02		1,730,750
7/1/94 - 6/30/95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02			1,783,170
7/1/95 - 6/30/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01				1,759,960
7/1/96 - 6/30/97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02					1,900,830
7/1/97 - 6/30/98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01						1,772,780
7/1/98 - 6/30/99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01							1,890,800
7/1/99 - 6/30/00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02								1,944,940
7/1/00 - 6/30/01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01									2,015,680
7/1/01 - 6/30/02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01										2,031,050
7/1/02 - 6/30/03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02											2,025,150
7/1/03 - 6/30/04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03												1,895,880
7/1/04 - 6/30/05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05													1,869,900
7/1/05 - 6/30/06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03														1,932,540
7/1/06 - 6/30/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03															2,033,590
7/1/07 - 6/30/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05																2,120,830
7/1/08 - 6/30/09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03																	2,046,790
7/1/09 - 6/30/10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07																		1,846,880
7/1/10 - 6/30/11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12																			1,696,890
7/1/11 - 6/30/12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43																				1,773,990
7/1/12 - 6/30/13	0.82	0.87	0.87	0.87	0.86	0.86	0.86	0.86	0.86	0.86	0.86																					1,892,520
7/1/13 - 6/30/14	0.93	0.99	0.99	0.99	0.99	0.99	0.99	1.00	1.00	1.00																						1,998,760
7/1/14 - 6/30/15	1.24	1.30	1.30	1.31	1.31	1.31	1.31	1.31	1.31																							2,137,000
7/1/15 - 6/30/16	1.15	1.18	1.18	1.18	1.18	1.18	1.18	1.18																								2,118,290
7/1/16 - 6/30/17	1.02	1.06	1.07	1.07	1.07	1.07	1.07																									2,030,850
7/1/17 - 6/30/18	1.04	1.11	1.12	1.12	1.12	1.12																										2,039,250
7/1/18 - 6/30/19	0.91	0.95	0.95	0.95	0.96																											2,180,600
7/1/19 - 6/30/20	0.89	0.95	0.95	0.95																												2,224,960
7/1/20 - 6/30/21	0.85	0.92	0.92																													2,221,021
7/1/21 - 6/30/22	0.57	0.60																														2,383,142
7/1/22 - 6/30/23	0.65																															2,460,536

Commonwealth of Massachusetts
Department of Mental Health
DMH - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss Rates

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.22	0.46	0.62	0.74	0.84	0.88	0.96	1.03	1.08	1.12	1.16	1.19	1.23	1.27	1.30	1.31	1.33	1.35	1.37	1.38	1.40	1.43	1.45	1.47	1.49	1.51	1.53	1.55	1.57	1.59		1,730,750
7/1/94 - 6/30/95	0.33	0.60	0.85	1.07	1.16	1.20	1.26	1.30	1.38	1.41	1.44	1.48	1.52	1.55	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58			1,783,170
7/1/95 - 6/30/96	0.26	0.49	0.68	0.82	0.97	1.00	1.01	1.07	1.07	1.08	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09				1,759,960
7/1/96 - 6/30/97	0.19	0.42	0.56	0.67	0.70	0.73	0.75	0.77	0.78	0.78	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83					1,900,830
7/1/97 - 6/30/98	0.31	0.62	0.94	1.05	1.17	1.33	1.37	1.39	1.45	1.47	1.49	1.53	1.59	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64						1,772,780
7/1/98 - 6/30/99	0.30	0.49	0.65	0.77	0.80	0.83	0.86	0.88	0.88	0.88	0.88	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89							1,890,800
7/1/99 - 6/30/00	0.23	0.58	0.83	0.93	1.03	1.09	1.14	1.18	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19								1,944,940
7/1/00 - 6/30/01	0.38	0.80	1.07	1.26	1.36	1.44	1.49	1.54	1.58	1.59	1.61	1.62	1.63	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64									2,015,680
7/1/01 - 6/30/02	0.31	0.63	0.79	0.91	0.99	1.09	1.21	1.24	1.27	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28										2,031,050
7/1/02 - 6/30/03	0.31	0.53	0.67	0.78	0.87	0.88	0.90	0.90	0.91	0.94	0.94	0.94	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89											2,025,150
7/1/03 - 6/30/04	0.41	0.80	1.08	1.29	1.46	1.63	1.66	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71												1,895,880
7/1/04 - 6/30/05	0.36	0.71	0.99	1.18	1.30	1.34	1.39	1.45	1.45	1.45	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46													1,869,900
7/1/05 - 6/30/06	0.31	0.55	0.77	0.90	0.94	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96														1,932,540
7/1/06 - 6/30/07	0.29	0.51	0.70	0.83	0.94	0.98	1.01	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09															2,033,590
7/1/07 - 6/30/08	0.30	0.54	0.62	0.67	0.71	0.72	0.74	0.76	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77																2,120,830
7/1/08 - 6/30/09	0.33	0.58	0.74	0.79	0.84	0.88	0.90	0.94	0.96	0.97	0.98	0.99	1.00	1.00	1.02																	2,046,790
7/1/09 - 6/30/10	0.22	0.40	0.50	0.63	0.66	0.67	0.67	0.67	0.67	0.67	0.70	0.70	0.70	0.70																		1,846,880
7/1/10 - 6/30/11	0.39	0.67	0.87	1.03	1.09	1.15	1.26	1.34	1.42	1.43	1.45	1.46	1.48																			1,696,890
7/1/11 - 6/30/12	0.34	0.69	0.84	0.88	0.93	0.94	0.95	0.97	1.00	1.00	1.00	1.00																				1,773,990
7/1/12 - 6/30/13	0.34	0.70	0.92	1.07	1.20	1.27	1.36	1.41	1.46	1.47	1.48																					1,892,520
7/1/13 - 6/30/14	0.37	0.77	1.08	1.29	1.38	1.54	1.59	1.67	1.69	1.73																						1,998,760
7/1/14 - 6/30/15	0.48	0.86	1.17	1.40	1.63	1.82	1.98	2.04	2.11																							2,137,000
7/1/15 - 6/30/16	0.66	1.30	1.79	2.11	2.34	2.47	2.51	2.54																								2,118,290
7/1/16 - 6/30/17	0.58	1.19	1.56	1.92	2.16	2.29	2.40																									2,030,850
7/1/17 - 6/30/18	0.49	0.95	1.21	1.48	1.69	1.77																										2,039,250
7/1/18 - 6/30/19	0.53	0.97	1.33	1.66	1.79																											2,180,600
7/1/19 - 6/30/20	0.51	0.85	1.00	1.12																												2,224,960
7/1/20 - 6/30/21	0.65	1.43	1.81																													2,221,021
7/1/21 - 6/30/22	0.39	0.66																														2,383,142
7/1/22 - 6/30/23	0.59																															2,460,536

Commonwealth of Massachusetts
Department of Mental Health
DMH - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Settlement Rates (Closed Claim Count / Ultimate Claim Count)

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
7/1/98 - 6/30/99																																
7/1/99 - 6/30/00																																
7/1/00 - 6/30/01																																
7/1/01 - 6/30/02																																
7/1/02 - 6/30/03																																
7/1/03 - 6/30/04																																
7/1/04 - 6/30/05																																
7/1/05 - 6/30/06																																
7/1/06 - 6/30/07																																
7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	0.00	0.46	0.85	0.93	0.94	0.96	0.97	0.97	0.99	0.99	0.99																					0.99
7/1/13 - 6/30/14	0.00	0.54	0.86	0.90	0.93	0.95	0.95	0.96	0.97	0.97																						0.97
7/1/14 - 6/30/15	0.00	0.60	0.90	0.95	0.94	0.95	0.95	0.98	0.98																							0.98
7/1/15 - 6/30/16	0.00	0.55	0.83	0.90	0.92	0.94	0.96	0.98																								0.98
7/1/16 - 6/30/17	0.00	0.53	0.83	0.87	0.92	0.93	0.97																									0.97
7/1/17 - 6/30/18	0.00	0.57	0.88	0.93	0.95	0.96																										0.96
7/1/18 - 6/30/19	0.00	0.54	0.85	0.91	0.94																											0.94
7/1/19 - 6/30/20	0.00	0.71	0.91	0.94																												0.94
7/1/20 - 6/30/21	0.00	0.53	0.81																													0.81
7/1/21 - 6/30/22	0.00	0.66																														0.66
7/1/22 - 6/30/23	0.00																															0.00

Commonwealth of Massachusetts
Department of Mental Health
DMH - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Open Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993	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	0	0	0	10	10
7/1/93 - 6/30/94	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	0	0	1		1
7/1/94 - 6/30/95	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	0	0			0
7/1/95 - 6/30/96	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	1				1
7/1/96 - 6/30/97	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					0
7/1/97 - 6/30/98	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
7/1/98 - 6/30/99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1							1
7/1/99 - 6/30/00	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
7/1/00 - 6/30/01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									0
7/1/01 - 6/30/02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										0
7/1/02 - 6/30/03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2											2
7/1/03 - 6/30/04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3												3
7/1/04 - 6/30/05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2													2
7/1/05 - 6/30/06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1														1
7/1/06 - 6/30/07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															0
7/1/07 - 6/30/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																0
7/1/08 - 6/30/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2																	2
7/1/09 - 6/30/10	0	0	0	0	0	0	0	0	0	0	0	0	0	1																		1
7/1/10 - 6/30/11	0	0	0	0	0	0	0	0	0	0	0	0	4																			4
7/1/11 - 6/30/12	0	0	0	0	0	0	0	0	0	0	0	3																				3
7/1/12 - 6/30/13	156	89	25	13	10	6	5	5	2	1	1																					1
7/1/13 - 6/30/14	185	91	26	18	12	9	9	8	6	6																						6
7/1/14 - 6/30/15	265	110	27	13	17	15	14	7	6																							6
7/1/15 - 6/30/16	244	114	43	26	20	14	9	6																								6
7/1/16 - 6/30/17	207	101	37	28	17	15	7																									7
7/1/17 - 6/30/18	212	97	28	17	11	8																										8
7/1/18 - 6/30/19	199	95	31	18	13																											13
7/1/19 - 6/30/20	199	61	20	13																												13
7/1/20 - 6/30/21	188	96	39																													39
7/1/21 - 6/30/22	137	49																														49
7/1/22 - 6/30/23	159																															159
																																338

Commonwealth of Massachusetts
Department of Mental Health
DMH - Medical

Section II
Exhibit II
Sheet 1

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Unpaid Loss & ALAE Estimates

Accident Year	Payroll (00)'s	Retention	Unlimited Paid Loss & ALAE @ 06/30/2023	Unlimited Reported Loss & ALAE @ 06/30/2023	Ultimate Loss & ALAE Low	Ultimate Loss & ALAE High	Indicated Total Unpaid Loss & ALAE Estimates Low	Indicated Total Unpaid Loss & ALAE Estimates High	Case Reserves	Indicated IBNR Estimate Low	Indicated IBNR Estimate High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993		Unlimited	11,923,386	11,923,386	12,045,133	12,072,188	121,747	148,802	0	121,747	148,802
7/1/93 - 6/30/94	1,730,750	Unlimited	651,447	651,447	677,500	680,200	26,053	28,753	0	26,053	28,753
7/1/94 - 6/30/95	1,783,170	Unlimited	854,216	854,216	891,000	894,900	36,784	40,684	0	36,784	40,684
7/1/95 - 6/30/96	1,759,960	Unlimited	816,037	816,037	853,800	857,800	37,763	41,763	0	37,763	41,763
7/1/96 - 6/30/97	1,900,830	Unlimited	588,046	588,046	617,300	620,400	29,254	32,354	0	29,254	32,354
7/1/97 - 6/30/98	1,772,780	Unlimited	508,116	508,116	534,300	537,100	26,184	28,984	0	26,184	28,984
7/1/98 - 6/30/99	1,890,800	Unlimited	948,446	948,446	998,300	1,003,600	49,854	55,154	0	49,854	55,154
7/1/99 - 6/30/00	1,944,940	Unlimited	602,355	602,355	635,500	639,000	33,145	36,645	0	33,145	36,645
7/1/00 - 6/30/01	2,015,680	Unlimited	753,978	753,978	799,400	804,100	45,422	50,122	0	45,422	50,122
7/1/01 - 6/30/02	2,031,050	Unlimited	619,240	619,240	660,000	664,300	40,760	45,060	0	40,760	45,060
7/1/02 - 6/30/03	2,025,150	Unlimited	894,525	894,525	958,700	965,400	64,175	70,875	0	64,175	70,875
7/1/03 - 6/30/04	1,895,880	Unlimited	1,503,977	1,503,977	1,621,300	1,633,600	117,323	129,623	0	117,323	129,623
7/1/04 - 6/30/05	1,869,900	Unlimited	939,839	939,839	1,020,700	1,029,200	80,861	89,361	0	80,861	89,361
7/1/05 - 6/30/06	1,932,540	Unlimited	941,703	941,703	1,031,000	1,040,400	89,297	98,697	0	89,297	98,697
7/1/06 - 6/30/07	2,033,590	Unlimited	671,423	671,423	741,100	748,400	69,677	76,977	0	69,677	76,977
7/1/07 - 6/30/08	2,120,830	Unlimited	663,947	663,947	739,700	747,700	75,753	83,753	0	75,753	83,753
7/1/08 - 6/30/09	2,046,790	Unlimited	886,920	886,920	998,300	1,010,100	111,380	123,180	0	111,380	123,180
7/1/09 - 6/30/10	1,846,880	Unlimited	576,892	576,892	657,700	666,200	80,808	89,308	0	80,808	89,308
7/1/10 - 6/30/11	1,696,890	Unlimited	914,351	914,351	1,057,300	1,072,400	142,949	158,049	0	142,949	158,049
7/1/11 - 6/30/12	1,773,990	Unlimited	610,622	610,622	716,700	727,800	106,078	117,178	0	106,078	117,178
7/1/12 - 6/30/13	1,892,520	Unlimited	591,161	591,161	708,100	720,400	116,939	129,239	0	116,939	129,239
7/1/13 - 6/30/14	1,998,760	Unlimited	738,071	738,071	905,200	922,800	167,129	184,729	0	167,129	184,729
7/1/14 - 6/30/15	2,137,000	Unlimited	1,050,424	1,050,424	1,319,200	1,347,500	268,776	297,076	0	268,776	297,076
7/1/15 - 6/30/16	2,118,290	Unlimited	1,290,543	1,290,543	1,652,400	1,706,900	361,857	416,357	0	361,857	416,357
7/1/16 - 6/30/17	2,030,850	Unlimited	1,193,345	1,193,345	1,568,900	1,625,400	375,555	432,055	0	375,555	432,055
7/1/17 - 6/30/18	2,039,250	Unlimited	904,311	904,311	1,224,100	1,272,200	319,789	367,889	0	319,789	367,889
7/1/18 - 6/30/19	2,180,600	Unlimited	935,882	935,882	1,310,900	1,367,300	375,018	431,418	0	375,018	431,418
7/1/19 - 6/30/20	2,224,960	Unlimited	524,905	524,905	1,009,400	1,082,400	484,495	557,495	0	484,495	557,495
7/1/20 - 6/30/21	2,221,021	Unlimited	791,537	791,537	1,343,000	1,465,000	551,463	673,463	0	551,463	673,463
7/1/21 - 6/30/22	2,383,142	Unlimited	392,208	392,208	1,064,000	1,214,000	671,792	821,792	0	671,792	821,792
7/1/22 - 6/30/23	2,460,536	Unlimited	315,743	315,743	1,243,000	1,449,000	927,257	1,133,257	0	927,257	1,133,257
Total	59,759,329		35,597,599	35,597,599	41,602,933	42,587,688	6,005,334	6,990,089	0	6,005,334	6,990,089

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	Provided by Entity
(6)	From Section II, Exhibit II, Sheet 6, Column (11)
(7)	From Section II, Exhibit II, Sheet 6, Column (12)
(8)	= (6) - (4)
(9)	= (7) - (4)
(10)	= (5) - (4)
(11)	= (8) - (10)
(12)	= (9) - (10)

Commonwealth of Massachusetts
Department of Mental Health
DMH - Medical

Section II
Exhibit II
Sheet 2

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Short-Term Portion

Accident Year	Age of Losses @ 06/30/2023	Selected Paid Test LDF @ 06/30/2023	Implied Paid LDF	Paid LDF	Cumulative Percent Paid	Incremental Percent Paid	Average Total Unpaid ss & ALAE Estimate	Undiscounted Cash Flow of Payments 2024
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
						0.37%		
Prior to 7/1/1993	372.0	1.039	1.011	1.039	96.24%	0.28%	135,275	13,296
7/1/93 - 6/30/94	360.0	1.042	1.042	1.042	95.96%	0.30%	27,403	1,914
7/1/94 - 6/30/95	348.0	1.045	1.045	1.045	95.66%	0.31%	38,734	2,650
7/1/95 - 6/30/96	336.0	1.049	1.049	1.049	95.35%	0.33%	39,763	2,672
7/1/96 - 6/30/97	324.0	1.052	1.052	1.052	95.02%	0.17%	30,804	2,039
7/1/97 - 6/30/98	312.0	1.054	1.054	1.054	94.85%	0.10%	27,584	915
7/1/98 - 6/30/99	300.0	1.055	1.055	1.055	94.75%	0.23%	52,504	981
7/1/99 - 6/30/00	288.0	1.058	1.058	1.058	94.52%	0.48%	34,895	1,470
7/1/00 - 6/30/01	276.0	1.063	1.063	1.063	94.04%	0.52%	47,772	3,855
7/1/01 - 6/30/02	264.0	1.069	1.069	1.069	93.52%	0.54%	42,910	3,456
7/1/02 - 6/30/03	252.0	1.075	1.075	1.075	92.98%	0.57%	67,525	5,164
7/1/03 - 6/30/04	240.0	1.082	1.082	1.082	92.41%	0.72%	123,473	9,301
7/1/04 - 6/30/05	228.0	1.091	1.091	1.091	91.70%	0.77%	85,111	7,338
7/1/05 - 6/30/06	216.0	1.100	1.100	1.100	90.93%	0.77%	93,997	7,961
7/1/06 - 6/30/07	204.0	1.109	1.109	1.109	90.16%	0.88%	73,327	5,735
7/1/07 - 6/30/08	192.0	1.120	1.120	1.120	89.28%	0.96%	79,753	6,548
7/1/08 - 6/30/09	180.0	1.132	1.132	1.132	88.32%	1.17%	117,280	9,597
7/1/09 - 6/30/10	168.0	1.147	1.147	1.147	87.16%	1.29%	85,058	7,721
7/1/10 - 6/30/11	156.0	1.165	1.165	1.165	85.87%	1.32%	150,499	13,737
7/1/11 - 6/30/12	144.0	1.183	1.183	1.183	84.55%	1.78%	111,628	9,536
7/1/12 - 6/30/13	132.0	1.208	1.208	1.208	82.76%	2.01%	123,089	12,725
7/1/13 - 6/30/14	120.0	1.238	1.238	1.238	80.75%	1.97%	175,929	18,398
7/1/14 - 6/30/15	108.0	1.269	1.269	1.269	78.78%	1.95%	282,926	26,258
7/1/15 - 6/30/16	96.0	1.302	1.302	1.302	76.83%	2.12%	389,107	32,704
7/1/16 - 6/30/17	84.0	1.338	1.338	1.338	74.72%	2.27%	403,805	33,796
7/1/17 - 6/30/18	72.0	1.380	1.380	1.380	72.45%	2.56%	343,839	28,281
7/1/18 - 6/30/19	60.0	1.431	1.431	1.431	69.89%	3.57%	403,218	34,313
7/1/19 - 6/30/20	48.0	1.508	1.993	1.508	66.32%	5.61%	520,995	55,169
7/1/20 - 6/30/21	36.0	1.647	1.774	1.647	60.72%	8.16%	612,463	87,434
7/1/21 - 6/30/22	24.0	1.903	2.904	1.903	52.55%	23.60%	746,792	128,491
7/1/22 - 6/30/23	12.0	3.454	4.263	3.454	28.95%	28.95%	1,030,257	342,202
Total							6,497,711	915,654

	Undiscounted	Discounted			
Short-Term Portion	14%	18%	(10)	Interest Rate	4%

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1) @ 06/30/2023
(3) From Section II, Exhibit II, Sheet 10, Column (6)
(4) Average Ultimate Loss Divided by Paid Loss From Section II, Exhibit II, Sheet 6
(5) Selected
(6) = 1 / (5)
(7) = (6) from Current Age - (6) from Subsequent Age
(8) From Section II, Exhibit II, Sheet 3
(9) - (9) Based on (5)

Commonwealth of Massachusetts
Department of Mental Health
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Section II
Exhibit II
Sheet 3

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Discounted at (4%) Unpaid Loss & ALAE Estimate

Accident Year	Indicated Total Unpaid Loss & ALAE Estimate Low	Indicated Total Unpaid Loss & ALAE Estimate High	Discount Factor	Discounted Total Unpaid Loss & ALAE Estimate Low	Discounted Total Unpaid Loss & ALAE Estimate High
(1)	(2)	(3)	(4)	(5)	(6)
Prior to 7/1/1993	121,747	148,802	1.000	121,747	148,802
7/1/93 - 6/30/94	26,053	28,753	0.981	25,547	28,194
7/1/94 - 6/30/95	36,784	40,684	0.945	34,777	38,464
7/1/95 - 6/30/96	37,763	41,763	0.914	34,511	38,166
7/1/96 - 6/30/97	29,254	32,354	0.885	25,904	28,648
7/1/97 - 6/30/98	26,184	28,984	0.856	22,406	24,802
7/1/98 - 6/30/99	49,854	55,154	0.826	41,167	45,543
7/1/99 - 6/30/00	33,145	36,645	0.802	26,577	29,384
7/1/00 - 6/30/01	45,422	50,122	0.788	35,789	39,492
7/1/01 - 6/30/02	40,760	45,060	0.776	31,612	34,947
7/1/02 - 6/30/03	64,175	70,875	0.764	49,010	54,127
7/1/03 - 6/30/04	117,323	129,623	0.753	88,329	97,590
7/1/04 - 6/30/05	80,861	89,361	0.746	60,326	66,667
7/1/05 - 6/30/06	89,297	98,697	0.740	66,048	73,001
7/1/06 - 6/30/07	69,677	76,977	0.732	51,022	56,368
7/1/07 - 6/30/08	75,753	83,753	0.727	55,057	60,872
7/1/08 - 6/30/09	111,380	123,180	0.722	80,405	88,924
7/1/09 - 6/30/10	80,808	89,308	0.720	58,192	64,314
7/1/10 - 6/30/11	142,949	158,049	0.719	102,743	113,596
7/1/11 - 6/30/12	106,078	117,178	0.716	75,933	83,879
7/1/12 - 6/30/13	116,939	129,239	0.719	84,022	92,860
7/1/13 - 6/30/14	167,129	184,729	0.721	120,528	133,221
7/1/14 - 6/30/15	268,776	297,076	0.720	193,541	213,920
7/1/15 - 6/30/16	361,857	416,357	0.717	259,310	298,365
7/1/16 - 6/30/17	375,555	432,055	0.713	267,939	308,248
7/1/17 - 6/30/18	319,789	367,889	0.710	227,125	261,288
7/1/18 - 6/30/19	375,018	431,418	0.708	265,606	305,552
7/1/19 - 6/30/20	484,495	557,495	0.713	345,315	397,344
7/1/20 - 6/30/21	551,463	673,463	0.727	401,173	489,924
7/1/21 - 6/30/22	671,792	821,792	0.748	502,402	614,580
7/1/22 - 6/30/23	927,257	1,133,257	0.806	747,318	913,343
Total	6,005,334	6,990,089		4,501,383	5,244,425

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From Section II, Exhibit II, Sheet 1, Column (8)
(3) From Section II, Exhibit II, Sheet 1, Column (9)
(4) From Section II, Exhibit II, Sheet 0, Column (8)
(5) = (2) x (4)
(6) = (3) x (4)

Commonwealth of Massachusetts
Department of Mental Health
DMH - Medical

Section II
Exhibit II
Sheet 4

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Actual vs Expected - Paid Loss & ALAE Emergence

Accident Year	Selected Low Ultimate Loss & ALAE @ 06/30/2022	Selected High Ultimate Loss & ALAE @ 06/30/2022	Unlimited Paid Loss & ALAE @ 06/30/2022	Unlimited Paid Loss & ALAE @ 06/30/2023	Paid LDF @ 06/30/2022	Projected Paid LDF @ 06/30/2023	Method 1 Low Expected Paid Emergence Loss & ALAE @ 06/30/2023	Method 1 High Expected Paid Emergence Loss & ALAE @ 06/30/2023	Actual Paid Emergence Loss & ALAE @ 06/30/2023	Actual - Expected Method 1 Low Paid	Actual - Expected Method 1 High Paid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993	12,009,644	12,026,589	11,908,422	11,923,386	1.042	1.038	9,935	11,598	14,964	5,029	3,366
7/1/93 - 6/30/94	679,600	682,600	651,447	651,447	1.045	1.042	1,929	2,134	0	(1,929)	(2,134)
7/1/94 - 6/30/95	893,900	898,000	854,160	854,216	1.049	1.045	2,674	2,950	56	(2,618)	(2,894)
7/1/95 - 6/30/96	855,900	860,200	815,224	816,037	1.053	1.049	2,697	2,982	813	(1,883)	(2,168)
7/1/96 - 6/30/97	617,700	620,800	588,046	588,046	1.053	1.053	258	284	0	(258)	(284)
7/1/97 - 6/30/98	534,800	537,600	508,116	508,116	1.055	1.053	973	1,075	0	(973)	(1,075)
7/1/98 - 6/30/99	998,100	1,003,700	944,445	948,446	1.060	1.055	3,910	4,318	4,001	91	(317)
7/1/99 - 6/30/00	639,500	643,400	602,355	602,355	1.065	1.060	2,761	3,051	0	(2,761)	(3,051)
7/1/00 - 6/30/01	804,400	809,700	753,978	753,978	1.070	1.065	3,723	4,114	0	(3,723)	(4,114)
7/1/01 - 6/30/02	664,200	668,900	619,240	619,240	1.076	1.070	3,278	3,620	0	(3,278)	(3,620)
7/1/02 - 6/30/03	954,000	961,400	883,654	894,525	1.084	1.076	5,794	6,403	10,871	5,078	4,468
7/1/03 - 6/30/04	1,617,800	1,631,400	1,487,966	1,503,977	1.092	1.084	10,427	11,519	16,011	5,584	4,492
7/1/04 - 6/30/05	1,028,600	1,038,000	938,500	939,839	1.101	1.092	7,501	8,283	1,339	(6,161)	(6,944)
7/1/05 - 6/30/06	1,029,300	1,039,800	928,712	941,703	1.114	1.101	10,388	11,473	12,991	2,603	1,518
7/1/06 - 6/30/07	752,600	761,100	671,423	671,423	1.127	1.114	7,602	8,398	0	(7,602)	(8,398)
7/1/07 - 6/30/08	753,500	762,900	663,947	663,947	1.142	1.127	8,213	9,075	0	(8,213)	(9,075)
7/1/08 - 6/30/09	1,014,100	1,028,000	882,150	886,920	1.157	1.142	11,399	12,600	4,770	(6,629)	(7,830)
7/1/09 - 6/30/10	665,400	675,300	571,047	576,892	1.174	1.157	7,715	8,524	5,845	(1,870)	(2,679)
7/1/10 - 6/30/11	1,057,700	1,075,100	892,402	914,351	1.195	1.174	15,202	16,803	21,948	6,746	5,146
7/1/11 - 6/30/12	723,700	736,700	599,891	610,622	1.217	1.195	10,619	11,734	10,732	113	(1,002)
7/1/12 - 6/30/13	727,900	742,300	591,095	591,161	1.244	1.217	12,222	13,508	66	(12,156)	(13,442)
7/1/13 - 6/30/14	883,600	902,700	701,719	738,071	1.273	1.244	15,596	17,234	36,353	20,757	19,119
7/1/14 - 6/30/15	1,308,300	1,351,700	1,019,981	1,050,424	1.304	1.273	23,199	26,691	30,443	7,244	3,752
7/1/15 - 6/30/16	1,644,400	1,704,000	1,248,180	1,290,543	1.341	1.304	33,284	38,290	42,364	9,080	4,073
7/1/16 - 6/30/17	1,584,500	1,646,900	1,169,570	1,193,345	1.381	1.341	32,571	37,470	23,775	(8,796)	(13,695)
7/1/17 - 6/30/18	1,226,900	1,279,600	876,545	904,311	1.430	1.381	28,509	32,797	27,767	(742)	(5,030)
7/1/18 - 6/30/19	1,340,200	1,405,300	908,316	935,882	1.511	1.430	48,172	55,434	27,566	(20,607)	(27,868)
7/1/19 - 6/30/20	1,036,000	1,153,000	506,050	524,905	1.669	1.511	82,829	101,115	18,855	(63,973)	(82,260)
7/1/20 - 6/30/21	1,318,000	1,460,000	680,112	791,537	1.921	1.669	104,277	127,490	111,424	7,148	(16,065)
7/1/21 - 6/30/22	1,144,000	1,339,000	266,965	392,208	3.667	1.921	298,963	365,434	125,243	(173,720)	(240,191)
Total	40,508,244	41,445,689	34,733,658	35,281,856			806,618	956,402	548,198	(258,419)	(408,204)

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Selected by Deloitte Consulting LLP @ 06/30/2022
(3)	Selected by Deloitte Consulting LLP @ 06/30/2022
(4)	Provided by Entity
(5)	Provided by Entity
(6)	Selected by Deloitte Consulting LLP @ 06/30/2022
(7)	Interpolated From (6)
(8)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((2) - (4))
(9)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((3) - (4))
(10)	= (5) - (4)
(11)	= (10) - (8)
(12)	= (10) - (9)

Commonwealth of Massachusetts
Department of Mental Health
DMH - Medical

Section II
Exhibit II
Sheet 5

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Ultimate Loss & ALAE Runoff

Accident Year	Ultimate Loss & ALAE @ 06/30/2022 Low	Ultimate Loss & ALAE @ 06/30/2022 High	Ultimate Loss & ALAE @ 06/30/2023 Low	Ultimate Loss & ALAE @ 06/30/2023 High	Deloitte Change Low	Deloitte Change High	Paid Loss & ALAE @ 06/30/2023	Reported Loss & ALAE @ 06/30/2023
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	12,009,644	12,026,589	12,045,133	12,072,188	35,489	45,599	11,923,386	11,923,386
7/1/93 - 6/30/94	679,600	682,600	677,500	680,200	(2,100)	(2,400)	651,447	651,447
7/1/94 - 6/30/95	893,900	898,000	891,000	894,900	(2,900)	(3,100)	854,216	854,216
7/1/95 - 6/30/96	855,900	860,200	853,800	857,800	(2,100)	(2,400)	816,037	816,037
7/1/96 - 6/30/97	617,700	620,800	617,300	620,400	(400)	(400)	588,046	588,046
7/1/97 - 6/30/98	534,800	537,600	534,300	537,100	(500)	(500)	508,116	508,116
7/1/98 - 6/30/99	998,100	1,003,700	998,300	1,003,600	200	(100)	948,446	948,446
7/1/99 - 6/30/00	639,500	643,400	635,500	639,000	(4,000)	(4,400)	602,355	602,355
7/1/00 - 6/30/01	804,400	809,700	799,400	804,100	(5,000)	(5,600)	753,978	753,978
7/1/01 - 6/30/02	664,200	668,900	660,000	664,300	(4,200)	(4,600)	619,240	619,240
7/1/02 - 6/30/03	954,000	961,400	958,700	965,400	4,700	4,000	894,525	894,525
7/1/03 - 6/30/04	1,617,800	1,631,400	1,621,300	1,633,600	3,500	2,200	1,503,977	1,503,977
7/1/04 - 6/30/05	1,028,600	1,038,000	1,020,700	1,029,200	(7,900)	(8,800)	939,839	939,839
7/1/05 - 6/30/06	1,029,300	1,039,800	1,031,000	1,040,400	1,700	600	941,703	941,703
7/1/06 - 6/30/07	752,600	761,100	741,100	748,400	(11,500)	(12,700)	671,423	671,423
7/1/07 - 6/30/08	753,500	762,900	739,700	747,700	(13,800)	(15,200)	663,947	663,947
7/1/08 - 6/30/09	1,014,100	1,028,000	998,300	1,010,100	(15,800)	(17,900)	886,920	886,920
7/1/09 - 6/30/10	665,400	675,300	657,700	666,200	(7,700)	(9,100)	576,892	576,892
7/1/10 - 6/30/11	1,057,700	1,075,100	1,057,300	1,072,400	(400)	(2,700)	914,351	914,351
7/1/11 - 6/30/12	723,700	736,700	716,700	727,800	(7,000)	(8,900)	610,622	610,622
7/1/12 - 6/30/13	727,900	742,300	708,100	720,400	(19,800)	(21,900)	591,161	591,161
7/1/13 - 6/30/14	883,600	902,700	905,200	922,800	21,600	20,100	738,071	738,071
7/1/14 - 6/30/15	1,308,300	1,351,700	1,319,200	1,347,500	10,900	(4,200)	1,050,424	1,050,424
7/1/15 - 6/30/16	1,644,400	1,704,000	1,652,400	1,706,900	8,000	2,900	1,290,543	1,290,543
7/1/16 - 6/30/17	1,584,500	1,646,900	1,568,900	1,625,400	(15,600)	(21,500)	1,193,345	1,193,345
7/1/17 - 6/30/18	1,226,900	1,279,600	1,224,100	1,272,200	(2,800)	(7,400)	904,311	904,311
7/1/18 - 6/30/19	1,340,200	1,405,300	1,310,900	1,367,300	(29,300)	(38,000)	935,882	935,882
7/1/19 - 6/30/20	1,036,000	1,153,000	1,009,400	1,082,400	(26,600)	(70,600)	524,905	524,905
7/1/20 - 6/30/21	1,318,000	1,460,000	1,343,000	1,465,000	25,000	5,000	791,537	791,537
7/1/21 - 6/30/22	1,144,000	1,339,000	1,064,000	1,214,000	(80,000)	(125,000)	392,208	392,208
Total	40,508,244	41,445,689	40,359,933	41,138,688	(148,311)	(307,001)	35,281,856	35,281,856

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(3) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(4) From Section II, Exhibit II, Sheet 6, Column (11)
(5) From Section II, Exhibit II, Sheet 6, Column (12)
(6) = (4) - (2)
(7) = (5) - (3)
(8) Provided by Entity
(9) Provided by Entity

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Selection of Ultimate Loss & ALAE

Accident Year	Payroll (00)'s	Unlimited Paid Loss & ALAE @ 06/30/2023	Unlimited Reported Loss & ALAE @ 06/30/2023	Ultimate Loss & ALAE Indications: Paid LDM	Expected Loss & ALAE	Paid B-F	Frequency Severity	Prior Selected Ultimate Loss & ALAE: Low	High	Selected Ultimate Loss & ALAE: Low	High	Ultimate Loss & ALAE Rates: Low	High	Ultimate Loss & ALAE Severity: Low	High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Prior to 7/1/1993		11,923,386	11,923,386	12,388,869	0		0	12,009,644	12,026,589	12,045,133	12,072,188				
7/1/93 - 6/30/94	1,730,750	651,447	651,447	678,870	793,102	683,484	0	679,600	682,600	677,500	680,200	0.39	0.39		
7/1/94 - 6/30/95	1,783,170	854,216	854,216	892,934	834,250	890,390	0	893,900	898,000	891,000	894,900	0.50	0.50		
7/1/95 - 6/30/96	1,759,960	816,037	816,037	855,819	843,034	855,225	0	855,900	860,200	853,800	857,800	0.49	0.49		
7/1/96 - 6/30/97	1,900,830	588,046	588,046	618,852	928,314	634,257	0	617,700	620,800	617,300	620,400	0.32	0.33		
7/1/97 - 6/30/98	1,772,780	508,116	508,116	535,697	878,082	553,325	0	534,800	537,600	534,300	537,100	0.30	0.30		
7/1/98 - 6/30/99	1,890,800	948,446	948,446	1,000,963	945,632	998,060	0	998,100	1,003,700	998,300	1,003,600	0.53	0.53		
7/1/99 - 6/30/00	1,944,940	602,355	602,355	637,260	987,200	656,428	0	639,500	643,400	635,500	639,000	0.33	0.33		
7/1/00 - 6/30/01	2,015,680	753,978	753,978	801,748	1,048,889	816,473	0	804,400	809,700	799,400	804,100	0.40	0.40		
7/1/01 - 6/30/02	2,031,050	619,240	619,240	662,148	1,080,394	689,250	0	664,200	668,900	660,000	664,300	0.32	0.33		
7/1/02 - 6/30/03	2,025,150	894,525	894,525	962,027	1,115,339	972,785	0	954,000	961,400	958,700	965,400	0.47	0.48		
7/1/03 - 6/30/04	1,895,880	1,503,977	1,503,977	1,627,475	1,081,813	1,586,068	0	1,617,800	1,631,400	1,621,300	1,633,600	0.86	0.86		
7/1/04 - 6/30/05	1,869,900	939,839	939,839	1,024,954	1,084,854	1,029,928	0	1,028,600	1,038,000	1,020,700	1,029,200	0.55	0.55		
7/1/05 - 6/30/06	1,932,540	941,703	941,703	1,035,665	1,137,339	1,044,889	0	1,029,300	1,039,800	1,031,000	1,040,400	0.53	0.54		
7/1/06 - 6/30/07	2,033,590	671,423	671,423	744,721	1,208,429	790,361	0	752,600	761,100	741,100	748,400	0.36	0.37		
7/1/07 - 6/30/08	2,120,830	663,947	663,947	743,691	1,272,505	800,395	0	753,500	762,900	739,700	747,700	0.35	0.35		
7/1/08 - 6/30/09	2,046,790	886,920	886,920	1,004,194	1,254,708	1,033,450	0	1,014,100	1,028,000	998,300	1,010,100	0.49	0.49		
7/1/09 - 6/30/10	1,846,880	576,892	576,892	661,910	1,161,372	726,062	0	665,400	675,300	657,700	666,200	0.36	0.36		
7/1/10 - 6/30/11	1,696,890	914,351	914,351	1,064,863	1,081,622	1,067,232	0	1,057,700	1,075,100	1,057,300	1,072,400	0.62	0.63		
7/1/11 - 6/30/12	1,773,990	610,622	610,622	722,242	1,141,745	787,075	0	723,700	736,700	716,700	727,800	0.40	0.41		
7/1/12 - 6/30/13	1,892,520	591,161	591,161	714,278	1,229,857	803,147	866,496	727,900	742,300	708,100	720,400	0.37	0.38	4,344	4,420
7/1/13 - 6/30/14	1,998,760	738,071	738,071	914,016	1,311,508	990,531	1,100,185	883,600	902,700	905,200	922,800	0.45	0.46	4,549	4,637
7/1/14 - 6/30/15	2,137,000	1,050,424	1,050,424	1,333,345	1,415,829	1,350,848	1,609,919	1,308,300	1,351,700	1,319,200	1,347,500	0.62	0.63	4,711	4,813
7/1/15 - 6/30/16	2,118,290	1,290,543	1,290,543	1,679,651	1,417,059	1,618,819	1,500,904	1,644,400	1,704,000	1,652,400	1,706,900	0.78	0.81	6,583	6,800
7/1/16 - 6/30/17	2,030,850	1,193,345	1,193,345	1,597,130	1,371,754	1,540,151	1,355,717	1,584,500	1,646,900	1,568,900	1,625,400	0.77	0.80	7,197	7,456
7/1/17 - 6/30/18	2,039,250	904,311	904,311	1,248,147	1,390,801	1,287,445	1,474,622	1,226,900	1,279,600	1,224,100	1,272,200	0.60	0.62	5,369	5,580
7/1/18 - 6/30/19	2,180,600	935,882	935,882	1,339,079	1,501,643	1,388,027	1,405,806	1,340,200	1,405,300	1,310,900	1,367,300	0.60	0.63	6,272	6,542
7/1/19 - 6/30/20	2,224,960	524,905	524,905	791,427	1,547,067	1,045,896	1,476,029	1,036,000	1,153,000	1,009,400	1,082,400	0.45	0.49	4,784	5,130
7/1/20 - 6/30/21	2,221,021	791,537	791,537	1,303,674	1,559,322	1,404,103	1,492,269	1,318,000	1,460,000	1,343,000	1,465,000	0.60	0.66	6,547	7,142
7/1/21 - 6/30/22	2,383,142	392,208	392,208	746,323	1,689,386	1,193,787	1,084,246	1,144,000	1,339,000	1,064,000	1,214,000	0.45	0.51	7,425	8,472
7/1/22 - 6/30/23	2,460,536	315,743	315,743	1,090,499	1,761,185	1,566,995	1,346,266			1,243,000	1,449,000	0.51	0.59	7,265	8,469
Total	59,759,329	35,597,599	35,597,599	41,422,472	36,074,034	30,804,886	14,712,461	40,508,244	41,445,689	41,602,933	42,587,688				

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	From Section II, Exhibit II, Sheet 10, Column (7)
(6)	From Section II, Exhibit II, Sheet 7, Column (4)
(7)	From Section II, Exhibit II, Sheet 7, Column (10)
(8)	From Section II, Exhibit II, Sheet 9, Column (12)
(9)	From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(10)	From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(11)	Selected by Deloitte Consulting LLP
(12)	Selected by Deloitte Consulting LLP
(13)	= (11) / (2)
(14)	= (12) / (2)
(15)	(11) Divided by Ultimate Claims From Section II, Exhibit II, Sheet 13, Column (7)
(16)	(12) Divided by Ultimate Claims From Section II, Exhibit II, Sheet 13, Column (7)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Bornhuetter-Ferguson Method

Accident Year	Payroll (00)'s	Initial Expected Loss & ALAE Rates	Initial Expected Loss & ALAE	Expected % of Paid Loss & ALAE	Expected Paid Loss & ALAE	Unlimited Actual Paid Loss & ALAE	Expected % of Unpaid Loss & ALAE	Expected Unpaid Loss & ALAE	Unlimited Indicated Ultimate Loss & ALAE	Unlimited Indicated Ultimate Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
7/1/93 - 6/30/94	1,730,750	0.46	793,102	96.0%	761,066	651,447	4.0%	32,037	683,484	0.39
7/1/94 - 6/30/95	1,783,170	0.47	834,250	95.7%	798,076	854,216	4.3%	36,174	890,390	0.50
7/1/95 - 6/30/96	1,759,960	0.48	843,034	95.4%	803,846	816,037	4.6%	39,188	855,225	0.49
7/1/96 - 6/30/97	1,900,830	0.49	928,314	95.0%	882,103	588,046	5.0%	46,211	634,257	0.33
7/1/97 - 6/30/98	1,772,780	0.50	878,082	94.9%	832,873	508,116	5.1%	45,209	553,325	0.31
7/1/98 - 6/30/99	1,890,800	0.50	945,632	94.8%	896,017	948,446	5.2%	49,614	998,060	0.53
7/1/99 - 6/30/00	1,944,940	0.51	987,200	94.5%	933,128	602,355	5.5%	54,073	656,428	0.34
7/1/00 - 6/30/01	2,015,680	0.52	1,048,889	94.0%	986,394	753,978	6.0%	62,495	816,473	0.41
7/1/01 - 6/30/02	2,031,050	0.53	1,080,394	93.5%	1,010,383	619,240	6.5%	70,010	689,250	0.34
7/1/02 - 6/30/03	2,025,150	0.55	1,115,339	93.0%	1,037,080	894,525	7.0%	78,259	972,785	0.48
7/1/03 - 6/30/04	1,895,880	0.57	1,081,813	92.4%	999,722	1,503,977	7.6%	82,091	1,586,068	0.84
7/1/04 - 6/30/05	1,869,900	0.58	1,084,854	91.7%	994,765	939,839	8.3%	90,089	1,029,928	0.55
7/1/05 - 6/30/06	1,932,540	0.59	1,137,339	90.9%	1,034,153	941,703	9.1%	103,187	1,044,889	0.54
7/1/06 - 6/30/07	2,033,590	0.59	1,208,429	90.2%	1,089,490	671,423	9.8%	118,938	790,361	0.39
7/1/07 - 6/30/08	2,120,830	0.60	1,272,505	89.3%	1,136,058	663,947	10.7%	136,448	800,395	0.38
7/1/08 - 6/30/09	2,046,790	0.61	1,254,708	88.3%	1,108,178	886,920	11.7%	146,530	1,033,450	0.50
7/1/09 - 6/30/10	1,846,880	0.63	1,161,372	87.2%	1,012,202	576,892	12.8%	149,170	726,062	0.39
7/1/10 - 6/30/11	1,696,890	0.64	1,081,622	85.9%	928,741	914,351	14.1%	152,881	1,067,232	0.63
7/1/11 - 6/30/12	1,773,990	0.64	1,141,745	84.5%	965,293	610,622	15.5%	176,452	787,075	0.44
7/1/12 - 6/30/13	1,892,520	0.65	1,229,857	82.8%	1,017,871	591,161	17.2%	211,985	803,147	0.42
7/1/13 - 6/30/14	1,998,760	0.66	1,311,508	80.8%	1,059,048	738,071	19.2%	252,460	990,531	0.50
7/1/14 - 6/30/15	2,137,000	0.66	1,415,829	78.8%	1,115,406	1,050,424	21.2%	300,423	1,350,848	0.63
7/1/15 - 6/30/16	2,118,290	0.67	1,417,059	76.8%	1,088,783	1,290,543	23.2%	328,276	1,618,819	0.76
7/1/16 - 6/30/17	2,030,850	0.68	1,371,754	74.7%	1,024,949	1,193,345	25.3%	346,806	1,540,151	0.76
7/1/17 - 6/30/18	2,039,250	0.68	1,390,801	72.5%	1,007,668	904,311	27.5%	383,134	1,287,445	0.63
7/1/18 - 6/30/19	2,180,600	0.69	1,501,643	69.9%	1,049,498	935,882	30.1%	452,145	1,388,027	0.64
7/1/19 - 6/30/20	2,224,960	0.70	1,547,067	66.3%	1,026,076	524,905	33.7%	520,991	1,045,896	0.47
7/1/20 - 6/30/21	2,221,021	0.70	1,559,322	60.7%	946,755	791,537	39.3%	612,567	1,404,103	0.63
7/1/21 - 6/30/22	2,383,142	0.71	1,689,386	52.6%	887,807	392,208	47.4%	801,579	1,193,787	0.50
7/1/22 - 6/30/23	2,460,536	0.72	1,761,185	29.0%	509,934	315,743	71.0%	1,251,251	1,566,995	0.64
Total	59,759,329		36,074,034		28,943,362	23,674,213		7,130,672	30,804,886	

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	From Section II, Exhibit II, Sheet 8, Column (13)
(4)	= (2) x (3)
(5)	= 1 / Section II, Exhibit II, Sheet 10, Column (6)
(6)	= (4) x (5)
(7)	Provided by Entity
(8)	= 1 - (5)
(9)	= (4) x (8)
(10)	= (7) + (9)
(11)	= (10) / (2)

Commonwealth of Massachusetts
Department of Mental Health
DMH - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Calculation of Initial Expected Loss & ALAE Rates

Accident Year	Payroll (00)'s	Payroll Trend	Loss Development Unlimited Indicated Ultimate Loss & ALAE Paid	Loss Development Unlimited Indicated Ultimate Loss & ALAE Reported	Selected Initial Ultimate Loss & ALAE	Loss & ALAE Trend Factor	Benefit Level Adjustment Factors	Trended Ultimate	On-level Loss & ALAE Rates	Detrended Loss & ALAE Rates	Prior Expected Loss & ALAE Rates	Initial Expected Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
7/1/93 - 6/30/94	1,730,750	2.357	678,870	678,870	12,058,661	3.119	1.180	44,387,320	10.88	0.46	0.43	0.46
7/1/94 - 6/30/95	1,783,170	2.288	892,934	892,934	678,850	2.999	1.167	2,376,228	0.58	0.47	0.44	0.47
7/1/95 - 6/30/96	1,759,960	2.221	855,819	855,819	892,950	2.883	1.151	2,963,911	0.76	0.48	0.45	0.48
7/1/96 - 6/30/97	1,900,830	2.157	618,852	618,852	855,800	2.772	1.140	2,704,978	0.66	0.49	0.46	0.49
7/1/97 - 6/30/98	1,772,780	2.094	535,697	535,697	618,850	2.666	1.135	1,872,453	0.50	0.50	0.47	0.50
7/1/98 - 6/30/99	1,890,800	2.033	1,000,963	1,000,963	535,700	2.563	1.135	1,558,525	0.41	0.50	0.47	0.50
7/1/99 - 6/30/00	1,944,940	1.974	637,260	637,260	1,000,950	2.465	1.129	2,785,766	0.73	0.51	0.48	0.51
7/1/00 - 6/30/01	2,015,680	1.916	801,748	801,748	637,250	2.370	1.112	1,679,562	0.43	0.52	0.49	0.52
7/1/01 - 6/30/02	2,031,050	1.860	662,148	662,148	801,750	2.279	1.098	2,006,941	0.53	0.53	0.50	0.53
7/1/02 - 6/30/03	2,025,150	1.806	962,027	962,027	662,150	2.191	1.071	1,554,270	0.42	0.55	0.52	0.55
7/1/03 - 6/30/04	1,895,880	1.754	1,627,475	1,627,475	962,050	2.107	1.044	2,116,113	0.64	0.57	0.54	0.57
7/1/04 - 6/30/05	1,869,900	1.702	1,024,954	1,024,954	1,627,450	2.026	1.037	3,418,221	1.07	0.58	0.55	0.58
7/1/05 - 6/30/06	1,932,540	1.653	1,035,665	1,035,665	1,024,950	1.948	1.032	2,060,389	0.65	0.59	0.56	0.59
7/1/06 - 6/30/07	2,033,590	1.605	744,721	744,721	1,035,700	1.873	1.032	2,001,922	0.61	0.59	0.56	0.59
7/1/07 - 6/30/08	2,120,830	1.558	743,691	743,691	744,750	1.801	1.032	1,384,173	0.42	0.60	0.57	0.60
7/1/08 - 6/30/09	2,046,790	1.513	1,004,194	1,004,194	743,700	1.732	1.020	1,313,484	0.42	0.61	0.58	0.61
7/1/09 - 6/30/10	1,846,880	1.469	661,910	661,910	1,004,200	1.665	1.004	1,678,598	0.62	0.63	0.60	0.63
7/1/10 - 6/30/11	1,696,890	1.426	1,064,863	1,064,863	661,950	1.601	1.000	1,059,803	0.44	0.64	0.60	0.64
7/1/11 - 6/30/12	1,773,990	1.384	722,242	722,242	1,064,850	1.539	1.000	1,639,288	0.67	0.64	0.61	0.64
7/1/12 - 6/30/13	1,892,520	1.344	714,278	714,278	722,250	1.480	1.000	1,069,106	0.42	0.65	0.62	0.65
7/1/13 - 6/30/14	1,998,760	1.305	914,016	914,016	714,250	1.423	1.000	1,016,600	0.39	0.66	0.62	0.66
7/1/14 - 6/30/15	2,137,000	1.267	1,333,345	1,333,345	914,000	1.369	1.000	1,250,872	0.46	0.66	0.63	0.66
7/1/15 - 6/30/16	2,118,290	1.230	1,679,651	1,679,651	1,333,350	1.316	1.000	1,754,598	0.67	0.67	0.63	0.67
7/1/16 - 6/30/17	2,030,850	1.194	1,597,130	1,597,130	1,679,650	1.265	1.000	2,125,293	0.88	0.68	0.64	0.68
7/1/17 - 6/30/18	2,039,250	1.159	1,248,147	1,248,147	1,597,150	1.217	1.000	1,943,177	0.82	0.68	0.65	0.68
7/1/18 - 6/30/19	2,180,600	1.126	1,339,079	1,339,079	1,248,150	1.170	1.000	1,460,159	0.59	0.69	0.65	0.69
7/1/19 - 6/30/20	2,224,960	1.093	791,427	791,427	1,339,100	1.125	1.000	1,506,305	0.62	0.70	0.66	0.70
7/1/20 - 6/30/21	2,221,021	1.061	1,303,674	1,303,674	1,303,674	1.082	1.000	1,410,054	***0.60***	0.70	0.67	0.70
7/1/21 - 6/30/22	2,383,142	1.030	746,323	746,323	746,323	1.040	1.000	776,176	***0.32***	0.71	0.67	0.71
7/1/22 - 6/30/23	2,460,536	1.000	1,090,499	1,090,499	1,090,499	1.000	1.000	1,090,499	***0.44***	0.72		0.72
			29,033,603	29,033,603				Last 3 Wtd Avg	0.68			
								Last 4 Wtd Avg	0.73			
								Last 5 Wtd Avg	0.72			
								All Per Wtd Avg	1.08			

(Note: numbers in bold and italics and with borders are excluded from the calculated averages)

Selected (14) 0.72

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Selected by Deloitte Consulting LLP
(4) From Section II, Exhibit II, Sheet 10, Column (7)
(5) From Section II, Exhibit II, Sheet 0, Column (7)
(6) Selected by Deloitte Consulting LLP
(7) Selected by Deloitte Consulting LLP
(8) Based on industry sources
(9) = (6) x (7) x (8)
(10) = (9) / [(2) x (3)]
(11) = (14) / (7) / (8) * (3)
(12) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(13) Selected for by Deloitte Consulting LLP Based on (14)
(14) Selected by Deloitte Consulting LLP

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Frequency Severity Method

Accident Year	Payroll (00)'s	Ultimate Reported Severity	Include For Fit	Exponential Fitted Reported Severity	Initial Selected Ultimate Severity	Selected Ultimate Claim Counts	Benefit Level Adjustment Factor	Selected Severity Trend	Trended Severity	On-Level Selected Ultimate Severity	Indicated Ultimate Loss & ALAE	Indicated Ultimate Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Prior to 7/1/1993			Exclude	2,514		0					0	
7/1/93 - 6/30/94	1,730,750		Exclude	2,588		0	1.180	3.119	0,000		0	0.00
7/1/94 - 6/30/95	1,783,170		Exclude	2,665		0	1.167	2.999	0,000		0	0.00
7/1/95 - 6/30/96	1,759,960		Exclude	2,744		0	1.151	2.883	0,000		0	0.00
7/1/96 - 6/30/97	1,900,830		Exclude	2,825		0	1.140	2.772	0,000		0	0.00
7/1/97 - 6/30/98	1,772,780		Exclude	2,909		0	1.135	2.666	0,000		0	0.00
7/1/98 - 6/30/99	1,890,800		Exclude	2,995		0	1.135	2.563	0,000		0	0.00
7/1/99 - 6/30/00	1,944,940		Exclude	3,084		0	1.129	2.465	0,000		0	0.00
7/1/00 - 6/30/01	2,015,680		Exclude	3,175		0	1.112	2.370	0,000		0	0.00
7/1/01 - 6/30/02	2,031,050		Exclude	3,270		0	1.098	2.279	0,000		0	0.00
7/1/02 - 6/30/03	2,025,150		Exclude	3,366		0	1.071	2.191	0,000		0	0.00
7/1/03 - 6/30/04	1,895,880		Exclude	3,466		0	1.044	2.107	0,000		0	0.00
7/1/04 - 6/30/05	1,869,900		Exclude	3,569		0	1.037	2.026	0,000		0	0.00
7/1/05 - 6/30/06	1,932,540		Exclude	3,675		0	1.032	1.948	0,000		0	0.00
7/1/06 - 6/30/07	2,033,590		Exclude	3,784		0	1.032	1.873	0,000		0	0.00
7/1/07 - 6/30/08	2,120,830		Exclude	3,896		0	1.032	1.801	0,000		0	0.00
7/1/08 - 6/30/09	2,046,790		Exclude	4,011		0	1.020	1.732	0,000		0	0.00
7/1/09 - 6/30/10	1,846,880		Exclude	4,130		0	1.004	1.665	0,000		0	0.00
7/1/10 - 6/30/11	1,696,890		Exclude	4,252		0	1.000	1.601	0,000		0	0.00
7/1/11 - 6/30/12	1,773,990		Exclude	4,379		0	1.000	1.539	0,000		0	0.00
7/1/12 - 6/30/13	1,892,520	4,382	Exclude	4,508	4,431	163	1.000	1.480	6,559	7,869	866,496	0.46
7/1/13 - 6/30/14	1,998,760	4,593	Exclude	4,642	3,589	199	1.000	1.423	5,109	7,869	1,100,185	0.55
7/1/14 - 6/30/15	2,137,000	4,762	Exclude	4,779	3,264	280	1.000	1.369	4,467	7,869	1,609,919	0.75
7/1/15 - 6/30/16	2,118,290	6,692	Exclude	4,921	5,312	251	1.000	1.316	6,990	7,869	1,500,904	0.71
7/1/16 - 6/30/17	2,030,850	7,326	Exclude	5,067	7,705	218	1.000	1.265	9,749	7,869	1,355,717	0.67
7/1/17 - 6/30/18	2,039,250	5,474	Include	5,217	7,005	228	1.000	1.217	8,523	7,869	1,474,622	0.72
7/1/18 - 6/30/19	2,180,600	6,407	Include	5,372	5,972	209	1.000	1.170	6,986	7,869	1,405,806	0.64
7/1/19 - 6/30/20	2,224,960	3,751	Include	5,531	6,346	211	1.000	1.125	7,139	7,869	1,476,029	0.66
7/1/20 - 6/30/21	2,221,021	6,356	Include	5,695	6,356	205	1.000	1.082	***6,874***	7,869	1,492,269	0.67
7/1/21 - 6/30/22	2,383,142	5,208	Exclude	5,864	5,208	143	1.000	1.040	***5,416***	7,869	1,084,246	0.45
7/1/22 - 6/30/23	2,460,536	6,374	Include	6,037	6,374	171	1.000	1.000	***6,374***	7,869	1,346,266	0.55
			Implied Trend	3.0%	22.4%			Last 5 Wtd Avg	7,869			
								Last 4 Wtd Avg	8,123			
								Last 3 Wtd Avg	7,577			
Total	59,759,329					2,279		Last 3 Avg	7,549		14,712,461	
								Selected	7,869			

Reported Exponential Regressio	
Constant	8.735
X Coefficient	(0.029)
R Squared	0.060

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Section II, Exhibit II, Sheet 0, Column (7) / Section II, Exhibit II, Sheet 13, Column (7) x 1
(4) Years included for purposes of fit
(5) Result of Exponential fit of Column (3) * Column (8)
(6) Selected by Deloitte Consulting LLP
(7) From Section II, Exhibit II, Sheet 13, Column (7)
(8) Based on industry sources
(9) Selected by Deloitte Consulting LLP
(10) = (6) x (8) x (9)
(11) Selected by Deloitte Consulting, LLP
(12) Selected in column (11) x (7) / (8) / (9)
(13) = (12) / (3)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss & ALAE Development Method

Accident Year	Age of Losses @ 06/30/2023	Retention	Payroll (00)'s	Unlimited Paid Loss & ALAE @ 06/30/2023	Paid LDF	Indicated Ultimate Loss & ALAE	Unlimited Indicated Ultimate Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Prior to 7/1/1993	372.0	Unlimited		11,923,386	1.039	12,388,869	
7/1/93 - 6/30/94	360.0	Unlimited	1,730,750	651,447	1.042	678,870	0.39
7/1/94 - 6/30/95	348.0	Unlimited	1,783,170	854,216	1.045	892,934	0.50
7/1/95 - 6/30/96	336.0	Unlimited	1,759,960	816,037	1.049	855,819	0.49
7/1/96 - 6/30/97	324.0	Unlimited	1,900,830	588,046	1.052	618,852	0.33
7/1/97 - 6/30/98	312.0	Unlimited	1,772,780	508,116	1.054	535,697	0.30
7/1/98 - 6/30/99	300.0	Unlimited	1,890,800	948,446	1.055	1,000,963	0.53
7/1/99 - 6/30/00	288.0	Unlimited	1,944,940	602,355	1.058	637,260	0.33
7/1/00 - 6/30/01	276.0	Unlimited	2,015,680	753,978	1.063	801,748	0.40
7/1/01 - 6/30/02	264.0	Unlimited	2,031,050	619,240	1.069	662,148	0.33
7/1/02 - 6/30/03	252.0	Unlimited	2,025,150	894,525	1.075	962,027	0.48
7/1/03 - 6/30/04	240.0	Unlimited	1,895,880	1,503,977	1.082	1,627,475	0.86
7/1/04 - 6/30/05	228.0	Unlimited	1,869,900	939,839	1.091	1,024,954	0.55
7/1/05 - 6/30/06	216.0	Unlimited	1,932,540	941,703	1.100	1,035,665	0.54
7/1/06 - 6/30/07	204.0	Unlimited	2,033,590	671,423	1.109	744,721	0.37
7/1/07 - 6/30/08	192.0	Unlimited	2,120,830	663,947	1.120	743,691	0.35
7/1/08 - 6/30/09	180.0	Unlimited	2,046,790	886,920	1.132	1,004,194	0.49
7/1/09 - 6/30/10	168.0	Unlimited	1,846,880	576,892	1.147	661,910	0.36
7/1/10 - 6/30/11	156.0	Unlimited	1,696,890	914,351	1.165	1,064,863	0.63
7/1/11 - 6/30/12	144.0	Unlimited	1,773,990	610,622	1.183	722,242	0.41
7/1/12 - 6/30/13	132.0	Unlimited	1,892,520	591,161	1.208	714,278	0.38
7/1/13 - 6/30/14	120.0	Unlimited	1,998,760	738,071	1.238	914,016	0.46
7/1/14 - 6/30/15	108.0	Unlimited	2,137,000	1,050,424	1.269	1,333,345	0.62
7/1/15 - 6/30/16	96.0	Unlimited	2,118,290	1,290,543	1.302	1,679,651	0.79
7/1/16 - 6/30/17	84.0	Unlimited	2,030,850	1,193,345	1.338	1,597,130	0.79
7/1/17 - 6/30/18	72.0	Unlimited	2,039,250	904,311	1.380	1,248,147	0.61
7/1/18 - 6/30/19	60.0	Unlimited	2,180,600	935,882	1.431	1,339,079	0.61
7/1/19 - 6/30/20	48.0	Unlimited	2,224,960	524,905	1.508	791,427	0.36
7/1/20 - 6/30/21	36.0	Unlimited	2,221,021	791,537	1.647	1,303,674	0.59
7/1/21 - 6/30/22	24.0	Unlimited	2,383,142	392,208	1.903	746,323	0.31
7/1/22 - 6/30/23	12.0	Unlimited	2,460,536	315,743	3.454	1,090,499	0.44
Total			59,759,329	35,597,599		41,422,472	

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1)
(3) Provided by Entity
(4) Provided by Entity
(5) Provided by Entity
(6) From Section II, Exhibit II, Sheet 11
(7) = (5) x (6)
(8) = (7) / (4)

Commonwealth of Massachusetts
Department of Mental Health
DMH - Medical

Section II
Exhibit II
Sheet 11

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss & ALAE

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development 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	348	360	372	As of 6/30/2023
Prior to 7/1/1993	25,280,553	9,170,781	9,649,046	10,033,516	10,183,361	10,297,870	10,457,033	10,619,408	10,716,949	10,810,320	10,848,929	10,915,180	10,998,531	11,058,073	11,132,246	11,341,367	11,403,158	11,451,085	11,496,778	11,549,874	11,580,133	11,624,676	11,742,078	11,773,281	11,805,721	11,829,433	11,865,625	11,890,260	11,904,282	11,908,423	11,923,386	11,923,386
7/1/93 - 6/30/94	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	630,803	638,628	643,805	645,212	646,087	646,087	646,087	648,097	649,916	650,607	650,607	650,607	651,447	651,447		651,447
7/1/94 - 6/30/95	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	812,267	823,958	831,209	836,948	844,533	849,478	852,296	852,795	853,499	854,111	854,160	854,160	854,160	854,216			854,216
7/1/95 - 6/30/96	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	794,884	796,128	797,390	798,221	801,390	803,766	804,662	807,002	808,470	810,127	811,848	814,155	815,224	816,037				816,037
7/1/96 - 6/30/97	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	509,796	517,517	522,815	524,946	533,925	536,788	541,806	545,274	549,243	579,458	584,865	587,564	588,046	588,046					588,046
7/1/97 - 6/30/98	160,545	332,451	383,627	422,681	445,088	461,616	487,824	498,965	499,061	499,770	500,001	503,898	505,757	505,921	506,053	506,185	506,317	506,558	506,783	507,079	507,413	507,678	508,116	508,116	508,116	508,116						508,116
7/1/98 - 6/30/99	177,752	299,718	340,747	360,722	405,072	439,482	477,272	520,347	561,026	584,273	585,114	588,553	606,906	637,239	655,000	683,204	721,085	759,098	807,305	852,118	899,201	917,808	931,714	944,445	948,446							948,446
7/1/99 - 6/30/00	185,350	429,256	483,565	521,929	539,722	558,001	575,939	582,579	584,965	587,880	590,258	592,928	595,238	598,391	601,805	602,355	602,355	602,355	602,355	602,355	602,355	602,355	602,355	602,355								602,355
7/1/00 - 6/30/01	241,669	433,098	500,398	575,365	598,840	628,934	693,180	725,143	730,102	735,829	737,792	740,203	753,447	753,978	753,978	753,978	753,978	753,978	753,978	753,978	753,978	753,978	753,978									753,978
7/1/01 - 6/30/02	174,410	368,134	462,671	501,999	514,827	521,795	525,972	571,546	580,032	584,275	614,358	616,264	616,631	617,414	619,074	619,240	619,240	619,240	619,240	619,240	619,240	619,240										619,240
7/1/02 - 6/30/03	106,077	382,205	468,554	496,191	560,019	574,291	585,592	637,875	657,335	673,709	685,713	699,469	728,782	748,904	767,961	783,698	833,252	854,735	863,101	883,654	894,525											894,525
7/1/03 - 6/30/04	258,429	665,381	856,411	1,022,737	1,071,500	1,113,490	1,161,995	1,192,531	1,222,893	1,246,683	1,275,099	1,309,807	1,343,324	1,369,371	1,396,465	1,425,306	1,458,419	1,473,946	1,487,966	1,503,977												1,503,977
7/1/04 - 6/30/05	223,896	627,798	728,574	772,233	797,587	811,216	848,381	866,048	884,415	901,769	910,493	916,815	919,419	921,970	933,349	935,067	936,819	938,500	939,839													939,839
7/1/05 - 6/30/06	251,300	520,856	684,007	715,286	737,612	754,221	768,311	780,174	795,227	811,568	832,733	850,355	867,723	881,683	896,930	911,356	928,712	941,703														941,703
7/1/06 - 6/30/07	266,977	578,217	638,599	652,141	659,793	664,093	666,803	669,308	669,732	671,423	671,423	671,423	671,423	671,423	671,423	671,423	671,423															671,423
7/1/07 - 6/30/08	278,965	550,541	604,168	629,658	649,695	656,991	663,909	663,947	663,947	663,947	663,947	663,947	663,947	663,947	663,947	663,947																663,947
7/1/08 - 6/30/09	302,300	569,565	595,188	605,449	639,872	662,294	692,213	758,066	800,323	818,123	864,669	876,799	879,355	882,150	886,920																	886,920
7/1/09 - 6/30/10	216,046	447,208	465,324	474,508	490,700	503,573	518,823	531,358	538,332	552,391	558,192	564,227	571,047	576,892																		576,892
7/1/10 - 6/30/11	336,085	580,670	657,424	693,649	718,170	745,916	777,594	801,107	825,743	844,721	867,891	892,402	914,351																			914,351
7/1/11 - 6/30/12	227,796	449,850	506,273	522,420	534,066	542,744	555,115	564,496	580,117	590,561	599,891	610,622																				610,622
7/1/12 - 6/30/13	233,641	493,068	541,673	556,182	566,294	575,278	582,721	586,481	590,255	591,095	591,161																					591,161
7/1/13 - 6/30/14	218,325	462,645	539,587	573,532	597,580	616,109	637,319	662,528	701,719	738,071																						738,071
7/1/14 - 6/30/15	336,154	677,878	754,658	849,442	936,293	973,223	998,771	1,019,981	1,050,424																							1,050,424
7/1/15 - 6/30/16	454,022	855,549	977,114	1,078,092	1,139,308	1,197,814	1,248,180	1,290,543																								1,290,543
7/1/16 - 6/30/17	447,474	885,357	1,035,430	1,111,472	1,139,389	1,169,570	1,193,345																									1,193,345
7/1/17 - 6/30/18	339,683	645,338	766,490	823,577	876,545	904,311																										904,311
7/1/18 - 6/30/19	318,609	689,080	785,310	908,316	935,882																											935,882
7/1/19 - 6/30/20	318,901	462,582	506,050	524,905																												524,905
7/1/20 - 6/30/21	336,719	680,112	791,537																													791,537
7/1/21 - 6/30/22	266,965	392,208																														392,208
7/1/22 - 6/30/23	315,743																															315,743
																																35,597,599

Accident Year	Age-to-Age Development Factors 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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993	***0.363***	***1.052***	***1.040***	***1.015***	***1.011***	***1.015***	***1.016***	***1.009***	***1.009***	***1.004***	***1.006***	***1.008***	***1.005***	***1.007***	***1.019***	***1.005***	***1.004***	***1.004***	***1.005***	***1.003***	***1.004***	***1.010***	***1.003***	***1.003***	***1.002***	***1.003***	***1.002***	***1.001***	***1.000***	***1.001***	
7/1/93 - 6/30/94	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	1.011	1.012	1.008	1.002	1.001	1.000	1.000	1.003	1.003	1.001	1.000	1.000	1.001	1.000		
7/1/94 - 6/30/95	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	1.015	1.014	1.009	1.007	1.009	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000			
7/1/95 - 6/30/96	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	1.006	1.002	1.002	1.001	1.004	1.003	1.001	1.003	1.002	1.002	1.002	1.003	1.001	1.001				
7/1/96 - 6/30/97	2.233	1.167	1.074	1.081	1.061	1.030	1.059	1.029	1.014	1.012	1.006	1.006	1.009	1.015	1.010	1.004	1.017	1.005	1.009	1.006	1.007	1.055	1.009	1.005	1.001	1.000					
7/1/97 - 6/30/98	2.071	1.154	1.102	1.053	1.037	1.057	1.023	1.000	1.001	1.000	1.008	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.001	1.001	1.001	1.000	1.000	1.000						
7/1/98 - 6/30/99	1.686	1.137	1.059	1.123	1.085	1.086	1.090	1.078	1.041	1.001	1.006	1.031	1.050	1.028	1.043	1.055	1.053	1.064	1.056	1.055	1.021	1.015	1.014	1.004							
7/1/99 - 6/30/00	2.316	1.127	1.079	1.034	1.034	1.032	1.012	1.004	1.005	1.004	1.005	1.004	1.005	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000								
7/1/00 - 6/30/01	1.792	1.155	1.150	1.041	1.050	1.102	1.046	1.007	1.008	1.003	1.003	1.018	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000									
7/1/01 - 6/30/02	2.111	1.257	1.085	1.026	1.014	1.008	1.087	1.015	1.007	1.051	1.003	1.001	1.001	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000										
7/1/02 - 6/30/03	3.603	1.226	1.059	1.129	1.025	1.020	1.089	1.031	1.025	1.018	1.020	1.042	1.028	1.025	1.020	1.063	1.026	1.010	1.024	1.012											
7/1/03 - 6/30/04	2.575	1.287	1.194	1.048	1.039	1.044	1.026	1.025	1.019	1.023	1.027	1.026	1.019	1.020	1.021	1.023	1.011	1.010	1.011												
7/1/04 - 6/30/05	2.804	1.161	1.060	1.033	1.017	1.046	1.021	1.021	1.020	1.010	1.007	1.003	1.003	1.012	1.002	1.002	1.002	1.001													
7/1/05 - 6/30/06	2.073	1.313	1.046	1.031	1.023	1.019	1.015	1.019	1.021	1.026	1.021	1.020	1.016	1.017	1.016	1.019	1.014														
7/1/06 - 6/30/07	2.166	1.104	1.021	1.012	1.007	1.004	1.004	1.001	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000															
7/1/07 - 6/30/08	1.974	1.097	1.042	1.032	1.011	1.011	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000																
7/1/08 - 6/30/09	1.884	1.045	1.017	1.057	1.035	1.045	1.095	1.056	1.022	1.057	1.014	1.003	1.003	1.005																	
7/1/09 - 6/30/10	2.070	1.041	1.020	1.034	1.026	1.030	1.024	1.013	1.026	1.011	1.011	1.012	1.010																		
7/1/10 - 6/30/11	1.728	1.132	1.055	1.035	1.039	1.042	1.030	1.031	1.023	1.027	1.028	1.025																			
7/1/11 - 6/30/12	1.975	1.125	1.032	1.022	1.016	1.023	1.017	1.028	1.018	1.016	1.018																				
7/1/12 - 6/30/13	2.110	1.099	1.027	1.018	1.016	1.013	1.006	1.006	1.001	1.000																					
7/1/13 - 6/30/14	2.119	1.166	1.063	1.042	1.031	1.034	1.040	1.059	1.052																						
7/1/14 - 6/30/15	2.017	1.113	1.126	1.102	1.039	1.026	1.021	1.030																							
7/1/15 - 6/30/16	1.884	1.142	1.103	1.057	1.051	1.042	1.034																								
7/1/16 - 6/30/17	1.979	1.170	1.073	1.025	1.026	1.020																									
7/1/17 - 6/30/18	1.900	1.188	1.074	1.064	1.032																										
7/1/18 - 6/30/19	2.163	1.140	1.157	1.030																											
7/1/19 - 6/30/20	1.451	1.094	1.037																												
7/1/20 - 6/30/21	2.020	1.164																													
7/1/21 - 6/30/22	1.469																														
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																															
Last 3 Wtd Avg	1.664	1.137	1.097	1.038	1.037	1.030	1.031	1.032	1.025	1.016	1.020	1.013	1.004	1.002	1.006	1.008	1.009	1.007	1.012	1.005	1.000	1.006	1.006	1.003	1.001	1.000	1.000				
Last 5 Wtd Avg	1.815	1.155	1.092	1.054	1.037	1.028	1.025	1.031	1.025	1.025	1.015	1.009	1.006	1.008	1.010	1.022	1.011	1.005	1.008	1.016	1.006	1.013	1.006	1.002	1.001						
Last 9 Wtd Avg	1.894	1.145	1.083	1.046	1.033	1.031	1.031	1.026	1.019	1.018	1.015	1.015	1.010	1.011	1.008	1.019	1.012	1.011	1.013	1.011	1.004										
Last 12 Wtd Avg	1.897	1.136	1.073	1.045	1.030	1.027	1.026	1.025	1.019	1.021	1.014	1.014	1.012	1.011	1.011	1.016	1.011	1.010													
All Per Wtd Avg	2.055	1.153	1.077	1.046	1.032	1.033	1.035	1.024	1.018	1.019	1.013	1.015	1.012	1.011	1.010	1.015	1.011	1.010	1.012	1.010	1.004	1.008	1.005	1.002	1.001	1.000	1.000	1.001	1.000		
Industry																															
Age-to-Age	1.952	1.143	1.054	1.022	1.017	1.007	1.012	1.008	1.009	1.008	1.007	1.008	1.007	1.008	1.007	1.007	1.008	1.007	1.004	1.004	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.004	1.004	
Age-to-Ult	2.959	1.516	1.326	1.258	1.231	1.210	1.202	1.188	1.179	1.168	1.159	1.151	1.142	1.134	1.125	1.117	1.109	1.100	1.092	1.088	1.083	1.078	1.073	1.068	1.063	1.058	1.052	1.047	1.043	1.038	1.034
Prior Selected																															
Age-to-Age	1.909	1.151	1.105	1.057	1.035	1.030	1.029	1.024	1.023	1.022	1.019	1.018	1.014	1.014	1.013	1.012	1.012	1.008	1.007	1.007	1.006	1.005	1.005	1.004	1.002	1.000	1.003	1.003	1.003	1.003	
Age-to-Ult	3.667	1.921	1.669	1.511	1.430	1.381	1.341	1.304	1.273	1.244	1.217	1.195	1.174	1.157	1.142	1.127	1.114	1.101	1.092	1.084	1.076	1.070	1.065	1.060	1.055	1.053	1.053	1.049	1.045	1.042	1.039
Selected																															
Age-to-Age	1.815	1.155	1.092	1.054	1.037	1.031	1.028	1.025	1.025	1.025	1.022	1.016	1.015	1.013	1.011	1.010	1.009	1.008	1.008	1.006	1.006	1.006	1.005	1.002	1.001	1.002	1.003	1.003	1.003	1.003	
Age-to-Ult	3.454	1.903	1.647	1.508	1.431	1.380	1.338	1.302	1.269	1.238	1.208	1.183	1.165	1.147	1.132	1.120	1.109	1.100	1.091	1.082	1.075	1.069	1.063	1.058	1.055	1.054	1.052	1.049	1.045	1.042	1.039

Commonwealth of Massachusetts
Department of Mental Health
DMH - Medical

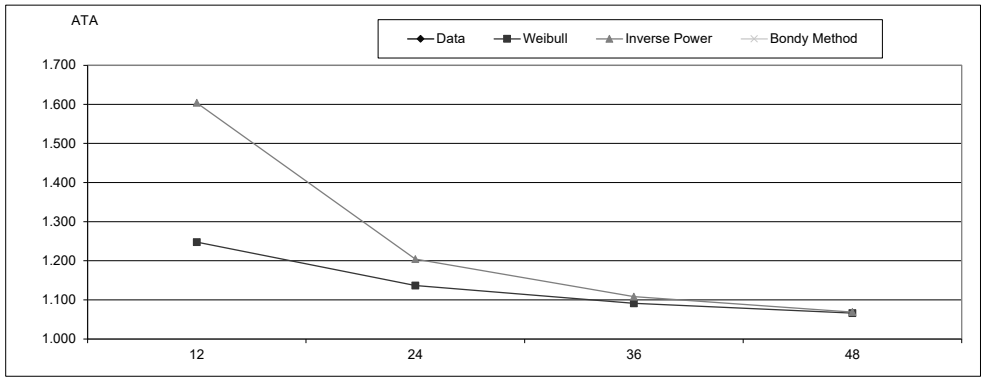
Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

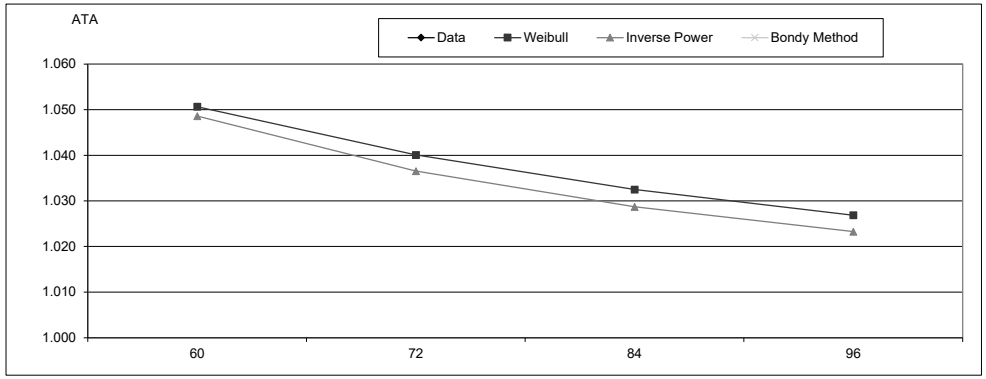
Curve Fitting Methods
Paid Loss & ALAE

Tail at Period: 31 (To display in table)
Cut-off point:(<=Tail & <51) 50 (to run-out pattern)

Summary of Curve Fitting Methods

Method	Tail	R^2
Weibull	**1.023**	**0.948**
Inverse Power	**1.039**	**0.882**
Bondy Method		**N/A**





				Weibull		Inverse Power		Bondy Method			
									Sel. Decay Ratio=		
PERIOD	AGE	ATA	Use	**ATA***	**ATU***	**ATA***	**ATU***	Ln(ATA)	Decay	**ATA***	**ATU***
1	12	0.000	Exclude	**1.248**	2.324	**1.604**	3.201				
2	24	1.155	Include	**1.136**	1.862	**1.204**	1.995				
3	36	1.092	Include	**1.091**	1.639	**1.108**	1.657				
4	48	1.054	Include	**1.066**	1.502	**1.069**	1.495				
5	60	1.037	Include	**1.051**	1.409	**1.049**	1.399				
6	72	1.031	Include	**1.040**	1.341	**1.037**	1.334				
7	84	1.028	Include	**1.033**	1.289	**1.029**	1.287				
8	96	1.025	Include	**1.027**	1.248	**1.023**	1.251				
9	108	1.025	Include	**1.023**	1.216	**1.019**	1.223				
10	120	1.025	Include	**1.019**	1.189	**1.016**	1.199				
11	132	1.022	Include	**1.016**	1.167	**1.014**	1.180				
12	144	1.016	Include	**1.014**	1.148	**1.012**	1.164				
13	156	1.015	Include	**1.012**	1.132	**1.011**	1.149				
14	168	1.013	Include	**1.011**	1.118	**1.010**	1.137				
15	180	1.011	Include	**1.010**	1.106	**1.009**	1.126				
16	192	1.010	Include	**1.009**	1.095	**1.008**	1.116				
17	204	1.009	Include	**1.008**	1.086	**1.007**	1.108				
18	216	1.008	Include	**1.007**	1.078	**1.007**	1.100				
19	228	1.008	Include	**1.006**	1.071	**1.006**	1.093				
20	240	1.006	Include	**1.005**	1.064	**1.006**	1.086				
21	252	1.006	Include	**1.005**	1.058	**1.005**	1.080				
22	264	1.006	Include	**1.004**	1.053	**1.005**	1.075				
23	276	1.005	Include	**1.004**	1.048	**1.004**	1.070				
24	288	1.002	Include	**1.004**	1.044	**1.004**	1.065				
25	300	1.001	Include	**1.003**	1.040	**1.004**	1.060				
26	312	1.002	Include	**1.003**	1.037	**1.004**	1.056				
27	324	0.000	Exclude	**1.003**	1.034	**1.003**	1.052				
28	336	0.000	Exclude	**1.003**	1.031	**1.003**	1.049				
29	348	0.000	Exclude	**1.002**	1.028	**1.003**	1.045				
30	360	0.000	Exclude	**1.002**	1.025	**1.003**	1.042				
31	372	0.000	Exclude	**1.002**	1.023	**1.003**	1.039				
32	384	0.000	Exclude	**1.002**	1.021	**1.003**	1.036				
33	396	0.000	Exclude	**1.002**	1.019	**1.003**	1.033				
34	408	0.000	Exclude	**1.002**	1.017	**1.002**	1.031				
35	420	0.000	Exclude	**1.002**	1.016	**1.002**	1.028				
36	432	0.000	Exclude	**1.001**	1.014	**1.002**	1.026				
37	444	0.000	Exclude	**1.001**	1.013	**1.002**	1.024				
38	456	0.000	Exclude	**1.001**	1.011	**1.002**	1.022				
39	468	0.000	Exclude	**1.001**	1.010	**1.002**	1.019				
40	480	0.000	Exclude	**1.001**	1.009	**1.002**	1.017				
41	492	0.000	Exclude	**1.001**	1.008	**1.002**	1.016				
42	504	0.000	Exclude	**1.001**	1.007	**1.002**	1.014				
43	516	0.000	Exclude	**1.001**	1.006	**1.002**	1.012				
44	528	0.000	Exclude	**1.001**	1.005	**1.002**	1.010				
45	540	0.000	Exclude	**1.001**	1.004	**1.002**	1.009				
46	552	0.000	Exclude	**1.001**	1.003	**1.002**	1.007				
47	564	0.000	Exclude	**1.001**	1.003	**1.001**	1.006				
48	576	0.000	Exclude	**1.001**	1.002	**1.001**	1.004				
49	588	0.000	Exclude	**1.001**	1.001	**1.001**	1.003				
50	600	0.000	Exclude	**1.001**	1.001	**1.001**	1.001				

Unpaid Claim Analysis as of 06/30/2023

Ultimate Claim Count Development

Accident Year	Age of Counts @ 06/30/2023	Payroll (00)'s	Reported Claim Counts @ 06/30/2023	Reported Count Dev Factor	Indicated Ultimate Claim Counts	Selected Ultimate Claim Counts	Selected Ultimate Frequency	Selected Ultimate Frequency (Inflation-Adjusted)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	372.0		42	1.000	42			
7/1/93 - 6/30/94	360.0	1,730,750	4	1.000	4		0.00%	0.00%
7/1/94 - 6/30/95	348.0	1,783,170	3	1.000	3		0.00%	0.00%
7/1/95 - 6/30/96	336.0	1,759,960	2	1.000	2		0.00%	0.00%
7/1/96 - 6/30/97	324.0	1,900,830	4	1.000	4		0.00%	0.00%
7/1/97 - 6/30/98	312.0	1,772,780	2	1.000	2		0.00%	0.00%
7/1/98 - 6/30/99	300.0	1,890,800	2	1.000	2		0.00%	0.00%
7/1/99 - 6/30/00	288.0	1,944,940	3	1.000	3		0.00%	0.00%
7/1/00 - 6/30/01	276.0	2,015,680	3	1.000	3		0.00%	0.00%
7/1/01 - 6/30/02	264.0	2,031,050	3	1.000	3		0.00%	0.00%
7/1/02 - 6/30/03	252.0	2,025,150	4	1.000	4		0.00%	0.00%
7/1/03 - 6/30/04	240.0	1,895,880	6	1.000	6		0.00%	0.00%
7/1/04 - 6/30/05	228.0	1,869,900	9	1.000	9		0.00%	0.00%
7/1/05 - 6/30/06	216.0	1,932,540	5	1.000	5		0.00%	0.00%
7/1/06 - 6/30/07	204.0	2,033,590	6	1.000	6		0.00%	0.00%
7/1/07 - 6/30/08	192.0	2,120,830	10	1.000	10		0.00%	0.00%
7/1/08 - 6/30/09	180.0	2,046,790	7	1.000	7		0.00%	0.00%
7/1/09 - 6/30/10	168.0	1,846,880	13	1.000	13		0.00%	0.00%
7/1/10 - 6/30/11	156.0	1,696,890	20	1.000	20		0.00%	0.00%
7/1/11 - 6/30/12	144.0	1,773,990	76	1.000	76		0.00%	0.00%
7/1/12 - 6/30/13	132.0	1,892,520	163	1.000	163	163	86.13%	64.09%
7/1/13 - 6/30/14	120.0	1,998,760	199	1.000	199	199	99.56%	76.31%
7/1/14 - 6/30/15	108.0	2,137,000	280	1.000	280	280	131.02%	103.43%
7/1/15 - 6/30/16	96.0	2,118,290	251	1.000	251	251	118.49%	96.34%
7/1/16 - 6/30/17	84.0	2,030,850	218	1.000	218	218	107.34%	89.90%
7/1/17 - 6/30/18	72.0	2,039,250	228	1.000	228	228	111.81%	96.44%
7/1/18 - 6/30/19	60.0	2,180,600	209	1.000	209	209	95.85%	85.16%
7/1/19 - 6/30/20	48.0	2,224,960	211	1.000	211	211	94.83%	86.79%
7/1/20 - 6/30/21	36.0	2,221,021	205	1.001	205	205	92.35%	87.05%
7/1/21 - 6/30/22	24.0	2,383,142	143	1.002	143	143	60.13%	58.38%
7/1/22 - 6/30/23	12.0	2,460,536	159	1.056	168	171	69.53%	69.53%
Total		59,759,329	2,490		2,499	2,279		

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1)
(3) Provided by Entity
(4) Provided by Entity
(5) From Section II, Exhibit II, Sheet 14
(6) = (4) x (5)
(7) Selected by Deloitte Consulting LLP
(8) = (7) / (3)
(9) = (7) / [(3) x Section II, Exhibit II, Sheet 8, Column (3)]

Commonwealth of Massachusetts
Department of Mental Health
DMH - Medical

Section II
Exhibit II
Sheet 14

Unpaid Claim Analysis as of 06/30/2023

Reported Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																															42	42
7/1/93 - 6/30/94																														4		4
7/1/94 - 6/30/95																													3			3
7/1/95 - 6/30/96																												2				2
7/1/96 - 6/30/97																											4					4
7/1/97 - 6/30/98																										2						2
7/1/98 - 6/30/99																									2							2
7/1/99 - 6/30/00																								3								3
7/1/00 - 6/30/01																							3									3
7/1/01 - 6/30/02																						3										3
7/1/02 - 6/30/03																					4											4
7/1/03 - 6/30/04																				6												6
7/1/04 - 6/30/05																			9													9
7/1/05 - 6/30/06																		5														5
7/1/06 - 6/30/07																	6															6
7/1/07 - 6/30/08																10																10
7/1/08 - 6/30/09															7																	7
7/1/09 - 6/30/10														13																		13
7/1/10 - 6/30/11													20																			20
7/1/11 - 6/30/12												76																				76
7/1/12 - 6/30/13	156	164	164	164	163	163	163	163	163	163	163																					163
7/1/13 - 6/30/14	185	198	198	198	198	198	198	199	199	199																						199
7/1/14 - 6/30/15	265	277	278	279	280	280	280	280	280																							280
7/1/15 - 6/30/16	244	251	251	251	251	251	251	251																								251
7/1/16 - 6/30/17	207	216	217	217	217	218	218																									218
7/1/17 - 6/30/18	212	227	228	228	228	228																										228
7/1/18 - 6/30/19	199	208	208	208	209																											209
7/1/19 - 6/30/20	199	211	211	211																												211
7/1/20 - 6/30/21	188	205	205																													205
7/1/21 - 6/30/22	137	143																														143
7/1/22 - 6/30/23	159																															159
																																2,490

Accident Year	Age-to-Age Development Factors																															
	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
7/1/98 - 6/30/99																																
7/1/99 - 6/30/00																																
7/1/00 - 6/30/01																																
7/1/01 - 6/30/02																																
7/1/02 - 6/30/03																																
7/1/03 - 6/30/04																																
7/1/04 - 6/30/05																																
7/1/05 - 6/30/06																																
7/1/06 - 6/30/07																																
7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	1.051	1.000	1.000	0.994	1.000	1.000	1.000	1.000	1.000	1.000																						
7/1/13 - 6/30/14	1.070	1.000	1.000	1.000	1.000	1.000	1.005	1.000	1.000																							
7/1/14 - 6/30/15	1.045	1.004	1.004	1.004	1.000	1.000	1.000	1.000																								
7/1/15 - 6/30/16	1.029	1.000	1.000	1.000	1.000	1.000	1.000																									
7/1/16 - 6/30/17	1.043	1.005	1.000	1.000	1.005	1.000																										
7/1/17 - 6/30/18	1.071	1.004	1.000	1.000	1.000																											
7/1/18 - 6/30/19	1.045	1.000	1.000	1.005																												
7/1/19 - 6/30/20	1.060	1.000	1.000																													
7/1/20 - 6/30/21	1.090	1.000																														
7/1/21 - 6/30/22	1.044																															
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																																
Last 3 Wtd Avg	1.067	1.000	1.000	1.002	1.001	1.000	1.001	1.000																								
Last 4 Wtd Avg	1.061	1.001	1.000	1.001	1.001	1.000	1.001																									
Last 5 Wtd Avg	1.063	1.002	1.000	1.002	1.001	1.000																										
All Per Wtd Avg	1.054	1.002	1.001	1.001	1.001	1.000	1.001	1.000	1.000	1.000																						
Average ex Hi/Lo	1.054	1.001	1.000	1.001	1.000	1.000	1.000	1.000																								
Prior Selected																																
Age-to-Age	1.055	1.002	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	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		
Age-to-Ult	1.057	1.002	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	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	
Selected																																
Age-to-Age	1.054	1.002	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	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		
Age-to-Ult	1.056	1.002	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	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	

Commonwealth of Massachusetts
Department of Mental Health
DMH - Medical

Section II
Exhibit II
Sheet 15

Unpaid Claim Analysis as of 06/30/2023

Reported Counts to Payroll (00)'s

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02		1,730,750
7/1/94 - 6/30/95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02			1,783,170
7/1/95 - 6/30/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01				1,759,960
7/1/96 - 6/30/97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02					1,900,830
7/1/97 - 6/30/98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01						1,772,780
7/1/98 - 6/30/99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01							1,890,800
7/1/99 - 6/30/00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02								1,944,940
7/1/00 - 6/30/01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01									2,015,680
7/1/01 - 6/30/02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01										2,031,050
7/1/02 - 6/30/03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02											2,025,150
7/1/03 - 6/30/04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03												1,895,880
7/1/04 - 6/30/05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05													1,869,900
7/1/05 - 6/30/06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03														1,932,540
7/1/06 - 6/30/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03															2,033,590
7/1/07 - 6/30/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05																2,120,830
7/1/08 - 6/30/09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03																	2,046,790
7/1/09 - 6/30/10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07																		1,846,880
7/1/10 - 6/30/11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12																			1,696,890
7/1/11 - 6/30/12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43																				1,773,990
7/1/12 - 6/30/13	0.82	0.87	0.87	0.87	0.86	0.86	0.86	0.86	0.86	0.86	0.86																					1,892,520
7/1/13 - 6/30/14	0.93	0.99	0.99	0.99	0.99	0.99	0.99	1.00	1.00	1.00																						1,998,760
7/1/14 - 6/30/15	1.24	1.30	1.30	1.31	1.31	1.31	1.31	1.31	1.31																							2,137,000
7/1/15 - 6/30/16	1.15	1.18	1.18	1.18	1.18	1.18	1.18	1.18																								2,118,290
7/1/16 - 6/30/17	1.02	1.06	1.07	1.07	1.07	1.07	1.07																									2,030,850
7/1/17 - 6/30/18	1.04	1.11	1.12	1.12	1.12	1.12																										2,039,250
7/1/18 - 6/30/19	0.91	0.95	0.95	0.95	0.96																											2,180,600
7/1/19 - 6/30/20	0.89	0.95	0.95	0.95																												2,224,960
7/1/20 - 6/30/21	0.85	0.92	0.92																													2,221,021
7/1/21 - 6/30/22	0.57	0.60																														2,383,142
7/1/22 - 6/30/23	0.65																															2,460,536

Commonwealth of Massachusetts
Department of Mental Health
DMH - Medical

Section II
Exhibit II
Sheet 16

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss & ALAE Rates

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.11	0.22	0.24	0.25	0.26	0.27	0.28	0.30	0.31	0.32	0.34	0.34	0.35	0.35	0.36	0.36	0.36	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.38	0.38	0.38	0.38	0.38	0.38		1,730,750
7/1/94 - 6/30/95	0.12	0.23	0.29	0.32	0.34	0.35	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.44	0.45	0.46	0.46	0.47	0.47	0.47	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48			1,783,170
7/1/95 - 6/30/96	0.09	0.33	0.37	0.39	0.40	0.41	0.41	0.42	0.42	0.43	0.43	0.44	0.44	0.45	0.45	0.45	0.45	0.45	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46				1,759,960
7/1/96 - 6/30/97	0.07	0.16	0.19	0.20	0.22	0.23	0.24	0.25	0.26	0.26	0.26	0.26	0.27	0.27	0.27	0.28	0.28	0.28	0.28	0.29	0.29	0.29	0.30	0.31	0.31	0.31	0.31					1,900,830
7/1/97 - 6/30/98	0.09	0.19	0.22	0.24	0.25	0.26	0.28	0.28	0.28	0.28	0.28	0.28	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29						1,772,780
7/1/98 - 6/30/99	0.09	0.16	0.18	0.19	0.21	0.23	0.25	0.28	0.30	0.31	0.31	0.31	0.32	0.34	0.35	0.36	0.38	0.40	0.43	0.45	0.48	0.49	0.49	0.50	0.50							1,890,800
7/1/99 - 6/30/00	0.10	0.22	0.25	0.27	0.28	0.29	0.30	0.30	0.30	0.30	0.30	0.30	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31								1,944,940
7/1/00 - 6/30/01	0.12	0.21	0.25	0.29	0.30	0.31	0.34	0.36	0.36	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37									2,015,680
7/1/01 - 6/30/02	0.09	0.18	0.23	0.25	0.25	0.26	0.26	0.28	0.29	0.29	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30										2,031,050
7/1/02 - 6/30/03	0.05	0.19	0.23	0.25	0.28	0.28	0.29	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.41	0.42	0.43	0.44	0.44											2,025,150
7/1/03 - 6/30/04	0.14	0.35	0.45	0.54	0.57	0.59	0.61	0.63	0.65	0.66	0.67	0.69	0.71	0.72	0.74	0.75	0.77	0.78	0.78	0.79												1,895,880
7/1/04 - 6/30/05	0.12	0.34	0.39	0.41	0.43	0.43	0.45	0.46	0.47	0.48	0.49	0.49	0.49	0.49	0.50	0.50	0.50	0.50	0.50													1,869,900
7/1/05 - 6/30/06	0.13	0.27	0.35	0.37	0.38	0.39	0.40	0.40	0.41	0.42	0.43	0.44	0.45	0.46	0.46	0.47	0.48	0.49														1,932,540
7/1/06 - 6/30/07	0.13	0.28	0.31	0.32	0.32	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33															2,033,590
7/1/07 - 6/30/08	0.13	0.26	0.28	0.30	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31																2,120,830
7/1/08 - 6/30/09	0.15	0.28	0.29	0.30	0.31	0.32	0.34	0.37	0.39	0.40	0.42	0.43	0.43	0.43	0.43																	2,046,790
7/1/09 - 6/30/10	0.12	0.24	0.25	0.26	0.27	0.27	0.28	0.29	0.29	0.30	0.30	0.31	0.31	0.31																		1,846,880
7/1/10 - 6/30/11	0.20	0.34	0.39	0.41	0.42	0.44	0.46	0.47	0.49	0.50	0.51	0.53	0.54																			1,696,890
7/1/11 - 6/30/12	0.13	0.25	0.29	0.29	0.30	0.31	0.31	0.32	0.33	0.33	0.34	0.34																				1,773,990
7/1/12 - 6/30/13	0.12	0.26	0.29	0.29	0.30	0.30	0.31	0.31	0.31	0.31	0.31																					1,892,520
7/1/13 - 6/30/14	0.11	0.23	0.27	0.29	0.30	0.31	0.32	0.33	0.35	0.37																						1,998,760
7/1/14 - 6/30/15	0.16	0.32	0.35	0.40	0.44	0.46	0.47	0.48	0.49																							2,137,000
7/1/15 - 6/30/16	0.21	0.40	0.46	0.51	0.54	0.57	0.59	0.61																								2,118,290
7/1/16 - 6/30/17	0.22	0.44	0.51	0.55	0.56	0.58	0.59																									2,030,850
7/1/17 - 6/30/18	0.17	0.32	0.38	0.40	0.43	0.44																										2,039,250
7/1/18 - 6/30/19	0.15	0.32	0.36	0.42	0.43																											2,180,600
7/1/19 - 6/30/20	0.14	0.21	0.23	0.24																												2,224,960
7/1/20 - 6/30/21	0.15	0.31	0.36																													2,221,021
7/1/21 - 6/30/22	0.11	0.16																														2,383,142
7/1/22 - 6/30/23	0.13																															2,460,536

Commonwealth of Massachusetts
Department of Mental Health
DMH - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Settlement Rates (Closed Claim Count / Ultimate Claim Count)

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development 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	348	360	372	As of 6/30/2023
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
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7/1/99 - 6/30/00																																
7/1/00 - 6/30/01																																
7/1/01 - 6/30/02																																
7/1/02 - 6/30/03																																
7/1/03 - 6/30/04																																
7/1/04 - 6/30/05																																
7/1/05 - 6/30/06																																
7/1/06 - 6/30/07																																
7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	0.00	0.46	0.85	0.93	0.94	0.96	0.97	0.97	0.99	0.99	0.99																					0.99
7/1/13 - 6/30/14	0.00	0.54	0.86	0.90	0.93	0.95	0.95	0.96	0.97	0.97																						0.97
7/1/14 - 6/30/15	0.00	0.60	0.90	0.95	0.94	0.95	0.95	0.98	0.98																							0.98
7/1/15 - 6/30/16	0.00	0.55	0.83	0.90	0.92	0.94	0.96	0.98																								0.98
7/1/16 - 6/30/17	0.00	0.53	0.83	0.87	0.92	0.93	0.97																									0.97
7/1/17 - 6/30/18	0.00	0.57	0.88	0.93	0.95	0.96																										0.96
7/1/18 - 6/30/19	0.00	0.54	0.85	0.91	0.94																											0.94
7/1/19 - 6/30/20	0.00	0.71	0.91	0.94																												0.94
7/1/20 - 6/30/21	0.00	0.53	0.81																													0.81
7/1/21 - 6/30/22	0.00	0.66																														0.66
7/1/22 - 6/30/23	0.00																															0.00

Commonwealth of Massachusetts
Department of Mental Health
DMH - Medical

Section II
Exhibit II
Sheet 18

Unpaid Claim Analysis as of 06/30/2023

Open Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993	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	0	0	0	10	10
7/1/93 - 6/30/94	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	0	0	1		1
7/1/94 - 6/30/95	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	0	0			0
7/1/95 - 6/30/96	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	1				1
7/1/96 - 6/30/97	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					0
7/1/97 - 6/30/98	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
7/1/98 - 6/30/99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1							1
7/1/99 - 6/30/00	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
7/1/00 - 6/30/01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									0
7/1/01 - 6/30/02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										0
7/1/02 - 6/30/03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2											2
7/1/03 - 6/30/04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3												3
7/1/04 - 6/30/05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2													2
7/1/05 - 6/30/06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1														1
7/1/06 - 6/30/07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															0
7/1/07 - 6/30/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																0
7/1/08 - 6/30/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2																	2
7/1/09 - 6/30/10	0	0	0	0	0	0	0	0	0	0	0	0	0	1																		1
7/1/10 - 6/30/11	0	0	0	0	0	0	0	0	0	0	0	0	4																			4
7/1/11 - 6/30/12	0	0	0	0	0	0	0	0	0	0	0	3																				3
7/1/12 - 6/30/13	156	89	25	13	10	6	5	5	2	1	1																					1
7/1/13 - 6/30/14	185	91	26	18	12	9	9	8	6	6																						6
7/1/14 - 6/30/15	265	110	27	13	17	15	14	7	6																							6
7/1/15 - 6/30/16	244	114	43	26	20	14	9	6																								6
7/1/16 - 6/30/17	207	101	37	28	17	15	7																									7
7/1/17 - 6/30/18	212	97	28	17	11	8																										8
7/1/18 - 6/30/19	199	95	31	18	13																											13
7/1/19 - 6/30/20	199	61	20	13																												13
7/1/20 - 6/30/21	188	96	39																													39
7/1/21 - 6/30/22	137	49																														49
7/1/22 - 6/30/23	159																															159
																																338

Commonwealth of Massachusetts
Department of Corrections
DOC - Indemnity (Including Lump Sum)

Section III
Exhibit I
Sheet 1

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Unpaid Loss Estimates

Accident Year	Payroll (00)'s	Retention	Unlimited Paid Loss @ 06/30/2023	Unlimited Reported Loss @ 06/30/2023	Ultimate Loss Low	Ultimate Loss High	Indicated Total Unpaid Loss Estimates Low	Indicated Total Unpaid Loss Estimates High	Case Reserves	Indicated IBNR Estimate Low	Indicated IBNR Estimate High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993		Unlimited	62,655,959	62,655,959	67,564,189	68,654,907	4,908,230	5,998,948	0	4,908,230	5,998,948
7/1/93 - 6/30/94	1,859,460	Unlimited	5,314,656	5,314,656	5,572,500	5,599,700	257,844	285,044	0	257,844	285,044
7/1/94 - 6/30/95	1,940,510	Unlimited	6,155,200	6,155,200	6,459,600	6,491,600	304,400	336,400	0	304,400	336,400
7/1/95 - 6/30/96	2,052,620	Unlimited	5,389,787	5,389,787	5,661,700	5,690,300	271,913	300,513	0	271,913	300,513
7/1/96 - 6/30/97	2,340,730	Unlimited	6,031,973	6,031,973	6,342,900	6,375,600	310,927	343,627	0	310,927	343,627
7/1/97 - 6/30/98	2,218,650	Unlimited	8,907,620	8,907,620	9,377,400	9,426,800	469,780	519,180	0	469,780	519,180
7/1/98 - 6/30/99	2,560,710	Unlimited	7,854,004	7,854,004	8,278,400	8,323,100	424,396	469,096	0	424,396	469,096
7/1/99 - 6/30/00	2,684,860	Unlimited	8,170,937	8,170,937	8,624,100	8,671,800	453,163	500,863	0	453,163	500,863
7/1/00 - 6/30/01	2,791,820	Unlimited	10,541,879	10,541,879	11,143,100	11,206,300	601,221	664,421	0	601,221	664,421
7/1/01 - 6/30/02	2,830,700	Unlimited	8,958,777	8,958,777	9,485,200	9,540,600	526,423	581,823	0	526,423	581,823
7/1/02 - 6/30/03	2,898,460	Unlimited	8,740,322	8,740,322	9,270,800	9,326,600	530,478	586,278	0	530,478	586,278
7/1/03 - 6/30/04	2,937,710	Unlimited	7,892,961	7,892,961	8,387,200	8,439,200	494,239	546,239	0	494,239	546,239
7/1/04 - 6/30/05	2,913,820	Unlimited	8,281,821	8,281,821	8,823,700	8,880,700	541,879	598,879	0	541,879	598,879
7/1/05 - 6/30/06	2,947,090	Unlimited	5,834,073	5,834,073	6,233,800	6,275,900	399,727	441,827	0	399,727	441,827
7/1/06 - 6/30/07	2,896,030	Unlimited	5,352,302	5,352,302	5,738,000	5,778,600	385,698	426,298	0	385,698	426,298
7/1/07 - 6/30/08	3,546,680	Unlimited	5,139,082	5,139,082	5,529,000	5,570,100	389,918	431,018	0	389,918	431,018
7/1/08 - 6/30/09	3,324,130	Unlimited	4,229,564	4,229,564	4,567,100	4,602,700	337,536	373,136	0	337,536	373,136
7/1/09 - 6/30/10	3,363,380	Unlimited	3,270,072	3,270,072	3,545,900	3,574,900	275,828	304,828	0	275,828	304,828
7/1/10 - 6/30/11	3,337,830	Unlimited	3,560,523	3,560,523	3,878,100	3,911,500	317,577	350,977	0	317,577	350,977
7/1/11 - 6/30/12	3,481,870	Unlimited	2,710,610	2,710,610	2,972,000	2,999,600	261,390	288,990	0	261,390	288,990
7/1/12 - 6/30/13	3,680,220	Unlimited	2,450,234	2,450,234	2,708,600	2,735,800	258,366	285,566	0	258,366	285,566
7/1/13 - 6/30/14	3,905,280	Unlimited	3,092,357	3,092,357	3,449,100	3,486,700	356,743	394,343	0	356,743	394,343
7/1/14 - 6/30/15	4,027,500	Unlimited	3,938,165	3,938,165	4,442,900	4,496,000	504,735	557,835	0	504,735	557,835
7/1/15 - 6/30/16	4,000,130	Unlimited	4,507,772	4,507,772	5,138,400	5,233,400	630,628	725,628	0	630,628	725,628
7/1/16 - 6/30/17	3,525,650	Unlimited	5,748,712	5,748,712	6,671,000	6,809,800	922,288	1,061,088	0	922,288	1,061,088
7/1/17 - 6/30/18	3,476,210	Unlimited	3,949,404	3,949,404	4,721,600	4,837,900	772,196	888,496	0	772,196	888,496
7/1/18 - 6/30/19	3,573,240	Unlimited	4,398,802	4,398,802	5,514,500	5,682,500	1,115,698	1,283,698	0	1,115,698	1,283,698
7/1/19 - 6/30/20	3,687,200	Unlimited	6,449,839	6,449,839	6,853,800	6,914,600	403,961	464,761	0	403,961	464,761
7/1/20 - 6/30/21	3,601,119	Unlimited	3,456,656	3,456,656	5,420,000	5,856,000	1,963,344	2,399,344	0	1,963,344	2,399,344
7/1/21 - 6/30/22	3,561,252	Unlimited	1,882,443	1,882,443	4,751,000	5,388,000	2,868,557	3,505,557	0	2,868,557	3,505,557
7/1/22 - 6/30/23	3,478,917	Unlimited	818,934	818,934	4,320,000	5,097,000	3,501,066	4,278,066	0	3,501,066	4,278,066
Total	93,443,779		225,685,441	225,685,441	251,445,589	255,878,207	25,760,148	30,192,766	0	25,760,148	30,192,766

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	Provided by Entity
(6)	From Section III, Exhibit I, Sheet 6, Column (11)
(7)	From Section III, Exhibit I, Sheet 6, Column (12)
(8)	= (6) - (4)
(9)	= (7) - (4)
(10)	= (5) - (4)
(11)	= (8) - (10)
(12)	= (9) - (10)

Commonwealth of Massachusetts
Department of Corrections
DOC - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Short-Term Portion

Accident Year	Age of Losses @ 06/30/2023	Selected Paid Test LDF @ 06/30/2023	Implied Paid LDF	Paid LDF	Cumulative Percent Paid	Incremental Percent Paid	Average Total Unpaid Loss Estimate	Undiscounted Cash Flow of Payments 2024
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
						0.47%		
Prior to 7/1/1993	372.0	1.050	1.087	1.050	95.22%	0.08%	5,453,589	533,425
7/1/93 - 6/30/94	360.0	1.051	1.051	1.051	95.14%	0.09%	271,444	4,583
7/1/94 - 6/30/95	348.0	1.052	1.052	1.052	95.05%	0.10%	320,400	5,725
7/1/95 - 6/30/96	336.0	1.053	1.053	1.053	94.96%	0.10%	286,213	5,421
7/1/96 - 6/30/97	324.0	1.054	1.054	1.054	94.85%	0.11%	327,277	6,581
7/1/97 - 6/30/98	312.0	1.056	1.056	1.056	94.74%	0.12%	494,480	10,574
7/1/98 - 6/30/99	300.0	1.057	1.057	1.057	94.62%	0.13%	446,746	10,177
7/1/99 - 6/30/00	288.0	1.058	1.058	1.058	94.48%	0.15%	477,013	11,598
7/1/00 - 6/30/01	276.0	1.060	1.060	1.060	94.34%	0.16%	632,821	16,455
7/1/01 - 6/30/02	264.0	1.062	1.062	1.062	94.17%	0.18%	554,123	15,442
7/1/02 - 6/30/03	252.0	1.064	1.064	1.064	93.99%	0.18%	558,378	16,716
7/1/03 - 6/30/04	240.0	1.066	1.066	1.066	93.82%	0.26%	520,239	15,006
7/1/04 - 6/30/05	228.0	1.069	1.069	1.069	93.56%	0.28%	570,379	23,007
7/1/05 - 6/30/06	216.0	1.072	1.072	1.072	93.27%	0.32%	420,777	17,784
7/1/06 - 6/30/07	204.0	1.076	1.076	1.076	92.95%	0.35%	405,998	18,608
7/1/07 - 6/30/08	192.0	1.080	1.080	1.080	92.60%	0.35%	410,468	19,184
7/1/08 - 6/30/09	180.0	1.084	1.084	1.084	92.25%	0.40%	355,336	16,200
7/1/09 - 6/30/10	168.0	1.089	1.089	1.089	91.85%	0.43%	290,328	14,408
7/1/10 - 6/30/11	156.0	1.094	1.094	1.094	91.42%	0.63%	334,277	16,699
7/1/11 - 6/30/12	144.0	1.102	1.102	1.102	90.78%	0.77%	275,190	18,915
7/1/12 - 6/30/13	132.0	1.111	1.111	1.111	90.01%	0.84%	271,966	21,094
7/1/13 - 6/30/14	120.0	1.121	1.121	1.121	89.17%	1.06%	375,543	29,029
7/1/14 - 6/30/15	108.0	1.135	1.135	1.135	88.11%	1.19%	531,285	47,297
7/1/15 - 6/30/16	96.0	1.150	1.150	1.150	86.92%	1.64%	678,128	61,671
7/1/16 - 6/30/17	84.0	1.173	1.173	1.173	85.29%	2.66%	991,688	110,298
7/1/17 - 6/30/18	72.0	1.210	1.210	1.210	82.63%	4.06%	830,346	127,101
7/1/18 - 6/30/19	60.0	1.273	1.273	1.273	78.57%	6.68%	1,199,698	227,148
7/1/19 - 6/30/20	48.0	1.391	1.067	1.391	71.89%	10.58%	434,361	103,199
7/1/20 - 6/30/21	36.0	1.631	1.631	1.631	61.31%	14.80%	2,181,344	596,525
7/1/21 - 6/30/22	24.0	2.150	2.693	2.150	46.51%	24.10%	3,187,057	882,032
7/1/22 - 6/30/23	12.0	4.462	5.750	4.462	22.41%	22.41%	3,889,566	1,208,138
Total							27,976,457	4,210,039

	Undiscounted	Discounted			
Short-Term Portion	15%	28%	(10)	Interest Rate	4%

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1) @ 06/30/2023
(3) From Section III, Exhibit I, Sheet 10, Column (6)
(4) Average Ultimate Loss Divided by Paid Loss From Section III, Exhibit I, Sheet 6
(5) Selected
(6) = 1 / (5)
(7) = (6) from Current Age - (6) from Subsequent Age
(8) From Section III, Exhibit I, Sheet 3
(9) - (9) Based on (5)

Commonwealth of Massachusetts
Department of Corrections
DOC - Indemnity (Including Lump Sum)

Section III
Exhibit I
Sheet 3

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Discounted at (4%) Unpaid Loss Estimate

Accident Year	Indicated Total Unpaid Loss Estimate Low	Indicated Total Unpaid Loss Estimate High	Discount Factor	Discounted Total Unpaid Loss Estimate Low	Discounted Total Unpaid Loss Estimate High
(1)	(2)	(3)	(4)	(5)	(6)
Prior to 7/1/1993	4,908,230	5,998,948	1.000	4,908,230	5,998,948
7/1/93 - 6/30/94	257,844	285,044	0.981	252,837	279,509
7/1/94 - 6/30/95	304,400	336,400	0.944	287,213	317,407
7/1/95 - 6/30/96	271,913	300,513	0.909	247,071	273,058
7/1/96 - 6/30/97	310,927	343,627	0.876	272,322	300,962
7/1/97 - 6/30/98	469,780	519,180	0.845	397,017	438,766
7/1/98 - 6/30/99	424,396	469,096	0.816	346,492	382,987
7/1/99 - 6/30/00	453,163	500,863	0.790	357,903	395,576
7/1/00 - 6/30/01	601,221	664,421	0.765	460,032	508,390
7/1/01 - 6/30/02	526,423	581,823	0.743	390,899	432,037
7/1/02 - 6/30/03	530,478	586,278	0.722	382,993	423,280
7/1/03 - 6/30/04	494,239	546,239	0.702	347,188	383,717
7/1/04 - 6/30/05	541,879	598,879	0.688	372,682	411,884
7/1/05 - 6/30/06	399,727	441,827	0.675	269,736	298,145
7/1/06 - 6/30/07	385,698	426,298	0.664	256,124	283,084
7/1/07 - 6/30/08	389,918	431,018	0.654	255,201	282,101
7/1/08 - 6/30/09	337,536	373,136	0.645	217,826	240,800
7/1/09 - 6/30/10	275,828	304,828	0.638	176,085	194,599
7/1/10 - 6/30/11	317,577	350,977	0.632	200,758	221,872
7/1/11 - 6/30/12	261,390	288,990	0.633	165,581	183,064
7/1/12 - 6/30/13	258,366	285,566	0.638	164,814	182,166
7/1/13 - 6/30/14	356,743	394,343	0.642	228,943	253,073
7/1/14 - 6/30/15	504,735	557,835	0.649	327,794	362,279
7/1/15 - 6/30/16	630,628	725,628	0.657	414,225	476,625
7/1/16 - 6/30/17	922,288	1,061,088	0.670	618,301	711,352
7/1/17 - 6/30/18	772,196	888,496	0.696	537,480	618,429
7/1/18 - 6/30/19	1,115,698	1,283,698	0.728	812,466	934,805
7/1/19 - 6/30/20	403,961	464,761	0.767	309,765	356,388
7/1/20 - 6/30/21	1,963,344	2,399,344	0.804	1,578,230	1,928,707
7/1/21 - 6/30/22	2,868,557	3,505,557	0.830	2,382,046	2,911,010
7/1/22 - 6/30/23	3,501,066	4,278,066	0.855	2,993,512	3,657,869
Total	25,760,148	30,192,766		20,931,767	24,642,890

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From Section III, Exhibit I, Sheet 1, Column (8)
(3) From Section III, Exhibit I, Sheet 1, Column (9)
(4) From Section III, Exhibit I, Sheet 0, Column (8)
(5) = (2) x (4)
(6) = (3) x (4)

Commonwealth of Massachusetts
Department of Corrections
DOC - Indemnity (Including Lump Sum)

Section III
Exhibit I
Sheet 4

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Actual vs Expected - Paid Loss Emergence

Accident Year	Selected Low Ultimate Loss @ 06/30/2022	Selected High Ultimate Loss @ 06/30/2022	Unlimited Paid Loss @ 06/30/2022	Unlimited Paid Loss @ 06/30/2023	Paid LDF @ 06/30/2022	Projected Paid LDF @ 06/30/2023	Method 1 Low Expected Paid Emergence Loss @ 06/30/2023	Method 1 High Expected Paid Emergence Loss @ 06/30/2023	Actual Paid Emergence Loss @ 06/30/2023	Actual - Expected Method 1 Low Paid	Actual - Expected Method 1 High Paid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993	67,139,990	68,219,464	62,194,975	62,655,959	1.055	1.050	482,625	587,979	460,984	(21,641)	(126,995)
7/1/93 - 6/30/94	5,554,200	5,583,800	5,273,081	5,314,656	1.056	1.055	4,247	4,694	41,574	37,328	36,880
7/1/94 - 6/30/95	6,489,100	6,524,200	6,155,200	6,155,200	1.057	1.056	5,370	5,935	0	(5,370)	(5,935)
7/1/95 - 6/30/96	5,687,500	5,718,900	5,389,787	5,389,787	1.058	1.057	5,106	5,645	0	(5,106)	(5,645)
7/1/96 - 6/30/97	6,371,800	6,407,500	6,031,973	6,031,973	1.059	1.058	6,228	6,882	0	(6,228)	(6,882)
7/1/97 - 6/30/98	9,316,700	9,370,000	8,809,863	8,907,620	1.061	1.059	9,943	10,989	97,757	87,814	86,768
7/1/98 - 6/30/99	8,281,500	8,330,000	7,821,316	7,854,004	1.062	1.061	9,684	10,705	32,689	23,004	21,984
7/1/99 - 6/30/00	8,663,600	8,715,400	8,170,937	8,170,937	1.063	1.062	11,146	12,318	0	(11,146)	(12,318)
7/1/00 - 6/30/01	11,194,400	11,263,100	10,541,879	10,541,879	1.065	1.063	15,909	17,584	0	(15,909)	(17,584)
7/1/01 - 6/30/02	9,529,300	9,589,400	8,958,777	8,958,777	1.067	1.065	15,027	16,610	0	(15,027)	(16,610)
7/1/02 - 6/30/03	9,314,400	9,374,800	8,740,322	8,740,322	1.069	1.067	16,380	18,103	0	(16,380)	(18,103)
7/1/03 - 6/30/04	8,433,000	8,489,800	7,892,961	7,892,961	1.072	1.069	20,181	22,303	0	(20,181)	(22,303)
7/1/04 - 6/30/05	8,871,300	8,933,400	8,281,821	8,281,821	1.075	1.072	21,359	23,609	0	(21,359)	(23,609)
7/1/05 - 6/30/06	6,267,100	6,312,700	5,834,073	5,834,073	1.078	1.075	16,499	18,236	0	(16,499)	(18,236)
7/1/06 - 6/30/07	5,694,800	5,738,100	5,283,800	5,352,302	1.082	1.078	17,499	19,342	68,502	51,003	49,160
7/1/07 - 6/30/08	5,501,200	5,544,900	5,086,285	5,139,082	1.086	1.082	17,796	19,670	52,797	35,001	33,127
7/1/08 - 6/30/09	4,579,500	4,617,500	4,218,745	4,229,564	1.090	1.086	15,305	16,918	10,818	(4,487)	(6,099)
7/1/09 - 6/30/10	3,408,600	3,438,200	3,127,495	3,270,072	1.095	1.090	12,545	13,866	142,577	130,032	128,711
7/1/10 - 6/30/11	3,900,900	3,936,700	3,560,523	3,560,523	1.101	1.095	18,540	20,490	0	(18,540)	(20,490)
7/1/11 - 6/30/12	2,999,300	3,029,700	2,710,610	2,710,610	1.112	1.101	26,898	29,730	0	(26,898)	(29,730)
7/1/12 - 6/30/13	2,738,600	2,769,000	2,450,234	2,450,234	1.124	1.112	24,637	27,234	0	(24,637)	(27,234)
7/1/13 - 6/30/14	3,491,500	3,533,500	3,092,357	3,092,357	1.136	1.124	31,276	34,567	0	(31,276)	(34,567)
7/1/14 - 6/30/15	4,464,200	4,545,600	3,923,223	3,938,165	1.148	1.136	39,897	45,901	14,942	(24,956)	(30,959)
7/1/15 - 6/30/16	4,983,700	5,085,500	4,307,204	4,507,772	1.169	1.148	71,908	82,729	200,568	128,660	117,839
7/1/16 - 6/30/17	6,806,600	6,972,900	5,702,006	5,748,712	1.208	1.169	178,822	205,744	46,706	(132,116)	(159,039)
7/1/17 - 6/30/18	4,618,200	4,757,800	3,690,719	3,949,404	1.270	1.208	175,858	202,328	258,685	82,827	56,358
7/1/18 - 6/30/19	5,508,200	5,727,900	4,048,603	4,398,802	1.388	1.270	348,119	400,519	350,198	2,079	(50,320)
7/1/19 - 6/30/20	6,335,000	6,509,000	5,550,157	6,449,839	1.629	1.388	217,087	265,216	899,682	682,594	634,466
7/1/20 - 6/30/21	5,151,000	5,697,000	2,692,944	3,456,656	2.149	1.629	682,626	834,256	763,712	81,085	(70,544)
7/1/21 - 6/30/22	4,908,000	5,785,000	961,748	1,882,443	4.465	2.149	1,227,530	1,500,331	920,696	(306,834)	(579,636)
Total	246,203,190	250,520,764	220,503,621	224,866,507			3,746,047	4,480,432	4,362,885	616,838	(117,547)

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Selected by Deloitte Consulting LLP @ 06/30/2022
(3)	Selected by Deloitte Consulting LLP @ 06/30/2022
(4)	Provided by Entity
(5)	Provided by Entity
(6)	Selected by Deloitte Consulting LLP @ 06/30/2022
(7)	Interpolated From (6)
(8)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((2) - (4))
(9)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((3) - (4))
(10)	= (5) - (4)
(11)	= (10) - (8)
(12)	= (10) - (9)

Commonwealth of Massachusetts
Department of Corrections
DOC - Indemnity (Including Lump Sum)

Section III
Exhibit I
Sheet 5

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Ultimate Loss Runoff

Accident Year	Ultimate Loss @ 06/30/2022 Low	Ultimate Loss @ 06/30/2022 High	Ultimate Loss @ 06/30/2023 Low	Ultimate Loss @ 06/30/2023 High	Deloitte Change Low	Deloitte Change High	Paid Loss @ 06/30/2023	Reported Loss @ 06/30/2023
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	67,139,990	68,219,464	67,564,189	68,654,907	424,199	435,444	62,655,959	62,655,959
7/1/93 - 6/30/94	5,554,200	5,583,800	5,572,500	5,599,700	18,300	15,900	5,314,656	5,314,656
7/1/94 - 6/30/95	6,489,100	6,524,200	6,459,600	6,491,600	(29,500)	(32,600)	6,155,200	6,155,200
7/1/95 - 6/30/96	5,687,500	5,718,900	5,661,700	5,690,300	(25,800)	(28,600)	5,389,787	5,389,787
7/1/96 - 6/30/97	6,371,800	6,407,500	6,342,900	6,375,600	(28,900)	(31,900)	6,031,973	6,031,973
7/1/97 - 6/30/98	9,316,700	9,370,000	9,377,400	9,426,800	60,700	56,800	8,907,620	8,907,620
7/1/98 - 6/30/99	8,281,500	8,330,000	8,278,400	8,323,100	(3,100)	(6,900)	7,854,004	7,854,004
7/1/99 - 6/30/00	8,663,600	8,715,400	8,624,100	8,671,800	(39,500)	(43,600)	8,170,937	8,170,937
7/1/00 - 6/30/01	11,194,400	11,263,100	11,143,100	11,206,300	(51,300)	(56,800)	10,541,879	10,541,879
7/1/01 - 6/30/02	9,529,300	9,589,400	9,485,200	9,540,600	(44,100)	(48,800)	8,958,777	8,958,777
7/1/02 - 6/30/03	9,314,400	9,374,800	9,270,800	9,326,600	(43,600)	(48,200)	8,740,322	8,740,322
7/1/03 - 6/30/04	8,433,000	8,489,800	8,387,200	8,439,200	(45,800)	(50,600)	7,892,961	7,892,961
7/1/04 - 6/30/05	8,871,300	8,933,400	8,823,700	8,880,700	(47,600)	(52,700)	8,281,821	8,281,821
7/1/05 - 6/30/06	6,267,100	6,312,700	6,233,800	6,275,900	(33,300)	(36,800)	5,834,073	5,834,073
7/1/06 - 6/30/07	5,694,800	5,738,100	5,738,000	5,778,600	43,200	40,500	5,352,302	5,352,302
7/1/07 - 6/30/08	5,501,200	5,544,900	5,529,000	5,570,100	27,800	25,200	5,139,082	5,139,082
7/1/08 - 6/30/09	4,579,500	4,617,500	4,567,100	4,602,700	(12,400)	(14,800)	4,229,564	4,229,564
7/1/09 - 6/30/10	3,408,600	3,438,200	3,545,900	3,574,900	137,300	136,700	3,270,072	3,270,072
7/1/10 - 6/30/11	3,900,900	3,936,700	3,878,100	3,911,500	(22,800)	(25,200)	3,560,523	3,560,523
7/1/11 - 6/30/12	2,999,300	3,029,700	2,972,000	2,999,600	(27,300)	(30,100)	2,710,610	2,710,610
7/1/12 - 6/30/13	2,738,600	2,769,000	2,708,600	2,735,800	(30,000)	(33,200)	2,450,234	2,450,234
7/1/13 - 6/30/14	3,491,500	3,533,500	3,449,100	3,486,700	(42,400)	(46,800)	3,092,357	3,092,357
7/1/14 - 6/30/15	4,464,200	4,545,600	4,442,900	4,496,000	(21,300)	(49,600)	3,938,165	3,938,165
7/1/15 - 6/30/16	4,983,700	5,085,500	5,138,400	5,233,400	154,700	147,900	4,507,772	4,507,772
7/1/16 - 6/30/17	6,806,600	6,972,900	6,671,000	6,809,800	(135,600)	(163,100)	5,748,712	5,748,712
7/1/17 - 6/30/18	4,618,200	4,757,800	4,721,600	4,837,900	103,400	80,100	3,949,404	3,949,404
7/1/18 - 6/30/19	5,508,200	5,727,900	5,514,500	5,682,500	6,300	(45,400)	4,398,802	4,398,802
7/1/19 - 6/30/20	6,335,000	6,509,000	6,853,800	6,914,600	518,800	405,600	6,449,839	6,449,839
7/1/20 - 6/30/21	5,151,000	5,697,000	5,420,000	5,856,000	269,000	159,000	3,456,656	3,456,656
7/1/21 - 6/30/22	4,908,000	5,785,000	4,751,000	5,388,000	(157,000)	(397,000)	1,882,443	1,882,443
Total	246,203,190	250,520,764	247,125,589	250,781,207	922,399	260,444	224,866,507	224,866,507

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(3) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(4) From Section III, Exhibit I, Sheet 6, Column (11)
(5) From Section III, Exhibit I, Sheet 6, Column (12)
(6) = (4) - (2)
(7) = (5) - (3)
(8) Provided by Entity
(9) Provided by Entity

Commonwealth of Massachusetts
Department of Corrections
DOC - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Selection of Ultimate Loss

Accident Year	Payroll (00)'s	Unlimited Paid Loss @ 06/30/2023	Unlimited Reported Loss @ 06/30/2023	Ultimate Loss Indications: Paid LDM	Ultimate Loss Indications: Expected Loss	Ultimate Loss Indications: Paid B-F	Ultimate Loss Indications: Frequency Severity	Prior Selected Ultimate Loss: Low	Prior Selected Ultimate Loss: High	Selected Ultimate Loss: Low	Selected Ultimate Loss: High	Ultimate Loss Rates: Low	Ultimate Loss Rates: High	Ultimate Loss Severity: Low	Ultimate Loss Severity: High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Prior to 7/1/1993		62,655,959	62,655,959	65,799,271	0		0	67,139,990	68,219,464	67,564,189	68,654,907				
7/1/93 - 6/30/94	1,859,460	5,314,656	5,314,656	5,586,093	1,374,374	5,381,439	0	5,554,200	5,583,800	5,572,500	5,599,700	3.00	3.01		
7/1/94 - 6/30/95	1,940,510	6,155,200	6,155,200	6,475,584	1,475,335	6,228,193	0	6,489,100	6,524,200	6,459,600	6,491,600	3.33	3.35		
7/1/95 - 6/30/96	2,052,620	5,389,787	5,389,787	5,676,034	1,604,197	5,470,688	0	5,687,500	5,718,900	5,661,700	5,690,300	2.76	2.77		
7/1/96 - 6/30/97	2,340,730	6,031,973	6,031,973	6,359,256	1,883,996	6,128,934	0	6,371,800	6,407,500	6,342,900	6,375,600	2.71	2.72		
7/1/97 - 6/30/98	2,218,650	8,907,620	8,907,620	9,402,077	1,843,613	9,004,576	0	9,316,700	9,370,000	9,377,400	9,426,800	4.23	4.25		
7/1/98 - 6/30/99	2,560,710	7,854,004	7,854,004	8,300,716	2,199,543	7,972,375	0	8,281,500	8,330,000	8,278,400	8,323,100	3.23	3.25		
7/1/99 - 6/30/00	2,684,860	8,170,937	8,170,937	8,647,932	2,392,378	8,302,893	0	8,663,600	8,715,400	8,624,100	8,671,800	3.21	3.23		
7/1/00 - 6/30/01	2,791,820	10,541,879	10,541,879	11,174,699	2,595,764	10,688,877	0	11,194,400	11,263,100	11,143,100	11,206,300	3.99	4.01		
7/1/01 - 6/30/02	2,830,700	8,958,777	8,958,777	9,512,935	2,732,589	9,117,959	0	9,529,300	9,589,400	9,485,200	9,540,600	3.35	3.37		
7/1/02 - 6/30/03	2,898,460	8,740,322	8,740,322	9,298,718	2,865,441	8,912,394	0	9,314,400	9,374,800	9,270,800	9,326,600	3.20	3.22		
7/1/03 - 6/30/04	2,937,710	7,892,961	7,892,961	8,413,185	2,961,739	8,076,098	0	8,433,000	8,489,800	8,387,200	8,439,200	2.86	2.87		
7/1/04 - 6/30/05	2,913,820	8,281,821	8,281,821	8,852,198	3,012,243	8,475,910	0	8,871,300	8,933,400	8,823,700	8,880,700	3.03	3.05		
7/1/05 - 6/30/06	2,947,090	5,834,073	5,834,073	6,254,882	3,137,622	6,045,162	0	6,267,100	6,312,700	6,233,800	6,275,900	2.12	2.13		
7/1/06 - 6/30/07	2,896,030	5,352,302	5,352,302	5,758,311	3,177,705	5,576,356	0	5,694,800	5,738,100	5,738,000	5,778,600	1.98	2.00		
7/1/07 - 6/30/08	3,546,680	5,139,082	5,139,082	5,549,557	4,011,340	5,435,783	0	5,501,200	5,544,900	5,529,000	5,570,100	1.56	1.57		
7/1/08 - 6/30/09	3,324,130	4,229,564	4,229,564	4,584,886	3,871,413	4,529,593	0	4,579,500	4,617,500	4,567,100	4,602,700	1.37	1.38		
7/1/09 - 6/30/10	3,363,380	3,270,072	3,270,072	3,560,407	4,010,099	3,597,077	0	3,408,600	3,438,200	3,545,900	3,574,900	1.05	1.06		
7/1/10 - 6/30/11	3,337,830	3,560,523	3,560,523	3,894,829	4,058,420	3,908,870	0	3,900,900	3,936,700	3,878,100	3,911,500	1.16	1.17		
7/1/11 - 6/30/12	3,481,870	2,710,610	2,710,610	2,985,806	4,340,454	3,110,662	0	2,999,300	3,029,700	2,972,000	2,999,600	0.85	0.86		
7/1/12 - 6/30/13	3,680,220	2,450,234	2,450,234	2,722,234	4,715,957	2,921,443	2,927,780	2,738,600	2,769,000	2,708,600	2,735,800	0.74	0.74	21,161	21,373
7/1/13 - 6/30/14	3,905,280	3,092,357	3,092,357	3,467,890	5,126,394	3,647,487	3,644,235	3,491,500	3,533,500	3,449,100	3,486,700	0.88	0.89	22,842	23,091
7/1/14 - 6/30/15	4,027,500	3,938,165	3,938,165	4,469,453	5,417,751	4,582,178	4,738,090	4,464,200	4,545,600	4,442,900	4,496,000	1.10	1.12	23,887	24,172
7/1/15 - 6/30/16	4,000,130	4,507,772	4,507,772	5,185,894	5,527,239	5,230,530	4,851,217	4,983,700	5,085,500	5,138,400	5,233,400	1.28	1.31	28,547	29,074
7/1/16 - 6/30/17	3,525,650	5,748,712	5,748,712	6,740,405	5,007,187	6,485,403	5,306,997	6,806,600	6,972,900	6,671,000	6,809,800	1.89	1.93	35,866	36,612
7/1/17 - 6/30/18	3,476,210	3,949,404	3,949,404	4,779,728	5,079,378	4,831,783	4,595,858	4,618,200	4,757,800	4,721,600	4,837,900	1.36	1.39	31,063	31,828
7/1/18 - 6/30/19	3,573,240	4,398,802	4,398,802	5,598,514	5,375,764	5,550,781	5,226,625	5,508,200	5,727,900	5,514,500	5,682,500	1.54	1.59	33,831	34,862
7/1/19 - 6/30/20	3,687,200	6,449,839	6,449,839	8,971,444	5,712,890	8,055,562	6,910,783	6,335,000	6,509,000	6,853,800	6,914,600	1.86	1.88	33,733	34,032
7/1/20 - 6/30/21	3,601,119	3,456,656	3,456,656	5,637,673	5,769,590	5,688,707	12,818,472	5,151,000	5,697,000	5,420,000	5,856,000	1.51	1.63	15,318	16,550
7/1/21 - 6/30/22	3,561,252	1,882,443	1,882,443	4,047,404	5,958,137	5,069,457	6,257,949	4,908,000	5,785,000	4,751,000	5,388,000	1.33	1.51	29,582	33,548
7/1/22 - 6/30/23	3,478,917	818,934	818,934	3,654,405	6,051,027	5,513,956	3,903,332			4,320,000	5,097,000	1.24	1.47	46,178	54,484
Total	93,443,779	225,685,441	225,685,441	251,362,420	113,289,580	183,541,127	61,181,339	246,203,190	250,520,764	251,445,589	255,878,207				

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Provided by Entity
(4) Provided by Entity
(5) From Section III, Exhibit I, Sheet 10, Column (7)
(6) From Section III, Exhibit I, Sheet 7, Column (4)
(7) From Section III, Exhibit I, Sheet 7, Column (10)
(8) From Section III, Exhibit I, Sheet 9, Column (12)
(9) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(10) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(11) Selected by Deloitte Consulting LLP
(12) Selected by Deloitte Consulting LLP
(13) = (11) / (2)
(14) = (12) / (2)
(15) (11) Divided by Ultimate Claims From Section III, Exhibit I, Sheet 13, Column (7)
(16) (12) Divided by Ultimate Claims From Section III, Exhibit I, Sheet 13, Column (7)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Bornhuetter-Ferguson Method

Accident Year	Payroll (00)'s	Initial Expected Loss Rates	Initial Expected Loss	Expected % of Paid Loss	Expected Paid Loss	Unlimited Actual Paid Loss	Expected % of Unpaid Loss	Expected Unpaid Loss	Unlimited Indicated Ultimate Loss	Unlimited Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
7/1/93 - 6/30/94	1,859,460	0.74	1,374,374	95.1%	1,307,591	5,314,656	4.9%	66,783	5,381,439	2.89
7/1/94 - 6/30/95	1,940,510	0.76	1,475,335	95.1%	1,402,342	6,155,200	4.9%	72,993	6,228,193	3.21
7/1/95 - 6/30/96	2,052,620	0.78	1,604,197	95.0%	1,523,296	5,389,787	5.0%	80,901	5,470,688	2.67
7/1/96 - 6/30/97	2,340,730	0.80	1,883,996	94.9%	1,787,035	6,031,973	5.1%	96,961	6,128,934	2.62
7/1/97 - 6/30/98	2,218,650	0.83	1,843,613	94.7%	1,746,657	8,907,620	5.3%	96,956	9,004,576	4.06
7/1/98 - 6/30/99	2,560,710	0.86	2,199,543	94.6%	2,081,173	7,854,004	5.4%	118,371	7,972,375	3.11
7/1/99 - 6/30/00	2,684,860	0.89	2,392,378	94.5%	2,260,421	8,170,937	5.5%	131,957	8,302,893	3.09
7/1/00 - 6/30/01	2,791,820	0.93	2,595,764	94.3%	2,448,767	10,541,879	5.7%	146,997	10,688,877	3.83
7/1/01 - 6/30/02	2,830,700	0.97	2,732,589	94.2%	2,573,407	8,958,777	5.8%	159,182	9,117,959	3.22
7/1/02 - 6/30/03	2,898,460	0.99	2,865,441	94.0%	2,693,369	8,740,322	6.0%	172,072	8,912,394	3.07
7/1/03 - 6/30/04	2,937,710	1.01	2,961,739	93.8%	2,778,602	7,892,961	6.2%	183,137	8,076,098	2.75
7/1/04 - 6/30/05	2,913,820	1.03	3,012,243	93.6%	2,818,155	8,281,821	6.4%	194,089	8,475,910	2.91
7/1/05 - 6/30/06	2,947,090	1.06	3,137,622	93.3%	2,926,533	5,834,073	6.7%	211,089	6,045,162	2.05
7/1/06 - 6/30/07	2,896,030	1.10	3,177,705	92.9%	2,953,650	5,352,302	7.1%	224,055	5,576,356	1.93
7/1/07 - 6/30/08	3,546,680	1.13	4,011,340	92.6%	3,714,640	5,139,082	7.4%	296,700	5,435,783	1.53
7/1/08 - 6/30/09	3,324,130	1.16	3,871,413	92.3%	3,571,384	4,229,564	7.7%	300,029	4,529,593	1.36
7/1/09 - 6/30/10	3,363,380	1.19	4,010,099	91.8%	3,683,093	3,270,072	8.2%	327,005	3,597,077	1.07
7/1/10 - 6/30/11	3,337,830	1.22	4,058,420	91.4%	3,710,072	3,560,523	8.6%	348,348	3,908,870	1.17
7/1/11 - 6/30/12	3,481,870	1.25	4,340,454	90.8%	3,940,401	2,710,610	9.2%	400,052	3,110,662	0.89
7/1/12 - 6/30/13	3,680,220	1.28	4,715,957	90.0%	4,244,748	2,450,234	10.0%	471,210	2,921,443	0.79
7/1/13 - 6/30/14	3,905,280	1.31	5,126,394	89.2%	4,571,264	3,092,357	10.8%	555,130	3,647,487	0.93
7/1/14 - 6/30/15	4,027,500	1.35	5,417,751	88.1%	4,773,738	3,938,165	11.9%	644,013	4,582,178	1.14
7/1/15 - 6/30/16	4,000,130	1.38	5,527,239	86.9%	4,804,482	4,507,772	13.1%	722,758	5,230,530	1.31
7/1/16 - 6/30/17	3,525,650	1.42	5,007,187	85.3%	4,270,496	5,748,712	14.7%	736,691	6,485,403	1.84
7/1/17 - 6/30/18	3,476,210	1.46	5,079,378	82.6%	4,197,000	3,949,404	17.4%	882,378	4,831,783	1.39
7/1/18 - 6/30/19	3,573,240	1.50	5,375,764	78.6%	4,223,785	4,398,802	21.4%	1,151,979	5,550,781	1.55
7/1/19 - 6/30/20	3,687,200	1.55	5,712,890	71.9%	4,107,167	6,449,839	28.1%	1,605,723	8,055,562	2.18
7/1/20 - 6/30/21	3,601,119	1.60	5,769,590	61.3%	3,537,539	3,456,656	38.7%	2,232,051	5,688,707	1.58
7/1/21 - 6/30/22	3,561,252	1.67	5,958,137	46.5%	2,771,123	1,882,443	53.5%	3,187,013	5,069,457	1.42
7/1/22 - 6/30/23	3,478,917	1.74	6,051,027	22.4%	1,356,005	818,934	77.6%	4,695,022	5,513,956	1.58
Total	93,443,779		113,289,580		92,777,935	163,029,482		20,511,645	183,541,127	

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	From Section III, Exhibit I, Sheet 8, Column (13)
(4)	= (2) x (3)
(5)	= 1 / Section III, Exhibit I, Sheet 10, Column (6)
(6)	= (4) x (5)
(7)	Provided by Entity
(8)	= 1 - (5)
(9)	= (4) x (8)
(10)	= (7) + (9)
(11)	= (10) / (2)

Commonwealth of Massachusetts
Department of Corrections
DOC - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Calculation of Initial Expected Loss Rates

Accident Year	Payroll (00)'s	Payroll Trend	Loss Development Unlimited Indicated Ultimate Loss Paid	Loss Development Unlimited Indicated Ultimate Loss Reported	Selected Initial Ultimate Loss	Loss Trend Factor	Benefit Level Adjustment Factors	Trended Ultimate	On-level Loss Rates	Detrended Loss Rates	Prior Expected Loss Rates	Initial Expected Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
7/1/93 - 6/30/94	1,859,460	2.357	5,586,093	5,586,093	68,109,548	4.116	1.347	377,706,507	***86.20***	0.74	0.68	0.74
7/1/94 - 6/30/95	1,940,510	2.288	6,475,584	6,475,584	5,586,100	3.920	1.335	29,238,909	6.59	0.76	0.70	0.76
7/1/95 - 6/30/96	2,052,620	2.221	5,676,034	5,676,034	6,475,600	3.733	1.324	32,012,592	7.02	0.78	0.72	0.78
7/1/96 - 6/30/97	2,340,730	2.157	6,359,256	6,359,256	5,676,000	3.556	1.311	26,452,488	5.24	0.80	0.74	0.80
7/1/97 - 6/30/98	2,218,650	2.094	9,402,077	9,402,077	6,359,250	3.386	1.294	27,870,236	6.00	0.83	0.77	0.83
7/1/98 - 6/30/99	2,560,710	2.033	8,300,716	8,300,716	9,402,100	3.225	1.276	38,701,794	7.43	0.86	0.79	0.86
7/1/99 - 6/30/00	2,684,860	1.974	8,647,932	8,647,932	8,300,750	3.072	1.254	31,977,931	6.03	0.89	0.82	0.89
7/1/00 - 6/30/01	2,791,820	1.916	11,174,699	11,174,699	8,647,950	2.925	1.225	30,998,399	5.79	0.93	0.86	0.93
7/1/01 - 6/30/02	2,830,700	1.860	9,512,935	9,512,935	11,174,700	2.786	1.203	37,456,061	7.11	0.97	0.89	0.97
7/1/02 - 6/30/03	2,898,460	1.806	9,298,718	9,298,718	9,512,900	2.653	1.198	30,228,620	5.77	0.99	0.91	0.99
7/1/03 - 6/30/04	2,937,710	1.754	8,413,185	8,413,185	9,298,700	2.527	1.197	28,130,443	5.46	1.01	0.93	1.01
7/1/04 - 6/30/05	2,913,820	1.702	8,852,198	8,852,198	8,413,200	2.407	1.190	24,098,439	4.86	1.03	0.95	1.03
7/1/05 - 6/30/06	2,947,090	1.653	6,254,882	6,254,882	8,852,200	2.292	1.178	23,903,517	4.91	1.06	0.98	1.06
7/1/06 - 6/30/07	2,896,030	1.605	5,758,311	5,758,311	6,254,850	2.183	1.165	15,910,617	3.42	1.10	1.01	1.10
7/1/07 - 6/30/08	3,546,680	1.558	5,549,557	5,549,557	5,758,300	2.079	1.152	13,796,538	2.50	1.13	1.04	1.13
7/1/08 - 6/30/09	3,324,130	1.513	4,584,886	4,584,886	5,549,550	1.980	1.141	12,536,386	2.49	1.16	1.07	1.16
7/1/09 - 6/30/10	3,363,380	1.469	3,560,407	3,560,407	4,584,900	1.886	1.136	9,822,446	1.99	1.19	1.10	1.19
7/1/10 - 6/30/11	3,337,830	1.426	3,894,829	3,894,829	3,560,400	1.796	1.136	7,261,690	1.53	1.22	1.12	1.22
7/1/11 - 6/30/12	3,481,870	1.384	2,985,806	2,985,806	3,894,800	1.710	1.129	7,522,411	1.56	1.25	1.15	1.25
7/1/12 - 6/30/13	3,680,220	1.344	2,722,234	2,722,234	2,985,800	1.629	1.120	5,446,555	1.10	1.28	1.18	1.28
7/1/13 - 6/30/14	3,905,280	1.305	3,467,890	3,467,890	2,722,200	1.551	1.114	4,706,307	0.92	1.31	1.21	1.31
7/1/14 - 6/30/15	4,027,500	1.267	4,469,453	4,469,453	3,467,900	1.477	1.109	5,680,229	1.11	1.35	1.24	1.35
7/1/15 - 6/30/16	4,000,130	1.230	5,185,894	5,185,894	4,469,450	1.407	1.100	6,919,353	1.41	1.38	1.27	1.38
7/1/16 - 6/30/17	3,525,650	1.194	6,740,405	6,740,405	5,185,900	1.340	1.091	7,583,642	1.80	1.42	1.31	1.42
7/1/17 - 6/30/18	3,476,210	1.159	4,779,728	4,779,728	6,740,400	1.276	1.081	9,301,484	2.31	1.46	1.35	1.46
7/1/18 - 6/30/19	3,573,240	1.126	5,598,514	5,598,514	4,779,750	1.216	1.071	6,219,580	1.55	1.50	1.39	1.50
7/1/19 - 6/30/20	3,687,200	1.093	8,971,444	8,971,444	5,598,500	1.158	1.060	6,867,666	1.70	1.55	1.43	1.55
7/1/20 - 6/30/21	3,601,119	1.061	5,637,673	5,637,673	5,637,673	1.103	1.045	6,493,097	***1.70***	1.60	1.48	1.60
7/1/21 - 6/30/22	3,561,252	1.030	4,047,404	4,047,404	4,047,404	1.050	1.020	4,334,021	***1.18***	1.67	1.54	1.67
7/1/22 - 6/30/23	3,478,917	1.000	3,654,405	3,654,405	3,654,405	1.000	1.000	3,654,405	***1.05***	1.74		1.74
			185,563,149	185,563,149				Last 3 Wtd Avg	1.85			
								Last 4 Wtd Avg	1.84			
								Last 5 Wtd Avg	1.74			
								All Per Wtd Avg	3.81			

(Note: numbers in bold and italics and with borders are excluded from the calculated averages)

Selected (14) 1.74

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Selected by Deloitte Consulting LLP
(4) From Section III, Exhibit I, Sheet 10, Column (7)
(5) From Section III, Exhibit I, Sheet 0, Column (7)
(6) Selected by Deloitte Consulting LLP
(7) Selected by Deloitte Consulting LLP
(8) Based on industry sources
(9) = (6) x (7) x (8)
(10) = (9) / [(2) x (3)]
(11) = (14) / (7) / (8) * (3)
(12) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(13) Selected for by Deloitte Consulting LLP Based on (14)
(14) Selected by Deloitte Consulting LLP

Commonwealth of Massachusetts
Department of Corrections
DOC - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Frequency Severity Method

Accident Year	Payroll (00)'s	Ultimate Reported Severity	Include For Fit	Exponential Fitted Reported Severity	Initial Selected Ultimate Severity	Selected Ultimate Claim Counts	Benefit Level Adjustment Factor	Selected Severity Trend	Trended Severity	On-Level Selected Ultimate Severity	Indicated Ultimate Loss	Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Prior to 7/1/1993			Exclude	6,404		0					0	
7/1/93 - 6/30/94	1,859,460		Exclude	6,873		0	1.347	4.116	0,000		0	0.00
7/1/94 - 6/30/95	1,940,510		Exclude	7,376		0	1.335	3.920	0,000		0	0.00
7/1/95 - 6/30/96	2,052,620		Exclude	7,915		0	1.324	3.733	0,000		0	0.00
7/1/96 - 6/30/97	2,340,730		Exclude	8,494		0	1.311	3.556	0,000		0	0.00
7/1/97 - 6/30/98	2,218,650		Exclude	9,116		0	1.294	3.386	0,000		0	0.00
7/1/98 - 6/30/99	2,560,710		Exclude	9,782		0	1.276	3.225	0,000		0	0.00
7/1/99 - 6/30/00	2,684,860		Exclude	10,498		0	1.254	3.072	0,000		0	0.00
7/1/00 - 6/30/01	2,791,820		Exclude	11,266		0	1.225	2.925	0,000		0	0.00
7/1/01 - 6/30/02	2,830,700		Exclude	12,090		0	1.203	2.786	0,000		0	0.00
7/1/02 - 6/30/03	2,898,460		Exclude	12,975		0	1.198	2.653	0,000		0	0.00
7/1/03 - 6/30/04	2,937,710		Exclude	13,924		0	1.197	2.527	0,000		0	0.00
7/1/04 - 6/30/05	2,913,820		Exclude	14,943		0	1.190	2.407	0,000		0	0.00
7/1/05 - 6/30/06	2,947,090		Exclude	16,036		0	1.178	2.292	0,000		0	0.00
7/1/06 - 6/30/07	2,896,030		Exclude	17,209		0	1.165	2.183	0,000		0	0.00
7/1/07 - 6/30/08	3,546,680		Exclude	18,468		0	1.152	2.079	0,000		0	0.00
7/1/08 - 6/30/09	3,324,130		Exclude	19,819		0	1.141	1.980	0,000		0	0.00
7/1/09 - 6/30/10	3,363,380		Exclude	21,269		0	1.136	1.886	0,000		0	0.00
7/1/10 - 6/30/11	3,337,830		Exclude	22,825		0	1.136	1.796	0,000		0	0.00
7/1/11 - 6/30/12	3,481,870		Exclude	24,495		0	1.129	1.710	0,000		0	0.00
7/1/12 - 6/30/13	3,680,220	21,267	Exclude	26,287	23,327	128	1.120	1.629	42,551	41,724	2,927,780	0.80
7/1/13 - 6/30/14	3,905,280	22,966	Exclude	28,210	18,028	151	1.114	1.551	31,168	41,724	3,644,235	0.93
7/1/14 - 6/30/15	4,027,500	24,029	Exclude	30,273	18,645	186	1.109	1.477	30,539	41,724	4,738,090	1.18
7/1/15 - 6/30/16	4,000,130	28,811	Include	32,488	24,830	180	1.100	1.407	38,441	41,724	4,851,217	1.21
7/1/16 - 6/30/17	3,525,650	36,239	Include	34,865	27,881	186	1.091	1.340	40,772	41,724	5,306,997	1.51
7/1/17 - 6/30/18	3,476,210	31,446	Include	37,415	44,345	152	1.081	1.276	61,194	41,724	4,595,858	1.32
7/1/18 - 6/30/19	3,573,240	34,347	Include	40,153	29,324	163	1.071	1.216	38,157	41,724	5,226,625	1.46
7/1/19 - 6/30/20	3,687,200	44,156	Include	43,090	27,555	203	1.060	1.158	33,801	41,724	6,910,783	1.87
7/1/20 - 6/30/21	3,601,119	15,933	Exclude	46,242	15,933	354	1.045	1.103	***18,351***	41,724	12,818,472	3.56
7/1/21 - 6/30/22	3,561,252	25,201	Exclude	49,625	25,201	161	1.020	1.050	***26,986***	41,724	6,257,949	1.76
7/1/22 - 6/30/23	3,478,917	39,063	Exclude	53,256	39,063	94	1.000	1.000	***39,063***	41,724	3,903,332	1.12
			Implied Trend	7.3%	55.0%			Last 5 Wtd Avg	41,724			
								Last 4 Wtd Avg	42,564			
								Last 3 Wtd Avg	43,207			
Total	93,443,779					1,957		Last 3 Avg	44,384		61,181,339	
								Selected	41,724			

Reported Exponential Regressio	
Constant	10.953
X Coefficient	(0.071)
R Squared	0.554

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Section III, Exhibit I, Sheet 0, Column (7) / Section III, Exhibit I, Sheet 13, Column (7) x 1
(4) Years included for purposes of fit
(5) Result of Exponential fit of Column (3) * Column (8)
(6) Selected by Deloitte Consulting LLP
(7) From Section III, Exhibit I, Sheet 13, Column (7)
(8) Based on industry sources
(9) Selected by Deloitte Consulting LLP
(10) = (6) x (8) x (9)
(11) Selected by Deloitte Consulting, LLP
(12) Selected in column (11) x (7) / (8) / (9)
(13) = (12) / (3)

Commonwealth of Massachusetts
Department of Corrections
DOC - Indemnity (Including Lump Sum)

Section III
Exhibit I
Sheet 10

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss Development Method

Accident Year	Age of Losses @ 06/30/2023	Retention	Payroll (00)'s	Unlimited Paid Loss @ 06/30/2023	Paid LDF	Indicated Ultimate Loss	Unlimited Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Prior to 7/1/1993	372.0	Unlimited		62,655,959	1.050	65,799,271	
7/1/93 - 6/30/94	360.0	Unlimited	1,859,460	5,314,656	1.051	5,586,093	3.00
7/1/94 - 6/30/95	348.0	Unlimited	1,940,510	6,155,200	1.052	6,475,584	3.34
7/1/95 - 6/30/96	336.0	Unlimited	2,052,620	5,389,787	1.053	5,676,034	2.77
7/1/96 - 6/30/97	324.0	Unlimited	2,340,730	6,031,973	1.054	6,359,256	2.72
7/1/97 - 6/30/98	312.0	Unlimited	2,218,650	8,907,620	1.056	9,402,077	4.24
7/1/98 - 6/30/99	300.0	Unlimited	2,560,710	7,854,004	1.057	8,300,716	3.24
7/1/99 - 6/30/00	288.0	Unlimited	2,684,860	8,170,937	1.058	8,647,932	3.22
7/1/00 - 6/30/01	276.0	Unlimited	2,791,820	10,541,879	1.060	11,174,699	4.00
7/1/01 - 6/30/02	264.0	Unlimited	2,830,700	8,958,777	1.062	9,512,935	3.36
7/1/02 - 6/30/03	252.0	Unlimited	2,898,460	8,740,322	1.064	9,298,718	3.21
7/1/03 - 6/30/04	240.0	Unlimited	2,937,710	7,892,961	1.066	8,413,185	2.86
7/1/04 - 6/30/05	228.0	Unlimited	2,913,820	8,281,821	1.069	8,852,198	3.04
7/1/05 - 6/30/06	216.0	Unlimited	2,947,090	5,834,073	1.072	6,254,882	2.12
7/1/06 - 6/30/07	204.0	Unlimited	2,896,030	5,352,302	1.076	5,758,311	1.99
7/1/07 - 6/30/08	192.0	Unlimited	3,546,680	5,139,082	1.080	5,549,557	1.56
7/1/08 - 6/30/09	180.0	Unlimited	3,324,130	4,229,564	1.084	4,584,886	1.38
7/1/09 - 6/30/10	168.0	Unlimited	3,363,380	3,270,072	1.089	3,560,407	1.06
7/1/10 - 6/30/11	156.0	Unlimited	3,337,830	3,560,523	1.094	3,894,829	1.17
7/1/11 - 6/30/12	144.0	Unlimited	3,481,870	2,710,610	1.102	2,985,806	0.86
7/1/12 - 6/30/13	132.0	Unlimited	3,680,220	2,450,234	1.111	2,722,234	0.74
7/1/13 - 6/30/14	120.0	Unlimited	3,905,280	3,092,357	1.121	3,467,890	0.89
7/1/14 - 6/30/15	108.0	Unlimited	4,027,500	3,938,165	1.135	4,469,453	1.11
7/1/15 - 6/30/16	96.0	Unlimited	4,000,130	4,507,772	1.150	5,185,894	1.30
7/1/16 - 6/30/17	84.0	Unlimited	3,525,650	5,748,712	1.173	6,740,405	1.91
7/1/17 - 6/30/18	72.0	Unlimited	3,476,210	3,949,404	1.210	4,779,728	1.37
7/1/18 - 6/30/19	60.0	Unlimited	3,573,240	4,398,802	1.273	5,598,514	1.57
7/1/19 - 6/30/20	48.0	Unlimited	3,687,200	6,449,839	1.391	8,971,444	2.43
7/1/20 - 6/30/21	36.0	Unlimited	3,601,119	3,456,656	1.631	5,637,673	1.57
7/1/21 - 6/30/22	24.0	Unlimited	3,561,252	1,882,443	2.150	4,047,404	1.14
7/1/22 - 6/30/23	12.0	Unlimited	3,478,917	818,934	4.462	3,654,405	1.05
Total			93,443,779	225,685,441		251,362,420	

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Age of (1)
(3)	Provided by Entity
(4)	Provided by Entity
(5)	Provided by Entity
(6)	From Section III, Exhibit I, Sheet 11
(7)	= (5) x (6)
(8)	= (7) / (4)

Commonwealth of Massachusetts
Department of Corrections
DOC - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development 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	348	360	372	As of 6/30/2023
Prior to 7/1/1993	117,665,216	36,358,935	39,629,855	42,364,766	44,302,189	45,872,597	47,331,520	48,475,124	49,538,296	50,570,327	51,528,268	52,381,568	53,185,021	53,985,202	54,688,090	55,367,472	55,981,408	56,454,629	56,931,954	57,314,755	57,839,219	58,273,842	58,862,391	59,542,622	59,993,934	60,453,088	60,842,903	61,234,589	61,619,195	62,194,975	62,655,959	62,655,959
7/1/93 - 6/30/94	927,165	2,033,302	2,780,203	3,356,697	3,634,645	3,851,496	4,005,071	4,173,789	4,301,274	4,443,414	4,517,718	4,597,495	4,643,609	4,677,277	4,713,446	4,751,301	4,794,476	4,830,349	4,868,100	4,908,602	4,958,342	4,995,545	5,034,790	5,072,821	5,110,605	5,151,631	5,190,867	5,230,578	5,273,081	5,314,656		5,314,656
7/1/94 - 6/30/95	1,084,762	2,496,858	3,319,215	3,952,717	4,535,814	4,962,104	5,339,797	5,618,657	5,737,392	5,843,417	5,926,488	6,010,582	6,086,103	6,146,311	6,146,311	6,146,311	6,148,565	6,148,615	6,149,952	6,149,952	6,149,952	6,152,581	6,155,200	6,155,200	6,155,200	6,155,200	6,155,200	6,155,200	6,155,200			6,155,200
7/1/95 - 6/30/96	1,138,070	2,139,418	2,833,267	3,498,876	3,802,508	4,071,768	4,312,958	4,516,697	4,691,458	4,794,040	4,866,632	4,897,368	4,931,763	4,965,668	4,999,750	5,033,690	5,072,397	5,110,156	5,257,373	5,290,232	5,324,898	5,389,786	5,389,786	5,389,787	5,389,787	5,389,787	5,389,787	5,389,787				5,389,787
7/1/96 - 6/30/97	1,322,194	3,019,490	3,847,480	4,557,297	5,003,162	5,341,666	5,664,217	5,853,687	5,899,825	5,944,264	5,973,039	5,997,062	5,997,062	6,000,066	6,000,066	6,000,261	6,001,023	6,002,962	6,004,157	6,031,973	6,031,973	6,031,973	6,031,973	6,031,973	6,031,973	6,031,973	6,031,973					6,031,973
7/1/97 - 6/30/98	1,695,170	3,413,043	4,549,254	5,298,562	5,922,124	6,501,713	6,891,141	7,149,960	7,307,645	7,448,653	7,549,911	7,642,278	7,736,213	7,821,983	7,915,996	8,001,207	8,089,166	8,174,901	8,264,124	8,351,126	8,439,699	8,529,887	8,621,698	8,715,203	8,809,863	8,907,620						8,907,620
7/1/98 - 6/30/99	1,336,118	2,975,082	4,095,622	4,999,875	5,851,736	6,318,008	6,687,193	6,936,244	7,127,105	7,267,271	7,384,000	7,454,652	7,481,466	7,511,960	7,543,693	7,577,540	7,606,948	7,636,041	7,665,092	7,694,667	7,724,781	7,756,368	7,789,644	7,821,316	7,854,004							7,854,004
7/1/99 - 6/30/00	1,879,439	4,023,020	5,370,313	6,485,282	7,168,221	7,582,391	7,837,334	7,865,387	8,025,216	8,069,062	8,098,226	8,121,157	8,142,719	8,164,322	8,170,937	8,170,937	8,170,937	8,170,937	8,170,937	8,170,937	8,170,937	8,170,937	8,170,937	8,170,937								8,170,937
7/1/00 - 6/30/01	2,234,933	4,936,339	6,837,609	8,301,092	9,178,415	9,840,644	10,289,598	10,483,368	10,490,989	10,514,075	10,517,984	10,523,035	10,530,614	10,537,905	10,538,673	10,541,308	10,541,308	10,541,308	10,541,808	10,541,879	10,541,879	10,541,879	10,541,879									10,541,879
7/1/01 - 6/30/02	2,224,570	4,650,913	6,309,752	7,404,957	8,052,044	8,471,970	8,626,408	8,716,121	8,777,953	8,822,773	8,873,927	8,940,564	8,942,757	8,955,672	8,955,672	8,955,995	8,955,995	8,956,894	8,958,777	8,958,777	8,958,777	8,958,777										8,958,777
7/1/02 - 6/30/03	2,532,484	5,088,457	6,688,589	7,608,237	8,290,013	8,510,769	8,630,418	8,649,833	8,653,581	8,671,068	8,700,480	8,724,903	8,738,259	8,738,259	8,740,322	8,740,322	8,740,322	8,740,322	8,740,322	8,740,322	8,740,322											8,740,322
7/1/03 - 6/30/04	2,147,040	4,522,866	5,971,885	6,882,733	7,351,927	7,651,981	7,830,578	7,871,729	7,876,100	7,876,862	7,881,126	7,887,626	7,891,296	7,891,296	7,891,296	7,892,961	7,892,961	7,892,961	7,892,961	7,892,961												7,892,961
7/1/04 - 6/30/05	2,241,999	4,626,895	6,112,787	7,151,632	7,601,865	7,895,959	8,119,183	8,213,814	8,233,940	8,238,136	8,251,812	8,258,462	8,258,462	8,277,509	8,277,509	8,281,321	8,281,321	8,281,821	8,281,821													8,281,821
7/1/05 - 6/30/06	1,249,906	3,044,800	4,280,890	5,099,300	5,488,420	5,663,659	5,781,264	5,818,917	5,823,600	5,828,507	5,833,869	5,833,869	5,833,869	5,833,869	5,833,869	5,834,073	5,834,073	5,834,073														5,834,073
7/1/06 - 6/30/07	1,380,680	2,851,182	3,662,399	4,164,861	4,468,218	4,616,792	4,702,867	4,771,878	4,836,173	4,896,053	4,955,915	5,016,856	5,081,636	5,145,885	5,218,540	5,283,800	5,352,302															5,352,302
7/1/07 - 6/30/08	1,238,290	2,660,404	3,395,949	3,977,583	4,333,272	4,542,475	4,665,256	4,734,181	4,784,582	4,834,843	4,885,104	4,935,365	4,985,763	5,036,024	5,086,285	5,139,082																5,139,082
7/1/08 - 6/30/09	1,050,261	2,239,832	2,921,364	3,401,645	3,650,335	3,803,053	3,924,501	4,010,904	4,045,095	4,105,356	4,145,139	4,173,107	4,196,894	4,218,745	4,229,564																	4,229,564
7/1/09 - 6/30/10	907,606	1,622,359	2,042,041	2,210,700	2,304,703	2,381,002	2,473,404	2,566,173	2,714,183	2,800,485	2,901,337	2,979,835	3,127,495	3,270,072																		3,270,072
7/1/10 - 6/30/11	985,007	2,222,551	2,813,023	3,143,543	3,343,763	3,511,007	3,534,827	3,549,827	3,552,523	3,554,523	3,560,523	3,560,523	3,560,523																			3,560,523
7/1/11 - 6/30/12	628,004	1,376,733	1,816,172	2,215,825	2,567,652	2,653,730	2,693,179	2,697,678	2,697,678	2,710,609	2,710,610	2,710,610																				2,710,610
7/1/12 - 6/30/13	598,769	1,434,375	1,969,769	2,251,316	2,358,051	2,422,308	2,450,234	2,450,234	2,450,234	2,450,234	2,450,234																					2,450,234
7/1/13 - 6/30/14	832,638	1,834,871	2,358,451	2,795,388	2,990,944	3,042,957	3,084,872	3,091,122	3,092,357	3,092,357																						3,092,357
7/1/14 - 6/30/15	1,207,484	2,196,382	2,911,042	3,416,525	3,751,564	3,887,422	3,906,801	3,923,223	3,938,165																							3,938,165
7/1/15 - 6/30/16	1,329,847	2,491,301	3,147,065	3,642,169	4,037,332	4,179,982	4,307,204	4,507,772																								4,507,772
7/1/16 - 6/30/17	1,489,465	3,359,360	4,352,430	5,102,957	5,528,757	5,702,006	5,748,712																									5,748,712
7/1/17 - 6/30/18	1,239,405	2,357,112	2,931,258	3,346,736	3,690,719	3,949,404																										3,949,404
7/1/18 - 6/30/19	1,503,593	2,783,308	3,537,102	4,048,603	4,398,802																											4,398,802
7/1/19 - 6/30/20	2,025,160	4,243,359	5,550,157	6,449,839																												6,449,839
7/1/20 - 6/30/21	1,668,613	2,692,944	3,456,656																													3,456,656
7/1/21 - 6/30/22	961,748	1,882,443																														1,882,443
7/1/22 - 6/30/23	818,934																															818,934
																																225,685,441

Accident Year	Age-to-Age Development Factors 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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993	***0.309***	***1.090***	***1.069***	***1.046***	***1.035***	***1.032***	***1.024***	***1.022***	***1.021***	***1.019***	***1.017***	***1.015***	***1.015***	***1.013***	***1.012***	***1.011***	***1.008***	***1.008***	***1.007***	***1.009***	***1.008***	***1.010***	***1.012***	***1.008***	***1.008***	***1.006***	***1.006***	***1.006***	***1.009***	***1.007***	
7/1/93 - 6/30/94	2.193	1.367	1.207	1.083	1.060	1.040	1.042	1.031	1.033	1.017	1.018	1.010	1.007	1.008	1.008	1.009	1.007	1.008	1.008	1.010	1.008	1.008	1.008	1.007	1.008	1.008	1.008	1.008	1.008		
7/1/94 - 6/30/95	2.302	1.329	1.191	1.148	1.094	1.076	1.052	1.021	1.018	1.014	1.014	1.013	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			
7/1/95 - 6/30/96	1.880	1.324	1.235	1.087	1.071	1.059	1.047	1.039	1.022	1.015	1.006	1.007	1.007	1.007	1.007	1.008	1.007	1.029	1.006	1.007	1.012	1.000	1.000	1.000	1.000	1.000	1.000				
7/1/96 - 6/30/97	2.284	1.274	1.184	1.098	1.068	1.060	1.033	1.008	1.008	1.005	1.004	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
7/1/97 - 6/30/98	2.013	1.333	1.165	1.118	1.098	1.060	1.038	1.022	1.019	1.014	1.012	1.012	1.011	1.012	1.011	1.011	1.011	1.011	1.011	1.011	1.011	1.011	1.011	1.011	1.011						
7/1/98 - 6/30/99	2.227	1.377	1.221	1.170	1.080	1.058	1.037	1.028	1.020	1.016	1.010	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004							
7/1/99 - 6/30/00	2.141	1.335	1.208	1.105	1.058	1.034	1.004	1.020	1.005	1.004	1.003	1.003	1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000								
7/1/00 - 6/30/01	2.209	1.385	1.214	1.106	1.072	1.046	1.019	1.001	1.002	1.000	1.000	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000									
7/1/01 - 6/30/02	2.091	1.357	1.174	1.087	1.052	1.018	1.010	1.007	1.005	1.006	1.008	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000										
7/1/02 - 6/30/03	2.009	1.314	1.137	1.090	1.027	1.014	1.002	1.000	1.002	1.003	1.003	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000											
7/1/03 - 6/30/04	2.107	1.320	1.153	1.068	1.041	1.023	1.005	1.001	1.000	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000												
7/1/04 - 6/30/05	2.064	1.321	1.170	1.063	1.039	1.028	1.012	1.002	1.001	1.002	1.001	1.000	1.002	1.000	1.000	1.000	1.000	1.000													
7/1/05 - 6/30/06	2.436	1.406	1.191	1.076	1.032	1.021	1.007	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000														
7/1/06 - 6/30/07	2.065	1.285	1.137	1.073	1.033	1.019	1.015	1.013	1.012	1.012	1.012	1.013	1.013	1.014	1.013	1.013															
7/1/07 - 6/30/08	2.148	1.276	1.171	1.089	1.048	1.027	1.015	1.011	1.011	1.010	1.010	1.010	1.010	1.010	1.010																
7/1/08 - 6/30/09	2.133	1.304	1.164	1.073	1.042	1.032	1.022	1.009	1.015	1.010	1.007	1.006	1.005	1.003																	
7/1/09 - 6/30/10	1.788	1.259	1.083	1.043	1.033	1.039	1.038	1.058	1.032	1.036	1.027	1.050	1.046																		
7/1/10 - 6/30/11	2.256	1.266	1.117	1.064	1.050	1.007	1.004	1.001	1.001	1.002	1.000	1.000																			
7/1/11 - 6/30/12	2.192	1.319	1.220	1.159	1.034	1.015	1.002	1.000	1.005	1.000	1.000																				
7/1/12 - 6/30/13	2.396	1.373	1.143	1.047	1.027	1.012	1.000	1.000	1.000	1.000																					
7/1/13 - 6/30/14	2.204	1.285	1.185	1.070	1.017	1.014	1.002	1.000	1.000																						
7/1/14 - 6/30/15	1.819	1.325	1.174	1.098	1.036	1.005	1.004	1.004																							
7/1/15 - 6/30/16	1.873	1.263	1.157	1.108	1.035	1.030	1.047																								
7/1/16 - 6/30/17	2.255	1.296	1.172	1.083	1.031	1.008																									
7/1/17 - 6/30/18	1.902	1.244	1.142	1.103	1.070																										
7/1/18 - 6/30/19	1.851	1.271	1.145	1.086																											
7/1/19 - 6/30/20	2.095	1.308	1.162																												
7/1/20 - 6/30/21	1.614	1.284																													
7/1/21 - 6/30/22	1.957																														
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																															
Last 3 Wtd Avg	1.894	1.291	1.152	1.090	1.043	1.014	1.020	1.002	1.002	1.001	1.009	1.016	1.017	1.009	1.007	1.004	1.000	1.000	1.000	1.000	1.000	1.001	1.005	1.006	1.005	1.000	1.002				
Last 5 Wtd Avg	1.887	1.284	1.157	1.095	1.038	1.014	1.014	1.001	1.007	1.009	1.009	1.014	1.012	1.005	1.004	1.002	1.000	1.000	1.000	1.001	1.003	1.003	1.003	1.004	1.004						
Last 9 Wtd Avg	1.945	1.292	1.164	1.090	1.038	1.017	1.016	1.010	1.008	1.007	1.005	1.006	1.005	1.002	1.002	1.001	1.002	1.002	1.002	1.002	1.003										
Last 12 Wtd Avg	1.996	1.289	1.156	1.086	1.039	1.019	1.014	1.006	1.005	1.006	1.004	1.004	1.004	1.003	1.003	1.002	1.002	1.003													
All Per Wtd Avg	2.075	1.318	1.173	1.093	1.052	1.032	1.019	1.011	1.009	1.007	1.006	1.005	1.005	1.003	1.003	1.003	1.002	1.003	1.003	1.003	1.003	1.003	1.003	1.004	1.004	1.002	1.002	1.004	1.008		
Industry																															
Age-to-Age	2.944	1.572	1.221	1.082	1.038	1.014	1.011	1.008	1.006	1.005	1.005	1.002	1.003	1.002	1.003	1.002	1.002	1.001	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	
Age-to-Ult	7.016	2.383	1.516	1.242	1.148	1.106	1.091	1.079	1.070	1.064	1.059	1.054	1.052	1.049	1.047	1.044	1.042	1.040	1.039	1.037	1.036	1.034	1.032	1.031	1.029	1.027	1.025	1.023	1.022	1.020	1.018
Prior Selected																															
Age-to-Age	2.078	1.319	1.174	1.092	1.051	1.034	1.018	1.011	1.011	1.011	1.010	1.005	1.004	1.004	1.004	1.003	1.003	1.003	1.003	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	
Age-to-Ult	4.465	2.149	1.629	1.388	1.270	1.208	1.169	1.148	1.136	1.124	1.112	1.101	1.095	1.090	1.086	1.082	1.078	1.075	1.072	1.069	1.067	1.065	1.063	1.062	1.061	1.059	1.058	1.057	1.056	1.055	1.054
Selected																															
Age-to-Age	2.075	1.318	1.173	1.093	1.052	1.032	1.019	1.014	1.012	1.009	1.009	1.007	1.005	1.004	1.004	1.004	1.003	1.003	1.003	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	
Age-to-Ult	4.462	2.150	1.631	1.391	1.273	1.210	1.173	1.150	1.135	1.121	1.111	1.102	1.094	1.089	1.084	1.080	1.076	1.072	1.069	1.066	1.064	1.062	1.060	1.058	1.057	1.056	1.054	1.053	1.052	1.051	1.050

Commonwealth of Massachusetts
Department of Corrections
DOC - Indemnity (Including Lump Sum)

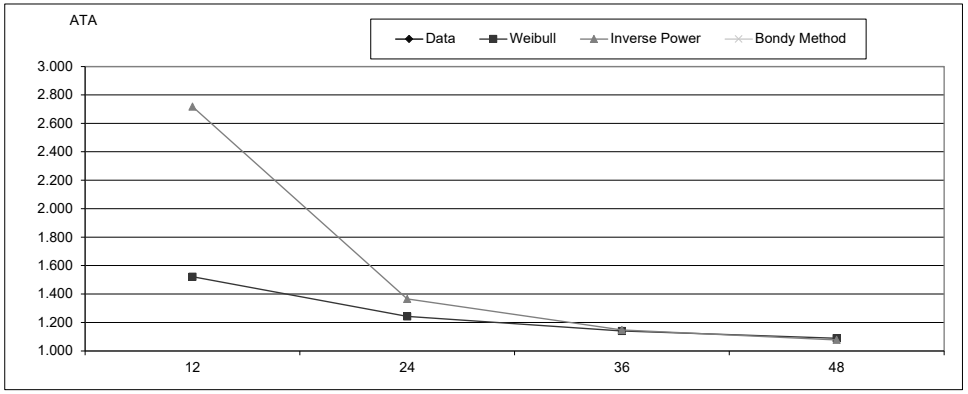
Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

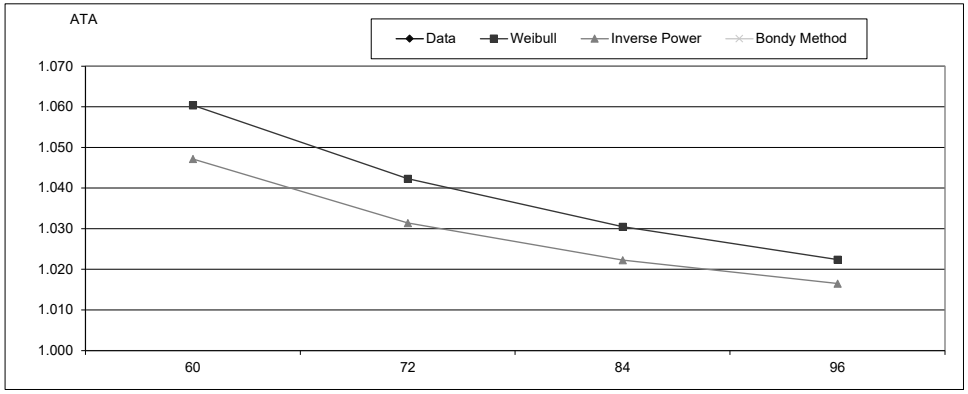
Curve Fitting Methods
Paid Loss

Tail at Period:	**31**	(To display in table)
Cut-off point:(<=Tail & <51)	**50**	(to run-out pattern)

Summary of Curve Fitting Methods

Method	Tail	R^2
Weibull	**1.001**	**0.965**
Inverse Power	**1.010**	**0.993**
Bondy Method		**N/A**





				Weibull		Inverse Power		Bondy Method			
									Sel. Decay Ratio=		
PERIOD	AGE	ATA	Use	**ATA***	**ATU***	**ATA***	**ATU***	Ln(ATA)	Decay	**ATA***	**ATU***
1	12	0.000	Exclude	**1.522**	2.951	**2.718**	5.624				
2	24	1.318	Include	**1.242**	1.939	**1.365**	2.069				
3	36	1.173	Include	**1.140**	1.561	**1.148**	1.516				
4	48	1.093	Include	**1.089**	1.369	**1.078**	1.321				
5	60	1.052	Include	**1.060**	1.257	**1.047**	1.225				
6	72	1.032	Include	**1.042**	1.185	**1.031**	1.170				
7	84	1.019	Include	**1.030**	1.137	**1.022**	1.135				
8	96	1.014	Include	**1.022**	1.104	**1.017**	1.110				
9	108	1.012	Include	**1.017**	1.079	**1.013**	1.092				
10	120	1.009	Include	**1.013**	1.062	**1.010**	1.078				
11	132	1.009	Include	**1.010**	1.048	**1.008**	1.068				
12	144	1.007	Include	**1.008**	1.038	**1.007**	1.059				
13	156	1.005	Include	**1.006**	1.030	**1.006**	1.052				
14	168	1.004	Include	**1.005**	1.024	**1.005**	1.046				
15	180	1.004	Include	**1.004**	1.020	**1.004**	1.041				
16	192	1.004	Include	**1.003**	1.016	**1.004**	1.037				
17	204	1.003	Include	**1.002**	1.013	**1.003**	1.033				
18	216	1.003	Include	**1.002**	1.011	**1.003**	1.030				
19	228	1.003	Include	**1.002**	1.009	**1.002**	1.027				
20	240	1.002	Include	**1.001**	1.007	**1.002**	1.025				
21	252	0.000	Exclude	**1.001**	1.006	**1.002**	1.023				
22	264	0.000	Exclude	**1.001**	1.005	**1.002**	1.021				
23	276	0.000	Exclude	**1.001**	1.004	**1.002**	1.019				
24	288	0.000	Exclude	**1.001**	1.003	**1.001**	1.017				
25	300	0.000	Exclude	**1.000**	1.003	**1.001**	1.016				
26	312	0.000	Exclude	**1.000**	1.002	**1.001**	1.015				
27	324	0.000	Exclude	**1.000**	1.002	**1.001**	1.013				
28	336	0.000	Exclude	**1.000**	1.002	**1.001**	1.012				
29	348	0.000	Exclude	**1.000**	1.001	**1.001**	1.011				
30	360	0.000	Exclude	**1.000**	1.001	**1.001**	1.010				
31	372	0.000	Exclude	**1.000**	1.001	**1.001**	1.010				
32	384	0.000	Exclude	**1.000**	1.001	**1.001**	1.009				
33	396	0.000	Exclude	**1.000**	1.001	**1.001**	1.008				
34	408	0.000	Exclude	**1.000**	1.001	**1.001**	1.007				
35	420	0.000	Exclude	**1.000**	1.001	**1.001**	1.007				
36	432	0.000	Exclude	**1.000**	1.000	**1.001**	1.006				
37	444	0.000	Exclude	**1.000**	1.000	**1.001**	1.005				
38	456	0.000	Exclude	**1.000**	1.000	**1.001**	1.005				
39	468	0.000	Exclude	**1.000**	1.000	**1.000**	1.004				
40	480	0.000	Exclude	**1.000**	1.000	**1.000**	1.004				
41	492	0.000	Exclude	**1.000**	1.000	**1.000**	1.003				
42	504	0.000	Exclude	**1.000**	1.000	**1.000**	1.003				
43	516	0.000	Exclude	**1.000**	1.000	**1.000**	1.003				
44	528	0.000	Exclude	**1.000**	1.000	**1.000**	1.002				
45	540	0.000	Exclude	**1.000**	1.000	**1.000**	1.002				
46	552	0.000	Exclude	**1.000**	1.000	**1.000**	1.002				
47	564	0.000	Exclude	**1.000**	1.000	**1.000**	1.001				
48	576	0.000	Exclude	**1.000**	1.000	**1.000**	1.001				
49	588	0.000	Exclude	**1.000**	1.000	**1.000**	1.001				
50	600	0.000	Exclude	**1.000**	1.000	**1.000**	1.000				

Commonwealth of Massachusetts
Department of Corrections
DOC - Indemnity (Including Lump Sum)

Section III
Exhibit I
Sheet 13

Unpaid Claim Analysis as of 06/30/2023

Ultimate Claim Count Development

Accident Year	Age of Counts @ 06/30/2023	Payroll (00)'s	Reported Claim Counts @ 06/30/2023	Reported Count Dev Factor	Indicated Ultimate Claim Counts	Selected Ultimate Claim Counts	Selected Ultimate Frequency	Selected Ultimate Frequency (Inflation-Adjusted)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	372.0		41	1.000	41			
7/1/93 - 6/30/94	360.0	1,859,460	8	1.000	8		0.00%	0.00%
7/1/94 - 6/30/95	348.0	1,940,510	7	1.000	7		0.00%	0.00%
7/1/95 - 6/30/96	336.0	2,052,620	6	1.000	6		0.00%	0.00%
7/1/96 - 6/30/97	324.0	2,340,730	8	1.000	8		0.00%	0.00%
7/1/97 - 6/30/98	312.0	2,218,650	8	1.000	8		0.00%	0.00%
7/1/98 - 6/30/99	300.0	2,560,710	9	1.000	9		0.00%	0.00%
7/1/99 - 6/30/00	288.0	2,684,860	9	1.000	9		0.00%	0.00%
7/1/00 - 6/30/01	276.0	2,791,820	12	1.000	12		0.00%	0.00%
7/1/01 - 6/30/02	264.0	2,830,700	16	1.000	16		0.00%	0.00%
7/1/02 - 6/30/03	252.0	2,898,460	11	1.000	11		0.00%	0.00%
7/1/03 - 6/30/04	240.0	2,937,710	13	1.000	13		0.00%	0.00%
7/1/04 - 6/30/05	228.0	2,913,820	19	1.000	19		0.00%	0.00%
7/1/05 - 6/30/06	216.0	2,947,090	17	1.000	17		0.00%	0.00%
7/1/06 - 6/30/07	204.0	2,896,030	18	1.000	18		0.00%	0.00%
7/1/07 - 6/30/08	192.0	3,546,680	22	1.000	22		0.00%	0.00%
7/1/08 - 6/30/09	180.0	3,324,130	29	1.000	29		0.00%	0.00%
7/1/09 - 6/30/10	168.0	3,363,380	24	1.000	24		0.00%	0.00%
7/1/10 - 6/30/11	156.0	3,337,830	58	1.000	58		0.00%	0.00%
7/1/11 - 6/30/12	144.0	3,481,870	90	1.000	90		0.00%	0.00%
7/1/12 - 6/30/13	132.0	3,680,220	128	1.000	128	128	34.78%	25.88%
7/1/13 - 6/30/14	120.0	3,905,280	151	1.000	151	151	38.67%	29.63%
7/1/14 - 6/30/15	108.0	4,027,500	186	1.000	186	186	46.18%	36.46%
7/1/15 - 6/30/16	96.0	4,000,130	180	1.000	180	180	45.00%	36.59%
7/1/16 - 6/30/17	84.0	3,525,650	186	1.000	186	186	52.76%	44.18%
7/1/17 - 6/30/18	72.0	3,476,210	152	1.000	152	152	43.73%	37.72%
7/1/18 - 6/30/19	60.0	3,573,240	163	1.000	163	163	45.62%	40.53%
7/1/19 - 6/30/20	48.0	3,687,200	203	1.001	203	203	55.10%	50.43%
7/1/20 - 6/30/21	36.0	3,601,119	353	1.002	354	354	98.26%	92.62%
7/1/21 - 6/30/22	24.0	3,561,252	159	1.010	161	161	45.10%	43.78%
7/1/22 - 6/30/23	12.0	3,478,917	82	1.089	89	94	26.89%	26.89%
Total		93,443,779	2,368		2,378	1,957		

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Age of (1)
(3)	Provided by Entity
(4)	Provided by Entity
(5)	From Section III, Exhibit I, Sheet 14
(6)	= (4) x (5)
(7)	Selected by Deloitte Consulting LLP
(8)	= (7) / (3)
(9)	= (7) / [(3) x Section III, Exhibit I, Sheet 8, Column (3)]

Commonwealth of Massachusetts
Department of Corrections
DOC - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Reported Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																															As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																															41	41
7/1/93 - 6/30/94																														8		8
7/1/94 - 6/30/95																													7			7
7/1/95 - 6/30/96																												6				6
7/1/96 - 6/30/97																											8					8
7/1/97 - 6/30/98																										8						8
7/1/98 - 6/30/99																									9							9
7/1/99 - 6/30/00																								9								9
7/1/00 - 6/30/01																							12									12
7/1/01 - 6/30/02																						16										16
7/1/02 - 6/30/03																					11											11
7/1/03 - 6/30/04																				13												13
7/1/04 - 6/30/05																			19													19
7/1/05 - 6/30/06																		17														17
7/1/06 - 6/30/07																	18															18
7/1/07 - 6/30/08																22																22
7/1/08 - 6/30/09															29																	29
7/1/09 - 6/30/10														24																		24
7/1/10 - 6/30/11													58																			58
7/1/11 - 6/30/12												90																				90
7/1/12 - 6/30/13	102	125	126	128	128	128	128	128	128	128	128																					128
7/1/13 - 6/30/14	134	150	151	151	151	151	151	151	151	151																						151
7/1/14 - 6/30/15	173	185	186	186	186	186	186	186	186																							186
7/1/15 - 6/30/16	167	178	179	179	180	180	180	180																								180
7/1/16 - 6/30/17	179	185	186	186	186	186	186																									186
7/1/17 - 6/30/18	142	149	152	152	152	152																										152
7/1/18 - 6/30/19	143	163	163	163	163																											163
7/1/19 - 6/30/20	181	202	203	203																												203
7/1/20 - 6/30/21	339	349	353																													353
7/1/21 - 6/30/22	152	159																														159
7/1/22 - 6/30/23	82																															82
																																2,368

Accident Year	Age-to-Age Development Factors																															
	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
7/1/98 - 6/30/99																																
7/1/99 - 6/30/00																																
7/1/00 - 6/30/01																																
7/1/01 - 6/30/02																																
7/1/02 - 6/30/03																																
7/1/03 - 6/30/04																																
7/1/04 - 6/30/05																																
7/1/05 - 6/30/06																																
7/1/06 - 6/30/07																																
7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	1.225	1.008	1.016	1.000	1.000	1.000	1.000	1.000	1.000	1.000																						
7/1/13 - 6/30/14	1.119	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000																							
7/1/14 - 6/30/15	1.069	1.005	1.000	1.000	1.000	1.000	1.000	1.000																								
7/1/15 - 6/30/16	1.066	1.006	1.000	1.006	1.000	1.000	1.000																									
7/1/16 - 6/30/17	1.034	1.005	1.000	1.000	1.000	1.000																										
7/1/17 - 6/30/18	1.049	1.020	1.000	1.000	1.000																											
7/1/18 - 6/30/19	1.140	1.000	1.000	1.000																												
7/1/19 - 6/30/20	1.116	1.005	1.000																													
7/1/20 - 6/30/21	1.029	1.011																														
7/1/21 - 6/30/22	1.046																															
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																																
Last 3 Wtd Avg	1.057	1.007	1.000	1.000	1.000	1.000	1.000	1.000																								
Last 4 Wtd Avg	1.071	1.009	1.000	1.001	1.000	1.000	1.000																									
Last 5 Wtd Avg	1.068	1.009	1.000	1.001	1.000	1.000																										
All Per Wtd Avg	1.078	1.008	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000																						
Average ex Hi/Lo	1.080	1.007	1.000	1.000	1.000	1.000	1.000	1.000																								
Prior Selected																																
Age-to-Age	1.081	1.007	1.002	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	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		
Age-to-Ult	1.091	1.010	1.003	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	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	
Selected																																
Age-to-Age	1.078	1.008	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	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		
Age-to-Ult	1.089	1.010	1.002	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	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	

Commonwealth of Massachusetts
Department of Corrections
DOC - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Reported Counts to Payroll (00)'s

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04		1,859,460
7/1/94 - 6/30/95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04			1,940,510
7/1/95 - 6/30/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03				2,052,620
7/1/96 - 6/30/97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03					2,340,730
7/1/97 - 6/30/98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04						2,218,650
7/1/98 - 6/30/99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04							2,560,710
7/1/99 - 6/30/00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03								2,684,860
7/1/00 - 6/30/01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04									2,791,820
7/1/01 - 6/30/02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06										2,830,700
7/1/02 - 6/30/03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04											2,898,460
7/1/03 - 6/30/04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04												2,937,710
7/1/04 - 6/30/05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07													2,913,820
7/1/05 - 6/30/06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06														2,947,090
7/1/06 - 6/30/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06															2,896,030
7/1/07 - 6/30/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06																3,546,680
7/1/08 - 6/30/09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09																	3,324,130
7/1/09 - 6/30/10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07																		3,363,380
7/1/10 - 6/30/11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17																			3,337,830
7/1/11 - 6/30/12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26																				3,481,870
7/1/12 - 6/30/13	0.28	0.34	0.34	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35																					3,680,220
7/1/13 - 6/30/14	0.34	0.38	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39																						3,905,280
7/1/14 - 6/30/15	0.43	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46																							4,027,500
7/1/15 - 6/30/16	0.42	0.44	0.45	0.45	0.45	0.45	0.45	0.45																								4,000,130
7/1/16 - 6/30/17	0.51	0.52	0.53	0.53	0.53	0.53	0.53																									3,525,650
7/1/17 - 6/30/18	0.41	0.43	0.44	0.44	0.44	0.44																										3,476,210
7/1/18 - 6/30/19	0.40	0.46	0.46	0.46	0.46																											3,573,240
7/1/19 - 6/30/20	0.49	0.55	0.55	0.55																												3,687,200
7/1/20 - 6/30/21	0.94	0.97	0.98																													3,601,119
7/1/21 - 6/30/22	0.43	0.45																														3,561,252
7/1/22 - 6/30/23	0.24																															3,478,917

Commonwealth of Massachusetts
Department of Corrections
DOC - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss Rates

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.50	1.09	1.50	1.81	1.95	2.07	2.15	2.24	2.31	2.39	2.43	2.47	2.50	2.52	2.53	2.56	2.58	2.60	2.62	2.64	2.67	2.69	2.71	2.73	2.75	2.77	2.79	2.81	2.84	2.86		1,859,460
7/1/94 - 6/30/95	0.56	1.29	1.71	2.04	2.34	2.56	2.75	2.90	2.96	3.01	3.05	3.10	3.14	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17			1,940,510
7/1/95 - 6/30/96	0.55	1.04	1.38	1.70	1.85	1.98	2.10	2.20	2.29	2.34	2.37	2.39	2.40	2.42	2.44	2.45	2.47	2.49	2.56	2.58	2.59	2.63	2.63	2.63	2.63	2.63	2.63	2.63				2,052,620
7/1/96 - 6/30/97	0.56	1.29	1.64	1.95	2.14	2.28	2.42	2.50	2.52	2.54	2.55	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.57	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58					2,340,730
7/1/97 - 6/30/98	0.76	1.54	2.05	2.39	2.67	2.93	3.11	3.22	3.29	3.36	3.40	3.44	3.49	3.53	3.57	3.61	3.65	3.68	3.72	3.76	3.80	3.84	3.89	3.93	3.97	4.01						2,218,650
7/1/98 - 6/30/99	0.52	1.16	1.60	1.95	2.29	2.47	2.61	2.71	2.78	2.84	2.88	2.91	2.92	2.93	2.95	2.96	2.97	2.98	2.99	3.00	3.02	3.03	3.04	3.05	3.07							2,560,710
7/1/99 - 6/30/00	0.70	1.50	2.00	2.42	2.67	2.82	2.92	2.93	2.99	3.01	3.02	3.02	3.03	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04								2,684,860
7/1/00 - 6/30/01	0.80	1.77	2.45	2.97	3.29	3.52	3.69	3.76	3.76	3.77	3.77	3.77	3.77	3.77	3.77	3.78	3.78	3.78	3.78	3.78	3.78	3.78	3.78									2,791,820
7/1/01 - 6/30/02	0.79	1.64	2.23	2.62	2.84	2.99	3.05	3.08	3.10	3.12	3.13	3.16	3.16	3.16	3.16	3.16	3.16	3.16	3.16	3.16	3.16	3.16										2,830,700
7/1/02 - 6/30/03	0.87	1.76	2.31	2.62	2.86	2.94	2.98	2.98	2.99	2.99	3.00	3.01	3.01	3.01	3.02	3.02	3.02	3.02	3.02	3.02	3.02											2,898,460
7/1/03 - 6/30/04	0.73	1.54	2.03	2.34	2.50	2.60	2.67	2.68	2.68	2.68	2.68	2.68	2.69	2.69	2.69	2.69	2.69	2.69	2.69	2.69												2,937,710
7/1/04 - 6/30/05	0.77	1.59	2.10	2.45	2.61	2.71	2.79	2.82	2.83	2.83	2.83	2.83	2.83	2.84	2.84	2.84	2.84	2.84	2.84													2,913,820
7/1/05 - 6/30/06	0.42	1.03	1.45	1.73	1.86	1.92	1.96	1.97	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98														2,947,090
7/1/06 - 6/30/07	0.48	0.98	1.26	1.44	1.54	1.59	1.62	1.65	1.67	1.69	1.71	1.73	1.75	1.78	1.80	1.82	1.85															2,896,030
7/1/07 - 6/30/08	0.35	0.75	0.96	1.12	1.22	1.28	1.32	1.33	1.35	1.36	1.38	1.39	1.41	1.42	1.43	1.45																3,546,680
7/1/08 - 6/30/09	0.32	0.67	0.88	1.02	1.10	1.14	1.18	1.21	1.22	1.24	1.25	1.26	1.26	1.27	1.27																	3,324,130
7/1/09 - 6/30/10	0.27	0.48	0.61	0.66	0.69	0.71	0.74	0.76	0.81	0.83	0.86	0.89	0.93	0.97																		3,363,380
7/1/10 - 6/30/11	0.30	0.67	0.84	0.94	1.00	1.05	1.06	1.06	1.06	1.06	1.07	1.07	1.07																			3,337,830
7/1/11 - 6/30/12	0.18	0.40	0.52	0.64	0.74	0.76	0.77	0.77	0.77	0.78	0.78	0.78																				3,481,870
7/1/12 - 6/30/13	0.16	0.39	0.54	0.61	0.64	0.66	0.67	0.67	0.67	0.67	0.67																					3,680,220
7/1/13 - 6/30/14	0.21	0.47	0.60	0.72	0.77	0.78	0.79	0.79	0.79	0.79																						3,905,280
7/1/14 - 6/30/15	0.30	0.55	0.72	0.85	0.93	0.97	0.97	0.97	0.98																							4,027,500
7/1/15 - 6/30/16	0.33	0.62	0.79	0.91	1.01	1.04	1.08	1.13																								4,000,130
7/1/16 - 6/30/17	0.42	0.95	1.23	1.45	1.57	1.62	1.63																									3,525,650
7/1/17 - 6/30/18	0.36	0.68	0.84	0.96	1.06	1.14																										3,476,210
7/1/18 - 6/30/19	0.42	0.78	0.99	1.13	1.23																											3,573,240
7/1/19 - 6/30/20	0.55	1.15	1.51	1.75																												3,687,200
7/1/20 - 6/30/21	0.46	0.75	0.96																													3,601,119
7/1/21 - 6/30/22	0.27	0.53																														3,561,252
7/1/22 - 6/30/23	0.24																															3,478,917

Commonwealth of Massachusetts
Department of Corrections
DOC - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Settlement Rates (Closed Claim Count / Ultimate Claim Count)

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
7/1/98 - 6/30/99																																
7/1/99 - 6/30/00																																
7/1/00 - 6/30/01																																
7/1/01 - 6/30/02																																
7/1/02 - 6/30/03																																
7/1/03 - 6/30/04																																
7/1/04 - 6/30/05																																
7/1/05 - 6/30/06																																
7/1/06 - 6/30/07																																
7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	0.00	0.28	0.76	0.84	0.94	0.97	0.98	1.00	1.00	1.00	1.00																					1.00
7/1/13 - 6/30/14	0.00	0.31	0.75	0.87	0.91	0.95	0.96	0.97	0.99	0.99																						0.99
7/1/14 - 6/30/15	0.00	0.47	0.81	0.90	0.92	0.95	0.97	0.98	0.97																							0.97
7/1/15 - 6/30/16	0.00	0.42	0.79	0.87	0.91	0.95	0.96	0.98																								0.98
7/1/16 - 6/30/17	0.00	0.45	0.75	0.88	0.93	0.96	0.99																									0.99
7/1/17 - 6/30/18	0.00	0.37	0.87	0.90	0.92	0.97																										0.97
7/1/18 - 6/30/19	0.00	0.31	0.84	0.88	0.94																											0.94
7/1/19 - 6/30/20	0.00	0.54	0.80	0.86																												0.86
7/1/20 - 6/30/21	0.00	0.83	0.92																													0.92
7/1/21 - 6/30/22	0.00	0.68																														0.68
7/1/22 - 6/30/23	0.00																															0.00

Commonwealth of Massachusetts
Department of Corrections
DOC - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Open Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993	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	0	0	0	9	9
7/1/93 - 6/30/94	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	0	0	2		2
7/1/94 - 6/30/95	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	0	1			1
7/1/95 - 6/30/96	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	1				1
7/1/96 - 6/30/97	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					0
7/1/97 - 6/30/98	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	2						2
7/1/98 - 6/30/99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2							2
7/1/99 - 6/30/00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1								1
7/1/00 - 6/30/01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1									1
7/1/01 - 6/30/02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1										1
7/1/02 - 6/30/03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											0
7/1/03 - 6/30/04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												0
7/1/04 - 6/30/05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2													2
7/1/05 - 6/30/06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1														1
7/1/06 - 6/30/07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5															5
7/1/07 - 6/30/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1																1
7/1/08 - 6/30/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4																	4
7/1/09 - 6/30/10	0	0	0	0	0	0	0	0	0	0	0	0	0	6																		6
7/1/10 - 6/30/11	0	0	0	0	0	0	0	0	0	0	0	0	0																			0
7/1/11 - 6/30/12	0	0	0	0	0	0	0	0	0	0	0	1																				1
7/1/12 - 6/30/13	102	89	29	20	8	4	3	0	0	0	0																					0
7/1/13 - 6/30/14	134	103	37	20	14	7	6	4	2	1																						1
7/1/14 - 6/30/15	173	97	36	18	14	9	5	4	5																							5
7/1/15 - 6/30/16	167	102	37	23	16	9	7	3																								3
7/1/16 - 6/30/17	179	102	46	22	13	7	2																									2
7/1/17 - 6/30/18	142	93	20	15	12	5																										5
7/1/18 - 6/30/19	143	112	26	20	9																											9
7/1/19 - 6/30/20	181	93	40	28																												28
7/1/20 - 6/30/21	339	54	29																													29
7/1/21 - 6/30/22	152	49																														49
7/1/22 - 6/30/23	82																															82
																																253

Commonwealth of Massachusetts
Fiscal Accident Years 1993 & Prior
Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
($U.S.)

Fiscal Accident Years 1994 - 2001 - Claim Survival Analysis (Based on 2005 Group Term Life Table)

Claim Number	Accident Year	Group	Gender	Age at 6/30/23	Life Expectancy Years	Deloitte Estimated Indemnity Unpaid	Selected Annual Payments 3.0%	Actual Historical Payments FY - CY 2023	FY - CY 2022	FY - CY 2021	FY - CY 2020	FY - CY 2019	FY - CY 2018	FY - CY 2017
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
15133	1994	Department of Correction	M	62	14.6	798	38	0	0	0	245	0	0	0
18463	1994	Department of Correction	M	64	13.7	800,836	41,574	41,574	40,280	39,711	38,991	38,301	37,617	36,949
33504	1995	Department of Correction	M	61	15.0	0	0	0	357	0	0	0	0	0
42130	1996	Department of Correction	M	64	13.7	0	0	0	0	0	0	0	0	0
63664	1998	Department of Correction	M	70	11.2	715,360	48,003	48,003	46,730	45,850	45,020	44,224	43,432	42,661
64233	1998	Department of Correction	M	67	12.4	846,068	49,754	49,754	47,930	47,655	46,792	45,964	45,141	44,341
68304	1999	Department of Correction	F	66	15.1	0	0	0	0	0	0	0	0	0
72028	1999	Department of Correction	M	80	7.6	303,526	32,689	32,689	31,672	31,223	30,656	30,114	29,575	29,051
71246	1999	Department of Correction	M	61	15.0	0	0	0	0	0	0	0	0	0
81108	2000	Department of Correction	M	89	4.6	0	0	0	0	0	0	0	0	0
88980	2001	Department of Correction	M	60	15.5	0	0	0	0	0	0	0	0	197,415
Total:						2,666,589		172,020	166,970	164,439	161,704	158,603	155,765	350,416

Selected Historical Trend for Permanent Claims: 1.030
Selected Future Trend for Permanent Claims: 1.030

Commonwealth of Massachusetts
Department of Correction Indemnity Tail Calculation
Indemnity (Including Lump Sum)

Section III
Exhibit 3

Unpaid Claim Analysis as of 06/30/2023
($U.S.)

Tail Factor Calculation @372 Months

Accident Year	Current Paid	LDF to @372 Months	Paid @372 Months	Unpaid 6/30/23	Selected Ultimate	Implied Tail
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1983	2,747,816	1.000	2,747,816	0	2,747,816	1.000
1984	1,405,260	1.000	1,405,260	0	1,405,260	1.000
1985	4,479,278	1.000	4,479,278	744,741	5,224,019	1.166
1986	6,399,508	1.000	6,399,508	0	6,399,508	1.000
1987	3,884,640	1.000	3,884,640	0	3,884,640	1.000
1988	6,097,875	1.000	6,097,875	0	6,097,875	1.000
1989	7,630,168	1.000	7,630,168	0	7,630,168	1.000
1990	9,880,391	1.000	9,880,391	591,343	10,471,734	1.060
1991	11,004,369	1.000	11,004,369	1,682,675	12,687,044	1.153
1992	4,774,871	1.000	4,774,871	1,109,785	5,884,656	1.232
1993	3,157,116	1.000	3,157,116	0	3,157,116	1.000
1994	5,314,656	1.008	5,356,558	801,634	6,116,290	1.142
1995	6,155,200	1.000	6,155,200	0	6,155,200	1.000
1996	5,389,787	1.000	5,389,787	0	5,389,787	1.000
1997	6,031,973	1.000	6,031,973	0	6,031,973	1.000
1998	8,907,620	1.057	9,412,919	1,561,428	10,469,049	1.112
1999	7,854,004	1.025	8,053,025	303,526	8,157,530	1.013
2000	8,170,937	1.000	8,170,937	0	8,170,937	1.000
2001	10,541,879	1.000	10,541,879	0	10,541,879	1.000
Total	119,827,349		120,573,570	6,795,132	126,622,481	1.050

Commonwealth of Massachusetts
Department of Corrections
DOC - Medical

Section III
Exhibit II
Sheet 1

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Unpaid Loss & ALAE Estimates

Accident Year	Payroll (00)'s	Retention	Unlimited Paid Loss & ALAE @ 06/30/2023	Unlimited Reported Loss & ALAE @ 06/30/2023	Ultimate Loss & ALAE Low	Ultimate Loss & ALAE High	Indicated Total Unpaid Loss & ALAE Estimates Low	Indicated Total Unpaid Loss & ALAE Estimates High	Case Reserves	Indicated IBNR Estimate Low	Indicated IBNR Estimate High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993		Unlimited	14,916,838	14,916,838	17,276,293	17,800,617	2,359,456	2,883,779	0	2,359,456	2,883,779
7/1/93 - 6/30/94	1,859,460	Unlimited	1,627,894	1,627,894	1,695,900	1,703,100	68,006	75,206	0	68,006	75,206
7/1/94 - 6/30/95	1,940,510	Unlimited	1,344,313	1,344,313	1,403,400	1,409,600	59,087	65,287	0	59,087	65,287
7/1/95 - 6/30/96	2,052,620	Unlimited	1,496,832	1,496,832	1,567,300	1,574,700	70,468	77,868	0	70,468	77,868
7/1/96 - 6/30/97	2,340,730	Unlimited	1,838,743	1,838,743	1,932,600	1,942,500	93,857	103,757	0	93,857	103,757
7/1/97 - 6/30/98	2,218,650	Unlimited	2,479,856	2,479,856	2,616,600	2,631,000	136,744	151,144	0	136,744	151,144
7/1/98 - 6/30/99	2,560,710	Unlimited	1,977,824	1,977,824	2,096,000	2,108,400	118,176	130,576	0	118,176	130,576
7/1/99 - 6/30/00	2,684,860	Unlimited	2,136,406	2,136,406	2,276,000	2,290,700	139,594	154,294	0	139,594	154,294
7/1/00 - 6/30/01	2,791,820	Unlimited	2,959,402	2,959,402	3,169,900	3,192,100	210,498	232,698	0	210,498	232,698
7/1/01 - 6/30/02	2,830,700	Unlimited	1,904,165	1,904,165	2,051,200	2,066,700	147,035	162,535	0	147,035	162,535
7/1/02 - 6/30/03	2,898,460	Unlimited	2,281,025	2,281,025	2,466,000	2,485,500	184,975	204,475	0	184,975	204,475
7/1/03 - 6/30/04	2,937,710	Unlimited	2,120,710	2,120,710	2,301,400	2,320,400	180,690	199,690	0	180,690	199,690
7/1/04 - 6/30/05	2,913,820	Unlimited	2,794,970	2,794,970	3,045,900	3,072,400	250,930	277,430	0	250,930	277,430
7/1/05 - 6/30/06	2,947,090	Unlimited	2,169,468	2,169,468	2,374,300	2,395,900	204,832	226,432	0	204,832	226,432
7/1/06 - 6/30/07	2,896,030	Unlimited	1,869,035	1,869,035	2,054,600	2,074,100	185,565	205,065	0	185,565	205,065
7/1/07 - 6/30/08	3,546,680	Unlimited	1,532,908	1,532,908	1,693,500	1,710,400	160,592	177,492	0	160,592	177,492
7/1/08 - 6/30/09	3,324,130	Unlimited	1,624,270	1,624,270	1,804,300	1,823,300	180,030	199,030	0	180,030	199,030
7/1/09 - 6/30/10	3,363,380	Unlimited	1,023,456	1,023,456	1,144,200	1,156,900	120,744	133,444	0	120,744	133,444
7/1/10 - 6/30/11	3,337,830	Unlimited	1,139,957	1,139,957	1,283,800	1,299,000	143,843	159,043	0	143,843	159,043
7/1/11 - 6/30/12	3,481,870	Unlimited	931,950	931,950	1,057,400	1,070,600	125,450	138,650	0	125,450	138,650
7/1/12 - 6/30/13	3,680,220	Unlimited	833,224	833,224	952,700	965,300	119,476	132,076	0	119,476	132,076
7/1/13 - 6/30/14	3,905,280	Unlimited	896,642	896,642	1,033,400	1,047,800	136,758	151,158	0	136,758	151,158
7/1/14 - 6/30/15	4,027,500	Unlimited	1,227,349	1,227,349	1,426,400	1,447,400	199,051	220,051	0	199,051	220,051
7/1/15 - 6/30/16	4,000,130	Unlimited	1,074,146	1,074,146	1,256,100	1,283,500	181,954	209,354	0	181,954	209,354
7/1/16 - 6/30/17	3,525,650	Unlimited	1,305,697	1,305,697	1,540,900	1,576,400	235,203	270,703	0	235,203	270,703
7/1/17 - 6/30/18	3,476,210	Unlimited	955,281	955,281	1,139,000	1,166,600	183,719	211,319	0	183,719	211,319
7/1/18 - 6/30/19	3,573,240	Unlimited	1,009,250	1,009,250	1,215,900	1,247,000	206,650	237,750	0	206,650	237,750
7/1/19 - 6/30/20	3,687,200	Unlimited	1,551,368	1,551,368	1,709,900	1,733,800	158,532	182,432	0	158,532	182,432
7/1/20 - 6/30/21	3,601,119	Unlimited	891,169	891,169	1,253,000	1,333,000	361,831	441,831	0	361,831	441,831
7/1/21 - 6/30/22	3,561,252	Unlimited	558,777	558,777	1,131,000	1,258,000	572,223	699,223	0	572,223	699,223
7/1/22 - 6/30/23	3,478,917	Unlimited	448,257	448,257	1,245,000	1,422,000	796,743	973,743	0	796,743	973,743
Total	93,443,779		60,921,182	60,921,182	69,213,893	70,608,717	8,292,711	9,687,535	0	8,292,711	9,687,535

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	Provided by Entity
(6)	From Section III, Exhibit II, Sheet 6, Column (11)
(7)	From Section III, Exhibit II, Sheet 6, Column (12)
(8)	= (6) - (4)
(9)	= (7) - (4)
(10)	= (5) - (4)
(11)	= (8) - (10)
(12)	= (9) - (10)

Commonwealth of Massachusetts
Department of Corrections
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Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Short-Term Portion

Accident Year	Age of Losses @ 06/30/2023	Selected Paid Test LDF @ 06/30/2023	Implied Paid LDF	Paid LDF	Cumulative Percent Paid	Incremental Percent Paid	Average Total Unpaid ss & ALAE Estimate	Undiscounted Cash Flow of Payments 2024
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
						0.39%		
Prior to 7/1/1993	372.0	1.041	1.176	1.041	96.05%	0.27%	2,621,618	257,438
7/1/93 - 6/30/94	360.0	1.044	1.044	1.044	95.79%	0.21%	71,606	4,529
7/1/94 - 6/30/95	348.0	1.046	1.046	1.046	95.58%	0.30%	62,187	2,949
7/1/95 - 6/30/96	336.0	1.050	1.050	1.050	95.28%	0.38%	74,168	4,709
7/1/96 - 6/30/97	324.0	1.054	1.054	1.054	94.90%	0.39%	98,807	7,326
7/1/97 - 6/30/98	312.0	1.058	1.058	1.058	94.51%	0.43%	143,944	10,160
7/1/98 - 6/30/99	300.0	1.063	1.063	1.063	94.08%	0.52%	124,376	9,002
7/1/99 - 6/30/00	288.0	1.069	1.069	1.069	93.56%	0.53%	146,944	11,886
7/1/00 - 6/30/01	276.0	1.075	1.075	1.075	93.03%	0.55%	221,598	16,869
7/1/01 - 6/30/02	264.0	1.081	1.081	1.081	92.48%	0.35%	154,785	11,316
7/1/02 - 6/30/03	252.0	1.085	1.085	1.085	92.13%	0.36%	194,725	8,676
7/1/03 - 6/30/04	240.0	1.090	1.090	1.090	91.77%	0.40%	190,190	8,433
7/1/04 - 6/30/05	228.0	1.095	1.095	1.095	91.36%	0.41%	264,180	12,364
7/1/05 - 6/30/06	216.0	1.099	1.099	1.099	90.96%	0.42%	215,632	9,664
7/1/06 - 6/30/07	204.0	1.104	1.105	1.104	90.54%	0.47%	195,315	8,654
7/1/07 - 6/30/08	192.0	1.110	1.110	1.110	90.07%	0.52%	169,042	8,034
7/1/08 - 6/30/09	180.0	1.117	1.117	1.117	89.55%	0.60%	189,530	9,395
7/1/09 - 6/30/10	168.0	1.124	1.124	1.124	88.95%	0.68%	127,094	6,878
7/1/10 - 6/30/11	156.0	1.133	1.133	1.133	88.27%	0.68%	151,443	8,771
7/1/11 - 6/30/12	144.0	1.142	1.142	1.142	87.59%	0.71%	132,050	7,243
7/1/12 - 6/30/13	132.0	1.151	1.151	1.151	86.89%	0.72%	125,776	6,772
7/1/13 - 6/30/14	120.0	1.161	1.161	1.161	86.17%	0.75%	143,958	7,476
7/1/14 - 6/30/15	108.0	1.171	1.171	1.171	85.41%	0.82%	209,551	10,816
7/1/15 - 6/30/16	96.0	1.182	1.182	1.182	84.59%	0.82%	195,654	10,419
7/1/16 - 6/30/17	84.0	1.194	1.194	1.194	83.77%	0.91%	252,953	12,841
7/1/17 - 6/30/18	72.0	1.207	1.207	1.207	82.87%	0.91%	197,519	10,436
7/1/18 - 6/30/19	60.0	1.220	1.220	1.220	81.96%	2.26%	222,200	11,163
7/1/19 - 6/30/20	48.0	1.255	1.110	1.255	79.70%	4.99%	170,482	18,997
7/1/20 - 6/30/21	36.0	1.339	1.451	1.339	74.70%	10.25%	401,831	79,312
7/1/21 - 6/30/22	24.0	1.552	2.138	1.552	64.45%	31.03%	635,723	183,342
7/1/22 - 6/30/23	12.0	2.992	2.975	2.992	33.42%	33.42%	885,243	412,588
Total							8,990,123	1,188,457

	Undiscounted	Discounted			
Short-Term Portion	13%	26%	(10)	Interest Rate	4%

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1) @ 06/30/2023
(3) From Section III, Exhibit II, Sheet 10, Column (6)
(4) Average Ultimate Loss Divided by Paid Loss From Section III, Exhibit II, Sheet 6
(5) Selected
(6) = 1 / (5)
(7) = (6) from Current Age - (6) from Subsequent Age
(8) From Section III, Exhibit II, Sheet 3
(9) - (9) Based on (5)

Commonwealth of Massachusetts
Department of Corrections
DOC - Medical

Section III
Exhibit II
Sheet 3

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Discounted at (4%) Unpaid Loss & ALAE Estimate

Accident Year	Indicated Total Unpaid Loss & ALAE Estimate Low	Indicated Total Unpaid Loss & ALAE Estimate High	Discount Factor	Discounted Total Unpaid Loss & ALAE Estimate Low	Discounted Total Unpaid Loss & ALAE Estimate High
(1)	(2)	(3)	(4)	(5)	(6)
Prior to 7/1/1993	2,359,456	2,883,779	1.000	2,359,456	2,883,779
7/1/93 - 6/30/94	68,006	75,206	0.981	66,686	73,746
7/1/94 - 6/30/95	59,087	65,287	0.945	55,816	61,673
7/1/95 - 6/30/96	70,468	77,868	0.913	64,331	71,086
7/1/96 - 6/30/97	93,857	103,757	0.885	83,103	91,869
7/1/97 - 6/30/98	136,744	151,144	0.860	117,666	130,057
7/1/98 - 6/30/99	118,176	130,576	0.838	99,088	109,485
7/1/99 - 6/30/00	139,594	154,294	0.820	114,513	126,572
7/1/00 - 6/30/01	210,498	232,698	0.803	169,110	186,945
7/1/01 - 6/30/02	147,035	162,535	0.788	115,819	128,028
7/1/02 - 6/30/03	184,975	204,475	0.767	141,939	156,902
7/1/03 - 6/30/04	180,690	199,690	0.749	135,263	149,487
7/1/04 - 6/30/05	250,930	277,430	0.732	183,683	203,081
7/1/05 - 6/30/06	204,832	226,432	0.716	146,712	162,183
7/1/06 - 6/30/07	185,565	205,065	0.702	130,199	143,881
7/1/07 - 6/30/08	160,592	177,492	0.689	110,679	122,326
7/1/08 - 6/30/09	180,030	199,030	0.678	122,140	135,031
7/1/09 - 6/30/10	120,744	133,444	0.670	80,912	89,423
7/1/10 - 6/30/11	143,843	159,043	0.664	95,485	105,575
7/1/11 - 6/30/12	125,450	138,650	0.657	82,428	91,101
7/1/12 - 6/30/13	119,476	132,076	0.651	77,727	85,924
7/1/13 - 6/30/14	136,758	151,158	0.644	88,069	97,343
7/1/14 - 6/30/15	199,051	220,051	0.638	126,967	140,362
7/1/15 - 6/30/16	181,954	209,354	0.633	115,156	132,497
7/1/16 - 6/30/17	235,203	270,703	0.627	147,574	169,848
7/1/17 - 6/30/18	183,719	211,319	0.623	114,500	131,701
7/1/18 - 6/30/19	206,650	237,750	0.618	127,797	147,030
7/1/19 - 6/30/20	158,532	182,432	0.638	101,086	116,326
7/1/20 - 6/30/21	361,831	441,831	0.686	248,087	302,939
7/1/21 - 6/30/22	572,223	699,223	0.752	430,277	525,773
7/1/22 - 6/30/23	796,743	973,743	0.843	671,703	820,925
Total	8,292,711	9,687,535		6,723,969	7,892,895

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From Section III, Exhibit II, Sheet 1, Column (8)
(3) From Section III, Exhibit II, Sheet 1, Column (9)
(4) From Section III, Exhibit II, Sheet 0, Column (8)
(5) = (2) x (4)
(6) = (3) x (4)

Commonwealth of Massachusetts
Department of Corrections
DOC - Medical

Section III
Exhibit II
Sheet 4

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Actual vs Expected - Paid Loss & ALAE Emergence

Accident Year	Selected Low Ultimate Loss & ALAE @ 06/30/2022	Selected High Ultimate Loss & ALAE @ 06/30/2022	Unlimited Paid Loss & ALAE @ 06/30/2022	Unlimited Paid Loss & ALAE @ 06/30/2023	Paid LDF @ 06/30/2022	Projected Paid LDF @ 06/30/2023	Method 1 Low Expected Paid Emergence Loss & ALAE @ 06/30/2023	Method 1 High Expected Paid Emergence Loss & ALAE @ 06/30/2023	Actual Paid Emergence Loss & ALAE @ 06/30/2023	Actual - Expected Method 1 Low Paid	Actual - Expected Method 1 High Paid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993	16,536,405	17,029,057	14,288,618	14,916,838	1.045	1.041	220,307	268,592	628,220	407,913	359,628
7/1/93 - 6/30/94	1,691,500	1,698,900	1,621,432	1,627,894	1.045	1.045	0	0	6,461	6,461	6,461
7/1/94 - 6/30/95	1,403,800	1,410,300	1,343,004	1,344,313	1.048	1.045	2,697	2,985	1,309	(1,387)	(1,676)
7/1/95 - 6/30/96	1,563,100	1,570,600	1,491,984	1,496,832	1.050	1.048	3,367	3,722	4,848	1,481	1,126
7/1/96 - 6/30/97	1,931,900	1,941,700	1,838,743	1,838,743	1.053	1.050	5,236	5,787	0	(5,236)	(5,787)
7/1/97 - 6/30/98	2,580,300	2,594,700	2,444,298	2,479,856	1.059	1.053	11,601	12,829	35,558	23,958	22,729
7/1/98 - 6/30/99	2,094,200	2,107,000	1,972,654	1,977,824	1.065	1.059	11,076	12,242	5,170	(5,905)	(7,072)
7/1/99 - 6/30/00	2,280,800	2,296,100	2,136,194	2,136,406	1.071	1.065	12,242	13,537	212	(12,030)	(13,325)
7/1/00 - 6/30/01	3,177,000	3,200,100	2,958,127	2,959,402	1.078	1.071	17,361	19,194	1,275	(16,086)	(17,919)
7/1/01 - 6/30/02	2,050,300	2,065,700	1,903,593	1,904,165	1.081	1.078	5,420	5,989	572	(4,848)	(5,417)
7/1/02 - 6/30/03	2,467,500	2,487,200	2,281,025	2,281,025	1.086	1.081	9,912	10,959	0	(9,912)	(10,959)
7/1/03 - 6/30/04	2,304,900	2,324,300	2,120,710	2,120,710	1.091	1.086	9,965	11,015	0	(9,965)	(11,015)
7/1/04 - 6/30/05	3,046,200	3,073,400	2,788,620	2,794,970	1.097	1.091	14,103	15,592	6,350	(7,753)	(9,242)
7/1/05 - 6/30/06	2,383,500	2,406,100	2,168,542	2,169,468	1.104	1.097	13,282	14,678	926	(12,356)	(13,752)
7/1/06 - 6/30/07	2,035,600	2,056,100	1,840,361	1,869,035	1.112	1.104	11,622	12,843	28,674	17,052	15,831
7/1/07 - 6/30/08	1,693,100	1,711,200	1,520,492	1,532,908	1.119	1.112	10,139	11,202	12,416	2,277	1,214
7/1/08 - 6/30/09	1,812,800	1,833,400	1,616,858	1,624,270	1.128	1.119	11,107	12,274	7,412	(3,695)	(4,862)
7/1/09 - 6/30/10	1,141,200	1,155,000	1,009,731	1,023,456	1.137	1.128	8,079	8,927	13,725	5,646	4,798
7/1/10 - 6/30/11	1,299,600	1,316,400	1,139,957	1,139,957	1.147	1.137	9,853	10,889	0	(9,853)	(10,889)
7/1/11 - 6/30/12	1,067,600	1,082,300	928,392	931,950	1.158	1.147	8,027	8,875	3,558	(4,469)	(5,317)
7/1/12 - 6/30/13	966,600	980,600	833,224	833,224	1.168	1.158	7,276	8,039	0	(7,276)	(8,039)
7/1/13 - 6/30/14	1,047,700	1,063,700	895,188	896,642	1.179	1.168	7,862	8,687	1,454	(6,408)	(7,233)
7/1/14 - 6/30/15	1,438,600	1,471,100	1,222,279	1,227,349	1.190	1.179	10,600	12,193	5,070	(5,530)	(7,122)
7/1/15 - 6/30/16	1,270,900	1,301,300	1,069,204	1,074,146	1.203	1.190	10,507	12,090	4,942	(5,565)	(7,148)
7/1/16 - 6/30/17	1,560,200	1,599,500	1,298,975	1,305,697	1.216	1.203	13,461	15,486	6,722	(6,739)	(8,764)
7/1/17 - 6/30/18	1,151,700	1,182,500	946,930	955,281	1.233	1.216	11,794	13,568	8,351	(3,444)	(5,218)
7/1/18 - 6/30/19	1,310,900	1,366,000	944,721	1,009,250	1.260	1.233	31,518	36,261	64,529	33,010	28,268
7/1/19 - 6/30/20	1,627,000	1,678,000	1,398,602	1,551,368	1.325	1.260	36,378	44,502	152,766	116,387	108,264
7/1/20 - 6/30/21	1,263,000	1,377,000	751,397	891,169	1.528	1.325	148,078	181,074	139,772	(8,306)	(41,302)
7/1/21 - 6/30/22	1,193,000	1,400,000	261,235	558,777	2.970	1.528	446,291	545,439	297,542	(148,749)	(247,897)
Total	67,390,905	68,779,257	59,035,091	60,472,925			1,119,159	1,339,469	1,437,834	318,675	98,365

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Selected by Deloitte Consulting LLP @ 06/30/2022
(3)	Selected by Deloitte Consulting LLP @ 06/30/2022
(4)	Provided by Entity
(5)	Provided by Entity
(6)	Selected by Deloitte Consulting LLP @ 06/30/2022
(7)	Interpolated From (6)
(8)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((2) - (4))
(9)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((3) - (4))
(10)	= (5) - (4)
(11)	= (10) - (8)
(12)	= (10) - (9)

Commonwealth of Massachusetts
Department of Corrections
DOC - Medical

Section III
Exhibit II
Sheet 5

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Ultimate Loss & ALAE Runoff

Accident Year	Ultimate Loss & ALAE @ 06/30/2022 Low	Ultimate Loss & ALAE @ 06/30/2022 High	Ultimate Loss & ALAE @ 06/30/2023 Low	Ultimate Loss & ALAE @ 06/30/2023 High	Deloitte Change Low	Deloitte Change High	Paid Loss & ALAE @ 06/30/2023	Reported Loss & ALAE @ 06/30/2023
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	16,536,405	17,029,057	17,276,293	17,800,617	739,889	771,560	14,916,838	14,916,838
7/1/93 - 6/30/94	1,691,500	1,698,900	1,695,900	1,703,100	4,400	4,200	1,627,894	1,627,894
7/1/94 - 6/30/95	1,403,800	1,410,300	1,403,400	1,409,600	(400)	(700)	1,344,313	1,344,313
7/1/95 - 6/30/96	1,563,100	1,570,600	1,567,300	1,574,700	4,200	4,100	1,496,832	1,496,832
7/1/96 - 6/30/97	1,931,900	1,941,700	1,932,600	1,942,500	700	800	1,838,743	1,838,743
7/1/97 - 6/30/98	2,580,300	2,594,700	2,616,600	2,631,000	36,300	36,300	2,479,856	2,479,856
7/1/98 - 6/30/99	2,094,200	2,107,000	2,096,000	2,108,400	1,800	1,400	1,977,824	1,977,824
7/1/99 - 6/30/00	2,280,800	2,296,100	2,276,000	2,290,700	(4,800)	(5,400)	2,136,406	2,136,406
7/1/00 - 6/30/01	3,177,000	3,200,100	3,169,900	3,192,100	(7,100)	(8,000)	2,959,402	2,959,402
7/1/01 - 6/30/02	2,050,300	2,065,700	2,051,200	2,066,700	900	1,000	1,904,165	1,904,165
7/1/02 - 6/30/03	2,467,500	2,487,200	2,466,000	2,485,500	(1,500)	(1,700)	2,281,025	2,281,025
7/1/03 - 6/30/04	2,304,900	2,324,300	2,301,400	2,320,400	(3,500)	(3,900)	2,120,710	2,120,710
7/1/04 - 6/30/05	3,046,200	3,073,400	3,045,900	3,072,400	(300)	(1,000)	2,794,970	2,794,970
7/1/05 - 6/30/06	2,383,500	2,406,100	2,374,300	2,395,900	(9,200)	(10,200)	2,169,468	2,169,468
7/1/06 - 6/30/07	2,035,600	2,056,100	2,054,600	2,074,100	19,000	18,000	1,869,035	1,869,035
7/1/07 - 6/30/08	1,693,100	1,711,200	1,693,500	1,710,400	400	(800)	1,532,908	1,532,908
7/1/08 - 6/30/09	1,812,800	1,833,400	1,804,300	1,823,300	(8,500)	(10,100)	1,624,270	1,624,270
7/1/09 - 6/30/10	1,141,200	1,155,000	1,144,200	1,156,900	3,000	1,900	1,023,456	1,023,456
7/1/10 - 6/30/11	1,299,600	1,316,400	1,283,800	1,299,000	(15,800)	(17,400)	1,139,957	1,139,957
7/1/11 - 6/30/12	1,067,600	1,082,300	1,057,400	1,070,600	(10,200)	(11,700)	931,950	931,950
7/1/12 - 6/30/13	966,600	980,600	952,700	965,300	(13,900)	(15,300)	833,224	833,224
7/1/13 - 6/30/14	1,047,700	1,063,700	1,033,400	1,047,800	(14,300)	(15,900)	896,642	896,642
7/1/14 - 6/30/15	1,438,600	1,471,100	1,426,400	1,447,400	(12,200)	(23,700)	1,227,349	1,227,349
7/1/15 - 6/30/16	1,270,900	1,301,300	1,256,100	1,283,500	(14,800)	(17,800)	1,074,146	1,074,146
7/1/16 - 6/30/17	1,560,200	1,599,500	1,540,900	1,576,400	(19,300)	(23,100)	1,305,697	1,305,697
7/1/17 - 6/30/18	1,151,700	1,182,500	1,139,000	1,166,600	(12,700)	(15,900)	955,281	955,281
7/1/18 - 6/30/19	1,310,900	1,366,000	1,215,900	1,247,000	(95,000)	(119,000)	1,009,250	1,009,250
7/1/19 - 6/30/20	1,627,000	1,678,000	1,709,900	1,733,800	82,900	55,800	1,551,368	1,551,368
7/1/20 - 6/30/21	1,263,000	1,377,000	1,253,000	1,333,000	(10,000)	(44,000)	891,169	891,169
7/1/21 - 6/30/22	1,193,000	1,400,000	1,131,000	1,258,000	(62,000)	(142,000)	558,777	558,777
Total	67,390,905	68,779,257	67,968,893	69,186,717	577,989	407,460	60,472,925	60,472,925

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(3) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(4) From Section III, Exhibit II, Sheet 6, Column (11)
(5) From Section III, Exhibit II, Sheet 6, Column (12)
(6) = (4) - (2)
(7) = (5) - (3)
(8) Provided by Entity
(9) Provided by Entity

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Selection of Ultimate Loss & ALAE

Accident Year	Payroll (00)'s	Unlimited Paid Loss & ALAE @ 06/30/2023	Unlimited Reported Loss & ALAE @ 06/30/2023	Ultimate Loss & ALAE Indications: Paid LDM	Ultimate Loss & ALAE Indications: Expected Loss & ALAE	Ultimate Loss & ALAE Indications: Paid B-F	Ultimate Loss & ALAE Indications: Frequency Severity	Prior Selected Ultimate Loss & ALAE: Low	Prior Selected Ultimate Loss & ALAE: High	Selected Ultimate Loss & ALAE: Low	Selected Ultimate Loss & ALAE: High	Ultimate Loss & ALAE Rates: Low	Ultimate Loss & ALAE Rates: High	Ultimate Loss & ALAE Severity: Low	Ultimate Loss & ALAE Severity: High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Prior to 7/1/1993		14,916,838	14,916,838	15,529,656	0		0	16,536,405	17,029,057	17,276,293	17,800,617				
7/1/93 - 6/30/94	1,859,460	1,627,894	1,627,894	1,699,485	455,762	1,647,093	0	1,691,500	1,698,900	1,695,900	1,703,100	0.91	0.92		
7/1/94 - 6/30/95	1,940,510	1,344,313	1,344,313	1,406,512	485,597	1,365,787	0	1,403,800	1,410,300	1,403,400	1,409,600	0.72	0.73		
7/1/95 - 6/30/96	2,052,620	1,496,832	1,496,832	1,571,016	525,905	1,521,666	0	1,563,100	1,570,600	1,567,300	1,574,700	0.76	0.77		
7/1/96 - 6/30/97	2,340,730	1,838,743	1,838,743	1,937,562	611,448	1,869,928	0	1,931,900	1,941,700	1,932,600	1,942,500	0.83	0.83		
7/1/97 - 6/30/98	2,218,650	2,479,856	2,479,856	2,623,840	587,795	2,512,112	0	2,580,300	2,594,700	2,616,600	2,631,000	1.18	1.19		
7/1/98 - 6/30/99	2,560,710	1,977,824	1,977,824	2,102,182	685,004	2,018,347	0	2,094,200	2,107,000	2,096,000	2,108,400	0.82	0.82		
7/1/99 - 6/30/00	2,684,860	2,136,406	2,136,406	2,283,371	728,916	2,183,322	0	2,280,800	2,296,100	2,276,000	2,290,700	0.85	0.85		
7/1/00 - 6/30/01	2,791,820	2,959,402	2,959,402	3,181,011	777,055	3,013,536	0	3,177,000	3,200,100	3,169,900	3,192,100	1.14	1.14		
7/1/01 - 6/30/02	2,830,700	1,904,165	1,904,165	2,058,915	805,400	1,964,699	0	2,050,300	2,065,700	2,051,200	2,066,700	0.72	0.73		
7/1/02 - 6/30/03	2,898,460	2,281,025	2,281,025	2,475,787	853,834	2,348,193	0	2,467,500	2,487,200	2,466,000	2,485,500	0.85	0.86		
7/1/03 - 6/30/04	2,937,710	2,120,710	2,120,710	2,310,938	896,616	2,194,516	0	2,304,900	2,324,300	2,301,400	2,320,400	0.78	0.79		
7/1/04 - 6/30/05	2,913,820	2,794,970	2,794,970	3,059,152	904,216	2,873,056	0	3,046,200	3,073,400	3,045,900	3,072,400	1.05	1.05		
7/1/05 - 6/30/06	2,947,090	2,169,468	2,169,468	2,385,106	927,708	2,253,342	0	2,383,500	2,406,100	2,374,300	2,395,900	0.81	0.81		
7/1/06 - 6/30/07	2,896,030	1,869,035	1,869,035	2,064,324	920,486	1,956,115	0	2,035,600	2,056,100	2,054,600	2,074,100	0.71	0.72		
7/1/07 - 6/30/08	3,546,680	1,532,908	1,532,908	1,701,949	1,138,236	1,645,960	0	1,693,100	1,711,200	1,693,500	1,710,400	0.48	0.48		
7/1/08 - 6/30/09	3,324,130	1,624,270	1,624,270	1,813,819	1,089,943	1,738,172	0	1,812,800	1,833,400	1,804,300	1,823,300	0.54	0.55		
7/1/09 - 6/30/10	3,363,380	1,023,456	1,023,456	1,150,572	1,131,267	1,148,439	0	1,141,200	1,155,000	1,144,200	1,156,900	0.34	0.34		
7/1/10 - 6/30/11	3,337,830	1,139,957	1,139,957	1,291,403	1,138,001	1,273,414	0	1,299,600	1,316,400	1,283,800	1,299,000	0.38	0.39		
7/1/11 - 6/30/12	3,481,870	931,950	931,950	1,063,965	1,198,635	1,080,674	0	1,067,600	1,082,300	1,057,400	1,070,600	0.30	0.31		
7/1/12 - 6/30/13	3,680,220	833,224	833,224	958,985	1,279,217	1,000,980	772,671	966,600	980,600	952,700	965,300	0.26	0.26	7,443	7,541
7/1/13 - 6/30/14	3,905,280	896,642	896,642	1,040,577	1,370,626	1,086,230	947,970	1,047,700	1,063,700	1,033,400	1,047,800	0.26	0.27	6,844	6,939
7/1/14 - 6/30/15	4,027,500	1,227,349	1,227,349	1,436,925	1,427,244	1,435,513	1,214,407	1,438,600	1,471,100	1,426,400	1,447,400	0.35	0.36	7,669	7,782
7/1/15 - 6/30/16	4,000,130	1,074,146	1,074,146	1,269,758	1,431,308	1,294,646	1,222,241	1,270,900	1,301,300	1,256,100	1,283,500	0.31	0.32	6,978	7,131
7/1/16 - 6/30/17	3,525,650	1,305,697	1,305,697	1,558,656	1,273,779	1,512,422	1,313,502	1,560,200	1,599,500	1,540,900	1,576,400	0.44	0.45	8,284	8,475
7/1/17 - 6/30/18	3,476,210	955,281	955,281	1,152,811	1,268,111	1,172,567	1,116,336	1,151,700	1,182,500	1,139,000	1,166,600	0.33	0.34	7,493	7,675
7/1/18 - 6/30/19	3,573,240	1,009,250	1,009,250	1,231,408	1,316,162	1,246,699	1,245,008	1,310,900	1,366,000	1,215,900	1,247,000	0.34	0.35	7,460	7,650
7/1/19 - 6/30/20	3,687,200	1,551,368	1,551,368	1,946,593	1,371,324	1,829,794	1,613,961	1,627,000	1,678,000	1,709,900	1,733,800	0.46	0.47	8,416	8,533
7/1/20 - 6/30/21	3,601,119	891,169	891,169	1,192,939	1,352,312	1,233,254	2,923,142	1,263,000	1,377,000	1,253,000	1,333,000	0.35	0.37	3,541	3,767
7/1/21 - 6/30/22	3,561,252	558,777	558,777	866,971	1,350,325	1,038,796	1,379,880	1,193,000	1,400,000	1,131,000	1,258,000	0.32	0.35	7,042	7,833
7/1/22 - 6/30/23	3,478,917	448,257	448,257	1,341,246	1,331,913	1,335,032	835,918			1,245,000	1,422,000	0.36	0.41	13,308	15,200
Total	93,443,779	60,921,182	60,921,182	67,707,435	30,634,147	50,794,304	14,585,036	67,390,905	68,779,257	69,213,893	70,608,717				

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Provided by Entity
(4) Provided by Entity
(5) From Section III, Exhibit II, Sheet 10, Column (7)
(6) From Section III, Exhibit II, Sheet 7, Column (4)
(7) From Section III, Exhibit II, Sheet 7, Column (10)
(8) From Section III, Exhibit II, Sheet 9, Column (12)
(9) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(10) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(11) Selected by Deloitte Consulting LLP
(12) Selected by Deloitte Consulting LLP
(13) = (11) / (2)
(14) = (12) / (2)
(15) (11) Divided by Ultimate Claims From Section III, Exhibit II, Sheet 13, Column (7)
(16) (12) Divided by Ultimate Claims From Section III, Exhibit II, Sheet 13, Column (7)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Bornhuetter-Ferguson Method

Accident Year	Payroll (00)'s	Initial Expected Loss & ALAE Rates	Initial Expected Loss & ALAE	Expected % of Paid Loss & ALAE	Expected Paid Loss & ALAE	Unlimited Actual Paid Loss & ALAE	Expected % of Unpaid Loss & ALAE	Expected Unpaid Loss & ALAE	Unlimited Indicated Ultimate Loss & ALAE	Unlimited Indicated Ultimate Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
7/1/93 - 6/30/94	1,859,460	0.25	455,762	95.8%	436,563	1,627,894	4.2%	19,199	1,647,093	0.89
7/1/94 - 6/30/95	1,940,510	0.25	485,597	95.6%	464,122	1,344,313	4.4%	21,474	1,365,787	0.70
7/1/95 - 6/30/96	2,052,620	0.26	525,905	95.3%	501,072	1,496,832	4.7%	24,833	1,521,666	0.74
7/1/96 - 6/30/97	2,340,730	0.26	611,448	94.9%	580,263	1,838,743	5.1%	31,185	1,869,928	0.80
7/1/97 - 6/30/98	2,218,650	0.26	587,795	94.5%	555,539	2,479,856	5.5%	32,255	2,512,112	1.13
7/1/98 - 6/30/99	2,560,710	0.27	685,004	94.1%	644,482	1,977,824	5.9%	40,523	2,018,347	0.79
7/1/99 - 6/30/00	2,684,860	0.27	728,916	93.6%	682,000	2,136,406	6.4%	46,915	2,183,322	0.81
7/1/00 - 6/30/01	2,791,820	0.28	777,055	93.0%	722,921	2,959,402	7.0%	54,135	3,013,536	1.08
7/1/01 - 6/30/02	2,830,700	0.28	805,400	92.5%	744,865	1,904,165	7.5%	60,535	1,964,699	0.69
7/1/02 - 6/30/03	2,898,460	0.29	853,834	92.1%	786,666	2,281,025	7.9%	67,168	2,348,193	0.81
7/1/03 - 6/30/04	2,937,710	0.31	896,616	91.8%	822,810	2,120,710	8.2%	73,806	2,194,516	0.75
7/1/04 - 6/30/05	2,913,820	0.31	904,216	91.4%	826,130	2,794,970	8.6%	78,086	2,873,056	0.99
7/1/05 - 6/30/06	2,947,090	0.31	927,708	91.0%	843,834	2,169,468	9.0%	83,874	2,253,342	0.76
7/1/06 - 6/30/07	2,896,030	0.32	920,486	90.5%	833,407	1,869,035	9.5%	87,080	1,956,115	0.68
7/1/07 - 6/30/08	3,546,680	0.32	1,138,236	90.1%	1,025,184	1,532,908	9.9%	113,052	1,645,960	0.46
7/1/08 - 6/30/09	3,324,130	0.33	1,089,943	89.5%	976,041	1,624,270	10.5%	113,902	1,738,172	0.52
7/1/09 - 6/30/10	3,363,380	0.34	1,131,267	89.0%	1,006,283	1,023,456	11.0%	124,984	1,148,439	0.34
7/1/10 - 6/30/11	3,337,830	0.34	1,138,001	88.3%	1,004,544	1,139,957	11.7%	133,457	1,273,414	0.38
7/1/11 - 6/30/12	3,481,870	0.34	1,198,635	87.6%	1,049,910	931,950	12.4%	148,725	1,080,674	0.31
7/1/12 - 6/30/13	3,680,220	0.35	1,279,217	86.9%	1,111,462	833,224	13.1%	167,756	1,000,980	0.27
7/1/13 - 6/30/14	3,905,280	0.35	1,370,626	86.2%	1,181,038	896,642	13.8%	189,588	1,086,230	0.28
7/1/14 - 6/30/15	4,027,500	0.35	1,427,244	85.4%	1,219,080	1,227,349	14.6%	208,164	1,435,513	0.36
7/1/15 - 6/30/16	4,000,130	0.36	1,431,308	84.6%	1,210,809	1,074,146	15.4%	220,499	1,294,646	0.32
7/1/16 - 6/30/17	3,525,650	0.36	1,273,779	83.8%	1,067,054	1,305,697	16.2%	206,726	1,512,422	0.43
7/1/17 - 6/30/18	3,476,210	0.36	1,268,111	82.9%	1,050,824	955,281	17.1%	217,286	1,172,567	0.34
7/1/18 - 6/30/19	3,573,240	0.37	1,316,162	82.0%	1,078,713	1,009,250	18.0%	237,449	1,246,699	0.35
7/1/19 - 6/30/20	3,687,200	0.37	1,371,324	79.7%	1,092,899	1,551,368	20.3%	278,425	1,829,794	0.50
7/1/20 - 6/30/21	3,601,119	0.38	1,352,312	74.7%	1,010,228	891,169	25.3%	342,085	1,233,254	0.34
7/1/21 - 6/30/22	3,561,252	0.38	1,350,325	64.5%	870,306	558,777	35.5%	480,019	1,038,796	0.29
7/1/22 - 6/30/23	3,478,917	0.38	1,331,913	33.4%	445,138	448,257	66.6%	886,775	1,335,032	0.38
Total	93,443,779		30,634,147		25,844,187	46,004,344		4,789,960	50,794,304	

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	From Section III, Exhibit II, Sheet 8, Column (13)
(4)	= (2) x (3)
(5)	= 1 / Section III, Exhibit II, Sheet 10, Column (6)
(6)	= (4) x (5)
(7)	Provided by Entity
(8)	= 1 - (5)
(9)	= (4) x (8)
(10)	= (7) + (9)
(11)	= (10) / (2)

Commonwealth of Massachusetts
Department of Corrections
DOC - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Calculation of Initial Expected Loss & ALAE Rates

Accident Year	Payroll (00)'s	Payroll Trend	Loss Development Unlimited Indicated Ultimate Loss & ALAE Paid	Reported	Selected Initial Ultimate Loss & ALAE	Loss & ALAE Trend Factor	Benefit Level Adjustment Factors	Trended Ultimate	On-level Loss & ALAE Rates	Detrended Loss & ALAE Rates	Prior Expected Loss & ALAE Rates	Initial Expected Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
7/1/93 - 6/30/94	1,859,460	2.357	1,699,485	1,699,485	17,538,455	3.119	1.180	64,558,167	***14.73***	0.25	0.25	0.25
7/1/94 - 6/30/95	1,940,510	2.288	1,406,512	1,406,512	1,699,500	2.999	1.167	5,948,883	1.34	0.25	0.26	0.25
7/1/95 - 6/30/96	2,052,620	2.221	1,571,016	1,571,016	1,406,500	2.883	1.151	4,668,505	1.02	0.26	0.27	0.26
7/1/96 - 6/30/97	2,340,730	2.157	1,937,562	1,937,562	1,571,000	2.772	1.140	4,965,553	0.98	0.26	0.27	0.26
7/1/97 - 6/30/98	2,218,650	2.094	2,623,840	2,623,840	1,937,550	2.666	1.135	5,862,441	1.26	0.26	0.28	0.26
7/1/98 - 6/30/99	2,560,710	2.033	2,102,182	2,102,182	2,623,800	2.563	1.135	7,633,486	1.47	0.27	0.28	0.27
7/1/99 - 6/30/00	2,684,860	1.974	2,283,371	2,283,371	2,102,200	2.465	1.129	5,850,679	1.10	0.27	0.28	0.27
7/1/00 - 6/30/01	2,791,820	1.916	3,181,011	3,181,011	2,283,350	2.370	1.112	6,018,089	1.12	0.28	0.29	0.28
7/1/01 - 6/30/02	2,830,700	1.860	2,058,915	2,058,915	3,181,000	2.279	1.098	7,962,680	1.51	0.28	0.30	0.28
7/1/02 - 6/30/03	2,898,460	1.806	2,475,787	2,475,787	2,058,950	2.191	1.071	4,832,990	0.92	0.29	0.31	0.29
7/1/03 - 6/30/04	2,937,710	1.754	2,310,938	2,310,938	2,475,750	2.107	1.044	5,445,629	1.06	0.31	0.32	0.31
7/1/04 - 6/30/05	2,913,820	1.702	3,059,152	3,059,152	2,310,900	2.026	1.037	4,853,707	0.98	0.31	0.32	0.31
7/1/05 - 6/30/06	2,947,090	1.653	2,385,106	2,385,106	3,059,150	1.948	1.032	6,149,605	1.26	0.31	0.33	0.31
7/1/06 - 6/30/07	2,896,030	1.605	2,064,324	2,064,324	2,385,100	1.873	1.032	4,610,199	0.99	0.32	0.33	0.32
7/1/07 - 6/30/08	3,546,680	1.558	1,701,949	1,701,949	2,064,350	1.801	1.032	3,836,747	0.69	0.32	0.33	0.32
7/1/08 - 6/30/09	3,324,130	1.513	1,813,819	1,813,819	1,701,950	1.732	1.020	3,005,895	0.60	0.33	0.34	0.33
7/1/09 - 6/30/10	3,363,380	1.469	1,150,572	1,150,572	1,813,800	1.665	1.004	3,031,908	0.61	0.34	0.35	0.34
7/1/10 - 6/30/11	3,337,830	1.426	1,291,403	1,291,403	1,150,550	1.601	1.000	1,842,068	0.39	0.34	0.35	0.34
7/1/11 - 6/30/12	3,481,870	1.384	1,063,965	1,063,965	1,291,400	1.539	1.000	1,988,051	0.41	0.34	0.36	0.34
7/1/12 - 6/30/13	3,680,220	1.344	958,985	958,985	1,064,000	1.480	1.000	1,574,980	0.32	0.35	0.36	0.35
7/1/13 - 6/30/14	3,905,280	1.305	1,040,577	1,040,577	959,000	1.423	1.000	1,364,956	0.27	0.35	0.36	0.35
7/1/14 - 6/30/15	4,027,500	1.267	1,436,925	1,436,925	1,040,600	1.369	1.000	1,424,133	0.28	0.35	0.37	0.35
7/1/15 - 6/30/16	4,000,130	1.230	1,269,758	1,269,758	1,436,900	1.316	1.000	1,890,862	0.38	0.36	0.37	0.36
7/1/16 - 6/30/17	3,525,650	1.194	1,558,656	1,558,656	1,269,800	1.265	1.000	1,606,702	0.38	0.36	0.38	0.36
7/1/17 - 6/30/18	3,476,210	1.159	1,152,811	1,152,811	1,558,650	1.217	1.000	1,896,336	0.47	0.36	0.38	0.36
7/1/18 - 6/30/19	3,573,240	1.126	1,231,408	1,231,408	1,152,800	1.170	1.000	1,348,613	0.34	0.37	0.38	0.37
7/1/19 - 6/30/20	3,687,200	1.093	1,946,593	1,946,593	1,231,450	1.125	1.000	1,385,214	0.34	0.37	0.39	0.37
7/1/20 - 6/30/21	3,601,119	1.061	1,192,939	1,192,939	1,192,939	1.082	1.000	1,290,282	***0.34***	0.38	0.39	0.38
7/1/21 - 6/30/22	3,561,252	1.030	866,971	866,971	866,971	1.040	1.000	901,650	***0.25***	0.38	0.39	0.38
7/1/22 - 6/30/23	3,478,917	1.000	1,341,246	1,341,246	1,341,246	1.000	1.000	1,341,246	***0.39***	0.38		0.38
			52,177,779	52,177,779				Last 3 Wtd Avg	0.38			
								Last 4 Wtd Avg	0.38			
								Last 5 Wtd Avg	0.38			
								All Per Wtd Avg	0.80			

(Note: numbers in bold and italics and with borders are excluded from the calculated averages)

Selected (14) 0.38

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Selected by Deloitte Consulting LLP
(4) From Section III, Exhibit II, Sheet 10, Column (7)
(5) From Section III, Exhibit II, Sheet 0, Column (7)
(6) Selected by Deloitte Consulting LLP
(7) Selected by Deloitte Consulting LLP
(8) Based on industry sources
(9) = (6) x (7) x (8)
(10) = (9) / [(2) x (3)]
(11) = (14) / (7) / (8) * (3)
(12) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(13) Selected for by Deloitte Consulting LLP Based on (14)
(14) Selected by Deloitte Consulting LLP

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Frequency Severity Method

Accident Year	Payroll (00)'s	Ultimate Reported Severity	Include For Fit	Exponential Fitted Reported Severity	Initial Selected Ultimate Severity	Selected Ultimate Claim Counts	Benefit Level Adjustment Factor	Selected Severity Trend	Trended Severity	On-Level Selected Ultimate Severity	Indicated Ultimate Loss & ALAE	Indicated Ultimate Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Prior to 7/1/1993			Exclude	16,873		0					0	
7/1/93 - 6/30/94	1,859,460		Exclude	16,271		0	1.180	3.119	0,000		0	0.00
7/1/94 - 6/30/95	1,940,510		Exclude	15,691		0	1.167	2.999	0,000		0	0.00
7/1/95 - 6/30/96	2,052,620		Exclude	15,132		0	1.151	2.883	0,000		0	0.00
7/1/96 - 6/30/97	2,340,730		Exclude	14,592		0	1.140	2.772	0,000		0	0.00
7/1/97 - 6/30/98	2,218,650		Exclude	14,072		0	1.135	2.666	0,000		0	0.00
7/1/98 - 6/30/99	2,560,710		Exclude	13,571		0	1.135	2.563	0,000		0	0.00
7/1/99 - 6/30/00	2,684,860		Exclude	13,087		0	1.129	2.465	0,000		0	0.00
7/1/00 - 6/30/01	2,791,820		Exclude	12,621		0	1.112	2.370	0,000		0	0.00
7/1/01 - 6/30/02	2,830,700		Exclude	12,171		0	1.098	2.279	0,000		0	0.00
7/1/02 - 6/30/03	2,898,460		Exclude	11,737		0	1.071	2.191	0,000		0	0.00
7/1/03 - 6/30/04	2,937,710		Exclude	11,319		0	1.044	2.107	0,000		0	0.00
7/1/04 - 6/30/05	2,913,820		Exclude	10,915		0	1.037	2.026	0,000		0	0.00
7/1/05 - 6/30/06	2,947,090		Exclude	10,526		0	1.032	1.948	0,000		0	0.00
7/1/06 - 6/30/07	2,896,030		Exclude	10,151		0	1.032	1.873	0,000		0	0.00
7/1/07 - 6/30/08	3,546,680		Exclude	9,789		0	1.032	1.801	0,000		0	0.00
7/1/08 - 6/30/09	3,324,130		Exclude	9,440		0	1.020	1.732	0,000		0	0.00
7/1/09 - 6/30/10	3,363,380		Exclude	9,104		0	1.004	1.665	0,000		0	0.00
7/1/10 - 6/30/11	3,337,830		Exclude	8,779		0	1.000	1.601	0,000		0	0.00
7/1/11 - 6/30/12	3,481,870		Exclude	8,466		0	1.000	1.539	0,000		0	0.00
7/1/12 - 6/30/13	3,680,220	7,492	Include	8,164	8,313	128	1.000	1.480	12,305	8,935	772,671	0.21
7/1/13 - 6/30/14	3,905,280	6,891	Include	7,873	6,351	151	1.000	1.423	9,039	8,935	947,970	0.24
7/1/14 - 6/30/15	4,027,500	7,725	Include	7,593	5,595	186	1.000	1.369	7,657	8,935	1,214,407	0.30
7/1/15 - 6/30/16	4,000,130	7,054	Include	7,322	7,983	180	1.000	1.316	10,505	8,935	1,222,241	0.31
7/1/16 - 6/30/17	3,525,650	8,380	Include	7,061	6,827	186	1.000	1.265	8,638	8,935	1,313,502	0.37
7/1/17 - 6/30/18	3,476,210	7,584	Include	6,809	10,254	152	1.000	1.217	12,476	8,935	1,116,336	0.32
7/1/18 - 6/30/19	3,573,240	7,555	Include	6,567	7,072	163	1.000	1.170	8,274	8,935	1,245,008	0.35
7/1/19 - 6/30/20	3,687,200	9,581	Include	6,333	6,061	203	1.000	1.125	6,818	8,935	1,613,961	0.44
7/1/20 - 6/30/21	3,601,119	3,371	Include	6,107	3,371	354	1.000	1.082	***3,647***	8,935	2,923,142	0.81
7/1/21 - 6/30/22	3,561,252	5,398	Exclude	5,889	5,398	161	1.000	1.040	***5,614***	8,935	1,379,880	0.39
7/1/22 - 6/30/23	3,478,917	14,337	Exclude	5,679	14,337	94	1.000	1.000	***14,337***	8,935	835,918	0.24
			Implied Trend	-3.6%	165.6%			Last 5 Wtd Avg	9,192			
								Last 4 Wtd Avg	8,857			
								Last 3 Wtd Avg	8,935			
Total	93,443,779					1,957		Last 3 Avg	9,189		14,585,036	
								Selected	8,935			

Reported Exponential Regressio	
Constant	8.608
X Coefficient	0.036
R Squared	0.114

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Section III, Exhibit II, Sheet 0, Column (7) / Section III, Exhibit II, Sheet 13, Column (7) x 1
(4) Years included for purposes of fit
(5) Result of Exponential fit of Column (3) * Column (8)
(6) Selected by Deloitte Consulting LLP
(7) From Section III, Exhibit II, Sheet 13, Column (7)
(8) Based on industry sources
(9) Selected by Deloitte Consulting LLP
(10) = (6) x (8) x (9)
(11) Selected by Deloitte Consulting, LLP
(12) Selected in column (11) x (7) / (8) / (9)
(13) = (12) / (3)

Commonwealth of Massachusetts
Department of Corrections
DOC - Medical

Section III
Exhibit II
Sheet 10

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss & ALAE Development Method

Accident Year	Age of Losses @ 06/30/2023	Retention	Payroll (00)'s	Unlimited Paid Loss & ALAE @ 06/30/2023	Paid LDF	Indicated Ultimate Loss & ALAE	Unlimited Indicated Ultimate Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Prior to 7/1/1993	372.0	Unlimited		14,916,838	1.041	15,529,656	
7/1/93 - 6/30/94	360.0	Unlimited	1,859,460	1,627,894	1.044	1,699,485	0.91
7/1/94 - 6/30/95	348.0	Unlimited	1,940,510	1,344,313	1.046	1,406,512	0.72
7/1/95 - 6/30/96	336.0	Unlimited	2,052,620	1,496,832	1.050	1,571,016	0.77
7/1/96 - 6/30/97	324.0	Unlimited	2,340,730	1,838,743	1.054	1,937,562	0.83
7/1/97 - 6/30/98	312.0	Unlimited	2,218,650	2,479,856	1.058	2,623,840	1.18
7/1/98 - 6/30/99	300.0	Unlimited	2,560,710	1,977,824	1.063	2,102,182	0.82
7/1/99 - 6/30/00	288.0	Unlimited	2,684,860	2,136,406	1.069	2,283,371	0.85
7/1/00 - 6/30/01	276.0	Unlimited	2,791,820	2,959,402	1.075	3,181,011	1.14
7/1/01 - 6/30/02	264.0	Unlimited	2,830,700	1,904,165	1.081	2,058,915	0.73
7/1/02 - 6/30/03	252.0	Unlimited	2,898,460	2,281,025	1.085	2,475,787	0.85
7/1/03 - 6/30/04	240.0	Unlimited	2,937,710	2,120,710	1.090	2,310,938	0.79
7/1/04 - 6/30/05	228.0	Unlimited	2,913,820	2,794,970	1.095	3,059,152	1.05
7/1/05 - 6/30/06	216.0	Unlimited	2,947,090	2,169,468	1.099	2,385,106	0.81
7/1/06 - 6/30/07	204.0	Unlimited	2,896,030	1,869,035	1.104	2,064,324	0.71
7/1/07 - 6/30/08	192.0	Unlimited	3,546,680	1,532,908	1.110	1,701,949	0.48
7/1/08 - 6/30/09	180.0	Unlimited	3,324,130	1,624,270	1.117	1,813,819	0.55
7/1/09 - 6/30/10	168.0	Unlimited	3,363,380	1,023,456	1.124	1,150,572	0.34
7/1/10 - 6/30/11	156.0	Unlimited	3,337,830	1,139,957	1.133	1,291,403	0.39
7/1/11 - 6/30/12	144.0	Unlimited	3,481,870	931,950	1.142	1,063,965	0.31
7/1/12 - 6/30/13	132.0	Unlimited	3,680,220	833,224	1.151	958,985	0.26
7/1/13 - 6/30/14	120.0	Unlimited	3,905,280	896,642	1.161	1,040,577	0.27
7/1/14 - 6/30/15	108.0	Unlimited	4,027,500	1,227,349	1.171	1,436,925	0.36
7/1/15 - 6/30/16	96.0	Unlimited	4,000,130	1,074,146	1.182	1,269,758	0.32
7/1/16 - 6/30/17	84.0	Unlimited	3,525,650	1,305,697	1.194	1,558,656	0.44
7/1/17 - 6/30/18	72.0	Unlimited	3,476,210	955,281	1.207	1,152,811	0.33
7/1/18 - 6/30/19	60.0	Unlimited	3,573,240	1,009,250	1.220	1,231,408	0.34
7/1/19 - 6/30/20	48.0	Unlimited	3,687,200	1,551,368	1.255	1,946,593	0.53
7/1/20 - 6/30/21	36.0	Unlimited	3,601,119	891,169	1.339	1,192,939	0.33
7/1/21 - 6/30/22	24.0	Unlimited	3,561,252	558,777	1.552	866,971	0.24
7/1/22 - 6/30/23	12.0	Unlimited	3,478,917	448,257	2.992	1,341,246	0.39
Total			93,443,779	60,921,182		67,707,435	

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1)
(3) Provided by Entity
(4) Provided by Entity
(5) Provided by Entity
(6) From Section III, Exhibit II, Sheet 11
(7) = (5) x (6)
(8) = (7) / (4)

Commonwealth of Massachusetts
Department of Corrections
DOC - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss & ALAE

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Months of Development

Accident Year	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	348	360	372	As of 6/30/2023
Prior to 7/1/1993	22,233,661	8,444,788	9,010,292	9,362,456	9,629,643	9,816,991	10,131,233	10,307,718	10,497,238	10,652,013	10,820,530	10,984,125	11,187,493	11,405,808	11,542,102	11,641,598	11,790,474	11,900,319	12,082,013	12,338,165	12,608,182	12,789,510	12,995,974	13,128,780	13,329,805	13,573,079	13,749,038	13,910,967	14,089,222	14,288,618	14,916,838	14,916,838
7/1/93 - 6/30/94	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	1,430,519	1,446,576	1,458,508	1,476,979	1,496,297	1,505,909	1,542,406	1,552,299	1,564,565	1,582,921	1,594,091	1,602,436	1,621,432	1,627,894		1,627,894
7/1/94 - 6/30/95	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	1,312,490	1,318,475	1,323,435	1,325,511	1,329,062	1,329,847	1,333,587	1,337,649	1,340,065	1,341,063	1,341,946	1,342,261	1,343,004	1,344,313			1,344,313
7/1/95 - 6/30/96	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	1,433,202	1,445,908	1,456,275	1,465,439	1,469,259	1,471,403	1,475,398	1,477,482	1,480,572	1,484,435	1,486,242	1,489,750	1,491,984	1,496,832				1,496,832
7/1/96 - 6/30/97	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	1,671,824	1,708,017	1,745,451	1,758,270	1,766,104	1,811,375	1,823,449	1,828,896	1,832,642	1,832,854	1,837,844	1,838,743	1,838,743	1,838,743					1,838,743
7/1/97 - 6/30/98	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	1,772,391	1,838,516	1,900,110	1,958,286	2,022,922	2,088,450	2,150,537	2,224,037	2,270,169	2,305,855	2,338,210	2,364,661	2,444,298	2,479,856						2,479,856
7/1/98 - 6/30/99	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	1,743,457	1,791,004	1,820,118	1,838,665	1,854,418	1,895,185	1,899,790	1,906,892	1,910,565	1,915,857	1,920,729	1,929,206	1,972,654	1,977,824							1,977,824
7/1/99 - 6/30/00	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	1,931,755	1,967,861	2,003,457	2,029,359	2,049,264	2,065,241	2,080,607	2,093,612	2,108,637	2,122,050	2,129,801	2,136,080	2,136,194	2,136,406								2,136,406
7/1/00 - 6/30/01	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	2,697,204	2,775,225	2,860,089	2,886,881	2,907,709	2,914,779	2,940,906	2,950,776	2,951,049	2,953,805	2,953,805	2,953,805	2,958,127	2,959,402									2,959,402
7/1/01 - 6/30/02	441,054	954,595	1,190,752	1,457,269	1,628,226	1,698,307	1,736,904	1,769,478	1,813,443	1,830,775	1,851,171	1,867,504	1,871,731	1,874,225	1,877,524	1,885,121	1,885,366	1,901,544	1,902,747	1,903,593	1,903,593	1,904,165										1,904,165
7/1/02 - 6/30/03	268,200	928,702	1,552,091	1,775,257	1,904,289	1,988,413	2,045,138	2,103,051	2,147,004	2,184,461	2,214,086	2,218,227	2,249,009	2,272,378	2,280,805	2,280,955	2,281,025	2,281,025	2,281,025	2,281,025	2,281,025											2,281,025
7/1/03 - 6/30/04	152,994	1,174,712	1,612,636	1,744,790	1,811,022	1,896,424	1,965,029	1,975,226	1,988,740	1,997,998	2,012,411	2,028,808	2,040,566	2,081,524	2,104,232	2,115,962	2,120,490	2,120,710	2,120,710	2,120,710												2,120,710
7/1/04 - 6/30/05	504,986	1,476,366	1,809,319	2,048,757	2,193,956	2,297,784	2,392,936	2,464,260	2,513,824	2,554,232	2,596,472	2,639,160	2,662,069	2,687,404	2,709,261	2,769,009	2,778,318	2,788,620	2,794,970													2,794,970
7/1/05 - 6/30/06	456,471	1,195,789	1,564,242	1,729,098	1,847,555	1,939,187	2,044,654	2,084,699	2,093,198	2,102,958	2,114,815	2,130,112	2,144,416	2,153,323	2,156,321	2,161,720	2,168,542	2,169,468														2,169,468
7/1/06 - 6/30/07	537,825	1,000,141	1,218,822	1,380,770	1,450,003	1,505,529	1,544,520	1,601,978	1,635,153	1,666,104	1,699,184	1,722,890	1,751,042	1,793,674	1,815,683	1,840,361	1,869,035															1,869,035
7/1/07 - 6/30/08	539,208	1,080,479	1,291,808	1,419,250	1,474,245	1,483,178	1,498,192	1,503,333	1,508,318	1,514,165	1,516,572	1,516,572	1,518,252	1,518,252	1,520,492	1,532,908																1,532,908
7/1/08 - 6/30/09	508,581	995,354	1,230,224	1,338,898	1,369,306	1,446,965	1,482,022	1,508,983	1,522,744	1,556,077	1,580,835	1,592,515	1,604,271	1,616,858	1,624,270																	1,624,270
7/1/09 - 6/30/10	391,950	706,776	789,348	818,546	853,637	887,106	921,303	943,389	957,541	970,743	984,033	993,255	1,009,731	1,023,456																		1,023,456
7/1/10 - 6/30/11	496,567	863,714	963,107	1,033,614	1,113,275	1,124,894	1,130,323	1,133,865	1,135,605	1,139,377	1,139,957	1,139,957	1,139,957																			1,139,957
7/1/11 - 6/30/12	293,489	642,176	729,181	787,260	829,904	865,598	876,475	905,787	918,866	925,281	928,392	931,950																				931,950
7/1/12 - 6/30/13	290,139	663,037	755,744	792,588	812,881	832,614	833,224	833,224	833,224	833,224	833,224																					833,224
7/1/13 - 6/30/14	291,440	674,154	774,302	827,430	857,325	879,191	886,031	892,858	895,188	896,642																						896,642
7/1/14 - 6/30/15	493,374	924,239	1,112,674	1,170,223	1,202,944	1,215,460	1,220,302	1,222,279	1,227,349																							1,227,349
7/1/15 - 6/30/16	502,405	850,944	977,597	1,021,640	1,041,398	1,047,246	1,069,204	1,074,146																								1,074,146
7/1/16 - 6/30/17	474,788	1,005,531	1,212,358	1,276,149	1,289,238	1,298,975	1,305,697																									1,305,697
7/1/17 - 6/30/18	414,037	835,128	883,844	925,487	946,930	955,281																										955,281
7/1/18 - 6/30/19	470,708	765,076	888,654	944,721	1,009,250																											1,009,250
7/1/19 - 6/30/20	616,489	1,193,622	1,398,602	1,551,368																												1,551,368
7/1/20 - 6/30/21	365,631	751,397	891,169																													891,169
7/1/21 - 6/30/22	261,235	558,777																														558,777
7/1/22 - 6/30/23	448,257																															448,257
																																60,921,182

Age-to-Age Development Factors

Accident Year	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993	***0.380***	***1.067***	***1.039***	***1.029***	***1.019***	***1.032***	***1.017***	***1.018***	***1.015***	***1.016***	***1.015***	***1.019***	***1.020***	***1.012***	***1.009***	***1.013***	***1.009***	***1.015***	***1.021***	***1.022***	***1.014***	***1.016***	***1.010***	***1.015***	***1.018***	***1.013***	***1.012***	***1.013***	***1.014***	***1.044***	
7/1/93 - 6/30/94	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	1.005	1.011	1.008	1.013	1.013	1.006	1.024	1.006	1.008	1.012	1.007	1.005	1.012	1.004		
7/1/94 - 6/30/95	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	1.005	1.005	1.004	1.002	1.003	1.001	1.003	1.003	1.002	1.001	1.001	1.000	1.001	1.001			
7/1/95 - 6/30/96	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	1.011	1.009	1.007	1.006	1.003	1.001	1.003	1.001	1.002	1.003	1.001	1.002	1.001	1.003				
7/1/96 - 6/30/97	2.178	1.168	1.098	1.056	1.041	1.040	1.032	1.054	1.045	1.045	1.048	1.013	1.026	1.022	1.022	1.007	1.004	1.026	1.007	1.003	1.002	1.000	1.003	1.000	1.000	1.000					
7/1/97 - 6/30/98	2.414	1.260	1.109	1.079	1.052	1.041	1.056	1.029	1.028	1.027	1.063	1.032	1.037	1.034	1.031	1.033	1.032	1.030	1.034	1.021	1.016	1.014	1.011	1.034	1.015						
7/1/98 - 6/30/99	2.325	1.293	1.110	1.104	1.087	1.079	1.075	1.033	1.025	1.018	1.036	1.027	1.016	1.010	1.009	1.022	1.002	1.004	1.002	1.003	1.003	1.004	1.023	1.003							
7/1/99 - 6/30/00	2.251	1.187	1.116	1.081	1.073	1.029	1.026	1.022	1.027	1.016	1.019	1.018	1.013	1.010	1.008	1.007	1.006	1.007	1.006	1.004	1.003	1.000	1.000								
7/1/00 - 6/30/01	2.099	1.280	1.163	1.222	1.086	1.052	1.036	1.027	1.050	1.029	1.031	1.009	1.007	1.002	1.009	1.003	1.000	1.001	1.000	1.000	1.001	1.000									
7/1/01 - 6/30/02	2.164	1.247	1.224	1.117	1.043	1.023	1.019	1.025	1.010	1.011	1.009	1.002	1.001	1.002	1.004	1.000	1.009	1.001	1.000	1.000	1.000										
7/1/02 - 6/30/03	3.463	1.671	1.144	1.073	1.044	1.029	1.028	1.021	1.017	1.014	1.002	1.014	1.010	1.004	1.000	1.000	1.000	1.000	1.000	1.000											
7/1/03 - 6/30/04	7.678	1.373	1.082	1.038	1.047	1.036	1.005	1.007	1.005	1.007	1.008	1.006	1.020	1.011	1.006	1.002	1.000	1.000	1.000												
7/1/04 - 6/30/05	2.924	1.226	1.132	1.071	1.047	1.041	1.030	1.020	1.016	1.017	1.016	1.009	1.010	1.008	1.022	1.003	1.004	1.002													
7/1/05 - 6/30/06	2.620	1.308	1.105	1.069	1.050	1.054	1.020	1.004	1.005	1.006	1.007	1.007	1.004	1.001	1.003	1.003	1.000														
7/1/06 - 6/30/07	1.860	1.219	1.133	1.050	1.038	1.026	1.037	1.021	1.019	1.020	1.014	1.016	1.024	1.012	1.014	1.016															
7/1/07 - 6/30/08	2.004	1.196	1.099	1.039	1.006	1.010	1.003	1.003	1.004	1.002	1.000	1.001	1.000	1.001	1.008																
7/1/08 - 6/30/09	1.957	1.236	1.088	1.023	1.057	1.024	1.018	1.009	1.022	1.016	1.007	1.007	1.008	1.005																	
7/1/09 - 6/30/10	1.803	1.117	1.037	1.043	1.039	1.039	1.024	1.015	1.014	1.014	1.009	1.017	1.014																		
7/1/10 - 6/30/11	1.739	1.115	1.073	1.077	1.010	1.005	1.003	1.002	1.003	1.001	1.000	1.000																			
7/1/11 - 6/30/12	2.188	1.135	1.080	1.054	1.043	1.013	1.033	1.014	1.007	1.003	1.004																				
7/1/12 - 6/30/13	2.285	1.140	1.049	1.026	1.024	1.001	1.000	1.000	1.000	1.000																					
7/1/13 - 6/30/14	2.313	1.149	1.069	1.036	1.026	1.008	1.008	1.003	1.002																						
7/1/14 - 6/30/15	1.873	1.204	1.052	1.028	1.010	1.004	1.002	1.004																							
7/1/15 - 6/30/16	1.694	1.149	1.045	1.019	1.006	1.021	1.005																								
7/1/16 - 6/30/17	2.118	1.206	1.053	1.010	1.008	1.005																									
7/1/17 - 6/30/18	2.017	1.058	1.047	1.023	1.009																										
7/1/18 - 6/30/19	1.625	1.162	1.063	1.068																											
7/1/19 - 6/30/20	1.936	1.172	1.109																												
7/1/20 - 6/30/21	2.055	1.186																													
7/1/21 - 6/30/22	2.139																														
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																															
Last 3 Wtd Avg	2.014	1.173	1.079	1.031	1.007	1.009	1.004	1.003	1.003	1.001	1.004	1.008	1.006	1.006	1.008	1.007	1.002	1.001	1.000	1.000	1.002	1.001	1.011	1.014	1.007	1.001	1.003				
Last 5 Wtd Avg	1.928	1.159	1.067	1.028	1.011	1.008	1.009	1.004	1.005	1.008	1.004	1.008	1.010	1.006	1.011	1.004	1.002	1.001	1.001	1.001	1.005	1.004	1.008	1.010	1.007						
Last 9 Wtd Avg	1.943	1.161	1.065	1.037	1.018	1.013	1.010	1.008	1.009	1.010	1.008	1.009	1.010	1.005	1.008	1.006	1.006	1.007	1.006	1.004	1.004										
Last 12 Wtd Avg	1.957	1.152	1.066	1.036	1.023	1.020	1.017	1.009	1.011	1.010	1.011	1.009	1.010	1.008	1.011	1.008	1.005	1.007													
All Per Wtd Avg	2.183	1.224	1.101	1.069	1.044	1.030	1.025	1.018	1.019	1.016	1.018	1.012	1.013	1.009	1.010	1.008	1.006	1.007	1.006	1.005	1.004	1.006	1.007	1.010	1.007	1.002	1.003	1.007	1.004		
Industry																															
Age-to-Age	1.952	1.143	1.054	1.022	1.017	1.007	1.012	1.008	1.009	1.008	1.007	1.008	1.007	1.008	1.007	1.007	1.008	1.007	1.004	1.004	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.004	1.004	
Age-to-Ult	2.959	1.516	1.326	1.258	1.231	1.210	1.202	1.188	1.179	1.168	1.159	1.151	1.142	1.134	1.125	1.117	1.109	1.100	1.092	1.088	1.083	1.078	1.073	1.068	1.063	1.058	1.052	1.047	1.043	1.038	1.034
Prior Selected																															
Age-to-Age	1.943	1.153	1.052	1.022	1.013	1.011	1.011	1.009	1.009	1.009	1.009	1.009	1.008	1.007	1.007	1.007	1.006	1.005	1.005	1.005	1.003	1.006	1.006	1.006	1.005	1.003	1.002	1.002	1.000	1.003	
Age-to-Ult	2.970	1.528	1.325	1.260	1.233	1.216	1.203	1.190	1.179	1.168	1.158	1.147	1.137	1.128	1.119	1.112	1.104	1.097	1.091	1.086	1.081	1.078	1.071	1.065	1.059	1.053	1.050	1.048	1.045	1.045	1.042
Selected																															
Age-to-Age	1.928	1.159	1.067	1.028	1.011	1.011	1.010	1.010	1.009	1.008	1.008	1.008	1.008	1.007	1.006	1.005	1.005	1.004	1.004	1.004	1.004	1.006	1.006	1.006	1.005	1.004	1.004	1.003	1.002	1.003	
Age-to-Ult	2.992	1.552	1.339	1.255	1.220	1.207	1.194	1.182	1.171	1.161	1.151	1.142	1.133	1.124	1.117	1.110	1.104	1.099	1.095	1.090	1.085	1.081	1.075	1.069	1.063	1.058	1.054	1.050	1.046	1.044	1.041

Commonwealth of Massachusetts
Department of Corrections
DOC - Medical

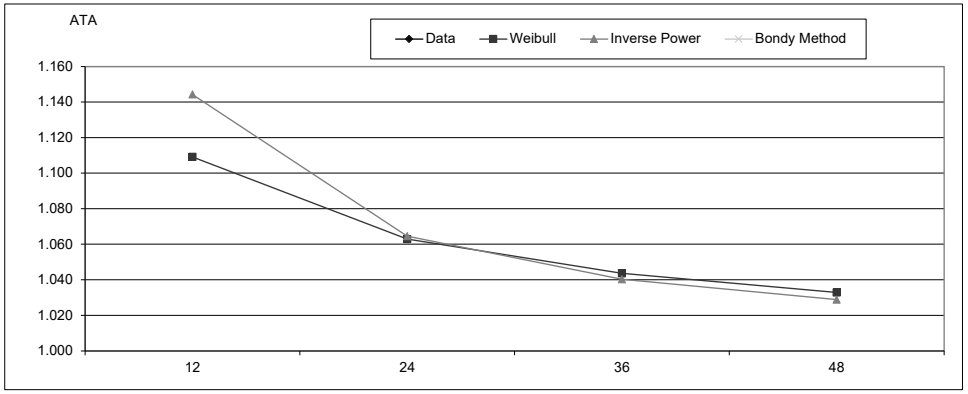
Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

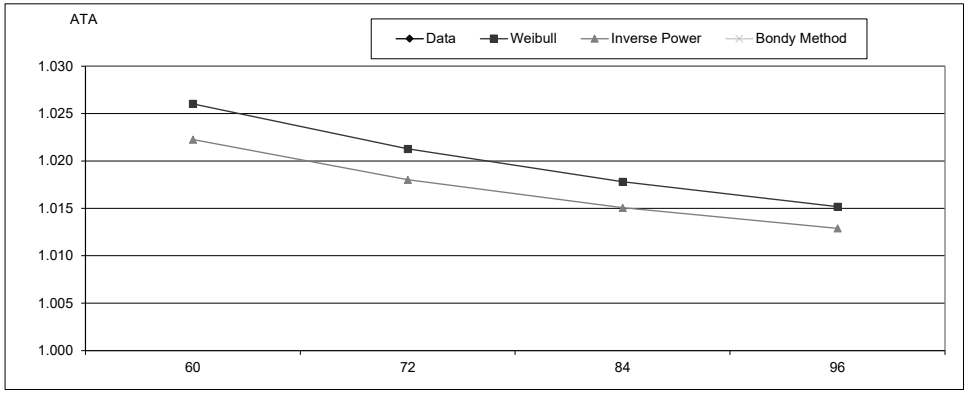
Curve Fitting Methods
Paid Loss

Tail at Period:	**31**	(To display in table)
Cut-off point:(<=Tail & <51)	**50**	(to run-out pattern)

Summary of Curve Fitting Methods

Method	Tail	R^2
Weibull	**1.027**	**0.789**
Inverse Power	**1.041**	**0.860**
Bondy Method		**N/A**





				Weibull		Inverse Power		Bondy Method			
									Sel. Decay Ratio=		
PERIOD	AGE	ATA	Use	**ATA***	**ATU***	**ATA***	**ATU***	Ln(ATA)	Decay	**ATA***	**ATU***
1	12	0.000	Exclude	**1.109**	1.593	**1.144**	1.634				
2	24	1.159	Include	**1.063**	1.436	**1.065**	1.428				
3	36	1.067	Include	**1.044**	1.351	**1.040**	1.341				
4	48	1.028	Include	**1.033**	1.295	**1.029**	1.289				
5	60	1.011	Include	**1.026**	1.253	**1.022**	1.253				
6	72	1.011	Include	**1.021**	1.222	**1.018**	1.226				
7	84	1.010	Include	**1.018**	1.196	**1.015**	1.204				
8	96	1.010	Include	**1.015**	1.175	**1.013**	1.186				
9	108	1.009	Include	**1.013**	1.158	**1.011**	1.171				
10	120	1.008	Include	**1.011**	1.143	**1.010**	1.158				
11	132	1.008	Include	**1.010**	1.130	**1.009**	1.147				
12	144	1.008	Include	**1.009**	1.118	**1.008**	1.136				
13	156	1.008	Include	**1.008**	1.108	**1.007**	1.127				
14	168	1.007	Include	**1.007**	1.100	**1.007**	1.119				
15	180	1.006	Include	**1.007**	1.092	**1.006**	1.112				
16	192	1.005	Include	**1.006**	1.085	**1.006**	1.105				
17	204	1.005	Include	**1.005**	1.078	**1.005**	1.098				
18	216	1.004	Include	**1.005**	1.072	**1.005**	1.093				
19	228	1.004	Include	**1.005**	1.067	**1.005**	1.087				
20	240	1.004	Include	**1.004**	1.062	**1.004**	1.082				
21	252	1.004	Include	**1.004**	1.057	**1.004**	1.077				
22	264	1.006	Include	**1.004**	1.053	**1.004**	1.073				
23	276	1.006	Include	**1.003**	1.049	**1.004**	1.068				
24	288	1.006	Include	**1.003**	1.046	**1.004**	1.064				
25	300	1.005	Include	**1.003**	1.043	**1.003**	1.061				
26	312	1.004	Include	**1.003**	1.039	**1.003**	1.057				
27	324	1.004	Include	**1.003**	1.037	**1.003**	1.053				
28	336	1.003	Include	**1.002**	1.034	**1.003**	1.050				
29	348	1.002	Include	**1.002**	1.031	**1.003**	1.047				
30	360	0.000	Exclude	**1.002**	1.029	**1.003**	1.044				
31	372	0.000	Exclude	**1.002**	1.027	**1.003**	1.041				
32	384	0.000	Exclude	**1.002**	1.025	**1.003**	1.038				
33	396	0.000	Exclude	**1.002**	1.023	**1.002**	1.036				
34	408	0.000	Exclude	**1.002**	1.021	**1.002**	1.033				
35	420	0.000	Exclude	**1.002**	1.019	**1.002**	1.031				
36	432	0.000	Exclude	**1.002**	1.017	**1.002**	1.028				
37	444	0.000	Exclude	**1.001**	1.016	**1.002**	1.026				
38	456	0.000	Exclude	**1.001**	1.014	**1.002**	1.024				
39	468	0.000	Exclude	**1.001**	1.013	**1.002**	1.021				
40	480	0.000	Exclude	**1.001**	1.011	**1.002**	1.019				
41	492	0.000	Exclude	**1.001**	1.010	**1.002**	1.017				
42	504	0.000	Exclude	**1.001**	1.009	**1.002**	1.015				
43	516	0.000	Exclude	**1.001**	1.008	**1.002**	1.013				
44	528	0.000	Exclude	**1.001**	1.007	**1.002**	1.012				
45	540	0.000	Exclude	**1.001**	1.006	**1.002**	1.010				
46	552	0.000	Exclude	**1.001**	1.005	**1.002**	1.008				
47	564	0.000	Exclude	**1.001**	1.004	**1.002**	1.006				
48	576	0.000	Exclude	**1.001**	1.003	**1.002**	1.005				
49	588	0.000	Exclude	**1.001**	1.002	**1.002**	1.003				
50	600	0.000	Exclude	**1.001**	1.001	**1.002**	1.002				

Unpaid Claim Analysis as of 06/30/2023

Ultimate Claim Count Development

Accident Year	Age of Counts @ 06/30/2023	Payroll (00)'s	Reported Claim Counts @ 06/30/2023	Reported Count Dev Factor	Indicated Ultimate Claim Counts	Selected Ultimate Claim Counts	Selected Ultimate Frequency	Selected Ultimate Frequency (Inflation-Adjusted)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	372.0		41	1.000	41			
7/1/93 - 6/30/94	360.0	1,859,460	8	1.000	8		0.00%	0.00%
7/1/94 - 6/30/95	348.0	1,940,510	7	1.000	7		0.00%	0.00%
7/1/95 - 6/30/96	336.0	2,052,620	6	1.000	6		0.00%	0.00%
7/1/96 - 6/30/97	324.0	2,340,730	8	1.000	8		0.00%	0.00%
7/1/97 - 6/30/98	312.0	2,218,650	8	1.000	8		0.00%	0.00%
7/1/98 - 6/30/99	300.0	2,560,710	9	1.000	9		0.00%	0.00%
7/1/99 - 6/30/00	288.0	2,684,860	9	1.000	9		0.00%	0.00%
7/1/00 - 6/30/01	276.0	2,791,820	12	1.000	12		0.00%	0.00%
7/1/01 - 6/30/02	264.0	2,830,700	16	1.000	16		0.00%	0.00%
7/1/02 - 6/30/03	252.0	2,898,460	11	1.000	11		0.00%	0.00%
7/1/03 - 6/30/04	240.0	2,937,710	13	1.000	13		0.00%	0.00%
7/1/04 - 6/30/05	228.0	2,913,820	19	1.000	19		0.00%	0.00%
7/1/05 - 6/30/06	216.0	2,947,090	17	1.000	17		0.00%	0.00%
7/1/06 - 6/30/07	204.0	2,896,030	18	1.000	18		0.00%	0.00%
7/1/07 - 6/30/08	192.0	3,546,680	22	1.000	22		0.00%	0.00%
7/1/08 - 6/30/09	180.0	3,324,130	29	1.000	29		0.00%	0.00%
7/1/09 - 6/30/10	168.0	3,363,380	24	1.000	24		0.00%	0.00%
7/1/10 - 6/30/11	156.0	3,337,830	58	1.000	58		0.00%	0.00%
7/1/11 - 6/30/12	144.0	3,481,870	90	1.000	90		0.00%	0.00%
7/1/12 - 6/30/13	132.0	3,680,220	128	1.000	128	128	34.78%	25.88%
7/1/13 - 6/30/14	120.0	3,905,280	151	1.000	151	151	38.67%	29.63%
7/1/14 - 6/30/15	108.0	4,027,500	186	1.000	186	186	46.18%	36.46%
7/1/15 - 6/30/16	96.0	4,000,130	180	1.000	180	180	45.00%	36.59%
7/1/16 - 6/30/17	84.0	3,525,650	186	1.000	186	186	52.76%	44.18%
7/1/17 - 6/30/18	72.0	3,476,210	152	1.000	152	152	43.73%	37.72%
7/1/18 - 6/30/19	60.0	3,573,240	163	1.000	163	163	45.62%	40.53%
7/1/19 - 6/30/20	48.0	3,687,200	203	1.001	203	203	55.10%	50.43%
7/1/20 - 6/30/21	36.0	3,601,119	353	1.002	354	354	98.26%	92.62%
7/1/21 - 6/30/22	24.0	3,561,252	159	1.010	161	161	45.10%	43.78%
7/1/22 - 6/30/23	12.0	3,478,917	82	1.089	89	94	26.89%	26.89%
Total		93,443,779	2,368		2,378	1,957		

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Age of (1)
(3)	Provided by Entity
(4)	Provided by Entity
(5)	From Section III, Exhibit II, Sheet 14
(6)	= (4) x (5)
(7)	Selected by Deloitte Consulting LLP
(8)	= (7) / (3)
(9)	= (7) / [(3) x Section III, Exhibit II, Sheet 8, Column (3)]

Commonwealth of Massachusetts
Department of Corrections
DOC - Medical

Unpaid Claim Analysis as of 06/30/2023

Reported Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																															41	41
7/1/93 - 6/30/94																														8		8
7/1/94 - 6/30/95																													7			7
7/1/95 - 6/30/96																												6				6
7/1/96 - 6/30/97																											8					8
7/1/97 - 6/30/98																										8						8
7/1/98 - 6/30/99																									9							9
7/1/99 - 6/30/00																								9								9
7/1/00 - 6/30/01																							12									12
7/1/01 - 6/30/02																						16										16
7/1/02 - 6/30/03																					11											11
7/1/03 - 6/30/04																				13												13
7/1/04 - 6/30/05																			19													19
7/1/05 - 6/30/06																		17														17
7/1/06 - 6/30/07																	18															18
7/1/07 - 6/30/08																22																22
7/1/08 - 6/30/09															29																	29
7/1/09 - 6/30/10														24																		24
7/1/10 - 6/30/11													58																			58
7/1/11 - 6/30/12												90																				90
7/1/12 - 6/30/13	102	125	126	128	128	128	128	128	128	128	128																					128
7/1/13 - 6/30/14	134	150	151	151	151	151	151	151	151	151																						151
7/1/14 - 6/30/15	173	185	186	186	186	186	186	186	186																							186
7/1/15 - 6/30/16	167	178	179	179	180	180	180	180																								180
7/1/16 - 6/30/17	179	185	186	186	186	186	186																									186
7/1/17 - 6/30/18	142	149	152	152	152	152																										152
7/1/18 - 6/30/19	143	163	163	163	163																											163
7/1/19 - 6/30/20	181	202	203	203																												203
7/1/20 - 6/30/21	339	349	353																													353
7/1/21 - 6/30/22	152	159																														159
7/1/22 - 6/30/23	82																															82
																																2,368

Accident Year	Age-to-Age Development Factors																															
	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
7/1/98 - 6/30/99																																
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7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	1.225	1.008	1.016	1.000	1.000	1.000	1.000	1.000	1.000	1.000																						
7/1/13 - 6/30/14	1.119	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000																							
7/1/14 - 6/30/15	1.069	1.005	1.000	1.000	1.000	1.000	1.000	1.000																								
7/1/15 - 6/30/16	1.066	1.006	1.000	1.006	1.000	1.000	1.000																									
7/1/16 - 6/30/17	1.034	1.005	1.000	1.000	1.000	1.000																										
7/1/17 - 6/30/18	1.049	1.020	1.000	1.000	1.000																											
7/1/18 - 6/30/19	1.140	1.000	1.000	1.000																												
7/1/19 - 6/30/20	1.116	1.005	1.000																													
7/1/20 - 6/30/21	1.029	1.011																														
7/1/21 - 6/30/22	1.046																															
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																																
Last 3 Wtd Avg	1.057	1.007	1.000	1.000	1.000	1.000	1.000	1.000																								
Last 4 Wtd Avg	1.071	1.009	1.000	1.001	1.000	1.000	1.000																									
Last 5 Wtd Avg	1.068	1.009	1.000	1.001	1.000	1.000																										
All Per Wtd Avg	1.078	1.008	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000																						
Average ex Hi/Lo	1.080	1.007	1.000	1.000	1.000	1.000	1.000	1.000																								
Prior Selected																																
Age-to-Age	1.081	1.007	1.002	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	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		
Age-to-Ult	1.091	1.010	1.003	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	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	
Selected																																
Age-to-Age	1.078	1.008	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	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		
Age-to-Ult	1.089	1.010	1.002	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	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	

Commonwealth of Massachusetts
Department of Corrections
DOC - Medical

Section III
Exhibit II
Sheet 15

Unpaid Claim Analysis as of 06/30/2023

Reported Counts to Payroll (00)'s

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04		1,859,460
7/1/94 - 6/30/95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04			1,940,510
7/1/95 - 6/30/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03				2,052,620
7/1/96 - 6/30/97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03					2,340,730
7/1/97 - 6/30/98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04						2,218,650
7/1/98 - 6/30/99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04							2,560,710
7/1/99 - 6/30/00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03								2,684,860
7/1/00 - 6/30/01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04									2,791,820
7/1/01 - 6/30/02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06										2,830,700
7/1/02 - 6/30/03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04											2,898,460
7/1/03 - 6/30/04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04												2,937,710
7/1/04 - 6/30/05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07													2,913,820
7/1/05 - 6/30/06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06														2,947,090
7/1/06 - 6/30/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06															2,896,030
7/1/07 - 6/30/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06																3,546,680
7/1/08 - 6/30/09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09																	3,324,130
7/1/09 - 6/30/10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07																		3,363,380
7/1/10 - 6/30/11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17																			3,337,830
7/1/11 - 6/30/12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26																				3,481,870
7/1/12 - 6/30/13	0.28	0.34	0.34	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35																					3,680,220
7/1/13 - 6/30/14	0.34	0.38	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39																						3,905,280
7/1/14 - 6/30/15	0.43	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46																							4,027,500
7/1/15 - 6/30/16	0.42	0.44	0.45	0.45	0.45	0.45	0.45	0.45																								4,000,130
7/1/16 - 6/30/17	0.51	0.52	0.53	0.53	0.53	0.53	0.53																									3,525,650
7/1/17 - 6/30/18	0.41	0.43	0.44	0.44	0.44	0.44																										3,476,210
7/1/18 - 6/30/19	0.40	0.46	0.46	0.46	0.46																											3,573,240
7/1/19 - 6/30/20	0.49	0.55	0.55	0.55																												3,687,200
7/1/20 - 6/30/21	0.94	0.97	0.98																													3,601,119
7/1/21 - 6/30/22	0.43	0.45																														3,561,252
7/1/22 - 6/30/23	0.24																															3,478,917

Commonwealth of Massachusetts
Department of Corrections
DOC - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss & ALAE Rates

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.23	0.44	0.52	0.57	0.61	0.66	0.68	0.70	0.71	0.72	0.73	0.74	0.75	0.75	0.76	0.77	0.77	0.78	0.78	0.79	0.80	0.81	0.83	0.83	0.84	0.85	0.86	0.86	0.87	0.88		1,859,460
7/1/94 - 6/30/95	0.18	0.37	0.47	0.51	0.55	0.57	0.59	0.61	0.62	0.64	0.65	0.66	0.67	0.67	0.67	0.68	0.68	0.68	0.68	0.68	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69			1,940,510
7/1/95 - 6/30/96	0.17	0.35	0.42	0.47	0.53	0.56	0.58	0.59	0.61	0.64	0.65	0.67	0.68	0.69	0.70	0.70	0.71	0.71	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.73	0.73	0.73				2,052,620
7/1/96 - 6/30/97	0.17	0.38	0.44	0.48	0.51	0.53	0.55	0.57	0.60	0.63	0.66	0.69	0.70	0.71	0.73	0.75	0.75	0.75	0.77	0.78	0.78	0.78	0.78	0.79	0.79	0.79	0.79					2,340,730
7/1/97 - 6/30/98	0.16	0.38	0.48	0.54	0.58	0.61	0.63	0.67	0.69	0.71	0.73	0.77	0.80	0.83	0.86	0.88	0.91	0.94	0.97	1.00	1.02	1.04	1.05	1.07	1.10	1.12						2,218,650
7/1/98 - 6/30/99	0.13	0.30	0.39	0.44	0.48	0.53	0.57	0.61	0.63	0.65	0.66	0.68	0.70	0.71	0.72	0.72	0.74	0.74	0.74	0.75	0.75	0.75	0.75	0.77	0.77							2,560,710
7/1/99 - 6/30/00	0.19	0.42	0.49	0.55	0.60	0.64	0.66	0.68	0.69	0.71	0.72	0.73	0.75	0.76	0.76	0.77	0.77	0.78	0.79	0.79	0.79	0.80	0.80	0.80								2,684,860
7/1/00 - 6/30/01	0.20	0.42	0.53	0.62	0.76	0.82	0.87	0.90	0.92	0.97	0.99	1.02	1.03	1.04	1.04	1.05	1.06	1.06	1.06	1.06	1.06	1.06	1.06									2,791,820
7/1/01 - 6/30/02	0.16	0.34	0.42	0.51	0.58	0.60	0.61	0.63	0.64	0.65	0.65	0.66	0.66	0.66	0.66	0.67	0.67	0.67	0.67	0.67	0.67	0.67										2,830,700
7/1/02 - 6/30/03	0.09	0.32	0.54	0.61	0.66	0.69	0.71	0.73	0.74	0.75	0.76	0.77	0.78	0.78	0.79	0.79	0.79	0.79	0.79	0.79	0.79											2,898,460
7/1/03 - 6/30/04	0.05	0.40	0.55	0.59	0.62	0.65	0.67	0.67	0.68	0.68	0.69	0.69	0.69	0.71	0.72	0.72	0.72	0.72	0.72	0.72												2,937,710
7/1/04 - 6/30/05	0.17	0.51	0.62	0.70	0.75	0.79	0.82	0.85	0.86	0.88	0.89	0.91	0.91	0.92	0.93	0.95	0.95	0.96	0.96													2,913,820
7/1/05 - 6/30/06	0.15	0.41	0.53	0.59	0.63	0.66	0.69	0.71	0.71	0.71	0.72	0.72	0.73	0.73	0.73	0.73	0.74	0.74														2,947,090
7/1/06 - 6/30/07	0.19	0.35	0.42	0.48	0.50	0.52	0.53	0.55	0.56	0.58	0.59	0.59	0.60	0.62	0.63	0.64	0.65															2,896,030
7/1/07 - 6/30/08	0.15	0.30	0.36	0.40	0.42	0.42	0.42	0.42	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43																3,546,680
7/1/08 - 6/30/09	0.15	0.30	0.37	0.40	0.41	0.44	0.45	0.45	0.46	0.47	0.48	0.48	0.48	0.49	0.49																	3,324,130
7/1/09 - 6/30/10	0.12	0.21	0.23	0.24	0.25	0.26	0.27	0.28	0.28	0.29	0.29	0.30	0.30	0.30																		3,363,380
7/1/10 - 6/30/11	0.15	0.26	0.29	0.31	0.33	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34																			3,337,830
7/1/11 - 6/30/12	0.08	0.18	0.21	0.23	0.24	0.25	0.25	0.26	0.26	0.27	0.27	0.27																				3,481,870
7/1/12 - 6/30/13	0.08	0.18	0.21	0.22	0.22	0.23	0.23	0.23	0.23	0.23	0.23																					3,680,220
7/1/13 - 6/30/14	0.07	0.17	0.20	0.21	0.22	0.23	0.23	0.23	0.23	0.23																						3,905,280
7/1/14 - 6/30/15	0.12	0.23	0.28	0.29	0.30	0.30	0.30	0.30	0.30																							4,027,500
7/1/15 - 6/30/16	0.13	0.21	0.24	0.26	0.26	0.26	0.27	0.27																								4,000,130
7/1/16 - 6/30/17	0.13	0.29	0.34	0.36	0.37	0.37	0.37																									3,525,650
7/1/17 - 6/30/18	0.12	0.24	0.25	0.27	0.27	0.27																										3,476,210
7/1/18 - 6/30/19	0.13	0.21	0.25	0.26	0.28																											3,573,240
7/1/19 - 6/30/20	0.17	0.32	0.38	0.42																												3,687,200
7/1/20 - 6/30/21	0.10	0.21	0.25																													3,601,119
7/1/21 - 6/30/22	0.07	0.16																														3,561,252
7/1/22 - 6/30/23	0.13																															3,478,917

Commonwealth of Massachusetts
Department of Corrections
DOC - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Settlement Rates (Closed Claim Count / Ultimate Claim Count)

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
7/1/98 - 6/30/99																																
7/1/99 - 6/30/00																																
7/1/00 - 6/30/01																																
7/1/01 - 6/30/02																																
7/1/02 - 6/30/03																																
7/1/03 - 6/30/04																																
7/1/04 - 6/30/05																																
7/1/05 - 6/30/06																																
7/1/06 - 6/30/07																																
7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	0.00	0.28	0.76	0.84	0.94	0.97	0.98	1.00	1.00	1.00	1.00																					1.00
7/1/13 - 6/30/14	0.00	0.31	0.75	0.87	0.91	0.95	0.96	0.97	0.99	0.99																						0.99
7/1/14 - 6/30/15	0.00	0.47	0.81	0.90	0.92	0.95	0.97	0.98	0.97																							0.97
7/1/15 - 6/30/16	0.00	0.42	0.79	0.87	0.91	0.95	0.96	0.98																								0.98
7/1/16 - 6/30/17	0.00	0.45	0.75	0.88	0.93	0.96	0.99																									0.99
7/1/17 - 6/30/18	0.00	0.37	0.87	0.90	0.92	0.97																										0.97
7/1/18 - 6/30/19	0.00	0.31	0.84	0.88	0.94																											0.94
7/1/19 - 6/30/20	0.00	0.54	0.80	0.86																												0.86
7/1/20 - 6/30/21	0.00	0.83	0.92																													0.92
7/1/21 - 6/30/22	0.00	0.68																														0.68
7/1/22 - 6/30/23	0.00																															0.00

Commonwealth of Massachusetts
Department of Corrections
DOC - Medical

Unpaid Claim Analysis as of 06/30/2023

Open Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993	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	0	0	0	9	9
7/1/93 - 6/30/94	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	0	0	2		2
7/1/94 - 6/30/95	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	0	1			1
7/1/95 - 6/30/96	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	1				1
7/1/96 - 6/30/97	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					0
7/1/97 - 6/30/98	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	2						2
7/1/98 - 6/30/99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2							2
7/1/99 - 6/30/00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1								1
7/1/00 - 6/30/01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1									1
7/1/01 - 6/30/02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1										1
7/1/02 - 6/30/03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											0
7/1/03 - 6/30/04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												0
7/1/04 - 6/30/05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2													2
7/1/05 - 6/30/06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1														1
7/1/06 - 6/30/07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5															5
7/1/07 - 6/30/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1																1
7/1/08 - 6/30/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4																	4
7/1/09 - 6/30/10	0	0	0	0	0	0	0	0	0	0	0	0	0	6																		6
7/1/10 - 6/30/11	0	0	0	0	0	0	0	0	0	0	0	0	0																			0
7/1/11 - 6/30/12	0	0	0	0	0	0	0	0	0	0	0	1																				1
7/1/12 - 6/30/13	102	89	29	20	8	4	3	0	0	0	0																					0
7/1/13 - 6/30/14	134	103	37	20	14	7	6	4	2	1																						1
7/1/14 - 6/30/15	173	97	36	18	14	9	5	4	5																							5
7/1/15 - 6/30/16	167	102	37	23	16	9	7	3																								3
7/1/16 - 6/30/17	179	102	46	22	13	7	2																									2
7/1/17 - 6/30/18	142	93	20	15	12	5																										5
7/1/18 - 6/30/19	143	112	26	20	9																											9
7/1/19 - 6/30/20	181	93	40	28																												28
7/1/20 - 6/30/21	339	54	29																													29
7/1/21 - 6/30/22	152	49																														49
7/1/22 - 6/30/23	82																															82
																																253

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Indemnity (Including Lump Sum)

Section IV
Exhibit I
Sheet 1

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Unpaid Loss Estimates

Accident Year	Payroll (00)'s	Retention	Unlimited Paid Loss @ 06/30/2023	Unlimited Reported Loss @ 06/30/2023	Ultimate Loss Low	Ultimate Loss High	Indicated Total Unpaid Loss Estimates Low	Indicated Total Unpaid Loss Estimates High	Case Reserves	Indicated IBNR Estimate Low	Indicated IBNR Estimate High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993		Unlimited	17,890,046	17,890,046	19,899,081	20,345,533	2,009,035	2,455,488	0	2,009,035	2,455,488
7/1/93 - 6/30/94	2,543,210	Unlimited	710,933	710,933	742,700	746,100	31,767	35,167	0	31,767	35,167
7/1/94 - 6/30/95	2,566,650	Unlimited	761,806	761,806	798,600	802,400	36,794	40,594	0	36,794	40,594
7/1/95 - 6/30/96	2,657,390	Unlimited	591,722	591,722	622,500	625,700	30,778	33,978	0	30,778	33,978
7/1/96 - 6/30/97	2,963,360	Unlimited	512,528	512,528	541,200	544,300	28,672	31,772	0	28,672	31,772
7/1/97 - 6/30/98	2,969,820	Unlimited	463,804	463,804	491,800	494,700	27,996	30,896	0	27,996	30,896
7/1/98 - 6/30/99	2,995,300	Unlimited	670,684	670,684	714,200	718,800	43,516	48,116	0	43,516	48,116
7/1/99 - 6/30/00	3,236,270	Unlimited	1,216,150	1,216,150	1,301,100	1,310,100	84,950	93,950	0	84,950	93,950
7/1/00 - 6/30/01	3,383,480	Unlimited	1,457,179	1,457,179	1,566,800	1,578,300	109,621	121,121	0	109,621	121,121
7/1/01 - 6/30/02	3,295,550	Unlimited	775,348	775,348	838,100	844,800	62,752	69,452	0	62,752	69,452
7/1/02 - 6/30/03	3,291,790	Unlimited	904,511	904,511	983,500	991,800	78,989	87,289	0	78,989	87,289
7/1/03 - 6/30/04	3,445,470	Unlimited	268,295	268,295	293,500	296,200	25,205	27,905	0	25,205	27,905
7/1/04 - 6/30/05	3,255,300	Unlimited	624,705	624,705	688,200	694,900	63,495	70,195	0	63,495	70,195
7/1/05 - 6/30/06	4,037,500	Unlimited	353,027	353,027	391,800	395,900	38,773	42,873	0	38,773	42,873
7/1/06 - 6/30/07	4,202,190	Unlimited	442,770	442,770	496,700	502,400	53,930	59,630	0	53,930	59,630
7/1/07 - 6/30/08	4,259,980	Unlimited	519,052	519,052	588,800	596,100	69,748	77,048	0	69,748	77,048
7/1/08 - 6/30/09	4,205,660	Unlimited	897,582	897,582	1,029,900	1,043,800	132,318	146,218	0	132,318	146,218
7/1/09 - 6/30/10	4,332,060	Unlimited	641,797	641,797	746,800	757,800	105,003	116,003	0	105,003	116,003
7/1/10 - 6/30/11	4,446,730	Unlimited	1,059,913	1,059,913	1,250,700	1,270,800	190,787	210,887	0	190,787	210,887
7/1/11 - 6/30/12	4,677,530	Unlimited	969,391	969,391	1,160,900	1,181,100	191,509	211,709	0	191,509	211,709
7/1/12 - 6/30/13	4,953,980	Unlimited	687,544	687,544	836,900	852,600	149,356	165,056	0	149,356	165,056
7/1/13 - 6/30/14	5,183,910	Unlimited	528,763	528,763	654,300	667,600	125,538	138,838	0	125,538	138,838
7/1/14 - 6/30/15	5,396,310	Unlimited	997,528	997,528	1,255,800	1,283,000	258,272	285,472	0	258,272	285,472
7/1/15 - 6/30/16	5,858,750	Unlimited	1,411,139	1,411,139	1,805,000	1,864,300	393,861	453,161	0	393,861	453,161
7/1/16 - 6/30/17	5,947,870	Unlimited	1,176,532	1,176,532	1,536,300	1,590,400	359,768	413,868	0	359,768	413,868
7/1/17 - 6/30/18	6,074,840	Unlimited	661,455	661,455	898,900	934,600	237,445	273,145	0	237,445	273,145
7/1/18 - 6/30/19	6,566,440	Unlimited	939,133	939,133	1,367,200	1,431,700	428,067	492,567	0	428,067	492,567
7/1/19 - 6/30/20	6,647,010	Unlimited	409,486	409,486	1,049,800	1,146,200	640,314	736,714	0	640,314	736,714
7/1/20 - 6/30/21	6,186,070	Unlimited	258,784	258,784	804,000	925,000	545,216	666,216	0	545,216	666,216
7/1/21 - 6/30/22	6,345,854	Unlimited	426,140	426,140	1,289,000	1,480,000	862,860	1,053,860	0	862,860	1,053,860
7/1/22 - 6/30/23	7,422,338	Unlimited	171,445	171,445	1,187,000	1,413,000	1,015,555	1,241,555	0	1,015,555	1,241,555
Total	133,348,612		39,399,191	39,399,191	47,831,081	49,329,933	8,431,890	9,930,743	0	8,431,890	9,930,743

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	Provided by Entity
(6)	From Section IV, Exhibit I, Sheet 6, Column (11)
(7)	From Section IV, Exhibit I, Sheet 6, Column (12)
(8)	= (6) - (4)
(9)	= (7) - (4)
(10)	= (5) - (4)
(11)	= (8) - (10)
(12)	= (9) - (10)

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Short-Term Portion

Accident Year	Age of Losses @ 06/30/2023	Selected Paid Test LDF @ 06/30/2023	Implied Paid LDF	Paid LDF	Cumulative Percent Paid	Incremental Percent Paid	Average Total Unpaid Loss Estimate	Undiscounted Cash Flow of Payments 2024
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
						0.41%		
Prior to 7/1/1993	372.0	1.044	1.125	1.044	95.83%	0.32%	2,232,261	218,967
7/1/93 - 6/30/94	360.0	1.047	1.047	1.047	95.50%	0.34%	33,467	2,390
7/1/94 - 6/30/95	348.0	1.051	1.051	1.051	95.17%	0.36%	38,694	2,709
7/1/95 - 6/30/96	336.0	1.055	1.055	1.055	94.81%	0.38%	32,378	2,230
7/1/96 - 6/30/97	324.0	1.059	1.059	1.059	94.43%	0.40%	30,222	2,053
7/1/97 - 6/30/98	312.0	1.063	1.063	1.063	94.03%	0.43%	29,446	1,978
7/1/98 - 6/30/99	300.0	1.068	1.068	1.068	93.60%	0.45%	45,816	3,053
7/1/99 - 6/30/00	288.0	1.074	1.074	1.074	93.15%	0.49%	89,450	5,930
7/1/00 - 6/30/01	276.0	1.079	1.079	1.079	92.66%	0.52%	115,371	7,628
7/1/01 - 6/30/02	264.0	1.085	1.085	1.085	92.14%	0.56%	66,102	4,371
7/1/02 - 6/30/03	252.0	1.092	1.092	1.092	91.59%	0.60%	83,139	5,513
7/1/03 - 6/30/04	240.0	1.099	1.099	1.099	90.99%	0.65%	26,555	1,771
7/1/04 - 6/30/05	228.0	1.107	1.107	1.107	90.33%	0.71%	66,845	4,497
7/1/05 - 6/30/06	216.0	1.116	1.116	1.116	89.63%	0.99%	40,823	2,779
7/1/06 - 6/30/07	204.0	1.128	1.128	1.128	88.64%	1.03%	56,780	4,944
7/1/07 - 6/30/08	192.0	1.141	1.141	1.141	87.61%	1.04%	73,398	6,083
7/1/08 - 6/30/09	180.0	1.155	1.155	1.155	86.57%	1.26%	139,268	10,822
7/1/09 - 6/30/10	168.0	1.172	1.172	1.172	85.31%	1.24%	110,503	9,458
7/1/10 - 6/30/11	156.0	1.189	1.189	1.189	84.07%	1.29%	200,837	15,640
7/1/11 - 6/30/12	144.0	1.208	1.208	1.208	82.78%	1.40%	201,609	15,095
7/1/12 - 6/30/13	132.0	1.229	1.229	1.229	81.39%	1.39%	157,206	11,784
7/1/13 - 6/30/14	120.0	1.250	1.250	1.250	80.00%	1.42%	132,188	9,175
7/1/14 - 6/30/15	108.0	1.273	1.273	1.273	78.58%	1.67%	271,872	17,972
7/1/15 - 6/30/16	96.0	1.300	1.300	1.300	76.92%	1.66%	423,511	30,594
7/1/16 - 6/30/17	84.0	1.329	1.329	1.329	75.26%	3.11%	386,818	25,930
7/1/17 - 6/30/18	72.0	1.386	1.386	1.386	72.15%	5.04%	255,295	28,478
7/1/18 - 6/30/19	60.0	1.490	1.490	1.490	67.11%	8.32%	460,317	70,574
7/1/19 - 6/30/20	48.0	1.701	2.681	1.701	58.79%	8.44%	688,514	138,958
7/1/20 - 6/30/21	36.0	1.986	3.341	1.986	50.35%	13.14%	605,716	102,999
7/1/21 - 6/30/22	24.0	2.688	3.249	2.688	37.20%	19.06%	958,360	200,590
7/1/22 - 6/30/23	12.0	5.510	7.583	5.510	18.15%	18.15%	1,128,555	262,751
Total							9,181,316	1,227,716

	Undiscounted	Discounted			
Short-Term Portion	13%	21%	(10)	Interest Rate	4%

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1) @ 06/30/2023
(3) From Section IV, Exhibit I, Sheet 10, Column (6)
(4) Average Ultimate Loss Divided by Paid Loss From Section IV, Exhibit I, Sheet 6
(5) Selected
(6) = 1 / (5)
(7) = (6) from Current Age - (6) from Subsequent Age
(8) From Section IV, Exhibit I, Sheet 3
(9) - (9) Based on (5)

Commonwealth of Massachusetts Section IV
UMass Amherst Exhibit I
UMassAmherst - Indemnity (Including Lump Sum) Sheet 3

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Discounted at (4%) Unpaid Loss Estimate

Accident Year	Indicated Total Unpaid Loss Estimate Low	Indicated Total Unpaid Loss Estimate High	Discount Factor	Discounted Total Unpaid Loss Estimate Low	Discounted Total Unpaid Loss Estimate High
(1)	(2)	(3)	(4)	(5)	(6)
Prior to 7/1/1993	2,009,035	2,455,488	1.000	2,009,035	2,455,488
7/1/93 - 6/30/94	31,767	35,167	0.981	31,150	34,484
7/1/94 - 6/30/95	36,794	40,594	0.946	34,789	38,382
7/1/95 - 6/30/96	30,778	33,978	0.914	28,133	31,058
7/1/96 - 6/30/97	28,672	31,772	0.886	25,398	28,144
7/1/97 - 6/30/98	27,996	30,896	0.860	24,088	26,583
7/1/98 - 6/30/99	43,516	48,116	0.838	36,446	40,298
7/1/99 - 6/30/00	84,950	93,950	0.817	69,398	76,750
7/1/00 - 6/30/01	109,621	121,121	0.798	87,522	96,704
7/1/01 - 6/30/02	62,752	69,452	0.782	49,058	54,295
7/1/02 - 6/30/03	78,989	87,289	0.767	60,575	66,940
7/1/03 - 6/30/04	25,205	27,905	0.754	18,995	21,029
7/1/04 - 6/30/05	63,495	70,195	0.742	47,103	52,073
7/1/05 - 6/30/06	38,773	42,873	0.732	28,363	31,362
7/1/06 - 6/30/07	53,930	59,630	0.728	39,234	43,381
7/1/07 - 6/30/08	69,748	77,048	0.723	50,415	55,692
7/1/08 - 6/30/09	132,318	146,218	0.717	94,899	104,868
7/1/09 - 6/30/10	105,003	116,003	0.715	75,028	82,887
7/1/10 - 6/30/11	190,787	210,887	0.710	135,440	149,709
7/1/11 - 6/30/12	191,509	211,709	0.705	134,997	149,236
7/1/12 - 6/30/13	149,356	165,056	0.700	104,623	115,621
7/1/13 - 6/30/14	125,538	138,838	0.695	87,231	96,473
7/1/14 - 6/30/15	258,272	285,472	0.689	177,895	196,630
7/1/15 - 6/30/16	393,861	453,161	0.685	269,910	310,547
7/1/16 - 6/30/17	359,768	413,868	0.680	244,821	281,636
7/1/17 - 6/30/18	237,445	273,145	0.691	164,007	188,666
7/1/18 - 6/30/19	428,067	492,567	0.713	305,068	351,035
7/1/19 - 6/30/20	640,314	736,714	0.745	476,943	548,747
7/1/20 - 6/30/21	545,216	666,216	0.761	414,999	507,100
7/1/21 - 6/30/22	862,860	1,053,860	0.784	676,432	826,165
7/1/22 - 6/30/23	1,015,555	1,241,555	0.807	819,138	1,001,427
Total	8,431,890	9,930,743		6,821,133	8,063,413

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From Section IV, Exhibit I, Sheet 1, Column (8)
(3) From Section IV, Exhibit I, Sheet 1, Column (9)
(4) From Section IV, Exhibit I, Sheet 0, Column (8)
(5) = (2) x (4)
(6) = (3) x (4)

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Indemnity (Including Lump Sum)

Section IV
Exhibit I
Sheet 4

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Actual vs Expected - Paid Loss Emergence

Accident Year	Selected Low Ultimate Loss @ 06/30/2022	Selected High Ultimate Loss @ 06/30/2022	Unlimited Paid Loss @ 06/30/2022	Unlimited Paid Loss @ 06/30/2023	Paid LDF @ 06/30/2022	Projected Paid LDF @ 06/30/2023	Method 1 Low Expected Paid Emergence Loss @ 06/30/2023	Method 1 High Expected Paid Emergence Loss @ 06/30/2023	Actual Paid Emergence Loss @ 06/30/2023	Actual - Expected Method 1 Low Paid	Actual - Expected Method 1 High Paid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993	19,728,105	20,175,589	17,703,395	17,890,046	1.049	1.044	198,155	241,950	186,651	(11,505)	(55,299)
7/1/93 - 6/30/94	746,500	750,300	710,933	710,933	1.053	1.049	2,484	2,749	0	(2,484)	(2,749)
7/1/94 - 6/30/95	802,900	807,200	761,806	761,806	1.057	1.053	2,822	3,118	0	(2,822)	(3,118)
7/1/95 - 6/30/96	626,100	629,700	591,722	591,722	1.061	1.057	2,329	2,572	0	(2,329)	(2,572)
7/1/96 - 6/30/97	544,600	548,000	512,528	512,528	1.066	1.061	2,149	2,376	0	(2,149)	(2,376)
7/1/97 - 6/30/98	495,000	498,300	463,804	463,804	1.071	1.066	2,073	2,292	0	(2,073)	(2,292)
7/1/98 - 6/30/99	719,300	724,400	670,684	670,684	1.076	1.071	3,212	3,549	0	(3,212)	(3,549)
7/1/99 - 6/30/00	1,311,000	1,321,000	1,216,150	1,216,150	1.082	1.076	6,249	6,908	0	(6,249)	(6,908)
7/1/00 - 6/30/01	1,579,500	1,592,400	1,457,179	1,457,179	1.088	1.082	8,058	8,908	0	(8,058)	(8,908)
7/1/01 - 6/30/02	845,500	852,900	775,348	775,348	1.095	1.088	4,634	5,122	0	(4,634)	(5,122)
7/1/02 - 6/30/03	992,800	1,002,000	904,511	904,511	1.103	1.095	5,864	6,475	0	(5,864)	(6,475)
7/1/03 - 6/30/04	296,600	299,500	268,295	268,295	1.111	1.103	1,896	2,090	0	(1,896)	(2,090)
7/1/04 - 6/30/05	695,900	703,400	624,705	624,705	1.120	1.111	4,824	5,332	0	(4,824)	(5,332)
7/1/05 - 6/30/06	396,600	401,200	353,027	353,027	1.130	1.120	2,997	3,313	0	(2,997)	(3,313)
7/1/06 - 6/30/07	503,700	510,200	442,770	442,770	1.145	1.130	5,594	6,191	0	(5,594)	(6,191)
7/1/07 - 6/30/08	598,600	606,900	519,052	519,052	1.161	1.145	7,017	7,749	0	(7,017)	(7,749)
7/1/08 - 6/30/09	1,049,900	1,066,000	897,582	897,582	1.179	1.161	12,783	14,134	0	(12,783)	(14,134)
7/1/09 - 6/30/10	761,900	774,500	641,706	641,797	1.197	1.179	9,535	10,534	91	(9,444)	(10,443)
7/1/10 - 6/30/11	1,257,900	1,280,500	1,043,153	1,059,913	1.217	1.197	16,234	17,942	16,761	527	(1,181)
7/1/11 - 6/30/12	1,188,300	1,211,300	969,391	969,391	1.238	1.217	15,897	17,567	0	(15,897)	(17,567)
7/1/12 - 6/30/13	856,900	874,800	687,544	687,544	1.259	1.238	11,419	12,626	0	(11,419)	(12,626)
7/1/13 - 6/30/14	670,500	685,500	528,763	528,763	1.282	1.259	9,127	10,093	0	(9,127)	(10,093)
7/1/14 - 6/30/15	1,263,800	1,306,500	980,089	997,528	1.311	1.282	20,617	23,720	17,440	(3,177)	(6,280)
7/1/15 - 6/30/16	1,860,000	1,927,500	1,411,139	1,411,139	1.342	1.311	30,799	35,430	0	(30,799)	(35,430)
7/1/16 - 6/30/17	1,617,200	1,683,600	1,176,532	1,176,532	1.403	1.342	49,562	57,030	0	(49,562)	(57,030)
7/1/17 - 6/30/18	976,700	1,024,200	661,454	661,455	1.512	1.403	48,096	55,343	1	(48,095)	(55,342)
7/1/18 - 6/30/19	1,441,800	1,529,400	860,053	939,133	1.727	1.512	113,634	130,746	79,081	(34,554)	(51,665)
7/1/19 - 6/30/20	1,133,000	1,310,000	340,004	409,486	2.014	1.727	129,647	158,585	69,482	(60,165)	(89,103)
7/1/20 - 6/30/21	924,000	1,084,000	202,800	258,784	2.730	2.014	148,374	181,291	55,983	(92,390)	(125,307)
7/1/21 - 6/30/22	1,463,000	1,723,000	291,134	426,140	5.739	2.730	272,479	332,934	135,006	(137,474)	(197,928)
Total	47,347,605	48,903,789	38,667,250	39,227,745			1,148,558	1,368,669	560,495	(588,063)	(808,174)

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Selected by Deloitte Consulting LLP @ 06/30/2022
(3)	Selected by Deloitte Consulting LLP @ 06/30/2022
(4)	Provided by Entity
(5)	Provided by Entity
(6)	Selected by Deloitte Consulting LLP @ 06/30/2022
(7)	Interpolated From (6)
(8)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((2) - (4))
(9)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((3) - (4))
(10)	= (5) - (4)
(11)	= (10) - (8)
(12)	= (10) - (9)

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Indemnity (Including Lump Sum)

Section IV
Exhibit I
Sheet 5

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Ultimate Loss Runoff

Accident Year	Ultimate Loss @ 06/30/2022 Low	Ultimate Loss @ 06/30/2022 High	Ultimate Loss @ 06/30/2023 Low	Ultimate Loss @ 06/30/2023 High	Deloitte Change Low	Deloitte Change High	Paid Loss @ 06/30/2023	Reported Loss @ 06/30/2023
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	19,728,105	20,175,589	19,899,081	20,345,533	170,976	169,945	17,890,046	17,890,046
7/1/93 - 6/30/94	746,500	750,300	742,700	746,100	(3,800)	(4,200)	710,933	710,933
7/1/94 - 6/30/95	802,900	807,200	798,600	802,400	(4,300)	(4,800)	761,806	761,806
7/1/95 - 6/30/96	626,100	629,700	622,500	625,700	(3,600)	(4,000)	591,722	591,722
7/1/96 - 6/30/97	544,600	548,000	541,200	544,300	(3,400)	(3,700)	512,528	512,528
7/1/97 - 6/30/98	495,000	498,300	491,800	494,700	(3,200)	(3,600)	463,804	463,804
7/1/98 - 6/30/99	719,300	724,400	714,200	718,800	(5,100)	(5,600)	670,684	670,684
7/1/99 - 6/30/00	1,311,000	1,321,000	1,301,100	1,310,100	(9,900)	(10,900)	1,216,150	1,216,150
7/1/00 - 6/30/01	1,579,500	1,592,400	1,566,800	1,578,300	(12,700)	(14,100)	1,457,179	1,457,179
7/1/01 - 6/30/02	845,500	852,900	838,100	844,800	(7,400)	(8,100)	775,348	775,348
7/1/02 - 6/30/03	992,800	1,002,000	983,500	991,800	(9,300)	(10,200)	904,511	904,511
7/1/03 - 6/30/04	296,600	299,500	293,500	296,200	(3,100)	(3,300)	268,295	268,295
7/1/04 - 6/30/05	695,900	703,400	688,200	694,900	(7,700)	(8,500)	624,705	624,705
7/1/05 - 6/30/06	396,600	401,200	391,800	395,900	(4,800)	(5,300)	353,027	353,027
7/1/06 - 6/30/07	503,700	510,200	496,700	502,400	(7,000)	(7,800)	442,770	442,770
7/1/07 - 6/30/08	598,600	606,900	588,800	596,100	(9,800)	(10,800)	519,052	519,052
7/1/08 - 6/30/09	1,049,900	1,066,000	1,029,900	1,043,800	(20,000)	(22,200)	897,582	897,582
7/1/09 - 6/30/10	761,900	774,500	746,800	757,800	(15,100)	(16,700)	641,797	641,797
7/1/10 - 6/30/11	1,257,900	1,280,500	1,250,700	1,270,800	(7,200)	(9,700)	1,059,913	1,059,913
7/1/11 - 6/30/12	1,188,300	1,211,300	1,160,900	1,181,100	(27,400)	(30,200)	969,391	969,391
7/1/12 - 6/30/13	856,900	874,800	836,900	852,600	(20,000)	(22,200)	687,544	687,544
7/1/13 - 6/30/14	670,500	685,500	654,300	667,600	(16,200)	(17,900)	528,763	528,763
7/1/14 - 6/30/15	1,263,800	1,306,500	1,255,800	1,283,000	(8,000)	(23,500)	997,528	997,528
7/1/15 - 6/30/16	1,860,000	1,927,500	1,805,000	1,864,300	(55,000)	(63,200)	1,411,139	1,411,139
7/1/16 - 6/30/17	1,617,200	1,683,600	1,536,300	1,590,400	(80,900)	(93,200)	1,176,532	1,176,532
7/1/17 - 6/30/18	976,700	1,024,200	898,900	934,600	(77,800)	(89,600)	661,455	661,455
7/1/18 - 6/30/19	1,441,800	1,529,400	1,367,200	1,431,700	(74,600)	(97,700)	939,133	939,133
7/1/19 - 6/30/20	1,133,000	1,310,000	1,049,800	1,146,200	(83,200)	(163,800)	409,486	409,486
7/1/20 - 6/30/21	924,000	1,084,000	804,000	925,000	(120,000)	(159,000)	258,784	258,784
7/1/21 - 6/30/22	1,463,000	1,723,000	1,289,000	1,480,000	(174,000)	(243,000)	426,140	426,140
Total	47,347,605	48,903,789	46,644,081	47,916,933	(703,524)	(986,855)	39,227,745	39,227,745

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(3) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(4) From Section IV, Exhibit I, Sheet 6, Column (11)
(5) From Section IV, Exhibit I, Sheet 6, Column (12)
(6) = (4) - (2)
(7) = (5) - (3)
(8) Provided by Entity
(9) Provided by Entity

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Selection of Ultimate Loss

Accident Year	Payroll (00)'s	Unlimited Paid Loss @ 06/30/2023	Unlimited Reported Loss @ 06/30/2023	Ultimate Loss Indications: Paid LDM	Ultimate Loss Indications: Expected Loss	Ultimate Loss Indications: Paid B-F	Ultimate Loss Indications: Frequency Severity	Prior Selected Ultimate Loss: Low	Prior Selected Ultimate Loss: High	Selected Ultimate Loss: Low	Selected Ultimate Loss: High	Ultimate Loss Rates: Low	Ultimate Loss Rates: High	Ultimate Loss Severity: Low	Ultimate Loss Severity: High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Prior to 7/1/1993		17,890,046	17,890,046	18,669,391	0		0	19,728,105	20,175,589	19,899,081	20,345,533				
7/1/93 - 6/30/94	2,543,210	710,933	710,933	744,397	290,832	724,007	0	746,500	750,300	742,700	746,100	0.29	0.29		
7/1/94 - 6/30/95	2,566,650	761,806	761,806	800,501	301,914	776,400	0	802,900	807,200	798,600	802,400	0.31	0.31		
7/1/95 - 6/30/96	2,657,390	591,722	591,722	624,122	321,326	608,403	0	626,100	629,700	622,500	625,700	0.23	0.24		
7/1/96 - 6/30/97	2,963,360	512,528	512,528	542,758	369,024	533,081	0	544,600	548,000	541,200	544,300	0.18	0.18		
7/1/97 - 6/30/98	2,969,820	463,804	463,804	493,255	381,815	486,602	0	495,000	498,300	491,800	494,700	0.17	0.17		
7/1/98 - 6/30/99	2,995,300	670,684	670,684	716,521	398,065	696,149	0	719,300	724,400	714,200	718,800	0.24	0.24		
7/1/99 - 6/30/00	3,236,270	1,216,150	1,216,150	1,305,601	446,164	1,246,718	0	1,311,000	1,321,000	1,301,100	1,310,100	0.40	0.40		
7/1/00 - 6/30/01	3,383,480	1,457,179	1,457,179	1,572,547	486,724	1,492,887	0	1,579,500	1,592,400	1,566,800	1,578,300	0.46	0.47		
7/1/01 - 6/30/02	3,295,550	775,348	775,348	841,451	492,209	814,015	0	845,500	852,900	838,100	844,800	0.25	0.26		
7/1/02 - 6/30/03	3,291,790	904,511	904,511	987,605	503,498	946,874	0	992,800	1,002,000	983,500	991,800	0.30	0.30		
7/1/03 - 6/30/04	3,445,470	268,295	268,295	294,878	537,437	316,745	0	296,600	299,500	293,500	296,200	0.09	0.09		
7/1/04 - 6/30/05	3,255,300	624,705	624,705	691,544	520,667	675,029	0	695,900	703,400	688,200	694,900	0.21	0.21		
7/1/05 - 6/30/06	4,037,500	353,027	353,027	393,877	665,061	422,002	0	396,600	401,200	391,800	395,900	0.10	0.10		
7/1/06 - 6/30/07	4,202,190	442,770	442,770	499,517	713,391	523,814	0	503,700	510,200	496,700	502,400	0.12	0.12		
7/1/07 - 6/30/08	4,259,980	519,052	519,052	592,437	745,447	611,390	0	598,600	606,900	588,800	596,100	0.14	0.14		
7/1/08 - 6/30/09	4,205,660	897,582	897,582	1,036,836	757,822	999,363	0	1,049,900	1,066,000	1,029,900	1,043,800	0.24	0.25		
7/1/09 - 6/30/10	4,332,060	641,797	641,797	752,292	799,126	759,171	0	761,900	774,500	746,800	757,800	0.17	0.17		
7/1/10 - 6/30/11	4,446,730	1,059,913	1,059,913	1,260,725	836,518	1,193,156	0	1,257,900	1,280,500	1,250,700	1,270,800	0.28	0.29		
7/1/11 - 6/30/12	4,677,530	969,391	969,391	1,171,008	902,154	1,124,718	0	1,188,300	1,211,300	1,160,900	1,181,100	0.25	0.25		
7/1/12 - 6/30/13	4,953,980	687,544	687,544	844,779	982,182	870,353	1,340,950	856,900	874,800	836,900	852,600	0.17	0.17	9,299	9,473
7/1/13 - 6/30/14	5,183,910	528,763	528,763	660,960	1,052,831	739,337	1,053,285	670,500	685,500	654,300	667,600	0.13	0.13	9,766	9,964
7/1/14 - 6/30/15	5,396,310	997,528	997,528	1,269,387	1,123,109	1,238,059	1,675,920	1,263,800	1,306,500	1,255,800	1,283,000	0.23	0.24	12,434	12,703
7/1/15 - 6/30/16	5,858,750	1,411,139	1,411,139	1,834,652	1,252,508	1,700,270	1,264,015	1,860,000	1,927,500	1,805,000	1,864,300	0.31	0.32	25,069	25,893
7/1/16 - 6/30/17	5,947,870	1,176,532	1,176,532	1,563,345	1,306,946	1,499,905	1,319,580	1,617,200	1,683,600	1,536,300	1,590,400	0.26	0.27	21,638	22,400
7/1/17 - 6/30/18	6,074,840	661,455	661,455	916,768	1,373,349	1,043,923	1,555,936	976,700	1,024,200	898,900	934,600	0.15	0.15	11,378	11,830
7/1/18 - 6/30/19	6,566,440	939,133	939,133	1,399,439	1,528,444	1,441,872	1,211,444	1,441,800	1,529,400	1,367,200	1,431,700	0.21	0.22	23,572	24,684
7/1/19 - 6/30/20	6,647,010	409,486	409,486	696,513	1,593,408	1,066,116	1,129,962	1,133,000	1,310,000	1,049,800	1,146,200	0.16	0.17	20,584	22,475
7/1/20 - 6/30/21	6,186,070	258,784	258,784	513,993	1,533,429	1,020,166	709,161	924,000	1,084,000	804,000	925,000	0.13	0.15	26,754	30,781
7/1/21 - 6/30/22	6,345,854	426,140	426,140	1,145,407	1,642,628	1,457,641	1,311,653	1,463,000	1,723,000	1,289,000	1,480,000	0.20	0.23	24,943	28,639
7/1/22 - 6/30/23	7,422,338	171,445	171,445	944,750	1,997,410	1,806,382	1,366,117			1,187,000	1,413,000	0.16	0.19	23,615	28,112
Total	133,348,612	39,399,191	39,399,191	45,781,257	25,855,439	28,834,548	13,938,022	47,347,605	48,903,789	47,831,081	49,329,933				

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	From Section IV, Exhibit I, Sheet 10, Column (7)
(6)	From Section IV, Exhibit I, Sheet 7, Column (4)
(7)	From Section IV, Exhibit I, Sheet 7, Column (10)
(8)	From Section IV, Exhibit I, Sheet 9, Column (12)
(9)	From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(10)	From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(11)	Selected by Deloitte Consulting LLP
(12)	Selected by Deloitte Consulting LLP
(13)	= (11) / (2)
(14)	= (12) / (2)
(15)	(11) Divided by Ultimate Claims From Section IV, Exhibit I, Sheet 13, Column (7)
(16)	(12) Divided by Ultimate Claims From Section IV, Exhibit I, Sheet 13, Column (7)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Bornhuetter-Ferguson Method

Accident Year	Payroll (00)'s	Initial Expected Loss Rates	Initial Expected Loss	Expected % of Paid Loss	Expected Paid Loss	Unlimited Actual Paid Loss	Expected % of Unpaid Loss	Expected Unpaid Loss	Unlimited Indicated Ultimate Loss	Unlimited Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
7/1/93 - 6/30/94	2,543,210	0.11	290,832	95.5%	277,758	710,933	4.5%	13,074	724,007	0.28
7/1/94 - 6/30/95	2,566,650	0.12	301,914	95.2%	287,320	761,806	4.8%	14,594	776,400	0.30
7/1/95 - 6/30/96	2,657,390	0.12	321,326	94.8%	304,645	591,722	5.2%	16,681	608,403	0.23
7/1/96 - 6/30/97	2,963,360	0.12	369,024	94.4%	348,471	512,528	5.6%	20,553	533,081	0.18
7/1/97 - 6/30/98	2,969,820	0.13	381,815	94.0%	359,017	463,804	6.0%	22,798	486,602	0.16
7/1/98 - 6/30/99	2,995,300	0.13	398,065	93.6%	372,600	670,684	6.4%	25,465	696,149	0.23
7/1/99 - 6/30/00	3,236,270	0.14	446,164	93.1%	415,596	1,216,150	6.9%	30,568	1,246,718	0.39
7/1/00 - 6/30/01	3,383,480	0.14	486,724	92.7%	451,016	1,457,179	7.3%	35,708	1,492,887	0.44
7/1/01 - 6/30/02	3,295,550	0.15	492,209	92.1%	453,542	775,348	7.9%	38,667	814,015	0.25
7/1/02 - 6/30/03	3,291,790	0.15	503,498	91.6%	461,135	904,511	8.4%	42,363	946,874	0.29
7/1/03 - 6/30/04	3,445,470	0.16	537,437	91.0%	488,988	268,295	9.0%	48,450	316,745	0.09
7/1/04 - 6/30/05	3,255,300	0.16	520,667	90.3%	470,343	624,705	9.7%	50,324	675,029	0.21
7/1/05 - 6/30/06	4,037,500	0.16	665,061	89.6%	596,086	353,027	10.4%	68,975	422,002	0.10
7/1/06 - 6/30/07	4,202,190	0.17	713,391	88.6%	632,347	442,770	11.4%	81,044	523,814	0.12
7/1/07 - 6/30/08	4,259,980	0.17	745,447	87.6%	653,108	519,052	12.4%	92,339	611,390	0.14
7/1/08 - 6/30/09	4,205,660	0.18	757,822	86.6%	656,042	897,582	13.4%	101,780	999,363	0.24
7/1/09 - 6/30/10	4,332,060	0.18	799,126	85.3%	681,752	641,797	14.7%	117,374	759,171	0.18
7/1/10 - 6/30/11	4,446,730	0.19	836,518	84.1%	703,275	1,059,913	15.9%	133,243	1,193,156	0.27
7/1/11 - 6/30/12	4,677,530	0.19	902,154	82.8%	746,827	969,391	17.2%	155,327	1,124,718	0.24
7/1/12 - 6/30/13	4,953,980	0.20	982,182	81.4%	799,373	687,544	18.6%	182,809	870,353	0.18
7/1/13 - 6/30/14	5,183,910	0.20	1,052,831	80.0%	842,256	528,763	20.0%	210,575	739,337	0.14
7/1/14 - 6/30/15	5,396,310	0.21	1,123,109	78.6%	882,578	997,528	21.4%	240,531	1,238,059	0.23
7/1/15 - 6/30/16	5,858,750	0.21	1,252,508	76.9%	963,378	1,411,139	23.1%	289,130	1,700,270	0.29
7/1/16 - 6/30/17	5,947,870	0.22	1,306,946	75.3%	983,572	1,176,532	24.7%	323,374	1,499,905	0.25
7/1/17 - 6/30/18	6,074,840	0.23	1,373,349	72.2%	990,881	661,455	27.8%	382,468	1,043,923	0.17
7/1/18 - 6/30/19	6,566,440	0.23	1,528,444	67.1%	1,025,706	939,133	32.9%	502,738	1,441,872	0.22
7/1/19 - 6/30/20	6,647,010	0.24	1,593,408	58.8%	936,778	409,486	41.2%	656,630	1,066,116	0.16
7/1/20 - 6/30/21	6,186,070	0.25	1,533,429	50.3%	772,047	258,784	49.7%	761,382	1,020,166	0.16
7/1/21 - 6/30/22	6,345,854	0.26	1,642,628	37.2%	611,127	426,140	62.8%	1,031,502	1,457,641	0.23
7/1/22 - 6/30/23	7,422,338	0.27	1,997,410	18.1%	362,474	171,445	81.9%	1,634,936	1,806,382	0.24
Total	133,348,612		25,855,439		18,530,037	21,509,145		7,325,403	28,834,548	

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	From Section IV, Exhibit I, Sheet 8, Column (13)
(4)	= (2) x (3)
(5)	= 1 / Section IV, Exhibit I, Sheet 10, Column (6)
(6)	= (4) x (5)
(7)	Provided by Entity
(8)	= 1 - (5)
(9)	= (4) x (8)
(10)	= (7) + (9)
(11)	= (10) / (2)

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Calculation of Initial Expected Loss Rates

Accident Year	Payroll (00)'s	Payroll Trend	Loss Development Unlimited Indicated Ultimate Loss Paid	Loss Development Unlimited Indicated Ultimate Loss Reported	Selected Initial Ultimate Loss	Loss Trend Factor	Benefit Level Adjustment Factors	Trended Ultimate	On-level Loss Rates	Detrended Loss Rates	Prior Expected Loss Rates	Initial Expected Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
7/1/93 - 6/30/94	2,543,210	2.357	744,397	744,397	20,122,307	4.116	1.347	111,589,734	***18.62***	0.11	0.12	0.11
7/1/94 - 6/30/95	2,566,650	2.288	800,501	800,501	744,400	3.920	1.335	3,896,358	0.66	0.12	0.13	0.12
7/1/95 - 6/30/96	2,657,390	2.221	624,122	624,122	800,500	3.733	1.324	3,957,329	0.67	0.12	0.13	0.12
7/1/96 - 6/30/97	2,963,360	2.157	542,758	542,758	624,100	3.556	1.311	2,908,562	0.46	0.12	0.13	0.12
7/1/97 - 6/30/98	2,969,820	2.094	493,255	493,255	542,750	3.386	1.294	2,378,672	0.38	0.13	0.14	0.13
7/1/98 - 6/30/99	2,995,300	2.033	716,521	716,521	493,250	3.225	1.276	2,030,361	0.33	0.13	0.14	0.13
7/1/99 - 6/30/00	3,236,270	1.974	1,305,601	1,305,601	716,500	3.072	1.254	2,760,255	0.43	0.14	0.15	0.14
7/1/00 - 6/30/01	3,383,480	1.916	1,572,547	1,572,547	1,305,600	2.925	1.225	4,679,896	0.72	0.14	0.16	0.14
7/1/01 - 6/30/02	3,295,550	1.860	841,451	841,451	1,572,550	2.786	1.203	5,270,972	0.86	0.15	0.16	0.15
7/1/02 - 6/30/03	3,291,790	1.806	987,605	987,605	841,450	2.653	1.198	2,673,829	0.45	0.15	0.16	0.15
7/1/03 - 6/30/04	3,445,470	1.754	294,878	294,878	987,650	2.527	1.197	2,987,840	0.49	0.16	0.17	0.16
7/1/04 - 6/30/05	3,255,300	1.702	691,544	691,544	294,850	2.407	1.190	844,557	0.15	0.16	0.17	0.16
7/1/05 - 6/30/06	4,037,500	1.653	393,877	393,877	691,550	2.292	1.178	1,867,386	0.28	0.16	0.18	0.16
7/1/06 - 6/30/07	4,202,190	1.605	499,517	499,517	393,850	2.183	1.165	1,001,846	0.15	0.17	0.18	0.17
7/1/07 - 6/30/08	4,259,980	1.558	592,437	592,437	499,550	2.079	1.152	1,196,892	0.18	0.17	0.19	0.17
7/1/08 - 6/30/09	4,205,660	1.513	1,036,836	1,036,836	592,450	1.980	1.141	1,338,339	0.21	0.18	0.19	0.18
7/1/09 - 6/30/10	4,332,060	1.469	752,292	752,292	1,036,850	1.886	1.136	2,221,292	0.35	0.18	0.20	0.18
7/1/10 - 6/30/11	4,446,730	1.426	1,260,725	1,260,725	752,300	1.796	1.136	1,534,370	0.24	0.19	0.20	0.19
7/1/11 - 6/30/12	4,677,530	1.384	1,171,008	1,171,008	1,260,750	1.710	1.129	2,435,011	0.38	0.19	0.21	0.19
7/1/12 - 6/30/13	4,953,980	1.344	844,779	844,779	1,171,000	1.629	1.120	2,136,083	0.32	0.20	0.21	0.20
7/1/13 - 6/30/14	5,183,910	1.305	660,960	660,960	844,750	1.551	1.114	1,460,456	0.22	0.20	0.22	0.20
7/1/14 - 6/30/15	5,396,310	1.267	1,269,387	1,269,387	660,950	1.477	1.109	1,082,600	0.16	0.21	0.22	0.21
7/1/15 - 6/30/16	5,858,750	1.230	1,834,652	1,834,652	1,269,400	1.407	1.100	1,965,214	0.27	0.21	0.23	0.21
7/1/16 - 6/30/17	5,947,870	1.194	1,563,345	1,563,345	1,834,650	1.340	1.091	2,682,915	0.38	0.22	0.24	0.22
7/1/17 - 6/30/18	6,074,840	1.159	916,768	916,768	1,563,350	1.276	1.081	2,157,361	0.31	0.23	0.24	0.23
7/1/18 - 6/30/19	6,566,440	1.126	1,399,439	1,399,439	916,750	1.216	1.071	1,192,908	0.16	0.23	0.25	0.23
7/1/19 - 6/30/20	6,647,010	1.093	696,513	696,513	1,399,450	1.158	1.060	1,716,702	0.24	0.24	0.26	0.24
7/1/20 - 6/30/21	6,186,070	1.061	513,993	513,993	513,993	1.103	1.045	591,983	***0.09***	0.25	0.27	0.25
7/1/21 - 6/30/22	6,345,854	1.030	1,145,407	1,145,407	1,145,407	1.050	1.020	1,226,519	***0.19***	0.26	0.28	0.26
7/1/22 - 6/30/23	7,422,338	1.000	944,750	944,750	944,750	1.000	1.000	944,750	***0.13***	0.27		0.27
			27,111,866	27,111,866				Last 3 Wtd Avg	0.23			
								Last 4 Wtd Avg	0.27			
								Last 5 Wtd Avg	0.27			
								All Per Wtd Avg	0.36			

(Note: numbers in bold and italics and with borders are excluded from the calculated averages)

Selected (14) 0.27

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Selected by Deloitte Consulting LLP
(4) From Section IV, Exhibit I, Sheet 10, Column (7)
(5) From Section IV, Exhibit I, Sheet 0, Column (7)
(6) Selected by Deloitte Consulting LLP
(7) Selected by Deloitte Consulting LLP
(8) Based on industry sources
(9) = (6) x (7) x (8)
(10) = (9) / [(2) x (3)]
(11) = (14) / (7) / (8) * (3)
(12) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(13) Selected for by Deloitte Consulting LLP Based on (14)
(14) Selected by Deloitte Consulting LLP

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Indemnity (Including Lump Sum)

Section IV
Exhibit I
Sheet 9

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Frequency Severity Method

Accident Year	Payroll (00)'s	Ultimate Reported Severity	Include For Fit	Exponential Fitted Reported Severity	Initial Selected Ultimate Severity	Selected Ultimate Claim Counts	Benefit Level Adjustment Factor	Selected Severity Trend	Trended Severity	On-Level Selected Ultimate Severity	Indicated Ultimate Loss	Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Prior to 7/1/1993			Exclude	5,174		0					0	
7/1/93 - 6/30/94	2,543,210		Exclude	5,429		0	1.347	4.116	0,000		0	0.00
7/1/94 - 6/30/95	2,566,650		Exclude	5,697		0	1.335	3.920	0,000		0	0.00
7/1/95 - 6/30/96	2,657,390		Exclude	5,978		0	1.324	3.733	0,000		0	0.00
7/1/96 - 6/30/97	2,963,360		Exclude	6,272		0	1.311	3.556	0,000		0	0.00
7/1/97 - 6/30/98	2,969,820		Exclude	6,582		0	1.294	3.386	0,000		0	0.00
7/1/98 - 6/30/99	2,995,300		Exclude	6,906		0	1.276	3.225	0,000		0	0.00
7/1/99 - 6/30/00	3,236,270		Exclude	7,247		0	1.254	3.072	0,000		0	0.00
7/1/00 - 6/30/01	3,383,480		Exclude	7,604		0	1.225	2.925	0,000		0	0.00
7/1/01 - 6/30/02	3,295,550		Exclude	7,979		0	1.203	2.786	0,000		0	0.00
7/1/02 - 6/30/03	3,291,790		Exclude	8,372		0	1.198	2.653	0,000		0	0.00
7/1/03 - 6/30/04	3,445,470		Exclude	8,785		0	1.197	2.527	0,000		0	0.00
7/1/04 - 6/30/05	3,255,300		Exclude	9,218		0	1.190	2.407	0,000		0	0.00
7/1/05 - 6/30/06	4,037,500		Exclude	9,672		0	1.178	2.292	0,000		0	0.00
7/1/06 - 6/30/07	4,202,190		Exclude	10,149		0	1.165	2.183	0,000		0	0.00
7/1/07 - 6/30/08	4,259,980		Exclude	10,649		0	1.152	2.079	0,000		0	0.00
7/1/08 - 6/30/09	4,205,660		Exclude	11,174		0	1.141	1.980	0,000		0	0.00
7/1/09 - 6/30/10	4,332,060		Exclude	11,725		0	1.136	1.886	0,000		0	0.00
7/1/10 - 6/30/11	4,446,730		Exclude	12,303		0	1.136	1.796	0,000		0	0.00
7/1/11 - 6/30/12	4,677,530		Exclude	12,910		0	1.129	1.710	0,000		0	0.00
7/1/12 - 6/30/13	4,953,980	9,386	Include	13,546	13,011	90	1.120	1.629	23,734	27,179	1,340,950	0.27
7/1/13 - 6/30/14	5,183,910	9,865	Include	14,214	12,608	67	1.114	1.551	21,798	27,179	1,053,285	0.20
7/1/14 - 6/30/15	5,396,310	12,568	Include	14,915	6,544	101	1.109	1.477	10,719	27,179	1,675,920	0.31
7/1/15 - 6/30/16	5,858,750	25,481	Include	15,650	17,631	72	1.100	1.407	27,295	27,179	1,264,015	0.22
7/1/16 - 6/30/17	5,947,870	22,019	Include	16,422	25,840	71	1.091	1.340	37,788	27,179	1,319,580	0.22
7/1/17 - 6/30/18	6,074,840	11,605	Include	17,231	19,789	79	1.081	1.276	27,308	27,179	1,555,936	0.26
7/1/18 - 6/30/19	6,566,440	24,128	Include	18,081	15,806	58	1.071	1.216	20,567	27,179	1,211,444	0.18
7/1/19 - 6/30/20	6,647,010	13,657	Include	18,972	27,440	51	1.060	1.158	33,661	27,179	1,129,962	0.17
7/1/20 - 6/30/21	6,186,070	17,104	Exclude	19,907	17,104	30	1.045	1.103	***19,699***	27,179	709,161	0.11
7/1/21 - 6/30/22	6,345,854	22,164	Exclude	20,889	22,164	52	1.020	1.050	***23,734***	27,179	1,311,653	0.21
7/1/22 - 6/30/23	7,422,338	18,796	Include	21,919	18,796	50	1.000	1.000	***18,796***	27,179	1,366,117	0.18
			Implied Trend	4.9%	-15.2%			Last 5 Wtd Avg	29,351			
								Last 4 Wtd Avg	29,922			
								Last 3 Wtd Avg	26,952			
Total	133,348,612					721		Last 3 Avg	27,179		13,938,022	
								Selected	27,179			

Reported Exponential Regression	
Constant	10.043
X Coefficient	(0.048)
R Squared	0.163

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Section IV, Exhibit I, Sheet 0, Column (7) / Section IV, Exhibit I, Sheet 13, Column (7) x 1
(4) Years included for purposes of fit
(5) Result of Exponential fit of Column (3) * Column (8)
(6) Selected by Deloitte Consulting LLP
(7) From Section IV, Exhibit I, Sheet 13, Column (7)
(8) Based on industry sources
(9) Selected by Deloitte Consulting LLP
(10) = (6) x (8) x (9)
(11) Selected by Deloitte Consulting, LLP
(12) Selected in column (11) x (7) / (8) / (9)
(13) = (12) / (3)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss Development Method

Accident Year	Age of Losses @ 06/30/2023	Retention	Payroll (00)'s	Unlimited Paid Loss @ 06/30/2023	Paid LDF	Indicated Ultimate Loss	Unlimited Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Prior to 7/1/1993	372.0	Unlimited		17,890,046	1.044	18,669,391	
7/1/93 - 6/30/94	360.0	Unlimited	2,543,210	710,933	1.047	744,397	0.29
7/1/94 - 6/30/95	348.0	Unlimited	2,566,650	761,806	1.051	800,501	0.31
7/1/95 - 6/30/96	336.0	Unlimited	2,657,390	591,722	1.055	624,122	0.23
7/1/96 - 6/30/97	324.0	Unlimited	2,963,360	512,528	1.059	542,758	0.18
7/1/97 - 6/30/98	312.0	Unlimited	2,969,820	463,804	1.063	493,255	0.17
7/1/98 - 6/30/99	300.0	Unlimited	2,995,300	670,684	1.068	716,521	0.24
7/1/99 - 6/30/00	288.0	Unlimited	3,236,270	1,216,150	1.074	1,305,601	0.40
7/1/00 - 6/30/01	276.0	Unlimited	3,383,480	1,457,179	1.079	1,572,547	0.46
7/1/01 - 6/30/02	264.0	Unlimited	3,295,550	775,348	1.085	841,451	0.26
7/1/02 - 6/30/03	252.0	Unlimited	3,291,790	904,511	1.092	987,605	0.30
7/1/03 - 6/30/04	240.0	Unlimited	3,445,470	268,295	1.099	294,878	0.09
7/1/04 - 6/30/05	228.0	Unlimited	3,255,300	624,705	1.107	691,544	0.21
7/1/05 - 6/30/06	216.0	Unlimited	4,037,500	353,027	1.116	393,877	0.10
7/1/06 - 6/30/07	204.0	Unlimited	4,202,190	442,770	1.128	499,517	0.12
7/1/07 - 6/30/08	192.0	Unlimited	4,259,980	519,052	1.141	592,437	0.14
7/1/08 - 6/30/09	180.0	Unlimited	4,205,660	897,582	1.155	1,036,836	0.25
7/1/09 - 6/30/10	168.0	Unlimited	4,332,060	641,797	1.172	752,292	0.17
7/1/10 - 6/30/11	156.0	Unlimited	4,446,730	1,059,913	1.189	1,260,725	0.28
7/1/11 - 6/30/12	144.0	Unlimited	4,677,530	969,391	1.208	1,171,008	0.25
7/1/12 - 6/30/13	132.0	Unlimited	4,953,980	687,544	1.229	844,779	0.17
7/1/13 - 6/30/14	120.0	Unlimited	5,183,910	528,763	1.250	660,960	0.13
7/1/14 - 6/30/15	108.0	Unlimited	5,396,310	997,528	1.273	1,269,387	0.24
7/1/15 - 6/30/16	96.0	Unlimited	5,858,750	1,411,139	1.300	1,834,652	0.31
7/1/16 - 6/30/17	84.0	Unlimited	5,947,870	1,176,532	1.329	1,563,345	0.26
7/1/17 - 6/30/18	72.0	Unlimited	6,074,840	661,455	1.386	916,768	0.15
7/1/18 - 6/30/19	60.0	Unlimited	6,566,440	939,133	1.490	1,399,439	0.21
7/1/19 - 6/30/20	48.0	Unlimited	6,647,010	409,486	1.701	696,513	0.10
7/1/20 - 6/30/21	36.0	Unlimited	6,186,070	258,784	1.986	513,993	0.08
7/1/21 - 6/30/22	24.0	Unlimited	6,345,854	426,140	2.688	1,145,407	0.18
7/1/22 - 6/30/23	12.0	Unlimited	7,422,338	171,445	5.510	944,750	0.13
Total			133,348,612	39,399,191		45,781,257	

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1)
(3) Provided by Entity
(4) Provided by Entity
(5) Provided by Entity
(6) From Section IV, Exhibit I, Sheet 11
(7) = (5) x (6)
(8) = (7) / (4)

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development 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	348	360	372	As of 6/30/2023
Prior to 7/1/1993	23,735,279	7,754,608	8,646,625	9,243,526	9,779,598	10,189,665	10,619,956	11,168,168	11,514,959	11,926,003	12,293,759	12,639,476	13,040,131	13,377,572	13,686,864	14,001,630	14,328,149	14,840,582	15,253,508	15,464,746	15,716,665	15,971,946	16,233,923	16,448,917	16,746,371	17,054,504	17,206,217	17,363,619	17,526,573	17,703,395	17,890,046	17,890,046
7/1/93 - 6/30/94	106,895	214,659	321,406	344,959	362,159	373,504	398,819	422,133	440,603	470,574	489,391	508,942	528,680	548,884	569,934	710,933	710,933	710,933	710,933	710,933	710,933	710,933	710,933	710,933	710,933	710,933	710,933	710,933	710,933	710,933		710,933
7/1/94 - 6/30/95	150,379	418,317	578,535	670,237	723,124	742,933	759,515	761,806	761,806	761,806	761,806	761,806	761,806	761,806	761,806	761,806	761,806	761,806	761,806	761,806	761,806	761,806	761,806	761,806	761,806	761,806	761,806	761,806	761,806			761,806
7/1/95 - 6/30/96	188,667	308,485	432,852	451,702	500,899	548,432	586,598	591,072	591,222	591,722	591,722	591,722	591,722	591,722	591,722	591,722	591,722	591,722	591,722	591,722	591,722	591,722	591,722	591,722	591,722	591,722	591,722	591,722				591,722
7/1/96 - 6/30/97	106,252	219,810	296,841	353,903	388,354	412,255	429,409	446,564	464,289	512,427	512,427	512,427	512,427	512,427	512,427	512,528	512,528	512,528	512,528	512,528	512,528	512,528	512,528	512,528	512,528	512,528	512,528					512,528
7/1/97 - 6/30/98	89,150	206,061	357,766	381,131	426,143	462,181	462,181	462,181	462,804	463,804	463,804	463,804	463,804	463,804	463,804	463,804	463,804	463,804	463,804	463,804	463,804	463,804	463,804	463,804	463,804	463,804						463,804
7/1/98 - 6/30/99	79,713	275,741	496,983	571,110	601,701	640,932	651,119	659,562	660,185	670,275	670,315	670,315	670,315	670,669	670,669	670,669	670,669	670,669	670,669	670,684	670,684	670,684	670,684	670,684	670,684							670,684
7/1/99 - 6/30/00	199,557	423,727	634,687	772,478	968,083	1,062,181	1,142,907	1,171,374	1,216,150	1,216,150	1,216,150	1,216,150	1,216,150	1,216,150	1,216,150	1,216,150	1,216,150	1,216,150	1,216,150	1,216,150	1,216,150	1,216,150	1,216,150	1,216,150								1,216,150
7/1/00 - 6/30/01	195,155	451,392	710,127	868,970	942,692	1,044,675	1,096,705	1,137,811	1,189,057	1,231,416	1,257,275	1,284,014	1,311,100	1,338,373	1,365,971	1,394,025	1,457,179	1,457,179	1,457,179	1,457,179	1,457,179	1,457,179	1,457,179									1,457,179
7/1/01 - 6/30/02	134,258	342,384	478,848	604,954	711,985	769,482	770,123	772,068	774,068	774,068	775,125	775,125	775,125	775,125	775,348	775,348	775,348	775,348	775,348	775,348	775,348	775,348										775,348
7/1/02 - 6/30/03	110,118	238,192	331,470	446,854	544,284	668,289	690,728	713,356	736,638	759,940	849,271	889,621	889,621	889,621	891,006	893,732	901,243	901,243	901,243	904,511	904,511											904,511
7/1/03 - 6/30/04	119,754	198,578	212,484	217,562	268,295	268,295	268,295	268,295	268,295	268,295	268,295	268,295	268,295	268,295	268,295	268,295	268,295	268,295	268,295	268,295												268,295
7/1/04 - 6/30/05	118,177	275,583	340,660	392,223	473,141	538,211	611,967	624,705	624,705	624,705	624,705	624,705	624,705	624,705	624,705	624,705	624,705	624,705	624,705													624,705
7/1/05 - 6/30/06	109,288	262,014	334,354	353,027	353,027	353,027	353,027	353,027	353,027	353,027	353,027	353,027	353,027	353,027	353,027	353,027	353,027	353,027														353,027
7/1/06 - 6/30/07	130,909	212,144	272,353	367,382	418,762	439,328	442,769	442,769	442,769	442,769	442,769	442,769	442,769	442,769	442,769	442,770	442,770															442,770
7/1/07 - 6/30/08	136,833	207,607	281,068	351,190	367,025	383,951	398,806	420,596	435,492	450,348	519,052	519,052	519,052	519,052	519,052	519,052																519,052
7/1/08 - 6/30/09	157,647	435,137	583,426	647,624	749,808	845,335	892,003	892,003	897,581	897,581	897,581	897,581	897,582	897,582	897,582																	897,582
7/1/09 - 6/30/10	84,674	287,731	373,835	437,633	513,716	545,802	569,744	640,634	640,634	641,460	641,460	641,642	641,706	641,797																		641,797
7/1/10 - 6/30/11	203,344	361,140	445,050	584,776	815,422	893,474	949,612	972,127	1,043,152	1,043,152	1,043,152	1,043,153	1,059,913																			1,059,913
7/1/11 - 6/30/12	198,403	427,078	622,167	773,444	813,132	909,747	968,492	968,492	969,391	969,391	969,391	969,391																				969,391
7/1/12 - 6/30/13	283,404	453,488	477,883	517,982	539,827	582,881	631,662	687,544	687,544	687,544	687,544																					687,544
7/1/13 - 6/30/14	158,266	466,023	507,365	513,733	528,762	528,762	528,763	528,763	528,763	528,763																						528,763
7/1/14 - 6/30/15	292,324	514,207	655,269	783,128	887,671	944,291	961,631	980,089	997,528																							997,528
7/1/15 - 6/30/16	271,286	532,156	735,829	908,616	1,235,947	1,310,000	1,411,139	1,411,139																								1,411,139
7/1/16 - 6/30/17	288,081	632,111	872,647	1,001,788	1,114,940	1,176,532	1,176,532																									1,176,532
7/1/17 - 6/30/18	253,776	407,472	521,994	584,794	661,454	661,455																										661,455
7/1/18 - 6/30/19	235,059	525,417	776,124	860,053	939,133																											939,133
7/1/19 - 6/30/20	183,754	292,165	340,004	409,486																												409,486
7/1/20 - 6/30/21	107,686	202,800	258,784																													258,784
7/1/21 - 6/30/22	291,134	426,140																														426,140
7/1/22 - 6/30/23	171,445																															171,445
																																39,399,191

Accident Year	Age-to-Age Development Factors 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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993	***0.327***	***1.115***	***1.069***	***1.058***	***1.042***	***1.042***	***1.052***	***1.031***	***1.036***	***1.031***	***1.028***	***1.032***	***1.026***	***1.023***	***1.023***	***1.023***	1.036	1.028	1.014	1.016	1.016	1.016	1.013	1.018	1.018	1.009	1.009	1.009	1.010	1.011	
7/1/93 - 6/30/94	2.008	1.497	1.073	1.050	1.031	1.068	1.058	1.044	1.068	1.040	1.040	1.039	1.038	1.038	1.247	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		
7/1/94 - 6/30/95	2.782	1.383	1.159	1.079	1.027	1.022	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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
7/1/95 - 6/30/96	1.635	1.403	1.044	1.109	1.095	1.070	1.008	1.000	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	1.000	1.000	1.000	1.000	1.000	1.000				
7/1/96 - 6/30/97	2.069	1.350	1.192	1.097	1.062	1.042	1.040	1.040	1.104	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					
7/1/97 - 6/30/98	2.311	1.736	1.065	1.118	1.085	1.000	1.000	1.001	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	1.000	1.000	1.000	1.000						
7/1/98 - 6/30/99	3.459	1.802	1.149	1.054	1.065	1.016	1.013	1.001	1.015	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
7/1/99 - 6/30/00	2.123	1.498	1.217	1.253	1.097	1.076	1.025	1.038	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								
7/1/00 - 6/30/01	2.313	1.573	1.224	1.085	1.108	1.050	1.037	1.045	1.036	1.021	1.021	1.021	1.021	1.021	1.021	1.045	1.000	1.000	1.000	1.000	1.000	1.000									
7/1/01 - 6/30/02	2.550	1.399	1.263	1.177	1.081	1.001	1.003	1.003	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000										
7/1/02 - 6/30/03	2.163	1.392	1.348	1.218	1.228	1.034	1.033	1.033	1.032	1.118	1.048	1.000	1.000	1.002	1.003	1.008	1.000	1.000	1.004	1.000											
7/1/03 - 6/30/04	1.658	1.070	1.024	1.233	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												
7/1/04 - 6/30/05	2.332	1.236	1.151	1.206	1.138	1.137	1.021	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000													
7/1/05 - 6/30/06	2.397	1.276	1.056	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														
7/1/06 - 6/30/07	1.621	1.284	1.349	1.140	1.049	1.008	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000															
7/1/07 - 6/30/08	1.517	1.354	1.249	1.045	1.046	1.039	1.055	1.035	1.034	1.153	1.000	1.000	1.000	1.000	1.000																
7/1/08 - 6/30/09	2.760	1.341	1.110	1.158	1.127	1.055	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000																	
7/1/09 - 6/30/10	3.398	1.299	1.171	1.174	1.062	1.044	1.124	1.000	1.001	1.000	1.000	1.000	1.000																		
7/1/10 - 6/30/11	1.776	1.232	1.314	1.394	1.096	1.063	1.024	1.073	1.000	1.000	1.000	1.016																			
7/1/11 - 6/30/12	2.153	1.457	1.243	1.051	1.119	1.065	1.000	1.001	1.000	1.000	1.000																				
7/1/12 - 6/30/13	1.600	1.054	1.084	1.042	1.080	1.084	1.088	1.000	1.000	1.000																					
7/1/13 - 6/30/14	2.945	1.089	1.013	1.029	1.000	1.000	1.000	1.000	1.000																						
7/1/14 - 6/30/15	1.759	1.274	1.195	1.133	1.064	1.018	1.019	1.018																							
7/1/15 - 6/30/16	1.962	1.383	1.235	1.360	1.060	1.077	1.000																								
7/1/16 - 6/30/17	2.194	1.381	1.148	1.113	1.055	1.000																									
7/1/17 - 6/30/18	1.606	1.281	1.120	1.131	1.000																										
7/1/18 - 6/30/19	2.235	1.477	1.108	1.092																											
7/1/19 - 6/30/20	1.590	1.164	1.204																												
7/1/20 - 6/30/21	1.883	1.276																													
7/1/21 - 6/30/22	1.464																														

(Note: numbers in bold and italics and with borders are excluded from the calculated averages)

Last 3 Wtd Avg	1.581	1.347	1.132	1.110	1.045	1.035	1.006	1.008	1.000	1.000	1.000	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.009			
Last 5 Wtd Avg	1.730	1.344	1.160	1.169	1.043	1.037	1.017	1.022	1.000	1.000	1.000	1.005	1.000	1.000	1.000	1.003	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.008					
Last 9 Wtd Avg	1.921	1.278	1.153	1.154	1.062	1.046	1.026	1.017	1.003	1.011	1.000	1.003	1.000	1.005	1.005	1.011	1.000	1.000	1.000	1.000	1.000	1.012									
Last 12 Wtd Avg	1.894	1.291	1.161	1.151	1.067	1.042	1.023	1.014	1.005	1.020	1.008	1.005	1.003	1.003	1.004	1.009	1.000	1.000	1.009												
All Per Wtd Avg	2.050	1.353	1.168	1.141	1.075	1.043	1.022	1.018	1.012	1.015	1.007	1.005	1.004	1.005	1.017	1.007	1.022	1.017	1.009	1.011	1.011	1.012	1.010	1.015	1.016	1.008	1.008	1.009	1.010	1.011	
Industry																															
Age-to-Age	2.944	1.572	1.221	1.082	1.038	1.014	1.011	1.008	1.006	1.005	1.005	1.002	1.003	1.002	1.003	1.002	1.002	1.001	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	
Age-to-Ult	7.016	2.383	1.516	1.242	1.148	1.106	1.091	1.079	1.070	1.064	1.059	1.054	1.052	1.049	1.047	1.044	1.042	1.040	1.039	1.037	1.036	1.034	1.032	1.031	1.029	1.027	1.025	1.023	1.022	1.020	1.018
Prior Selected																															
Age-to-Age	2.102	1.356	1.166	1.142	1.078	1.045	1.023	1.023	1.018	1.017	1.017	1.016	1.016	1.015	1.014	1.013	1.009	1.008	1.007	1.007	1.006	1.006	1.005	1.005	1.005	1.004	1.004	1.004	1.004	1.003	
Age-to-Ult	5.739	2.730	2.014	1.727	1.512	1.403	1.342	1.311	1.282	1.259	1.238	1.217	1.197	1.179	1.161	1.145	1.130	1.120	1.111	1.103	1.095	1.088	1.082	1.076	1.071	1.066	1.061	1.057	1.053	1.049	1.045
Selected																															
Age-to-Age	2.050	1.353	1.168	1.141	1.075	1.043	1.022	1.022	1.018	1.017	1.017	1.016	1.015	1.015	1.012	1.012	1.011	1.008	1.007	1.007	1.006	1.006	1.005	1.005	1.005	1.004	1.004	1.004	1.004	1.003	
Age-to-Ult	5.510	2.688	1.986	1.701	1.490	1.386	1.329	1.300	1.273	1.250	1.229	1.208	1.189	1.172	1.155	1.141	1.128	1.116	1.107	1.099	1.092	1.085	1.079	1.074	1.068	1.063	1.059	1.055	1.051	1.047	1.044

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Indemnity (Including Lump Sum)

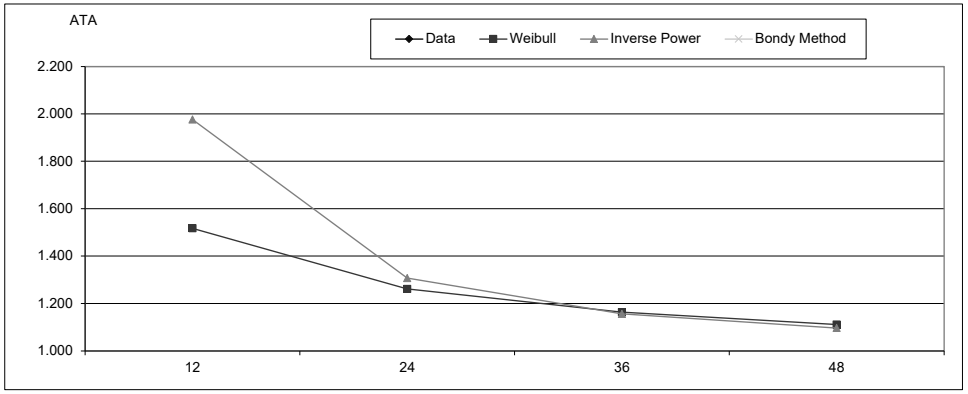
Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

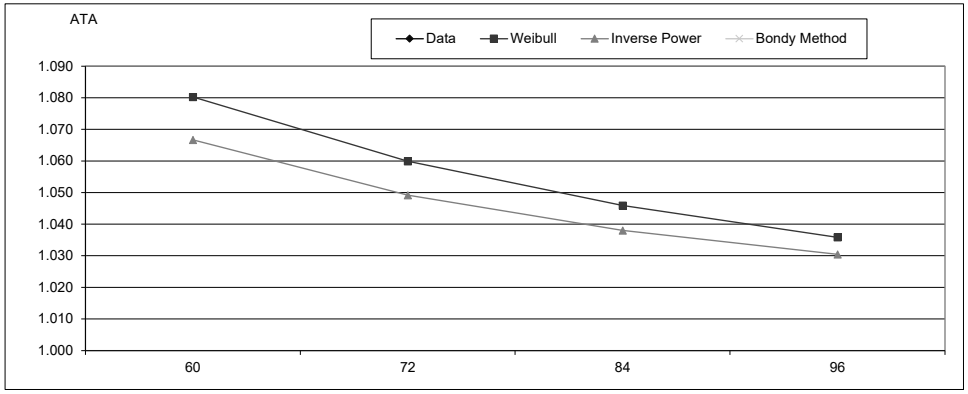
Curve Fitting Methods
Paid Loss

Tail at Period:	**31**	(To display in table)
Cut-off point:(<=Tail & <51)	**50**	(to run-out pattern)

Summary of Curve Fitting Methods

Method	Tail	R^2
Weibull	**1.007**	**0.918**
Inverse Power	**1.044**	**0.947**
Bondy Method		**N/A**





				Weibull		Inverse Power		Bondy Method			
									Sel. Decay Ratio=		
PERIOD	AGE	ATA	Use	**ATA***	**ATU***	**ATA***	**ATU***	Ln(ATA)	Decay	**ATA***	**ATU***
1	12	0.000	Exclude	**1.518**	3.636	**1.976**	4.998				
2	24	1.353	Include	**1.262**	2.396	**1.307**	2.529				
3	36	1.168	Include	**1.163**	1.899	**1.156**	1.934				
4	48	1.141	Include	**1.111**	1.633	**1.097**	1.673				
5	60	1.075	Include	**1.080**	1.469	**1.067**	1.525				
6	72	1.043	Include	**1.060**	1.360	**1.049**	1.430				
7	84	1.022	Include	**1.046**	1.283	**1.038**	1.363				
8	96	1.022	Include	**1.036**	1.227	**1.030**	1.313				
9	108	1.018	Include	**1.028**	1.184	**1.025**	1.274				
10	120	1.017	Include	**1.023**	1.151	**1.021**	1.243				
11	132	1.017	Include	**1.019**	1.126	**1.018**	1.217				
12	144	1.016	Include	**1.015**	1.105	**1.015**	1.196				
13	156	1.015	Include	**1.013**	1.089	**1.014**	1.178				
14	168	1.015	Include	**1.010**	1.075	**1.012**	1.162				
15	180	1.012	Include	**1.009**	1.064	**1.011**	1.148				
16	192	1.012	Include	**1.007**	1.055	**1.010**	1.136				
17	204	1.011	Include	**1.006**	1.047	**1.009**	1.125				
18	216	0.000	Exclude	**1.005**	1.041	**1.008**	1.116				
19	228	0.000	Exclude	**1.005**	1.035	**1.007**	1.107				
20	240	0.000	Exclude	**1.004**	1.030	**1.007**	1.099				
21	252	0.000	Exclude	**1.003**	1.026	**1.006**	1.092				
22	264	0.000	Exclude	**1.003**	1.023	**1.006**	1.085				
23	276	0.000	Exclude	**1.002**	1.020	**1.005**	1.079				
24	288	0.000	Exclude	**1.002**	1.018	**1.005**	1.074				
25	300	0.000	Exclude	**1.002**	1.015	**1.005**	1.068				
26	312	0.000	Exclude	**1.002**	1.013	**1.004**	1.063				
27	324	0.000	Exclude	**1.001**	1.012	**1.004**	1.059				
28	336	0.000	Exclude	**1.001**	1.010	**1.004**	1.055				
29	348	0.000	Exclude	**1.001**	1.009	**1.004**	1.051				
30	360	0.000	Exclude	**1.001**	1.008	**1.003**	1.047				
31	372	0.000	Exclude	**1.001**	1.007	**1.003**	1.044				
32	384	0.000	Exclude	**1.001**	1.006	**1.003**	1.040				
33	396	0.000	Exclude	**1.001**	1.005	**1.003**	1.037				
34	408	0.000	Exclude	**1.001**	1.005	**1.003**	1.034				
35	420	0.000	Exclude	**1.001**	1.004	**1.003**	1.031				
36	432	0.000	Exclude	**1.000**	1.004	**1.002**	1.029				
37	444	0.000	Exclude	**1.000**	1.003	**1.002**	1.026				
38	456	0.000	Exclude	**1.000**	1.003	**1.002**	1.024				
39	468	0.000	Exclude	**1.000**	1.002	**1.002**	1.021				
40	480	0.000	Exclude	**1.000**	1.002	**1.002**	1.019				
41	492	0.000	Exclude	**1.000**	1.002	**1.002**	1.017				
42	504	0.000	Exclude	**1.000**	1.001	**1.002**	1.015				
43	516	0.000	Exclude	**1.000**	1.001	**1.002**	1.013				
44	528	0.000	Exclude	**1.000**	1.001	**1.002**	1.011				
45	540	0.000	Exclude	**1.000**	1.001	**1.002**	1.009				
46	552	0.000	Exclude	**1.000**	1.001	**1.002**	1.008				
47	564	0.000	Exclude	**1.000**	1.000	**1.002**	1.006				
48	576	0.000	Exclude	**1.000**	1.000	**1.002**	1.004				
49	588	0.000	Exclude	**1.000**	1.000	**1.001**	1.003				
50	600	0.000	Exclude	**1.000**	1.000	**1.001**	1.001				

Unpaid Claim Analysis as of 06/30/2023

Ultimate Claim Count Development

Accident Year	Age of Counts @ 06/30/2023	Payroll (00)'s	Reported Claim Counts @ 06/30/2023	Reported Count Dev Factor	Indicated Ultimate Claim Counts	Selected Ultimate Claim Counts	Selected Ultimate Frequency	Selected Ultimate Frequency (Inflation-Adjusted)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	372.0		20	1.000	20			
7/1/93 - 6/30/94	360.0	2,543,210	2	1.000	2		0.00%	0.00%
7/1/94 - 6/30/95	348.0	2,566,650	1	1.000	1		0.00%	0.00%
7/1/95 - 6/30/96	336.0	2,657,390	1	1.000	1		0.00%	0.00%
7/1/96 - 6/30/97	324.0	2,963,360	1	1.000	1		0.00%	0.00%
7/1/97 - 6/30/98	312.0	2,969,820	2	1.000	2		0.00%	0.00%
7/1/98 - 6/30/99	300.0	2,995,300	2	1.000	2		0.00%	0.00%
7/1/99 - 6/30/00	288.0	3,236,270	4	1.000	4		0.00%	0.00%
7/1/00 - 6/30/01	276.0	3,383,480	3	1.000	3		0.00%	0.00%
7/1/01 - 6/30/02	264.0	3,295,550	4	1.000	4		0.00%	0.00%
7/1/02 - 6/30/03	252.0	3,291,790	3	1.000	3		0.00%	0.00%
7/1/03 - 6/30/04	240.0	3,445,470	1	1.000	1		0.00%	0.00%
7/1/04 - 6/30/05	228.0	3,255,300	1	1.000	1		0.00%	0.00%
7/1/05 - 6/30/06	216.0	4,037,500	2	1.000	2		0.00%	0.00%
7/1/06 - 6/30/07	204.0	4,202,190	4	1.000	4		0.00%	0.00%
7/1/07 - 6/30/08	192.0	4,259,980	4	1.000	4		0.00%	0.00%
7/1/08 - 6/30/09	180.0	4,205,660	7	1.000	7		0.00%	0.00%
7/1/09 - 6/30/10	168.0	4,332,060	6	1.000	6		0.00%	0.00%
7/1/10 - 6/30/11	156.0	4,446,730	18	1.000	18		0.00%	0.00%
7/1/11 - 6/30/12	144.0	4,677,530	39	1.000	39		0.00%	0.00%
7/1/12 - 6/30/13	132.0	4,953,980	90	1.000	90	90	18.17%	13.52%
7/1/13 - 6/30/14	120.0	5,183,910	67	1.000	67	67	12.92%	9.91%
7/1/14 - 6/30/15	108.0	5,396,310	101	1.000	101	101	18.72%	14.77%
7/1/15 - 6/30/16	96.0	5,858,750	72	1.000	72	72	12.29%	9.99%
7/1/16 - 6/30/17	84.0	5,947,870	71	1.000	71	71	11.94%	10.00%
7/1/17 - 6/30/18	72.0	6,074,840	79	1.000	79	79	13.00%	11.22%
7/1/18 - 6/30/19	60.0	6,566,440	58	1.000	58	58	8.83%	7.85%
7/1/19 - 6/30/20	48.0	6,647,010	51	1.000	51	51	7.67%	7.02%
7/1/20 - 6/30/21	36.0	6,186,070	30	1.002	30	30	4.86%	4.58%
7/1/21 - 6/30/22	24.0	6,345,854	51	1.013	52	52	8.14%	7.91%
7/1/22 - 6/30/23	12.0	7,422,338	43	1.111	48	50	6.77%	6.77%
Total		133,348,612	838		844	721		

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Age of (1)
(3)	Provided by Entity
(4)	Provided by Entity
(5)	From Section IV, Exhibit I, Sheet 14
(6)	= (4) x (5)
(7)	Selected by Deloitte Consulting LLP
(8)	= (7) / (3)
(9)	= (7) / [(3) x Section IV, Exhibit I, Sheet 8, Column (3)]

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Reported Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																															20	20
7/1/93 - 6/30/94																														2		2
7/1/94 - 6/30/95																													1			1
7/1/95 - 6/30/96																												1				1
7/1/96 - 6/30/97																											1					1
7/1/97 - 6/30/98																										2						2
7/1/98 - 6/30/99																									2							2
7/1/99 - 6/30/00																								4								4
7/1/00 - 6/30/01																							3									3
7/1/01 - 6/30/02																						4										4
7/1/02 - 6/30/03																					3											3
7/1/03 - 6/30/04																				1												1
7/1/04 - 6/30/05																			1													1
7/1/05 - 6/30/06																		2														2
7/1/06 - 6/30/07																	4															4
7/1/07 - 6/30/08																4																4
7/1/08 - 6/30/09															7																	7
7/1/09 - 6/30/10														6																		6
7/1/10 - 6/30/11													18																			18
7/1/11 - 6/30/12												39																				39
7/1/12 - 6/30/13	78	89	90	90	90	90	90	90	90	90	90																					90
7/1/13 - 6/30/14	54	64	65	66	66	66	67	67	67	67																						67
7/1/14 - 6/30/15	93	101	101	101	101	101	101	101	101																							101
7/1/15 - 6/30/16	67	72	72	72	72	72	72	72																								72
7/1/16 - 6/30/17	66	69	71	71	71	71	71																									71
7/1/17 - 6/30/18	75	77	78	78	78	79																										79
7/1/18 - 6/30/19	49	55	55	55	58																											58
7/1/19 - 6/30/20	49	50	51	51																												51
7/1/20 - 6/30/21	23	29	30																													30
7/1/21 - 6/30/22	45	51																														51
7/1/22 - 6/30/23	43																															43
																																838

Accident Year	Age-to-Age Development Factors																															
	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
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7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	1.141	1.011	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000																						
7/1/13 - 6/30/14	1.185	1.016	1.015	1.000	1.000	1.015	1.000	1.000	1.000																							
7/1/14 - 6/30/15	1.086	1.000	1.000	1.000	1.000	1.000	1.000	1.000																								
7/1/15 - 6/30/16	1.075	1.000	1.000	1.000	1.000	1.000	1.000																									
7/1/16 - 6/30/17	1.045	1.029	1.000	1.000	1.000	1.000																										
7/1/17 - 6/30/18	1.027	1.013	1.000	1.000	1.013																											
7/1/18 - 6/30/19	1.122	1.000	1.000	1.055																												
7/1/19 - 6/30/20	1.020	1.020	1.000																													
7/1/20 - 6/30/21	1.261	1.034																														
7/1/21 - 6/30/22	1.133																															
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																																
Last 3 Wtd Avg	1.111	1.015	1.000	1.015	1.005	1.000	1.000	1.000																								
Last 4 Wtd Avg	1.114	1.014	1.000	1.011	1.003	1.003	1.000																									
Last 5 Wtd Avg	1.087	1.018	1.000	1.008	1.003	1.003																										
All Per Wtd Avg	1.097	1.012	1.002	1.006	1.002	1.003	1.000	1.000	1.000	1.000																						
Average ex Hi/Lo	1.102	1.013	1.000	1.000	1.000	1.000	1.000	1.000																								
Prior Selected																																
Age-to-Age	1.094	1.010	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	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		
Age-to-Ult	1.107	1.012	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	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	
Selected																																
Age-to-Age	1.097	1.012	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	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		
Age-to-Ult	1.111	1.013	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	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	

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Reported Counts to Payroll (00)'s

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01		2,543,210
7/1/94 - 6/30/95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			2,566,650
7/1/95 - 6/30/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				2,657,390
7/1/96 - 6/30/97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					2,963,360
7/1/97 - 6/30/98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01						2,969,820
7/1/98 - 6/30/99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01							2,995,300
7/1/99 - 6/30/00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01								3,236,270
7/1/00 - 6/30/01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01									3,383,480
7/1/01 - 6/30/02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01										3,295,550
7/1/02 - 6/30/03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01											3,291,790
7/1/03 - 6/30/04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00												3,445,470
7/1/04 - 6/30/05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00													3,255,300
7/1/05 - 6/30/06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00														4,037,500
7/1/06 - 6/30/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01															4,202,190
7/1/07 - 6/30/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01																4,259,980
7/1/08 - 6/30/09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02																	4,205,660
7/1/09 - 6/30/10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01																		4,332,060
7/1/10 - 6/30/11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04																			4,446,730
7/1/11 - 6/30/12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08																				4,677,530
7/1/12 - 6/30/13	0.16	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18																					4,953,980
7/1/13 - 6/30/14	0.10	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13																						5,183,910
7/1/14 - 6/30/15	0.17	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19																							5,396,310
7/1/15 - 6/30/16	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12																								5,858,750
7/1/16 - 6/30/17	0.11	0.12	0.12	0.12	0.12	0.12	0.12																									5,947,870
7/1/17 - 6/30/18	0.12	0.13	0.13	0.13	0.13	0.13																										6,074,840
7/1/18 - 6/30/19	0.07	0.08	0.08	0.08	0.09																											6,566,440
7/1/19 - 6/30/20	0.07	0.08	0.08	0.08																												6,647,010
7/1/20 - 6/30/21	0.04	0.05	0.05																													6,186,070
7/1/21 - 6/30/22	0.07	0.08																														6,345,854
7/1/22 - 6/30/23	0.06																															7,422,338

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss Rates

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.04	0.08	0.13	0.14	0.14	0.15	0.16	0.17	0.17	0.19	0.19	0.20	0.21	0.22	0.22	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28		2,543,210
7/1/94 - 6/30/95	0.06	0.16	0.23	0.26	0.28	0.29	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30			2,566,650
7/1/95 - 6/30/96	0.07	0.12	0.16	0.17	0.19	0.21	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22				2,657,390
7/1/96 - 6/30/97	0.04	0.07	0.10	0.12	0.13	0.14	0.14	0.15	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17					2,963,360
7/1/97 - 6/30/98	0.03	0.07	0.12	0.13	0.14	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16						2,969,820
7/1/98 - 6/30/99	0.03	0.09	0.17	0.19	0.20	0.21	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22							2,995,300
7/1/99 - 6/30/00	0.06	0.13	0.20	0.24	0.30	0.33	0.35	0.36	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38								3,236,270
7/1/00 - 6/30/01	0.06	0.13	0.21	0.26	0.28	0.31	0.32	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.40	0.41	0.43	0.43	0.43	0.43	0.43	0.43	0.43									3,383,480
7/1/01 - 6/30/02	0.04	0.10	0.15	0.18	0.22	0.23	0.23	0.23	0.23	0.23	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24										3,295,550
7/1/02 - 6/30/03	0.03	0.07	0.10	0.14	0.17	0.20	0.21	0.22	0.22	0.23	0.26	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27											3,291,790
7/1/03 - 6/30/04	0.03	0.06	0.06	0.06	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08												3,445,470
7/1/04 - 6/30/05	0.04	0.08	0.10	0.12	0.15	0.17	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19													3,255,300
7/1/05 - 6/30/06	0.03	0.06	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09														4,037,500
7/1/06 - 6/30/07	0.03	0.05	0.06	0.09	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11															4,202,190
7/1/07 - 6/30/08	0.03	0.05	0.07	0.08	0.09	0.09	0.09	0.10	0.10	0.11	0.12	0.12	0.12	0.12	0.12	0.12																4,259,980
7/1/08 - 6/30/09	0.04	0.10	0.14	0.15	0.18	0.20	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21																	4,205,660
7/1/09 - 6/30/10	0.02	0.07	0.09	0.10	0.12	0.13	0.13	0.15	0.15	0.15	0.15	0.15	0.15	0.15																		4,332,060
7/1/10 - 6/30/11	0.05	0.08	0.10	0.13	0.18	0.20	0.21	0.22	0.23	0.23	0.23	0.23	0.24																			4,446,730
7/1/11 - 6/30/12	0.04	0.09	0.13	0.17	0.17	0.19	0.21	0.21	0.21	0.21	0.21	0.21																				4,677,530
7/1/12 - 6/30/13	0.06	0.09	0.10	0.10	0.11	0.12	0.13	0.14	0.14	0.14	0.14																					4,953,980
7/1/13 - 6/30/14	0.03	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10																						5,183,910
7/1/14 - 6/30/15	0.05	0.10	0.12	0.15	0.16	0.17	0.18	0.18	0.18																							5,396,310
7/1/15 - 6/30/16	0.05	0.09	0.13	0.16	0.21	0.22	0.24	0.24																								5,858,750
7/1/16 - 6/30/17	0.05	0.11	0.15	0.17	0.19	0.20	0.20																									5,947,870
7/1/17 - 6/30/18	0.04	0.07	0.09	0.10	0.11	0.11																										6,074,840
7/1/18 - 6/30/19	0.04	0.08	0.12	0.13	0.14																											6,566,440
7/1/19 - 6/30/20	0.03	0.04	0.05	0.06																												6,647,010
7/1/20 - 6/30/21	0.02	0.03	0.04																													6,186,070
7/1/21 - 6/30/22	0.05	0.07																														6,345,854
7/1/22 - 6/30/23	0.02																															7,422,338

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Settlement Rates (Closed Claim Count / Ultimate Claim Count)

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
7/1/98 - 6/30/99																																
7/1/99 - 6/30/00																																
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7/1/01 - 6/30/02																																
7/1/02 - 6/30/03																																
7/1/03 - 6/30/04																																
7/1/04 - 6/30/05																																
7/1/05 - 6/30/06																																
7/1/06 - 6/30/07																																
7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	0.00	0.39	0.87	0.91	0.96	0.98	0.98	0.99	1.00	1.00	1.00																					1.00
7/1/13 - 6/30/14	0.00	0.49	0.82	0.94	0.96	0.99	0.99	1.00	1.00	1.00																						1.00
7/1/14 - 6/30/15	0.00	0.49	0.83	0.92	0.94	0.94	0.97	0.95	0.99																							0.99
7/1/15 - 6/30/16	0.00	0.43	0.81	0.86	0.90	0.94	0.96	1.00																								1.00
7/1/16 - 6/30/17	0.00	0.52	0.87	0.96	0.96	0.97	0.99																									0.99
7/1/17 - 6/30/18	0.00	0.52	0.89	0.92	0.97	0.99																										0.99
7/1/18 - 6/30/19	0.00	0.48	0.72	0.90	0.91																											0.91
7/1/19 - 6/30/20	0.00	0.69	0.88	0.88																												0.88
7/1/20 - 6/30/21	0.00	0.17	0.87																													0.87
7/1/21 - 6/30/22	0.00	0.43																														0.43
7/1/22 - 6/30/23	0.00																															0.00

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Open Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993	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	0	0	0	4	4
7/1/93 - 6/30/94	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	0	0	1		1
7/1/94 - 6/30/95	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	0	0			0
7/1/95 - 6/30/96	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	0				0
7/1/96 - 6/30/97	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					0
7/1/97 - 6/30/98	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
7/1/98 - 6/30/99	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
7/1/99 - 6/30/00	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
7/1/00 - 6/30/01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									0
7/1/01 - 6/30/02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1										1
7/1/02 - 6/30/03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1											1
7/1/03 - 6/30/04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												0
7/1/04 - 6/30/05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0													0
7/1/05 - 6/30/06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														0
7/1/06 - 6/30/07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															0
7/1/07 - 6/30/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																0
7/1/08 - 6/30/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1																	1
7/1/09 - 6/30/10	0	0	0	0	0	0	0	0	0	0	0	0	0	3																		3
7/1/10 - 6/30/11	0	0	0	0	0	0	0	0	0	0	0	0	2																			2
7/1/11 - 6/30/12	0	0	0	0	0	0	0	0	0	0	0	1																				1
7/1/12 - 6/30/13	78	54	12	8	4	2	2	1	0	0	0																					0
7/1/13 - 6/30/14	54	31	10	3	2	0	1	0	0	0																						0
7/1/14 - 6/30/15	93	52	17	8	6	6	3	5	1																							1
7/1/15 - 6/30/16	67	41	14	10	7	4	3	0																								0
7/1/16 - 6/30/17	66	32	9	3	3	2	1																									1
7/1/17 - 6/30/18	75	36	8	5	1	1																										1
7/1/18 - 6/30/19	49	27	13	3	5																											5
7/1/19 - 6/30/20	49	15	6	6																												6
7/1/20 - 6/30/21	23	24	4																													4
7/1/21 - 6/30/22	45	29																														29
7/1/22 - 6/30/23	43																															43
																																104

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Medical

Section IV
Exhibit II
Sheet 1

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Unpaid Loss & ALAE Estimates

Accident Year	Payroll (00)'s	Retention	Unlimited Paid Loss & ALAE @ 06/30/2023	Unlimited Reported Loss & ALAE @ 06/30/2023	Ultimate Loss & ALAE Low	Ultimate Loss & ALAE High	Indicated Total Unpaid Loss & ALAE Estimates Low	Indicated Total Unpaid Loss & ALAE Estimates High	Case Reserves	Indicated IBNR Estimate Low	Indicated IBNR Estimate High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993		Unlimited	2,477,219	2,477,219	2,477,219	2,477,219	0	0	0	0	0
7/1/93 - 6/30/94	2,543,210	Unlimited	546,366	546,366	564,800	566,700	18,434	20,334	0	18,434	20,334
7/1/94 - 6/30/95	2,566,650	Unlimited	305,369	305,369	316,500	317,600	11,131	12,231	0	11,131	12,231
7/1/95 - 6/30/96	2,657,390	Unlimited	243,985	243,985	253,500	254,500	9,515	10,515	0	9,515	10,515
7/1/96 - 6/30/97	2,963,360	Unlimited	187,967	187,967	195,500	196,300	7,533	8,333	0	7,533	8,333
7/1/97 - 6/30/98	2,969,820	Unlimited	188,043	188,043	195,800	196,600	7,757	8,557	0	7,757	8,557
7/1/98 - 6/30/99	2,995,300	Unlimited	261,179	261,179	272,200	273,400	11,021	12,221	0	11,021	12,221
7/1/99 - 6/30/00	3,236,270	Unlimited	360,853	360,853	376,900	378,600	16,047	17,747	0	16,047	17,747
7/1/00 - 6/30/01	3,383,480	Unlimited	396,643	396,643	415,100	417,000	18,457	20,357	0	18,457	20,357
7/1/01 - 6/30/02	3,295,550	Unlimited	572,103	572,103	600,000	603,000	27,897	30,897	0	27,897	30,897
7/1/02 - 6/30/03	3,291,790	Unlimited	355,638	355,638	374,800	376,800	19,162	21,162	0	19,162	21,162
7/1/03 - 6/30/04	3,445,470	Unlimited	146,045	146,045	155,100	156,100	9,055	10,055	0	9,055	10,055
7/1/04 - 6/30/05	3,255,300	Unlimited	287,625	287,625	308,000	310,100	20,375	22,475	0	20,375	22,475
7/1/05 - 6/30/06	4,037,500	Unlimited	287,294	287,294	310,100	312,500	22,806	25,206	0	22,806	25,206
7/1/06 - 6/30/07	4,202,190	Unlimited	215,436	215,436	234,800	236,800	19,364	21,364	0	19,364	21,364
7/1/07 - 6/30/08	4,259,980	Unlimited	458,767	458,767	505,200	510,100	46,433	51,333	0	46,433	51,333
7/1/08 - 6/30/09	4,205,660	Unlimited	620,509	620,509	690,600	697,900	70,091	77,391	0	70,091	77,391
7/1/09 - 6/30/10	4,332,060	Unlimited	401,749	401,749	452,800	458,100	51,051	56,351	0	51,051	56,351
7/1/10 - 6/30/11	4,446,730	Unlimited	384,687	384,687	439,400	445,200	54,713	60,513	0	54,713	60,513
7/1/11 - 6/30/12	4,677,530	Unlimited	484,145	484,145	561,400	569,600	77,255	85,455	0	77,255	85,455
7/1/12 - 6/30/13	4,953,980	Unlimited	367,346	367,346	434,300	441,300	66,954	73,954	0	66,954	73,954
7/1/13 - 6/30/14	5,183,910	Unlimited	340,080	340,080	409,900	417,200	69,820	77,120	0	69,820	77,120
7/1/14 - 6/30/15	5,396,310	Unlimited	540,436	540,436	664,600	677,700	124,164	137,264	0	124,164	137,264
7/1/15 - 6/30/16	5,858,750	Unlimited	450,709	450,709	563,400	580,400	112,691	129,691	0	112,691	129,691
7/1/16 - 6/30/17	5,947,870	Unlimited	364,573	364,573	465,500	480,600	100,927	116,027	0	100,927	116,027
7/1/17 - 6/30/18	6,074,840	Unlimited	294,353	294,353	383,900	397,400	89,547	103,047	0	89,547	103,047
7/1/18 - 6/30/19	6,566,440	Unlimited	344,701	344,701	462,700	480,500	117,999	135,799	0	117,999	135,799
7/1/19 - 6/30/20	6,647,010	Unlimited	253,756	253,756	350,600	365,200	96,844	111,444	0	96,844	111,444
7/1/20 - 6/30/21	6,186,070	Unlimited	95,876	95,876	233,000	263,000	137,124	167,124	0	137,124	167,124
7/1/21 - 6/30/22	6,345,854	Unlimited	286,580	286,580	445,000	480,000	158,420	193,420	0	158,420	193,420
7/1/22 - 6/30/23	7,422,338	Unlimited	82,287	82,287	392,000	461,000	309,713	378,713	0	309,713	378,713
Total	133,348,612		12,602,319	12,602,319	14,504,619	14,798,419	1,902,299	2,196,099	0	1,902,299	2,196,099

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	Provided by Entity
(6)	From Section IV, Exhibit II, Sheet 6, Column (11)
(7)	From Section IV, Exhibit II, Sheet 6, Column (12)
(8)	= (6) - (4)
(9)	= (7) - (4)
(10)	= (5) - (4)
(11)	= (8) - (10)
(12)	= (9) - (10)

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Unpaid Claim Analysis as of 06/30/2023
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Short-Term Portion

Accident Year	Age of Losses @ 06/30/2023	Selected Paid Test LDF @ 06/30/2023	Implied Paid LDF	Paid LDF	Cumulative Percent Paid	Incremental Percent Paid	Average Total Unpaid ss & ALAE Estimate	Undiscounted Cash Flow of Payments 2024
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
						0.31%		
Prior to 7/1/1993	372.0	1.033	1.000	1.033	96.81%	0.24%	0	0
7/1/93 - 6/30/94	360.0	1.036	1.035	1.036	96.57%	0.25%	19,384	1,364
7/1/94 - 6/30/95	348.0	1.038	1.038	1.038	96.32%	0.27%	11,681	805
7/1/95 - 6/30/96	336.0	1.041	1.041	1.041	96.05%	0.10%	10,015	679
7/1/96 - 6/30/97	324.0	1.042	1.042	1.042	95.95%	0.11%	7,933	200
7/1/97 - 6/30/98	312.0	1.043	1.043	1.043	95.84%	0.11%	8,157	210
7/1/98 - 6/30/99	300.0	1.045	1.044	1.045	95.73%	0.19%	11,621	303
7/1/99 - 6/30/00	288.0	1.047	1.047	1.047	95.53%	0.20%	16,897	735
7/1/00 - 6/30/01	276.0	1.049	1.049	1.049	95.34%	0.23%	19,407	813
7/1/01 - 6/30/02	264.0	1.051	1.051	1.051	95.11%	0.48%	29,397	1,383
7/1/02 - 6/30/03	252.0	1.057	1.057	1.057	94.63%	0.78%	20,162	1,817
7/1/03 - 6/30/04	240.0	1.066	1.065	1.066	93.84%	0.78%	9,555	1,212
7/1/04 - 6/30/05	228.0	1.074	1.074	1.074	93.07%	0.79%	21,425	2,401
7/1/05 - 6/30/06	216.0	1.084	1.084	1.084	92.27%	0.92%	24,006	2,465
7/1/06 - 6/30/07	204.0	1.095	1.095	1.095	91.36%	0.99%	20,364	2,159
7/1/07 - 6/30/08	192.0	1.107	1.107	1.107	90.36%	0.99%	48,883	5,044
7/1/08 - 6/30/09	180.0	1.119	1.119	1.119	89.38%	1.17%	73,741	6,854
7/1/09 - 6/30/10	168.0	1.134	1.134	1.134	88.21%	1.24%	53,701	5,318
7/1/10 - 6/30/11	156.0	1.150	1.150	1.150	86.97%	1.35%	57,613	5,477
7/1/11 - 6/30/12	144.0	1.168	1.168	1.168	85.62%	1.70%	81,355	7,663
7/1/12 - 6/30/13	132.0	1.192	1.192	1.192	83.91%	1.68%	70,454	7,460
7/1/13 - 6/30/14	120.0	1.216	1.216	1.216	82.23%	1.71%	73,470	6,948
7/1/14 - 6/30/15	108.0	1.242	1.242	1.242	80.52%	1.71%	130,714	11,491
7/1/15 - 6/30/16	96.0	1.269	1.269	1.269	78.81%	1.74%	121,191	9,775
7/1/16 - 6/30/17	84.0	1.298	1.298	1.298	77.07%	1.72%	108,477	8,243
7/1/17 - 6/30/18	72.0	1.327	1.327	1.327	75.34%	2.25%	96,297	6,732
7/1/18 - 6/30/19	60.0	1.368	1.368	1.368	73.09%	2.19%	126,899	10,621
7/1/19 - 6/30/20	48.0	1.410	1.410	1.410	70.90%	4.97%	104,144	7,843
7/1/20 - 6/30/21	36.0	1.517	2.587	1.517	65.93%	10.27%	152,124	22,202
7/1/21 - 6/30/22	24.0	1.797	1.614	1.797	55.66%	27.48%	175,920	40,750
7/1/22 - 6/30/23	12.0	3.549	5.183	3.549	28.18%	28.18%	344,213	131,692
Total							2,049,199	310,657

	Undiscounted	Discounted			
Short-Term Portion	15%	19%	(10)	Interest Rate	4%

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1) @ 06/30/2023
(3) From Section IV, Exhibit II, Sheet 10, Column (6)
(4) Average Ultimate Loss Divided by Paid Loss From Section IV, Exhibit II, Sheet 6
(5) Selected
(6) = 1 / (5)
(7) = (6) from Current Age - (6) from Subsequent Age
(8) From Section IV, Exhibit II, Sheet 3
(9) - (9) Based on (5)

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Section IV
Exhibit II
Sheet 3

Unpaid Claim Analysis as of 06/30/2023
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Summary of Discounted at (4%) Unpaid Loss & ALAE Estimate

Accident Year	Indicated Total Unpaid Loss & ALAE Estimate Low	Indicated Total Unpaid Loss & ALAE Estimate High	Discount Factor	Discounted Total Unpaid Loss & ALAE Estimate Low	Discounted Total Unpaid Loss & ALAE Estimate High
(1)	(2)	(3)	(4)	(5)	(6)
Prior to 7/1/1993	0	0	1.000	0	0
7/1/93 - 6/30/94	18,434	20,334	0.981	18,076	19,939
7/1/94 - 6/30/95	11,131	12,231	0.945	10,524	11,564
7/1/95 - 6/30/96	9,515	10,515	0.914	8,696	9,610
7/1/96 - 6/30/97	7,533	8,333	0.881	6,639	7,344
7/1/97 - 6/30/98	7,757	8,557	0.851	6,600	7,281
7/1/98 - 6/30/99	11,021	12,221	0.822	9,064	10,051
7/1/99 - 6/30/00	16,047	17,747	0.799	12,822	14,180
7/1/00 - 6/30/01	18,457	20,357	0.777	14,344	15,821
7/1/01 - 6/30/02	27,897	30,897	0.758	21,153	23,428
7/1/02 - 6/30/03	19,162	21,162	0.752	14,406	15,909
7/1/03 - 6/30/04	9,055	10,055	0.756	6,841	7,597
7/1/04 - 6/30/05	20,375	22,475	0.755	15,382	16,967
7/1/05 - 6/30/06	22,806	25,206	0.752	17,151	18,956
7/1/06 - 6/30/07	19,364	21,364	0.750	14,531	16,032
7/1/07 - 6/30/08	46,433	51,333	0.748	34,745	38,412
7/1/08 - 6/30/09	70,091	77,391	0.744	52,132	57,562
7/1/09 - 6/30/10	51,051	56,351	0.741	37,852	41,782
7/1/10 - 6/30/11	54,713	60,513	0.738	40,399	44,681
7/1/11 - 6/30/12	77,255	85,455	0.735	56,819	62,850
7/1/12 - 6/30/13	66,954	73,954	0.736	49,287	54,440
7/1/13 - 6/30/14	69,820	77,120	0.734	51,221	56,576
7/1/14 - 6/30/15	124,164	137,264	0.730	90,589	100,147
7/1/15 - 6/30/16	112,691	129,691	0.724	81,592	93,901
7/1/16 - 6/30/17	100,927	116,027	0.718	72,445	83,284
7/1/17 - 6/30/18	89,547	103,047	0.710	63,622	73,214
7/1/18 - 6/30/19	117,999	135,799	0.708	83,550	96,153
7/1/19 - 6/30/20	96,844	111,444	0.703	68,120	78,389
7/1/20 - 6/30/21	137,124	167,124	0.721	98,832	120,454
7/1/21 - 6/30/22	158,420	193,420	0.760	120,341	146,928
7/1/22 - 6/30/23	309,713	378,713	0.826	255,862	312,865
Total	1,902,299	2,196,099		1,433,639	1,656,318

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From Section IV, Exhibit II, Sheet 1, Column (8)
(3) From Section IV, Exhibit II, Sheet 1, Column (9)
(4) From Section IV, Exhibit II, Sheet 0, Column (8)
(5) = (2) x (4)
(6) = (3) x (4)

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Section IV
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Sheet 4

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Actual vs Expected - Paid Loss & ALAE Emergence

Accident Year	Selected Low Ultimate Loss & ALAE @ 06/30/2022	Selected High Ultimate Loss & ALAE @ 06/30/2022	Unlimited Paid Loss & ALAE @ 06/30/2022	Unlimited Paid Loss & ALAE @ 06/30/2023	Paid LDF @ 06/30/2022	Projected Paid LDF @ 06/30/2023	Method 1 Low Expected Paid Emergence Loss & ALAE @ 06/30/2023	Method 1 High Expected Paid Emergence Loss & ALAE @ 06/30/2023	Actual Paid Emergence Loss & ALAE @ 06/30/2023	Actual - Expected Method 1 Low Paid	Actual - Expected Method 1 High Paid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993	2,486,344	2,487,344	2,477,219	2,477,219	1.037	1.033	898	996	0	(898)	(996)
7/1/93 - 6/30/94	565,700	567,900	545,258	546,366	1.040	1.037	1,402	1,553	1,108	(294)	(445)
7/1/94 - 6/30/95	317,700	319,000	305,369	305,369	1.043	1.040	831	919	0	(831)	(919)
7/1/95 - 6/30/96	254,100	255,100	243,985	243,985	1.044	1.043	230	253	0	(230)	(253)
7/1/96 - 6/30/97	195,900	196,800	187,967	187,967	1.045	1.044	188	209	0	(188)	(209)
7/1/97 - 6/30/98	196,200	197,100	188,043	188,043	1.046	1.045	199	221	0	(199)	(221)
7/1/98 - 6/30/99	272,900	274,100	261,179	261,179	1.047	1.046	305	337	0	(305)	(337)
7/1/99 - 6/30/00	377,700	379,500	360,853	360,853	1.049	1.047	700	775	0	(700)	(775)
7/1/00 - 6/30/01	416,100	418,200	396,643	396,643	1.052	1.049	884	979	0	(884)	(979)
7/1/01 - 6/30/02	601,100	604,300	571,166	572,103	1.055	1.052	1,796	1,988	938	(858)	(1,050)
7/1/02 - 6/30/03	370,400	372,700	349,298	355,638	1.064	1.055	2,674	2,966	6,339	3,665	3,374
7/1/03 - 6/30/04	156,100	157,200	146,045	146,045	1.073	1.064	1,160	1,287	0	(1,160)	(1,287)
7/1/04 - 6/30/05	310,000	312,400	287,625	287,625	1.082	1.073	2,363	2,616	0	(2,363)	(2,616)
7/1/05 - 6/30/06	312,700	315,400	287,294	287,294	1.093	1.082	2,855	3,159	0	(2,855)	(3,159)
7/1/06 - 6/30/07	237,000	239,200	215,436	215,436	1.105	1.093	2,232	2,459	0	(2,232)	(2,459)
7/1/07 - 6/30/08	510,300	515,700	458,767	458,767	1.118	1.105	5,175	5,717	0	(5,175)	(5,717)
7/1/08 - 6/30/09	699,400	707,800	620,498	620,509	1.134	1.118	8,252	9,130	11	(8,241)	(9,119)
7/1/09 - 6/30/10	451,700	457,600	395,231	401,749	1.150	1.134	5,443	6,011	6,517	1,075	506
7/1/10 - 6/30/11	446,000	452,500	384,348	384,687	1.169	1.150	5,877	6,497	339	(5,538)	(6,158)
7/1/11 - 6/30/12	572,900	582,200	484,091	484,145	1.193	1.169	9,514	10,510	53	(9,460)	(10,456)
7/1/12 - 6/30/13	443,500	451,500	367,346	367,346	1.218	1.193	7,379	8,154	0	(7,379)	(8,154)
7/1/13 - 6/30/14	419,200	427,500	340,080	340,080	1.245	1.218	7,056	7,796	0	(7,056)	(7,796)
7/1/14 - 6/30/15	677,300	697,900	540,436	540,436	1.272	1.245	11,071	12,737	0	(11,071)	(12,737)
7/1/15 - 6/30/16	576,700	595,700	450,709	450,709	1.301	1.272	9,312	10,717	0	(9,312)	(10,717)
7/1/16 - 6/30/17	476,300	493,200	364,155	364,573	1.331	1.301	7,946	9,144	417	(7,529)	(8,726)
7/1/17 - 6/30/18	396,300	411,600	294,353	294,353	1.372	1.331	8,492	9,766	0	(8,492)	(9,766)
7/1/18 - 6/30/19	472,500	492,400	340,878	344,701	1.415	1.372	9,910	11,409	3,823	(6,087)	(7,585)
7/1/19 - 6/30/20	406,000	440,000	251,894	253,756	1.522	1.415	22,281	27,197	1,862	(20,419)	(25,335)
7/1/20 - 6/30/21	255,000	295,000	73,352	95,876	1.797	1.522	41,137	50,196	22,524	(18,613)	(27,672)
7/1/21 - 6/30/22	468,000	534,000	172,519	286,580	3.617	1.797	114,372	139,919	114,061	(312)	(25,858)
Total	14,341,044	14,650,844	12,362,039	12,520,032			291,934	345,616	157,994	(133,940)	(187,623)

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Selected by Deloitte Consulting LLP @ 06/30/2022
(3)	Selected by Deloitte Consulting LLP @ 06/30/2022
(4)	Provided by Entity
(5)	Provided by Entity
(6)	Selected by Deloitte Consulting LLP @ 06/30/2022
(7)	Interpolated From (6)
(8)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((2) - (4))
(9)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((3) - (4))
(10)	= (5) - (4)
(11)	= (10) - (8)
(12)	= (10) - (9)

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Section IV
Exhibit II
Sheet 5

Unpaid Claim Analysis as of 06/30/2023
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Ultimate Loss & ALAE Runoff

Accident Year	Ultimate Loss & ALAE @ 06/30/2022 Low	Ultimate Loss & ALAE @ 06/30/2022 High	Ultimate Loss & ALAE @ 06/30/2023 Low	Ultimate Loss & ALAE @ 06/30/2023 High	Deloitte Change Low	Deloitte Change High	Paid Loss & ALAE @ 06/30/2023	Reported Loss & ALAE @ 06/30/2023
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	2,486,344	2,487,344	2,477,219	2,477,219	(9,125)	(10,125)	2,477,219	2,477,219
7/1/93 - 6/30/94	565,700	567,900	564,800	566,700	(900)	(1,200)	546,366	546,366
7/1/94 - 6/30/95	317,700	319,000	316,500	317,600	(1,200)	(1,400)	305,369	305,369
7/1/95 - 6/30/96	254,100	255,100	253,500	254,500	(600)	(600)	243,985	243,985
7/1/96 - 6/30/97	195,900	196,800	195,500	196,300	(400)	(500)	187,967	187,967
7/1/97 - 6/30/98	196,200	197,100	195,800	196,600	(400)	(500)	188,043	188,043
7/1/98 - 6/30/99	272,900	274,100	272,200	273,400	(700)	(700)	261,179	261,179
7/1/99 - 6/30/00	377,700	379,500	376,900	378,600	(800)	(900)	360,853	360,853
7/1/00 - 6/30/01	416,100	418,200	415,100	417,000	(1,000)	(1,200)	396,643	396,643
7/1/01 - 6/30/02	601,100	604,300	600,000	603,000	(1,100)	(1,300)	572,103	572,103
7/1/02 - 6/30/03	370,400	372,700	374,800	376,800	4,400	4,100	355,638	355,638
7/1/03 - 6/30/04	156,100	157,200	155,100	156,100	(1,000)	(1,100)	146,045	146,045
7/1/04 - 6/30/05	310,000	312,400	308,000	310,100	(2,000)	(2,300)	287,625	287,625
7/1/05 - 6/30/06	312,700	315,400	310,100	312,500	(2,600)	(2,900)	287,294	287,294
7/1/06 - 6/30/07	237,000	239,200	234,800	236,800	(2,200)	(2,400)	215,436	215,436
7/1/07 - 6/30/08	510,300	515,700	505,200	510,100	(5,100)	(5,600)	458,767	458,767
7/1/08 - 6/30/09	699,400	707,800	690,600	697,900	(8,800)	(9,900)	620,509	620,509
7/1/09 - 6/30/10	451,700	457,600	452,800	458,100	1,100	500	401,749	401,749
7/1/10 - 6/30/11	446,000	452,500	439,400	445,200	(6,600)	(7,300)	384,687	384,687
7/1/11 - 6/30/12	572,900	582,200	561,400	569,600	(11,500)	(12,600)	484,145	484,145
7/1/12 - 6/30/13	443,500	451,500	434,300	441,300	(9,200)	(10,200)	367,346	367,346
7/1/13 - 6/30/14	419,200	427,500	409,900	417,200	(9,300)	(10,300)	340,080	340,080
7/1/14 - 6/30/15	677,300	697,900	664,600	677,700	(12,700)	(20,200)	540,436	540,436
7/1/15 - 6/30/16	576,700	595,700	563,400	580,400	(13,300)	(15,300)	450,709	450,709
7/1/16 - 6/30/17	476,300	493,200	465,500	480,600	(10,800)	(12,600)	364,573	364,573
7/1/17 - 6/30/18	396,300	411,600	383,900	397,400	(12,400)	(14,200)	294,353	294,353
7/1/18 - 6/30/19	472,500	492,400	462,700	480,500	(9,800)	(11,900)	344,701	344,701
7/1/19 - 6/30/20	406,000	440,000	350,600	365,200	(55,400)	(74,800)	253,756	253,756
7/1/20 - 6/30/21	255,000	295,000	233,000	263,000	(22,000)	(32,000)	95,876	95,876
7/1/21 - 6/30/22	468,000	534,000	445,000	480,000	(23,000)	(54,000)	286,580	286,580
Total	14,341,044	14,650,844	14,112,619	14,337,419	(228,425)	(313,425)	12,520,032	12,520,032

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(3) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(4) From Section IV, Exhibit II, Sheet 6, Column (11)
(5) From Section IV, Exhibit II, Sheet 6, Column (12)
(6) = (4) - (2)
(7) = (5) - (3)
(8) Provided by Entity
(9) Provided by Entity

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Selection of Ultimate Loss & ALAE

Accident Year	Payroll (00)'s	Unlimited Paid Loss & ALAE @ 06/30/2023	Unlimited Reported Loss & ALAE @ 06/30/2023	Ultimate Loss & ALAE Indications: Paid LDM	Ultimate Loss & ALAE Indications: Expected Loss & ALAE	Ultimate Loss & ALAE Indications: Paid B-F	Ultimate Loss & ALAE Indications: Frequency Severity	Prior Selected Ultimate Loss & ALAE: Low	Prior Selected Ultimate Loss & ALAE: High	Selected Ultimate Loss & ALAE: Low	Selected Ultimate Loss & ALAE: High	Ultimate Loss & ALAE Rates: Low	Ultimate Loss & ALAE Rates: High	Ultimate Loss & ALAE Severity: Low	Ultimate Loss & ALAE Severity: High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Prior to 7/1/1993		2,477,219	2,477,219	2,558,781	0		0	2,486,344	2,487,344	2,477,219	2,477,219				
7/1/93 - 6/30/94	2,543,210	546,366	546,366	565,765	163,579	551,975	0	565,700	567,900	564,800	566,700	0.22	0.22		
7/1/94 - 6/30/95	2,566,650	305,369	305,369	317,045	166,926	311,516	0	317,700	319,000	316,500	317,600	0.12	0.12		
7/1/95 - 6/30/96	2,657,390	243,985	243,985	254,019	175,249	250,908	0	254,100	255,100	253,500	254,500	0.10	0.10		
7/1/96 - 6/30/97	2,963,360	187,967	187,967	195,906	197,332	195,963	0	195,900	196,800	195,500	196,300	0.07	0.07		
7/1/97 - 6/30/98	2,969,820	188,043	188,043	196,204	198,644	196,305	0	196,200	197,100	195,800	196,600	0.07	0.07		
7/1/98 - 6/30/99	2,995,300	261,179	261,179	272,831	200,348	269,736	0	272,900	274,100	272,200	273,400	0.09	0.09		
7/1/99 - 6/30/00	3,236,270	360,853	360,853	377,719	217,579	370,569	0	377,700	379,500	376,900	378,600	0.12	0.12		
7/1/00 - 6/30/01	3,383,480	396,643	396,643	416,032	230,966	407,407	0	416,100	418,200	415,100	417,000	0.12	0.12		
7/1/01 - 6/30/02	3,295,550	572,103	572,103	601,521	227,756	583,242	0	601,100	604,300	600,000	603,000	0.18	0.18		
7/1/02 - 6/30/03	3,291,790	355,638	355,638	375,838	233,274	368,176	0	370,400	372,700	374,800	376,800	0.11	0.11		
7/1/03 - 6/30/04	3,445,470	146,045	146,045	155,624	250,541	161,467	0	156,100	157,200	155,100	156,100	0.05	0.05		
7/1/04 - 6/30/05	3,255,300	287,625	287,625	309,049	238,362	304,149	0	310,000	312,400	308,000	310,100	0.09	0.10		
7/1/05 - 6/30/06	4,037,500	287,294	287,294	311,347	297,010	310,239	0	312,700	315,400	310,100	312,500	0.08	0.08		
7/1/06 - 6/30/07	4,202,190	215,436	215,436	235,814	309,125	242,149	0	237,000	239,200	234,800	236,800	0.06	0.06		
7/1/07 - 6/30/08	4,259,980	458,767	458,767	507,687	313,376	488,964	0	510,300	515,700	505,200	510,100	0.12	0.12		
7/1/08 - 6/30/09	4,205,660	620,509	620,509	694,261	313,048	653,764	0	699,400	707,800	690,600	697,900	0.16	0.17		
7/1/09 - 6/30/10	4,332,060	401,749	401,749	455,449	327,596	440,374	0	451,700	457,600	452,800	458,100	0.10	0.11		
7/1/10 - 6/30/11	4,446,730	384,687	384,687	442,318	337,581	428,672	0	446,000	452,500	439,400	445,200	0.10	0.10		
7/1/11 - 6/30/12	4,677,530	484,145	484,145	565,486	355,103	535,224	0	572,900	582,200	561,400	569,600	0.12	0.12		
7/1/12 - 6/30/13	4,953,980	367,346	367,346	437,773	376,090	427,850	564,671	443,500	451,500	434,300	441,300	0.09	0.09	4,826	4,903
7/1/13 - 6/30/14	5,183,910	340,080	340,080	413,562	393,546	410,006	432,978	419,200	427,500	409,900	417,200	0.08	0.08	6,118	6,227
7/1/14 - 6/30/15	5,396,310	540,436	540,436	671,186	409,670	620,241	672,278	677,300	697,900	664,600	677,700	0.12	0.13	6,580	6,710
7/1/15 - 6/30/16	5,858,750	450,709	450,709	571,891	444,777	544,956	493,625	576,700	595,700	563,400	580,400	0.10	0.10	7,825	8,061
7/1/16 - 6/30/17	5,947,870	364,573	364,573	473,054	451,543	468,121	501,373	476,300	493,200	465,500	480,600	0.08	0.08	6,556	6,769
7/1/17 - 6/30/18	6,074,840	294,353	294,353	390,677	461,182	408,061	574,601	396,300	411,600	383,900	397,400	0.06	0.07	4,859	5,030
7/1/18 - 6/30/19	6,566,440	344,701	344,701	471,597	498,503	478,837	434,515	472,500	492,400	462,700	480,500	0.07	0.07	7,978	8,284
7/1/19 - 6/30/20	6,647,010	253,756	253,756	357,904	504,619	400,597	395,751	406,000	440,000	350,600	365,200	0.05	0.05	6,836	7,121
7/1/20 - 6/30/21	6,186,070	95,876	95,876	145,425	469,626	255,887	240,190	255,000	295,000	233,000	263,000	0.04	0.04	7,710	8,703
7/1/21 - 6/30/22	6,345,854	286,580	286,580	514,911	481,757	500,209	425,430	468,000	534,000	445,000	480,000	0.07	0.08	8,563	9,236
7/1/22 - 6/30/23	7,422,338	82,287	82,287	292,025	563,480	486,989	426,898			392,000	461,000	0.05	0.06	7,743	9,105
Total	133,348,612	12,602,319	12,602,319	14,548,701	9,808,189	12,072,551	5,162,310	14,341,044	14,650,844	14,504,619	14,798,419				

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	From Section IV, Exhibit II, Sheet 10, Column (7)
(6)	From Section IV, Exhibit II, Sheet 7, Column (4)
(7)	From Section IV, Exhibit II, Sheet 7, Column (10)
(8)	From Section IV, Exhibit II, Sheet 9, Column (12)
(9)	From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(10)	From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(11)	Selected by Deloitte Consulting LLP
(12)	Selected by Deloitte Consulting LLP
(13)	= (11) / (2)
(14)	= (12) / (2)
(15)	(11) Divided by Ultimate Claims From Section IV, Exhibit II, Sheet 13, Column (7)
(16)	(12) Divided by Ultimate Claims From Section IV, Exhibit II, Sheet 13, Column (7)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Bornhuetter-Ferguson Method

Accident Year	Payroll (00)'s	Initial Expected Loss & ALAE Rates	Initial Expected Loss & ALAE	Expected % of Paid Loss & ALAE	Expected Paid Loss & ALAE	Unlimited Actual Paid Loss & ALAE	Expected % of Unpaid Loss & ALAE	Expected Unpaid Loss & ALAE	Unlimited Indicated Ultimate Loss & ALAE	Unlimited Indicated Ultimate Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
7/1/93 - 6/30/94	2,543,210	0.06	163,579	96.6%	157,970	546,366	3.4%	5,609	551,975	0.22
7/1/94 - 6/30/95	2,566,650	0.07	166,926	96.3%	160,779	305,369	3.7%	6,147	311,516	0.12
7/1/95 - 6/30/96	2,657,390	0.07	175,249	96.0%	168,326	243,985	4.0%	6,923	250,908	0.09
7/1/96 - 6/30/97	2,963,360	0.07	197,332	95.9%	189,336	187,967	4.1%	7,996	195,963	0.07
7/1/97 - 6/30/98	2,969,820	0.07	198,644	95.8%	190,382	188,043	4.2%	8,263	196,305	0.07
7/1/98 - 6/30/99	2,995,300	0.07	200,348	95.7%	191,792	261,179	4.3%	8,557	269,736	0.09
7/1/99 - 6/30/00	3,236,270	0.07	217,579	95.5%	207,864	360,853	4.5%	9,715	370,569	0.11
7/1/00 - 6/30/01	3,383,480	0.07	230,966	95.3%	220,202	396,643	4.7%	10,764	407,407	0.12
7/1/01 - 6/30/02	3,295,550	0.07	227,756	95.1%	216,618	572,103	4.9%	11,138	583,242	0.18
7/1/02 - 6/30/03	3,291,790	0.07	233,274	94.6%	220,736	355,638	5.4%	12,538	368,176	0.11
7/1/03 - 6/30/04	3,445,470	0.07	250,541	93.8%	235,119	146,045	6.2%	15,422	161,467	0.05
7/1/04 - 6/30/05	3,255,300	0.07	238,362	93.1%	221,838	287,625	6.9%	16,524	304,149	0.09
7/1/05 - 6/30/06	4,037,500	0.07	297,010	92.3%	274,065	287,294	7.7%	22,945	310,239	0.08
7/1/06 - 6/30/07	4,202,190	0.07	309,125	91.4%	282,412	215,436	8.6%	26,713	242,149	0.06
7/1/07 - 6/30/08	4,259,980	0.07	313,376	90.4%	283,180	458,767	9.6%	30,196	488,964	0.11
7/1/08 - 6/30/09	4,205,660	0.07	313,048	89.4%	279,793	620,509	10.6%	33,256	653,764	0.16
7/1/09 - 6/30/10	4,332,060	0.08	327,596	88.2%	288,970	401,749	11.8%	38,626	440,374	0.10
7/1/10 - 6/30/11	4,446,730	0.08	337,581	87.0%	293,597	384,687	13.0%	43,984	428,672	0.10
7/1/11 - 6/30/12	4,677,530	0.08	355,103	85.6%	304,024	484,145	14.4%	51,079	535,224	0.11
7/1/12 - 6/30/13	4,953,980	0.08	376,090	83.9%	315,586	367,346	16.1%	60,504	427,850	0.09
7/1/13 - 6/30/14	5,183,910	0.08	393,546	82.2%	323,620	340,080	17.8%	69,925	410,006	0.08
7/1/14 - 6/30/15	5,396,310	0.08	409,670	80.5%	329,864	540,436	19.5%	79,806	620,241	0.11
7/1/15 - 6/30/16	5,858,750	0.08	444,777	78.8%	350,531	450,709	21.2%	94,247	544,956	0.09
7/1/16 - 6/30/17	5,947,870	0.08	451,543	77.1%	347,995	364,573	22.9%	103,548	468,121	0.08
7/1/17 - 6/30/18	6,074,840	0.08	461,182	75.3%	347,474	294,353	24.7%	113,708	408,061	0.07
7/1/18 - 6/30/19	6,566,440	0.08	498,503	73.1%	364,367	344,701	26.9%	134,136	478,837	0.07
7/1/19 - 6/30/20	6,647,010	0.08	504,619	70.9%	357,779	253,756	29.1%	146,840	400,597	0.06
7/1/20 - 6/30/21	6,186,070	0.08	469,626	65.9%	309,616	95,876	34.1%	160,011	255,887	0.04
7/1/21 - 6/30/22	6,345,854	0.08	481,757	55.7%	268,128	286,580	44.3%	213,629	500,209	0.08
7/1/22 - 6/30/23	7,422,338	0.08	563,480	28.2%	158,778	82,287	71.8%	404,702	486,989	0.07
Total	133,348,612		9,808,189		7,860,739	10,125,101		1,947,450	12,072,551	

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	From Section IV, Exhibit II, Sheet 8, Column (13)
(4)	= (2) x (3)
(5)	= 1 / Section IV, Exhibit II, Sheet 10, Column (6)
(6)	= (4) x (5)
(7)	Provided by Entity
(8)	= 1 - (5)
(9)	= (4) x (8)
(10)	= (7) + (9)
(11)	= (10) / (2)

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Calculation of Initial Expected Loss & ALAE Rates

Accident Year	Payroll (00)'s	Payroll Trend	Loss Development Unlimited Indicated Ultimate Loss & ALAE Paid	Reported	Selected Initial Ultimate Loss & ALAE	Loss & ALAE Trend Factor	Benefit Level Adjustment Factors	Trended Ultimate	On-level Loss & ALAE Rates	Detrended Loss & ALAE Rates	Prior Expected Loss & ALAE Rates	Initial Expected Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
7/1/93 - 6/30/94	2,543,210	2.357	565,765	565,765	2,477,219	2.357	1.180	6,890,280	***1.15***	0.06	0.08	0.06
7/1/94 - 6/30/95	2,566,650	2.288	317,045	317,045	565,750	2.288	1.167	1,510,941	0.26	0.07	0.08	0.07
7/1/95 - 6/30/96	2,657,390	2.221	254,019	254,019	317,050	2.221	1.151	810,720	0.14	0.07	0.08	0.07
7/1/96 - 6/30/97	2,963,360	2.157	195,906	195,906	254,000	2.157	1.140	624,491	0.10	0.07	0.08	0.07
7/1/97 - 6/30/98	2,969,820	2.094	196,204	196,204	195,900	2.094	1.135	465,540	0.07	0.07	0.08	0.07
7/1/98 - 6/30/99	2,995,300	2.033	272,831	272,831	196,200	2.033	1.135	452,673	0.07	0.07	0.08	0.07
7/1/99 - 6/30/00	3,236,270	1.974	377,719	377,719	272,800	1.974	1.129	607,947	0.10	0.07	0.08	0.07
7/1/00 - 6/30/01	3,383,480	1.916	416,032	416,032	377,750	1.916	1.112	804,963	0.12	0.07	0.08	0.07
7/1/01 - 6/30/02	3,295,550	1.860	601,521	601,521	416,050	1.860	1.098	850,203	0.14	0.07	0.08	0.07
7/1/02 - 6/30/03	3,291,790	1.806	375,838	375,838	601,500	1.806	1.071	1,163,814	0.20	0.07	0.08	0.07
7/1/03 - 6/30/04	3,445,470	1.754	155,624	155,624	375,800	1.754	1.044	687,974	0.11	0.07	0.09	0.07
7/1/04 - 6/30/05	3,255,300	1.702	309,049	309,049	155,600	1.702	1.037	274,645	0.05	0.07	0.09	0.07
7/1/05 - 6/30/06	4,037,500	1.653	311,347	311,347	309,050	1.653	1.032	527,159	0.08	0.07	0.09	0.07
7/1/06 - 6/30/07	4,202,190	1.605	235,814	235,814	311,300	1.605	1.032	515,531	0.08	0.07	0.09	0.07
7/1/07 - 6/30/08	4,259,980	1.558	507,687	507,687	235,800	1.558	1.032	379,125	0.06	0.07	0.09	0.07
7/1/08 - 6/30/09	4,205,660	1.513	694,261	694,261	507,650	1.513	1.020	783,152	0.12	0.07	0.09	0.07
7/1/09 - 6/30/10	4,332,060	1.469	455,449	455,449	694,250	1.469	1.004	1,023,512	0.16	0.08	0.09	0.08
7/1/10 - 6/30/11	4,446,730	1.426	442,318	442,318	455,450	1.426	1.000	649,363	0.10	0.08	0.09	0.08
7/1/11 - 6/30/12	4,677,530	1.384	565,486	565,486	442,300	1.384	1.000	612,247	0.09	0.08	0.09	0.08
7/1/12 - 6/30/13	4,953,980	1.344	437,773	437,773	565,500	1.344	1.000	759,985	0.11	0.08	0.09	0.08
7/1/13 - 6/30/14	5,183,910	1.305	413,562	413,562	437,800	1.305	1.000	571,230	0.08	0.08	0.09	0.08
7/1/14 - 6/30/15	5,396,310	1.267	671,186	671,186	413,550	1.267	1.000	523,873	0.08	0.08	0.09	0.08
7/1/15 - 6/30/16	5,858,750	1.230	571,891	571,891	671,150	1.230	1.000	825,430	0.11	0.08	0.09	0.08
7/1/16 - 6/30/17	5,947,870	1.194	473,054	473,054	571,900	1.194	1.000	682,879	0.10	0.08	0.09	0.08
7/1/17 - 6/30/18	6,074,840	1.159	390,677	390,677	473,050	1.159	1.000	548,395	0.08	0.08	0.09	0.08
7/1/18 - 6/30/19	6,566,440	1.126	471,597	471,597	390,650	1.126	1.000	439,680	0.06	0.08	0.09	0.08
7/1/19 - 6/30/20	6,647,010	1.093	357,904	357,904	471,600	1.093	1.000	515,330	0.07	0.08	0.09	0.08
7/1/20 - 6/30/21	6,186,070	1.061	145,425	145,425	145,425	1.061	1.000	154,281	***0.02***	0.08	0.09	0.08
7/1/21 - 6/30/22	6,345,854	1.030	514,911	514,911	514,911	1.030	1.000	530,359	***0.08***	0.08	0.09	0.08
7/1/22 - 6/30/23	7,422,338	1.000	292,025	292,025	292,025	1.000	1.000	292,025	***0.04***	0.08		0.08
			11,989,920	11,989,920				Last 3 Wtd Avg	0.07			
								Last 4 Wtd Avg	0.08			
								Last 5 Wtd Avg	0.08			
								All Per Wtd Avg	0.10			

(Note: numbers in bold and italics and with borders are excluded from the calculated averages)

Selected (14) 0.08

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Selected by Deloitte Consulting LLP
(4) From Section IV, Exhibit II, Sheet 10, Column (7)
(5) From Section IV, Exhibit II, Sheet 0, Column (7)
(6) Selected by Deloitte Consulting LLP
(7) Selected by Deloitte Consulting LLP
(8) Based on industry sources
(9) = (6) x (7) x (8)
(10) = (9) / [(2) x (3)]
(11) = (14) / (7) / (8) * (3)
(12) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(13) Selected for by Deloitte Consulting LLP Based on (14)
(14) Selected by Deloitte Consulting LLP

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Frequency Severity Method

Accident Year	Payroll (00)'s	Ultimate Reported Severity	Include For Fit	Exponential Fitted Reported Severity	Initial Selected Ultimate Severity	Selected Ultimate Claim Counts	Benefit Level Adjustment Factor	Selected Severity Trend	Trended Severity	On-Level Selected Ultimate Severity	Indicated Ultimate Loss & ALAE	Indicated Ultimate Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Prior to 7/1/1993			Exclude	5,013		0					0	
7/1/93 - 6/30/94	2,543,210		Exclude	5,062		0	1.180	2.357	0,000		0	0.00
7/1/94 - 6/30/95	2,566,650		Exclude	5,112		0	1.167	2.288	0,000		0	0.00
7/1/95 - 6/30/96	2,657,390		Exclude	5,163		0	1.151	2.221	0,000		0	0.00
7/1/96 - 6/30/97	2,963,360		Exclude	5,214		0	1.140	2.157	0,000		0	0.00
7/1/97 - 6/30/98	2,969,820		Exclude	5,266		0	1.135	2.094	0,000		0	0.00
7/1/98 - 6/30/99	2,995,300		Exclude	5,318		0	1.135	2.033	0,000		0	0.00
7/1/99 - 6/30/00	3,236,270		Exclude	5,370		0	1.129	1.974	0,000		0	0.00
7/1/00 - 6/30/01	3,383,480		Exclude	5,423		0	1.112	1.916	0,000		0	0.00
7/1/01 - 6/30/02	3,295,550		Exclude	5,477		0	1.098	1.860	0,000		0	0.00
7/1/02 - 6/30/03	3,291,790		Exclude	5,531		0	1.071	1.806	0,000		0	0.00
7/1/03 - 6/30/04	3,445,470		Exclude	5,586		0	1.044	1.754	0,000		0	0.00
7/1/04 - 6/30/05	3,255,300		Exclude	5,641		0	1.037	1.702	0,000		0	0.00
7/1/05 - 6/30/06	4,037,500		Exclude	5,697		0	1.032	1.653	0,000		0	0.00
7/1/06 - 6/30/07	4,202,190		Exclude	5,753		0	1.032	1.605	0,000		0	0.00
7/1/07 - 6/30/08	4,259,980		Exclude	5,810		0	1.032	1.558	0,000		0	0.00
7/1/08 - 6/30/09	4,205,660		Exclude	5,868		0	1.020	1.513	0,000		0	0.00
7/1/09 - 6/30/10	4,332,060		Exclude	5,926		0	1.004	1.469	0,000		0	0.00
7/1/10 - 6/30/11	4,446,730		Exclude	5,985		0	1.000	1.426	0,000		0	0.00
7/1/11 - 6/30/12	4,677,530		Exclude	6,044		0	1.000	1.384	0,000		0	0.00
7/1/12 - 6/30/13	4,953,980	4,864	Include	6,104	6,283	90	1.000	1.344	8,444	8,432	564,671	0.11
7/1/13 - 6/30/14	5,183,910	6,173	Include	6,164	6,534	67	1.000	1.305	8,526	8,432	432,978	0.08
7/1/14 - 6/30/15	5,396,310	6,645	Include	6,225	4,095	101	1.000	1.267	5,187	8,432	672,278	0.12
7/1/15 - 6/30/16	5,858,750	7,943	Include	6,287	9,322	72	1.000	1.230	11,464	8,432	493,625	0.08
7/1/16 - 6/30/17	5,947,870	6,663	Include	6,349	8,055	71	1.000	1.194	9,618	8,432	501,373	0.08
7/1/17 - 6/30/18	6,074,840	4,945	Include	6,412	5,988	79	1.000	1.159	6,942	8,432	574,601	0.09
7/1/18 - 6/30/19	6,566,440	8,131	Include	6,475	6,735	58	1.000	1.126	7,581	8,432	434,515	0.07
7/1/19 - 6/30/20	6,647,010	6,978	Include	6,539	9,195	51	1.000	1.093	10,048	8,432	395,751	0.06
7/1/20 - 6/30/21	6,186,070	4,812	Exclude	6,604	4,812	30	1.000	1.061	***5,105***	8,432	240,190	0.04
7/1/21 - 6/30/22	6,345,854	9,908	Exclude	6,669	9,908	52	1.000	1.030	***10,205***	8,432	425,430	0.07
7/1/22 - 6/30/23	7,422,338	5,768	Include	6,735	5,768	51	1.000	1.000	***5,768***	8,432	426,898	0.06
			Implied Trend	1.0%	-41.8%			Last 5 Wtd Avg	9,091			
								Last 4 Wtd Avg	8,432			
								Last 3 Wtd Avg	7,985			
Total	133,348,612					722		Last 3 Avg	8,190		5,162,310	
								Selected	8,432			

Reported Exponential Regressio	
Constant	8.825
X Coefficient	(0.010)
R Squared	0.029

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Section IV, Exhibit II, Sheet 0, Column (7) / Section IV, Exhibit II, Sheet 13, Column (7) x 1
(4) Years included for purposes of fit
(5) Result of Exponential fit of Column (3) * Column (8)
(6) Selected by Deloitte Consulting LLP
(7) From Section IV, Exhibit II, Sheet 13, Column (7)
(8) Based on industry sources
(9) Selected by Deloitte Consulting LLP
(10) = (6) x (8) x (9)
(11) Selected by Deloitte Consulting, LLP
(12) Selected in column (11) x (7) / (8) / (9)
(13) = (12) / (3)

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Medical

Section IV
Exhibit II
Sheet 10

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss & ALAE Development Method

Accident Year	Age of Losses @ 06/30/2023	Retention	Payroll (00)'s	Unlimited Paid Loss & ALAE @ 06/30/2023	Paid LDF	Indicated Ultimate Loss & ALAE	Unlimited Indicated Ultimate Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Prior to 7/1/1993	372.0	Unlimited		2,477,219	1.033	2,558,781	
7/1/93 - 6/30/94	360.0	Unlimited	2,543,210	546,366	1.036	565,765	0.22
7/1/94 - 6/30/95	348.0	Unlimited	2,566,650	305,369	1.038	317,045	0.12
7/1/95 - 6/30/96	336.0	Unlimited	2,657,390	243,985	1.041	254,019	0.10
7/1/96 - 6/30/97	324.0	Unlimited	2,963,360	187,967	1.042	195,906	0.07
7/1/97 - 6/30/98	312.0	Unlimited	2,969,820	188,043	1.043	196,204	0.07
7/1/98 - 6/30/99	300.0	Unlimited	2,995,300	261,179	1.045	272,831	0.09
7/1/99 - 6/30/00	288.0	Unlimited	3,236,270	360,853	1.047	377,719	0.12
7/1/00 - 6/30/01	276.0	Unlimited	3,383,480	396,643	1.049	416,032	0.12
7/1/01 - 6/30/02	264.0	Unlimited	3,295,550	572,103	1.051	601,521	0.18
7/1/02 - 6/30/03	252.0	Unlimited	3,291,790	355,638	1.057	375,838	0.11
7/1/03 - 6/30/04	240.0	Unlimited	3,445,470	146,045	1.066	155,624	0.05
7/1/04 - 6/30/05	228.0	Unlimited	3,255,300	287,625	1.074	309,049	0.09
7/1/05 - 6/30/06	216.0	Unlimited	4,037,500	287,294	1.084	311,347	0.08
7/1/06 - 6/30/07	204.0	Unlimited	4,202,190	215,436	1.095	235,814	0.06
7/1/07 - 6/30/08	192.0	Unlimited	4,259,980	458,767	1.107	507,687	0.12
7/1/08 - 6/30/09	180.0	Unlimited	4,205,660	620,509	1.119	694,261	0.17
7/1/09 - 6/30/10	168.0	Unlimited	4,332,060	401,749	1.134	455,449	0.11
7/1/10 - 6/30/11	156.0	Unlimited	4,446,730	384,687	1.150	442,318	0.10
7/1/11 - 6/30/12	144.0	Unlimited	4,677,530	484,145	1.168	565,486	0.12
7/1/12 - 6/30/13	132.0	Unlimited	4,953,980	367,346	1.192	437,773	0.09
7/1/13 - 6/30/14	120.0	Unlimited	5,183,910	340,080	1.216	413,562	0.08
7/1/14 - 6/30/15	108.0	Unlimited	5,396,310	540,436	1.242	671,186	0.12
7/1/15 - 6/30/16	96.0	Unlimited	5,858,750	450,709	1.269	571,891	0.10
7/1/16 - 6/30/17	84.0	Unlimited	5,947,870	364,573	1.298	473,054	0.08
7/1/17 - 6/30/18	72.0	Unlimited	6,074,840	294,353	1.327	390,677	0.06
7/1/18 - 6/30/19	60.0	Unlimited	6,566,440	344,701	1.368	471,597	0.07
7/1/19 - 6/30/20	48.0	Unlimited	6,647,010	253,756	1.410	357,904	0.05
7/1/20 - 6/30/21	36.0	Unlimited	6,186,070	95,876	1.517	145,425	0.02
7/1/21 - 6/30/22	24.0	Unlimited	6,345,854	286,580	1.797	514,911	0.08
7/1/22 - 6/30/23	12.0	Unlimited	7,422,338	82,287	3.549	292,025	0.04
Total			133,348,612	12,602,319		14,548,701	

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1)
(3) Provided by Entity
(4) Provided by Entity
(5) Provided by Entity
(6) From Section IV, Exhibit II, Sheet 11
(7) = (5) x (6)
(8) = (7) / (4)

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Medical

Section IV
Exhibit II
Sheet 11

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss & ALAE

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																																	As of
	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	348	360	372	6/30/2023
Prior to 7/1/1993	4,623,062	1,770,472	1,905,982	1,960,229	2,013,035	2,051,843	2,089,708	2,111,535	2,129,486	2,142,167	2,150,530	2,165,931	2,179,573	2,194,179	2,209,696	2,237,087	2,341,584	2,396,594	2,428,044	2,439,294	2,443,509	2,446,341	2,453,158	2,459,353	2,467,831	2,475,638	2,477,219	2,477,219	2,477,219	2,477,219	2,477,219	2,477,219
7/1/93 - 6/30/94	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	462,395	472,317	484,855	493,591	497,802	502,382	534,763	536,976	540,506	541,735	543,166	544,268	545,258	546,366		546,366
7/1/94 - 6/30/95	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	305,369	305,369	305,369	305,369	305,369	305,369	305,369	305,369	305,369	305,369	305,369	305,369	305,369	305,369			305,369
7/1/95 - 6/30/96	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	243,985	243,985	243,985	243,985	243,985	243,985	243,985	243,985	243,985	243,985	243,985	243,985	243,985	243,985				243,985
7/1/96 - 6/30/97	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	187,967	187,967	187,967	187,967	187,967	187,967	187,967	187,967	187,967	187,967	187,967	187,967	187,967	187,967					187,967
7/1/97 - 6/30/98	40,014	98,284	119,324	134,344	139,107	141,779	147,819	148,338	149,621	183,281	184,542	185,346	186,264	187,193	188,013	188,043	188,043	188,043	188,043	188,043	188,043	188,043	188,043	188,043	188,043	188,043						188,043
7/1/98 - 6/30/99	57,055	145,931	161,873	165,175	173,370	179,001	181,785	183,278	186,735	189,893	194,365	198,821	204,465	208,778	214,267	223,056	234,647	247,484	255,257	256,033	259,412	261,179	261,179	261,179	261,179							261,179
7/1/99 - 6/30/00	78,904	144,101	178,359	211,117	245,711	260,589	272,440	284,728	298,320	311,888	326,984	344,501	356,294	360,812	360,853	360,853	360,853	360,853	360,853	360,853	360,853	360,853	360,853	360,853								360,853
7/1/00 - 6/30/01	78,435	185,081	235,180	264,482	271,555	289,614	313,258	334,076	349,005	361,767	371,025	374,808	383,720	389,539	393,015	396,630	396,643	396,643	396,643	396,643	396,643	396,643	396,643									396,643
7/1/01 - 6/30/02	42,493	107,557	182,137	222,791	235,866	244,961	262,574	293,121	350,090	378,624	404,630	431,684	458,565	489,061	520,322	536,271	555,819	562,282	565,234	567,952	571,166	572,103										572,103
7/1/02 - 6/30/03	25,041	124,452	162,035	187,240	223,402	231,574	235,669	238,598	245,618	250,270	253,237	278,177	288,992	297,087	305,180	313,391	319,925	324,884	332,596	349,298	355,638											355,638
7/1/03 - 6/30/04	58,014	123,410	131,529	133,995	134,242	145,534	145,992	146,045	146,045	146,045	146,045	146,045	146,045	146,045	146,045	146,045	146,045	146,045	146,045	146,045												146,045
7/1/04 - 6/30/05	90,145	204,953	256,853	271,491	281,203	284,263	285,428	287,625	287,625	287,625	287,625	287,625	287,625	287,625	287,625	287,625	287,625	287,625	287,625													287,625
7/1/05 - 6/30/06	104,747	269,295	283,925	286,559	286,907	286,907	287,115	287,115	287,115	287,294	287,294	287,294	287,294	287,294	287,294	287,294	287,294	287,294														287,294
7/1/06 - 6/30/07	90,114	168,280	184,018	193,167	200,918	206,920	207,690	208,341	209,582	212,260	213,725	214,871	215,240	215,436	215,436	215,436	215,436															215,436
7/1/07 - 6/30/08	174,365	329,758	353,009	367,373	382,156	389,416	393,781	428,915	439,772	457,987	458,453	458,767	458,767	458,767	458,767	458,767																458,767
7/1/08 - 6/30/09	175,201	332,994	476,353	502,636	515,594	547,517	553,032	564,035	568,971	571,864	590,342	591,240	591,937	620,498	620,509																	620,509
7/1/09 - 6/30/10	71,728	205,753	256,446	286,005	301,536	322,879	343,232	353,435	360,460	366,255	371,850	391,158	395,231	401,749																		401,749
7/1/10 - 6/30/11	188,496	302,104	334,423	349,891	353,820	364,982	367,695	372,561	376,026	381,072	383,553	384,348	384,687																			384,687
7/1/11 - 6/30/12	156,195	353,012	387,653	443,902	446,349	456,701	474,449	478,119	480,510	483,135	484,091	484,145																				484,145
7/1/12 - 6/30/13	144,944	280,644	336,072	349,078	358,844	363,516	367,346	367,346	367,346	367,346	367,346																					367,346
7/1/13 - 6/30/14	132,938	226,831	336,161	339,509	340,080	340,080	340,080	340,080	340,080	340,080																						340,080
7/1/14 - 6/30/15	218,420	401,476	462,947	491,400	501,679	524,026	531,448	540,436	540,436																							540,436
7/1/15 - 6/30/16	182,868	360,252	399,743	435,477	445,256	449,684	450,709	450,709																								450,709
7/1/16 - 6/30/17	193,279	317,975	350,243	356,140	363,685	364,155	364,573																									364,573
7/1/17 - 6/30/18	148,821	270,700	289,468	293,703	294,353	294,353																										294,353
7/1/18 - 6/30/19	136,770	284,172	332,915	340,878	344,701																											344,701
7/1/19 - 6/30/20	190,589	243,916	251,894	253,756																												253,756
7/1/20 - 6/30/21	48,996	73,352	95,876																													95,876
7/1/21 - 6/30/22	172,519	286,580																														286,580
7/1/22 - 6/30/23	82,287																															82,287
																																12,602,319

Accident Year	Age-to-Age Development Factors																														
	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993	***0.383***	***1.077***	***1.028***	***1.027***	***1.019***	***1.018***	***1.010***	***1.009***	***1.006***	***1.004***	***1.007***	***1.006***	***1.007***	***1.007***	***1.012***	***1.047***	***1.023***	***1.013***	***1.005***	***1.002***	***1.001***	***1.003***	***1.003***	***1.003***	***1.003***	***1.001***	***1.000***	***1.000***	***1.000***	***1.000***	
7/1/93 - 6/30/94	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	1.017	1.021	1.027	1.018	1.009	1.009	1.064	1.004	1.007	1.002	1.003	1.002	1.002	1.002		
7/1/94 - 6/30/95	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	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			
7/1/95 - 6/30/96	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	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				
7/1/96 - 6/30/97	1.685	1.248	1.396	1.025	1.009	1.000	1.002	1.000	1.002	1.000	1.000	1.000	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					
7/1/97 - 6/30/98	2.456	1.214	1.126	1.035	1.019	1.043	1.004	1.009	1.225	1.007	1.004	1.005	1.005	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
7/1/98 - 6/30/99	2.558	1.109	1.020	1.050	1.032	1.016	1.008	1.019	1.017	1.024	1.023	1.028	1.021	1.026	1.041	1.052	1.055	1.031	1.003	1.013	1.007	1.000	1.000	1.000							
7/1/99 - 6/30/00	1.826	1.238	1.184	1.164	1.061	1.045	1.045	1.048	1.045	1.048	1.054	1.034	1.013	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000								
7/1/00 - 6/30/01	2.360	1.271	1.125	1.027	1.067	1.082	1.066	1.045	1.037	1.026	1.010	1.024	1.015	1.009	1.009	1.000	1.000	1.000	1.000	1.000	1.000	1.000									
7/1/01 - 6/30/02	2.531	1.693	1.223	1.059	1.039	1.072	1.116	1.194	1.082	1.069	1.067	1.062	1.067	1.064	1.031	1.036	1.012	1.005	1.005	1.006	1.002										
7/1/02 - 6/30/03	4.970	1.302	1.156	1.193	1.037	1.018	1.012	1.029	1.019	1.012	1.098	1.039	1.028	1.027	1.027	1.021	1.016	1.024	1.050	1.018											
7/1/03 - 6/30/04	2.127	1.066	1.019	1.002	1.084	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												
7/1/04 - 6/30/05	2.274	1.253	1.057	1.036	1.011	1.004	1.008	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000													
7/1/05 - 6/30/06	2.571	1.054	1.009	1.001	1.000	1.001	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000														
7/1/06 - 6/30/07	1.867	1.094	1.050	1.040	1.030	1.004	1.003	1.006	1.013	1.007	1.005	1.002	1.001	1.000	1.000	1.000															
7/1/07 - 6/30/08	1.891	1.071	1.041	1.040	1.019	1.011	1.089	1.025	1.041	1.001	1.001	1.000	1.000	1.000	1.000																
7/1/08 - 6/30/09	1.901	1.431	1.055	1.026	1.062	1.010	1.020	1.009	1.005	1.032	1.002	1.001	1.048	1.000																	
7/1/09 - 6/30/10	2.869	1.246	1.115	1.054	1.071	1.063	1.030	1.020	1.016	1.015	1.052	1.010	1.016																		
7/1/10 - 6/30/11	1.603	1.107	1.046	1.011	1.032	1.007	1.013	1.009	1.013	1.007	1.002	1.001																			
7/1/11 - 6/30/12	2.260	1.098	1.145	1.006	1.023	1.039	1.008	1.005	1.005	1.002	1.000																				
7/1/12 - 6/30/13	1.936	1.198	1.039	1.028	1.013	1.011	1.000	1.000	1.000	1.000																					
7/1/13 - 6/30/14	1.706	1.482	1.010	1.002	1.000	1.000	1.000	1.000	1.000																						
7/1/14 - 6/30/15	1.838	1.153	1.061	1.021	1.045	1.014	1.017	1.000																							
7/1/15 - 6/30/16	1.970	1.110	1.089	1.022	1.010	1.002	1.000																								
7/1/16 - 6/30/17	1.645	1.101	1.017	1.021	1.001	1.001																									
7/1/17 - 6/30/18	1.819	1.069	1.015	1.002	1.000																										
7/1/18 - 6/30/19	2.078	1.172	1.024	1.011																											
7/1/19 - 6/30/20	1.280	1.033	1.007																												
7/1/20 - 6/30/21	1.497	1.307																													
7/1/21 - 6/30/22	1.661																														

(Note: numbers in bold and italics and with borders are excluded from the calculated averages)

Last 3 Wtd Avg	1.465	1.132	1.016	1.012	1.004	1.007	1.007	1.000	1.002	1.003	1.016	1.004	1.024	1.000	1.000	1.000	1.000	1.010	1.019	1.007	1.001	1.000	1.000	1.000	1.000	1.000	1.001				
Last 5 Wtd Avg	1.661	1.109	1.034	1.017	1.014	1.006	1.006	1.003	1.007	1.013	1.009	1.003	1.018	1.000	1.000	1.005	1.007	1.006	1.011	1.007	1.002	1.000	1.000	1.000	1.001						
Last 9 Wtd Avg	1.730	1.161	1.050	1.014	1.022	1.016	1.019	1.008	1.011	1.009	1.007	1.005	1.024	1.013	1.009	1.014	1.009	1.007	1.008	1.005	1.002										
Last 12 Wtd Avg	1.776	1.155	1.054	1.020	1.027	1.014	1.017	1.007	1.010	1.014	1.018	1.015	1.022	1.012	1.010	1.011	1.007	1.008													
All Per Wtd Avg	1.975	1.185	1.075	1.031	1.031	1.020	1.021	1.020	1.022	1.016	1.023	1.014	1.023	1.011	1.010	1.011	1.009	1.008	1.008	1.005	1.002	1.013	1.001	1.002	1.001	1.001	1.001	1.001	1.002		
Industry																															
Age-to-Age	1.952	1.143	1.054	1.022	1.017	1.007	1.012	1.008	1.009	1.008	1.007	1.008	1.007	1.008	1.007	1.007	1.008	1.007	1.004	1.004	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.004	1.004	
Age-to-Ult	2.959	1.516	1.326	1.258	1.231	1.210	1.202	1.188	1.179	1.168	1.159	1.151	1.142	1.134	1.125	1.117	1.109	1.100	1.092	1.088	1.083	1.078	1.073	1.068	1.063	1.058	1.052	1.047	1.043	1.038	1.034
Prior Selected																															
Age-to-Age	2.013	1.180	1.075	1.031	1.031	1.023	1.022	1.022	1.022	1.021	1.021	1.016	1.014	1.014	1.012	1.011	1.010	1.009	1.008	1.008	1.003	1.002	1.002	1.001	1.001	1.001	1.001	1.003	1.003	1.003	
Age-to-Ult	3.617	1.797	1.522	1.415	1.372	1.331	1.301	1.272	1.245	1.218	1.193	1.169	1.150	1.134	1.118	1.105	1.093	1.082	1.073	1.064	1.055	1.052	1.049	1.047	1.046	1.045	1.044	1.043	1.040	1.037	1.034
Selected																															
Age-to-Age	1.975	1.185	1.075	1.031	1.031	1.023	1.023	1.022	1.021	1.020	1.020	1.016	1.014	1.013	1.011	1.011	1.010	1.009	1.008	1.008	1.005	1.002	1.002	1.002	1.001	1.001	1.001	1.003	1.003	1.002	
Age-to-Ult	3.549	1.797	1.517	1.410	1.368	1.327	1.298	1.269	1.242	1.216	1.192	1.168	1.150	1.134	1.119	1.107	1.095	1.084	1.074	1.066	1.057	1.051	1.049	1.047	1.045	1.043	1.042	1.041	1.038	1.036	1.033

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Medical

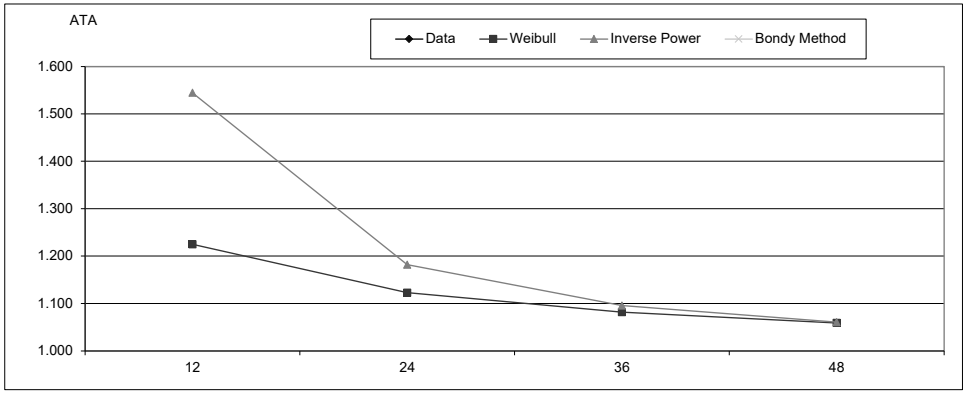
Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

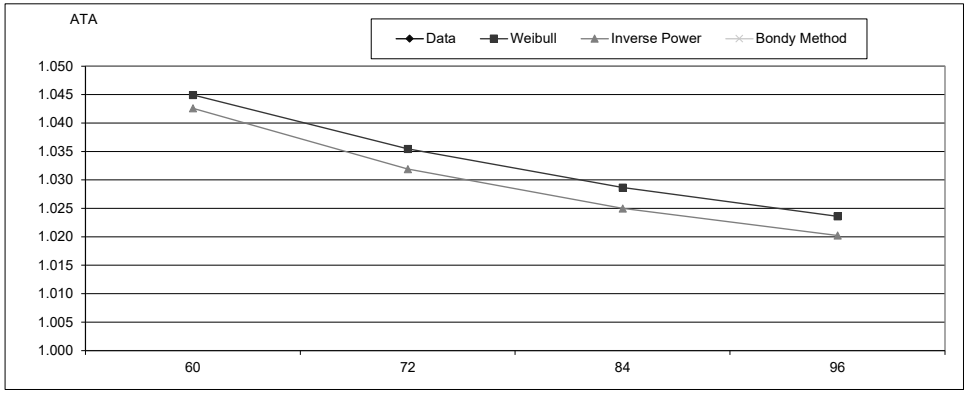
Curve Fitting Methods
Paid Loss

Tail at Period:	**31**	(To display in table)
Cut-off point:(<=Tail & <51)	**50**	(to run-out pattern)

Summary of Curve Fitting Methods

Method	Tail	R^2
Weibull	**1.020**	**0.884**
Inverse Power	**1.033**	**0.825**
Bondy Method		**N/A**





				Weibull		Inverse Power		Bondy Method			
									Sel. Decay Ratio=		
PERIOD	AGE	ATA	Use	**ATA***	**ATU***	**ATA***	**ATU***	Ln(ATA)	Decay	**ATA***	**ATU***
1	12	0.000	Exclude	**1.225**	2.126	**1.545**	2.836				
2	24	1.185	Include	**1.123**	1.735	**1.182**	1.836				
3	36	1.075	Include	**1.082**	1.545	**1.096**	1.554				
4	48	1.031	Include	**1.059**	1.429	**1.061**	1.418				
5	60	1.031	Include	**1.045**	1.349	**1.043**	1.337				
6	72	1.023	Include	**1.035**	1.291	**1.032**	1.282				
7	84	1.023	Include	**1.029**	1.247	**1.025**	1.243				
8	96	1.022	Include	**1.024**	1.212	**1.020**	1.212				
9	108	1.021	Include	**1.020**	1.184	**1.017**	1.188				
10	120	1.020	Include	**1.017**	1.161	**1.014**	1.169				
11	132	1.020	Include	**1.014**	1.142	**1.012**	1.152				
12	144	1.016	Include	**1.012**	1.126	**1.011**	1.138				
13	156	1.014	Include	**1.011**	1.112	**1.009**	1.126				
14	168	1.013	Include	**1.009**	1.101	**1.008**	1.116				
15	180	1.011	Include	**1.008**	1.090	**1.007**	1.107				
16	192	1.011	Include	**1.007**	1.081	**1.007**	1.098				
17	204	1.010	Include	**1.007**	1.073	**1.006**	1.091				
18	216	1.009	Include	**1.006**	1.066	**1.006**	1.084				
19	228	1.008	Include	**1.005**	1.060	**1.005**	1.078				
20	240	1.008	Include	**1.005**	1.055	**1.005**	1.073				
21	252	1.005	Include	**1.004**	1.050	**1.004**	1.068				
22	264	1.002	Include	**1.004**	1.045	**1.004**	1.063				
23	276	1.002	Include	**1.004**	1.041	**1.004**	1.059				
24	288	1.002	Include	**1.003**	1.038	**1.004**	1.055				
25	300	1.001	Include	**1.003**	1.034	**1.003**	1.051				
26	312	1.001	Include	**1.003**	1.031	**1.003**	1.047				
27	324	0.000	Exclude	**1.002**	1.029	**1.003**	1.044				
28	336	0.000	Exclude	**1.002**	1.026	**1.003**	1.041				
29	348	0.000	Exclude	**1.002**	1.024	**1.003**	1.038				
30	360	0.000	Exclude	**1.002**	1.022	**1.002**	1.036				
31	372	0.000	Exclude	**1.002**	1.020	**1.002**	1.033				
32	384	0.000	Exclude	**1.002**	1.018	**1.002**	1.030				
33	396	0.000	Exclude	**1.002**	1.016	**1.002**	1.028				
34	408	0.000	Exclude	**1.001**	1.015	**1.002**	1.026				
35	420	0.000	Exclude	**1.001**	1.013	**1.002**	1.024				
36	432	0.000	Exclude	**1.001**	1.012	**1.002**	1.022				
37	444	0.000	Exclude	**1.001**	1.011	**1.002**	1.020				
38	456	0.000	Exclude	**1.001**	1.010	**1.002**	1.018				
39	468	0.000	Exclude	**1.001**	1.008	**1.002**	1.016				
40	480	0.000	Exclude	**1.001**	1.007	**1.002**	1.015				
41	492	0.000	Exclude	**1.001**	1.007	**1.002**	1.013				
42	504	0.000	Exclude	**1.001**	1.006	**1.001**	1.012				
43	516	0.000	Exclude	**1.001**	1.005	**1.001**	1.010				
44	528	0.000	Exclude	**1.001**	1.004	**1.001**	1.009				
45	540	0.000	Exclude	**1.001**	1.003	**1.001**	1.007				
46	552	0.000	Exclude	**1.001**	1.003	**1.001**	1.006				
47	564	0.000	Exclude	**1.001**	1.002	**1.001**	1.005				
48	576	0.000	Exclude	**1.001**	1.002	**1.001**	1.003				
49	588	0.000	Exclude	**1.001**	1.001	**1.001**	1.002				
50	600	0.000	Exclude	**1.000**	1.000	**1.001**	1.001				

Unpaid Claim Analysis as of 06/30/2023

Ultimate Claim Count Development

Accident Year	Age of Counts @ 06/30/2023	Payroll (00)'s	Reported Claim Counts @ 06/30/2023	Reported Count Dev Factor	Indicated Ultimate Claim Counts	Selected Ultimate Claim Counts	Selected Ultimate Frequency	Selected Ultimate Frequency (Inflation-Adjusted)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	372.0		20	1.000	20			
7/1/93 - 6/30/94	360.0	2,543,210	2	1.000	2		0.00%	0.00%
7/1/94 - 6/30/95	348.0	2,566,650	1	1.000	1		0.00%	0.00%
7/1/95 - 6/30/96	336.0	2,657,390	1	1.000	1		0.00%	0.00%
7/1/96 - 6/30/97	324.0	2,963,360	1	1.000	1		0.00%	0.00%
7/1/97 - 6/30/98	312.0	2,969,820	2	1.000	2		0.00%	0.00%
7/1/98 - 6/30/99	300.0	2,995,300	2	1.000	2		0.00%	0.00%
7/1/99 - 6/30/00	288.0	3,236,270	4	1.000	4		0.00%	0.00%
7/1/00 - 6/30/01	276.0	3,383,480	3	1.000	3		0.00%	0.00%
7/1/01 - 6/30/02	264.0	3,295,550	4	1.000	4		0.00%	0.00%
7/1/02 - 6/30/03	252.0	3,291,790	3	1.000	3		0.00%	0.00%
7/1/03 - 6/30/04	240.0	3,445,470	1	1.000	1		0.00%	0.00%
7/1/04 - 6/30/05	228.0	3,255,300	1	1.000	1		0.00%	0.00%
7/1/05 - 6/30/06	216.0	4,037,500	2	1.000	2		0.00%	0.00%
7/1/06 - 6/30/07	204.0	4,202,190	4	1.000	4		0.00%	0.00%
7/1/07 - 6/30/08	192.0	4,259,980	4	1.000	4		0.00%	0.00%
7/1/08 - 6/30/09	180.0	4,205,660	7	1.000	7		0.00%	0.00%
7/1/09 - 6/30/10	168.0	4,332,060	6	1.000	6		0.00%	0.00%
7/1/10 - 6/30/11	156.0	4,446,730	18	1.000	18		0.00%	0.00%
7/1/11 - 6/30/12	144.0	4,677,530	39	1.000	39		0.00%	0.00%
7/1/12 - 6/30/13	132.0	4,953,980	90	1.000	90	90	18.17%	13.52%
7/1/13 - 6/30/14	120.0	5,183,910	67	1.000	67	67	12.92%	9.91%
7/1/14 - 6/30/15	108.0	5,396,310	101	1.000	101	101	18.72%	14.77%
7/1/15 - 6/30/16	96.0	5,858,750	72	1.000	72	72	12.29%	9.99%
7/1/16 - 6/30/17	84.0	5,947,870	71	1.000	71	71	11.94%	10.00%
7/1/17 - 6/30/18	72.0	6,074,840	79	1.000	79	79	13.00%	11.22%
7/1/18 - 6/30/19	60.0	6,566,440	58	1.000	58	58	8.83%	7.85%
7/1/19 - 6/30/20	48.0	6,647,010	51	1.006	51	51	7.72%	7.06%
7/1/20 - 6/30/21	36.0	6,186,070	30	1.007	30	30	4.89%	4.60%
7/1/21 - 6/30/22	24.0	6,345,854	51	1.019	52	52	8.19%	7.95%
7/1/22 - 6/30/23	12.0	7,422,338	43	1.118	48	51	6.82%	6.82%
Total		133,348,612	838		845	722		

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1)
(3) Provided by Entity
(4) Provided by Entity
(5) From Section IV, Exhibit II, Sheet 14
(6) = (4) x (5)
(7) Selected by Deloitte Consulting LLP
(8) = (7) / (3)
(9) = (7) / [(3) x Section IV, Exhibit II, Sheet 8, Column (3)]

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Medical

Unpaid Claim Analysis as of 06/30/2023

Reported Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																															As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																															20	20
7/1/93 - 6/30/94																														2		2
7/1/94 - 6/30/95																													1			1
7/1/95 - 6/30/96																												1				1
7/1/96 - 6/30/97																											1					1
7/1/97 - 6/30/98																										2						2
7/1/98 - 6/30/99																									2							2
7/1/99 - 6/30/00																								4								4
7/1/00 - 6/30/01																							3									3
7/1/01 - 6/30/02																						4										4
7/1/02 - 6/30/03																					3											3
7/1/03 - 6/30/04																				1												1
7/1/04 - 6/30/05																			1													1
7/1/05 - 6/30/06																		2														2
7/1/06 - 6/30/07																	4															4
7/1/07 - 6/30/08																4																4
7/1/08 - 6/30/09															7																	7
7/1/09 - 6/30/10														6																		6
7/1/10 - 6/30/11													18																			18
7/1/11 - 6/30/12												39																				39
7/1/12 - 6/30/13	78	89	90	90	90	90	90	90	90	90	90																					90
7/1/13 - 6/30/14	54	64	65	66	66	66	67	67	67	67																						67
7/1/14 - 6/30/15	93	101	101	101	101	101	101	101	101																							101
7/1/15 - 6/30/16	67	72	72	72	72	72	72	72																								72
7/1/16 - 6/30/17	66	69	71	71	71	71	71																									71
7/1/17 - 6/30/18	75	77	78	78	78	79																										79
7/1/18 - 6/30/19	49	55	55	55	58																											58
7/1/19 - 6/30/20	49	50	51	51																												51
7/1/20 - 6/30/21	23	29	30																													30
7/1/21 - 6/30/22	45	51																														51
7/1/22 - 6/30/23	43																															43
																																838

Accident Year	Age-to-Age Development Factors																															
	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
7/1/98 - 6/30/99																																
7/1/99 - 6/30/00																																
7/1/00 - 6/30/01																																
7/1/01 - 6/30/02																																
7/1/02 - 6/30/03																																
7/1/03 - 6/30/04																																
7/1/04 - 6/30/05																																
7/1/05 - 6/30/06																																
7/1/06 - 6/30/07																																
7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	1.141	1.011	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000																						
7/1/13 - 6/30/14	1.185	1.016	1.015	1.000	1.000	1.015	1.000	1.000	1.000																							
7/1/14 - 6/30/15	1.086	1.000	1.000	1.000	1.000	1.000	1.000	1.000																								
7/1/15 - 6/30/16	1.075	1.000	1.000	1.000	1.000	1.000	1.000																									
7/1/16 - 6/30/17	1.045	1.029	1.000	1.000	1.000	1.000																										
7/1/17 - 6/30/18	1.027	1.013	1.000	1.000	1.013																											
7/1/18 - 6/30/19	1.122	1.000	1.000	1.055																												
7/1/19 - 6/30/20	1.020	1.020	1.000																													
7/1/20 - 6/30/21	1.261	1.034																														
7/1/21 - 6/30/22	1.133																															
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																																
Last 3 Wtd Avg	1.111	1.015	1.000	1.015	1.005	1.000	1.000	1.000																								
Last 4 Wtd Avg	1.114	1.014	1.000	1.011	1.003	1.003	1.000																									
Last 5 Wtd Avg	1.087	1.018	1.000	1.008	1.003	1.003																										
All Per Wtd Avg	1.097	1.012	1.002	1.006	1.002	1.003	1.000	1.000	1.000	1.000																						
Average ex Hi/Lo	1.102	1.013	1.000	1.000	1.000	1.000	1.000	1.000																								
Prior Selected																																
Age-to-Age	1.094	1.010	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	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		
Age-to-Ult	1.107	1.012	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	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	
Selected																																
Age-to-Age	1.097	1.012	1.002	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	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		
Age-to-Ult	1.118	1.019	1.007	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	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	

Unpaid Claim Analysis as of 06/30/2023

Reported Counts to Payroll (00)'s

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01		2,543,210
7/1/94 - 6/30/95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			2,566,650
7/1/95 - 6/30/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				2,657,390
7/1/96 - 6/30/97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					2,963,360
7/1/97 - 6/30/98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01						2,969,820
7/1/98 - 6/30/99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01							2,995,300
7/1/99 - 6/30/00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01								3,236,270
7/1/00 - 6/30/01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01									3,383,480
7/1/01 - 6/30/02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01										3,295,550
7/1/02 - 6/30/03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01											3,291,790
7/1/03 - 6/30/04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00												3,445,470
7/1/04 - 6/30/05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00													3,255,300
7/1/05 - 6/30/06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00														4,037,500
7/1/06 - 6/30/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01															4,202,190
7/1/07 - 6/30/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01																4,259,980
7/1/08 - 6/30/09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02																	4,205,660
7/1/09 - 6/30/10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01																		4,332,060
7/1/10 - 6/30/11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04																			4,446,730
7/1/11 - 6/30/12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08																				4,677,530
7/1/12 - 6/30/13	0.16	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18																					4,953,980
7/1/13 - 6/30/14	0.10	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13																						5,183,910
7/1/14 - 6/30/15	0.17	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19																							5,396,310
7/1/15 - 6/30/16	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12																								5,858,750
7/1/16 - 6/30/17	0.11	0.12	0.12	0.12	0.12	0.12	0.12																									5,947,870
7/1/17 - 6/30/18	0.12	0.13	0.13	0.13	0.13	0.13																										6,074,840
7/1/18 - 6/30/19	0.07	0.08	0.08	0.08	0.09																											6,566,440
7/1/19 - 6/30/20	0.07	0.08	0.08	0.08																												6,647,010
7/1/20 - 6/30/21	0.04	0.05	0.05																													6,186,070
7/1/21 - 6/30/22	0.07	0.08																														6,345,854
7/1/22 - 6/30/23	0.06																															7,422,338

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss & ALAE Rates

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.03	0.06	0.09	0.11	0.11	0.13	0.13	0.13	0.13	0.14	0.14	0.15	0.16	0.17	0.18	0.18	0.18	0.19	0.19	0.19	0.20	0.20	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21		2,543,210
7/1/94 - 6/30/95	0.03	0.09	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12			2,566,650
7/1/95 - 6/30/96	0.03	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09				2,657,390
7/1/96 - 6/30/97	0.02	0.04	0.04	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06					2,963,360
7/1/97 - 6/30/98	0.01	0.03	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06						2,969,820
7/1/98 - 6/30/99	0.02	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09							2,995,300
7/1/99 - 6/30/00	0.02	0.04	0.06	0.07	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11								3,236,270
7/1/00 - 6/30/01	0.02	0.05	0.07	0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12									3,383,480
7/1/01 - 6/30/02	0.01	0.03	0.06	0.07	0.07	0.07	0.08	0.09	0.11	0.11	0.12	0.13	0.14	0.15	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.17										3,295,550
7/1/02 - 6/30/03	0.01	0.04	0.05	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.11	0.11											3,291,790
7/1/03 - 6/30/04	0.02	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04												3,445,470
7/1/04 - 6/30/05	0.03	0.06	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09													3,255,300
7/1/05 - 6/30/06	0.03	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07														4,037,500
7/1/06 - 6/30/07	0.02	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05															4,202,190
7/1/07 - 6/30/08	0.04	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11																4,259,980
7/1/08 - 6/30/09	0.04	0.08	0.11	0.12	0.12	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.14	0.15	0.15																	4,205,660
7/1/09 - 6/30/10	0.02	0.05	0.06	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09																		4,332,060
7/1/10 - 6/30/11	0.04	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09																			4,446,730
7/1/11 - 6/30/12	0.03	0.08	0.08	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10																				4,677,530
7/1/12 - 6/30/13	0.03	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07																					4,953,980
7/1/13 - 6/30/14	0.03	0.04	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07																						5,183,910
7/1/14 - 6/30/15	0.04	0.07	0.09	0.09	0.09	0.10	0.10	0.10	0.10																							5,396,310
7/1/15 - 6/30/16	0.03	0.06	0.07	0.07	0.08	0.08	0.08	0.08																								5,858,750
7/1/16 - 6/30/17	0.03	0.05	0.06	0.06	0.06	0.06	0.06																									5,947,870
7/1/17 - 6/30/18	0.02	0.04	0.05	0.05	0.05	0.05																										6,074,840
7/1/18 - 6/30/19	0.02	0.04	0.05	0.05	0.05																											6,566,440
7/1/19 - 6/30/20	0.03	0.04	0.04	0.04																												6,647,010
7/1/20 - 6/30/21	0.01	0.01	0.02																													6,186,070
7/1/21 - 6/30/22	0.03	0.05																														6,345,854
7/1/22 - 6/30/23	0.01																															7,422,338

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Medical

Section IV
Exhibit II
Sheet 17

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Settlement Rates (Closed Claim Count / Ultimate Claim Count)

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
7/1/98 - 6/30/99																																
7/1/99 - 6/30/00																																
7/1/00 - 6/30/01																																
7/1/01 - 6/30/02																																
7/1/02 - 6/30/03																																
7/1/03 - 6/30/04																																
7/1/04 - 6/30/05																																
7/1/05 - 6/30/06																																
7/1/06 - 6/30/07																																
7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	0.00	0.39	0.87	0.91	0.96	0.98	0.98	0.99	1.00	1.00	1.00																					1.00
7/1/13 - 6/30/14	0.00	0.49	0.82	0.94	0.96	0.99	0.99	1.00	1.00	1.00																						1.00
7/1/14 - 6/30/15	0.00	0.49	0.83	0.92	0.94	0.94	0.97	0.95	0.99																							0.99
7/1/15 - 6/30/16	0.00	0.43	0.81	0.86	0.90	0.94	0.96	1.00																								1.00
7/1/16 - 6/30/17	0.00	0.52	0.87	0.96	0.96	0.97	0.99																									0.99
7/1/17 - 6/30/18	0.00	0.52	0.89	0.92	0.97	0.99																										0.99
7/1/18 - 6/30/19	0.00	0.48	0.72	0.90	0.91																											0.91
7/1/19 - 6/30/20	0.00	0.68	0.88	0.88																												0.88
7/1/20 - 6/30/21	0.00	0.17	0.86																													0.86
7/1/21 - 6/30/22	0.00	0.42																														0.42
7/1/22 - 6/30/23	0.00																															0.00

Commonwealth of Massachusetts
UMass Amherst
UMassAmherst - Medical

Section IV
Exhibit II
Sheet 18

Unpaid Claim Analysis as of 06/30/2023

Open Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993	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	0	0	0	4	4
7/1/93 - 6/30/94	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	0	0	1		1
7/1/94 - 6/30/95	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	0	0			0
7/1/95 - 6/30/96	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	0				0
7/1/96 - 6/30/97	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					0
7/1/97 - 6/30/98	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
7/1/98 - 6/30/99	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
7/1/99 - 6/30/00	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
7/1/00 - 6/30/01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									0
7/1/01 - 6/30/02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1										1
7/1/02 - 6/30/03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1											1
7/1/03 - 6/30/04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												0
7/1/04 - 6/30/05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0													0
7/1/05 - 6/30/06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														0
7/1/06 - 6/30/07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															0
7/1/07 - 6/30/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																0
7/1/08 - 6/30/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1																	1
7/1/09 - 6/30/10	0	0	0	0	0	0	0	0	0	0	0	0	0	3																		3
7/1/10 - 6/30/11	0	0	0	0	0	0	0	0	0	0	0	0	2																			2
7/1/11 - 6/30/12	0	0	0	0	0	0	0	0	0	0	0	1																				1
7/1/12 - 6/30/13	78	54	12	8	4	2	2	1	0	0	0																					0
7/1/13 - 6/30/14	54	31	10	3	2	0	1	0	0	0																						0
7/1/14 - 6/30/15	93	52	17	8	6	6	3	5	1																							1
7/1/15 - 6/30/16	67	41	14	10	7	4	3	0																								0
7/1/16 - 6/30/17	66	32	9	3	3	2	1																									1
7/1/17 - 6/30/18	75	36	8	5	1	1																										1
7/1/18 - 6/30/19	49	27	13	3	5																											5
7/1/19 - 6/30/20	49	15	6	6																												6
7/1/20 - 6/30/21	23	24	4																													4
7/1/21 - 6/30/22	45	29																														29
7/1/22 - 6/30/23	43																															43
																																104

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Indemnity (Including Lump Sum)

Section V
Exhibit I
Sheet 1

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Unpaid Loss Estimates

Accident Year	Payroll (00)'s	Retention	Unlimited Paid Loss @ 06/30/2023	Unlimited Reported Loss @ 06/30/2023	Ultimate Loss Low	Ultimate Loss High	Indicated Total Unpaid Loss Estimates Low	Indicated Total Unpaid Loss Estimates High	Case Reserves	Indicated IBNR Estimate Low	Indicated IBNR Estimate High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993		Unlimited	20,652,284	20,652,284	20,652,284	20,652,284	0	0	0	0	0
7/1/93 - 6/30/94	1,771,840	Unlimited	2,029,326	2,029,326	2,061,300	2,064,600	31,974	35,274	0	31,974	35,274
7/1/94 - 6/30/95	1,883,910	Unlimited	521,127	521,127	530,000	531,000	8,873	9,873	0	8,873	9,873
7/1/95 - 6/30/96	2,017,510	Unlimited	491,723	491,723	500,800	501,800	9,077	10,077	0	9,077	10,077
7/1/96 - 6/30/97	2,318,720	Unlimited	422,390	422,390	430,900	431,800	8,510	9,410	0	8,510	9,410
7/1/97 - 6/30/98	2,322,370	Unlimited	545,727	545,727	557,600	558,900	11,873	13,173	0	11,873	13,173
7/1/98 - 6/30/99	2,320,750	Unlimited	631,601	631,601	646,500	648,100	14,899	16,499	0	14,899	16,499
7/1/99 - 6/30/00	2,118,190	Unlimited	687,583	687,583	705,400	707,300	17,817	19,717	0	17,817	19,717
7/1/00 - 6/30/01	2,150,990	Unlimited	737,973	737,973	758,900	761,100	20,927	23,127	0	20,927	23,127
7/1/01 - 6/30/02	2,277,970	Unlimited	344,140	344,140	354,800	355,900	10,660	11,760	0	10,660	11,760
7/1/02 - 6/30/03	2,420,080	Unlimited	1,106,166	1,106,166	1,144,200	1,148,300	38,034	42,134	0	38,034	42,134
7/1/03 - 6/30/04	2,767,580	Unlimited	962,971	962,971	999,600	1,003,400	36,629	40,429	0	36,629	40,429
7/1/04 - 6/30/05	2,603,780	Unlimited	201,102	201,102	209,500	210,400	8,398	9,298	0	8,398	9,298
7/1/05 - 6/30/06	3,177,410	Unlimited	778,823	778,823	814,400	818,100	35,577	39,277	0	35,577	39,277
7/1/06 - 6/30/07	3,259,220	Unlimited	368,698	368,698	387,200	389,200	18,502	20,502	0	18,502	20,502
7/1/07 - 6/30/08	3,541,300	Unlimited	1,308,936	1,308,936	1,381,900	1,389,600	72,964	80,664	0	72,964	80,664
7/1/08 - 6/30/09	3,623,090	Unlimited	541,635	541,635	575,100	578,600	33,465	36,965	0	33,465	36,965
7/1/09 - 6/30/10	3,832,980	Unlimited	555,149	555,149	593,000	597,000	37,851	41,851	0	37,851	41,851
7/1/10 - 6/30/11	3,949,240	Unlimited	695,093	695,093	747,000	752,500	51,907	57,407	0	51,907	57,407
7/1/11 - 6/30/12	3,819,430	Unlimited	1,101,780	1,101,780	1,191,600	1,201,000	89,820	99,220	0	89,820	99,220
7/1/12 - 6/30/13	3,847,630	Unlimited	406,699	406,699	442,800	446,600	36,101	39,901	0	36,101	39,901
7/1/13 - 6/30/14	3,645,820	Unlimited	657,315	657,315	721,700	728,500	64,385	71,185	0	64,385	71,185
7/1/14 - 6/30/15	3,705,430	Unlimited	558,986	558,986	619,900	626,400	60,914	67,414	0	60,914	67,414
7/1/15 - 6/30/16	3,826,020	Unlimited	784,362	784,362	880,100	894,600	95,738	110,238	0	95,738	110,238
7/1/16 - 6/30/17	3,953,240	Unlimited	259,030	259,030	295,600	301,100	36,570	42,070	0	36,570	42,070
7/1/17 - 6/30/18	3,987,220	Unlimited	348,871	348,871	407,900	416,800	59,029	67,929	0	59,029	67,929
7/1/18 - 6/30/19	4,108,260	Unlimited	759,960	759,960	931,800	957,700	171,840	197,740	0	171,840	197,740
7/1/19 - 6/30/20	4,245,650	Unlimited	68,807	68,807	240,200	266,000	171,393	197,193	0	171,393	197,193
7/1/20 - 6/30/21	4,355,634	Unlimited	205,283	205,283	390,000	431,000	184,717	225,717	0	184,717	225,717
7/1/21 - 6/30/22	4,584,348	Unlimited	230,676	230,676	381,000	414,000	150,324	183,324	0	150,324	183,324
7/1/22 - 6/30/23	5,124,373	Unlimited	119,020	119,020	661,000	781,000	541,980	661,980	0	541,980	661,980
Total	97,559,985		39,083,236	39,083,236	41,213,984	41,564,584	2,130,748	2,481,348	0	2,130,748	2,481,348

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	Provided by Entity
(6)	From Section V, Exhibit I, Sheet 6, Column (11)
(7)	From Section V, Exhibit I, Sheet 6, Column (12)
(8)	= (6) - (4)
(9)	= (7) - (4)
(10)	= (5) - (4)
(11)	= (8) - (10)
(12)	= (9) - (10)

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Short-Term Portion

Accident Year	Age of Losses @ 06/30/2023	Selected Paid Test LDF @ 06/30/2023	Implied Paid LDF	Paid LDF	Cumulative Percent Paid	Incremental Percent Paid	Average Total Unpaid Loss Estimate	Undiscounted Cash Flow of Payments 2024
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
						0.15%		
Prior to 7/1/1993	372.0	1.015	1.000	1.015	98.50%	0.13%	0	0
7/1/93 - 6/30/94	360.0	1.017	1.017	1.017	98.37%	0.14%	33,624	2,654
7/1/94 - 6/30/95	348.0	1.018	1.018	1.018	98.23%	0.15%	9,373	730
7/1/95 - 6/30/96	336.0	1.020	1.019	1.020	98.09%	0.16%	9,577	738
7/1/96 - 6/30/97	324.0	1.021	1.021	1.021	97.93%	0.17%	8,960	686
7/1/97 - 6/30/98	312.0	1.023	1.023	1.023	97.76%	0.18%	12,523	955
7/1/98 - 6/30/99	300.0	1.025	1.025	1.025	97.57%	0.23%	15,699	1,195
7/1/99 - 6/30/00	288.0	1.027	1.027	1.027	97.34%	0.23%	18,767	1,621
7/1/00 - 6/30/01	276.0	1.030	1.030	1.030	97.11%	0.27%	22,027	1,787
7/1/01 - 6/30/02	264.0	1.033	1.033	1.033	96.84%	0.34%	11,210	944
7/1/02 - 6/30/03	252.0	1.036	1.036	1.036	96.50%	0.35%	40,084	3,873
7/1/03 - 6/30/04	240.0	1.040	1.040	1.040	96.15%	0.36%	38,529	3,521
7/1/04 - 6/30/05	228.0	1.044	1.044	1.044	95.80%	0.38%	8,848	748
7/1/05 - 6/30/06	216.0	1.048	1.048	1.048	95.42%	0.44%	37,427	3,101
7/1/06 - 6/30/07	204.0	1.053	1.053	1.053	94.97%	0.52%	19,502	1,715
7/1/07 - 6/30/08	192.0	1.059	1.059	1.059	94.46%	0.56%	76,814	7,172
7/1/08 - 6/30/09	180.0	1.065	1.065	1.065	93.90%	0.59%	35,215	3,237
7/1/09 - 6/30/10	168.0	1.072	1.072	1.072	93.31%	0.60%	39,851	3,511
7/1/10 - 6/30/11	156.0	1.079	1.079	1.079	92.71%	0.61%	54,657	4,478
7/1/11 - 6/30/12	144.0	1.086	1.086	1.086	92.10%	0.64%	94,520	7,282
7/1/12 - 6/30/13	132.0	1.093	1.093	1.093	91.46%	0.81%	38,001	2,831
7/1/13 - 6/30/14	120.0	1.103	1.103	1.103	90.65%	0.95%	67,785	5,881
7/1/14 - 6/30/15	108.0	1.115	1.115	1.115	89.70%	1.31%	64,164	5,906
7/1/15 - 6/30/16	96.0	1.131	1.131	1.131	88.39%	1.56%	102,988	11,633
7/1/16 - 6/30/17	84.0	1.152	1.152	1.152	86.83%	2.22%	39,320	4,657
7/1/17 - 6/30/18	72.0	1.182	1.182	1.182	84.61%	4.17%	63,479	9,171
7/1/18 - 6/30/19	60.0	1.243	1.243	1.243	80.44%	7.50%	184,790	39,382
7/1/19 - 6/30/20	48.0	1.371	3.678	1.371	72.95%	13.35%	184,293	51,065
7/1/20 - 6/30/21	36.0	1.678	2.000	1.678	59.60%	17.27%	205,217	67,796
7/1/21 - 6/30/22	24.0	2.363	1.723	2.363	42.32%	23.86%	166,824	49,966
7/1/22 - 6/30/23	12.0	5.415	6.058	5.415	18.47%	18.47%	601,980	176,140
Total							2,306,048	474,378

	Undiscounted	Discounted			
Short-Term Portion	21%	24%	(10)	Interest Rate	4%

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1) @ 06/30/2023
(3) From Section V, Exhibit I, Sheet 10, Column (6)
(4) Average Ultimate Loss Divided by Paid Loss From Section V, Exhibit I, Sheet 6
(5) Selected
(6) = 1 / (5)
(7) = (6) from Current Age - (6) from Subsequent Age
(8) From Section V, Exhibit I, Sheet 3
(9) - (9) Based on (5)

Commonwealth of Massachusetts Section V
UMass Medical Center Exhibit I
UMassMedical - Indemnity (Including Lump Sum) Sheet 3

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Discounted at (4%) Unpaid Loss Estimate

Accident Year	Indicated Total Unpaid Loss Estimate Low	Indicated Total Unpaid Loss Estimate High	Discount Factor	Discounted Total Unpaid Loss Estimate Low	Discounted Total Unpaid Loss Estimate High
(1)	(2)	(3)	(4)	(5)	(6)
Prior to 7/1/1993	0	0	1.000	0	0
7/1/93 - 6/30/94	31,974	35,274	0.981	31,353	34,589
7/1/94 - 6/30/95	8,873	9,873	0.946	8,392	9,338
7/1/95 - 6/30/96	9,077	10,077	0.915	8,305	9,220
7/1/96 - 6/30/97	8,510	9,410	0.887	7,552	8,351
7/1/97 - 6/30/98	11,873	13,173	0.863	10,247	11,368
7/1/98 - 6/30/99	14,899	16,499	0.841	12,535	13,881
7/1/99 - 6/30/00	17,817	19,717	0.824	14,677	16,242
7/1/00 - 6/30/01	20,927	23,127	0.807	16,896	18,672
7/1/01 - 6/30/02	10,660	11,760	0.794	8,459	9,332
7/1/02 - 6/30/03	38,034	42,134	0.784	29,820	33,034
7/1/03 - 6/30/04	36,629	40,429	0.775	28,373	31,316
7/1/04 - 6/30/05	8,398	9,298	0.765	6,422	7,110
7/1/05 - 6/30/06	35,577	39,277	0.756	26,883	29,679
7/1/06 - 6/30/07	18,502	20,502	0.749	13,856	15,354
7/1/07 - 6/30/08	72,964	80,664	0.744	54,316	60,048
7/1/08 - 6/30/09	33,465	36,965	0.740	24,769	27,359
7/1/09 - 6/30/10	37,851	41,851	0.735	27,834	30,775
7/1/10 - 6/30/11	51,907	57,407	0.729	37,865	41,877
7/1/11 - 6/30/12	89,820	99,220	0.723	64,934	71,730
7/1/12 - 6/30/13	36,101	39,901	0.716	25,863	28,585
7/1/13 - 6/30/14	64,385	71,185	0.714	45,980	50,837
7/1/14 - 6/30/15	60,914	67,414	0.714	43,477	48,116
7/1/15 - 6/30/16	95,738	110,238	0.720	68,887	79,320
7/1/16 - 6/30/17	36,570	42,070	0.726	26,552	30,545
7/1/17 - 6/30/18	59,029	67,929	0.739	43,618	50,195
7/1/18 - 6/30/19	171,840	197,740	0.768	131,985	151,878
7/1/19 - 6/30/20	171,393	197,193	0.806	138,074	158,858
7/1/20 - 6/30/21	184,717	225,717	0.843	155,653	190,202
7/1/21 - 6/30/22	150,324	183,324	0.861	129,469	157,891
7/1/22 - 6/30/23	541,980	661,980	0.873	473,010	577,739
Total	2,130,748	2,481,348		1,716,056	2,003,444

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From Section V, Exhibit I, Sheet 1, Column (8)
(3) From Section V, Exhibit I, Sheet 1, Column (9)
(4) From Section V, Exhibit I, Sheet 0, Column (8)
(5) = (2) x (4)
(6) = (3) x (4)

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Indemnity (Including Lump Sum)

Section V
Exhibit I
Sheet 4

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Actual vs Expected - Paid Loss Emergence

Accident Year	Selected Low Ultimate Loss @ 06/30/2022	Selected High Ultimate Loss @ 06/30/2022	Unlimited Paid Loss @ 06/30/2022	Unlimited Paid Loss @ 06/30/2023	Paid LDF @ 06/30/2022	Projected Paid LDF @ 06/30/2023	Method 1 Low Expected Paid Emergence Loss @ 06/30/2023	Method 1 High Expected Paid Emergence Loss @ 06/30/2023	Actual Paid Emergence Loss @ 06/30/2023	Actual - Expected Method 1 Low Paid	Actual - Expected Method 1 High Paid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993	20,662,017	20,663,017	20,652,284	20,652,284	1.016	1.014	966	1,066	0	(966)	(1,066)
7/1/93 - 6/30/94	2,037,400	2,040,700	2,005,329	2,029,326	1.017	1.016	1,424	1,570	23,998	22,574	22,427
7/1/94 - 6/30/95	529,900	530,800	521,127	521,127	1.018	1.017	461	508	0	(461)	(508)
7/1/95 - 6/30/96	500,600	501,500	491,723	491,723	1.019	1.018	546	602	0	(546)	(602)
7/1/96 - 6/30/97	430,600	431,500	422,390	422,390	1.020	1.019	586	650	0	(586)	(650)
7/1/97 - 6/30/98	557,300	558,500	545,727	545,727	1.022	1.020	946	1,045	0	(946)	(1,045)
7/1/98 - 6/30/99	646,400	647,900	631,601	631,601	1.025	1.022	1,370	1,509	0	(1,370)	(1,509)
7/1/99 - 6/30/00	705,400	707,200	687,583	687,583	1.027	1.025	1,648	1,814	0	(1,648)	(1,814)
7/1/00 - 6/30/01	759,200	761,400	737,973	737,973	1.030	1.027	2,062	2,276	0	(2,062)	(2,276)
7/1/01 - 6/30/02	352,600	353,700	341,709	344,140	1.033	1.030	1,016	1,118	2,431	1,416	1,313
7/1/02 - 6/30/03	1,145,200	1,149,300	1,106,166	1,106,166	1.037	1.033	3,746	4,140	0	(3,746)	(4,140)
7/1/03 - 6/30/04	1,000,700	1,004,600	962,971	962,971	1.041	1.037	3,621	3,995	0	(3,621)	(3,995)
7/1/04 - 6/30/05	209,800	210,700	201,102	201,102	1.045	1.041	770	850	0	(770)	(850)
7/1/05 - 6/30/06	816,000	819,900	778,823	778,823	1.050	1.045	3,437	3,797	0	(3,437)	(3,797)
7/1/06 - 6/30/07	388,300	390,300	368,698	368,698	1.056	1.050	1,878	2,069	0	(1,878)	(2,069)
7/1/07 - 6/30/08	1,386,300	1,394,500	1,308,936	1,308,936	1.062	1.056	7,467	8,258	0	(7,467)	(8,258)
7/1/08 - 6/30/09	577,000	580,700	541,635	541,635	1.069	1.062	3,120	3,447	0	(3,120)	(3,447)
7/1/09 - 6/30/10	594,900	599,100	555,149	555,149	1.075	1.069	3,306	3,656	0	(3,306)	(3,656)
7/1/10 - 6/30/11	749,500	755,200	695,093	695,093	1.082	1.075	4,333	4,787	0	(4,333)	(4,787)
7/1/11 - 6/30/12	1,154,100	1,163,600	1,063,215	1,101,780	1.090	1.082	7,035	7,770	38,564	31,530	30,794
7/1/12 - 6/30/13	444,800	448,800	406,699	406,699	1.099	1.090	3,063	3,384	0	(3,063)	(3,384)
7/1/13 - 6/30/14	724,900	732,000	657,315	657,315	1.108	1.099	5,493	6,070	0	(5,493)	(6,070)
7/1/14 - 6/30/15	588,000	596,900	528,469	558,986	1.121	1.108	5,672	6,520	30,517	24,845	23,997
7/1/15 - 6/30/16	827,100	841,200	733,629	784,362	1.137	1.121	9,739	11,208	50,732	40,993	39,524
7/1/16 - 6/30/17	237,200	241,700	207,335	259,030	1.155	1.137	3,033	3,490	51,695	48,662	48,205
7/1/17 - 6/30/18	419,500	430,200	348,871	348,871	1.218	1.155	17,647	20,321	0	(17,647)	(20,321)
7/1/18 - 6/30/19	614,700	636,100	472,010	759,960	1.325	1.218	38,661	44,459	287,950	249,289	243,490
7/1/19 - 6/30/20	314,000	368,000	68,807	68,807	1.621	1.325	88,278	107,720	0	(88,278)	(107,720)
7/1/20 - 6/30/21	415,000	477,000	138,340	205,283	2.264	1.621	86,754	106,196	66,944	(19,811)	(39,253)
7/1/21 - 6/30/22	479,000	571,000	63,312	230,676	5.110	2.264	127,108	155,239	167,364	40,256	12,125
Total	40,267,417	40,607,017	38,244,021	38,964,216			435,186	519,534	720,195	285,009	200,661

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Selected by Deloitte Consulting LLP @ 06/30/2022
(3)	Selected by Deloitte Consulting LLP @ 06/30/2022
(4)	Provided by Entity
(5)	Provided by Entity
(6)	Selected by Deloitte Consulting LLP @ 06/30/2022
(7)	Interpolated From (6)
(8)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((2) - (4))
(9)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((3) - (4))
(10)	= (5) - (4)
(11)	= (10) - (8)
(12)	= (10) - (9)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Ultimate Loss Runoff

Accident Year	Ultimate Loss @ 06/30/2022 Low	Ultimate Loss @ 06/30/2022 High	Ultimate Loss @ 06/30/2023 Low	Ultimate Loss @ 06/30/2023 High	Deloitte Change Low	Deloitte Change High	Paid Loss @ 06/30/2023	Reported Loss @ 06/30/2023
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	20,662,017	20,663,017	20,652,284	20,652,284	(9,733)	(10,733)	20,652,284	20,652,284
7/1/93 - 6/30/94	2,037,400	2,040,700	2,061,300	2,064,600	23,900	23,900	2,029,326	2,029,326
7/1/94 - 6/30/95	529,900	530,800	530,000	531,000	100	200	521,127	521,127
7/1/95 - 6/30/96	500,600	501,500	500,800	501,800	200	300	491,723	491,723
7/1/96 - 6/30/97	430,600	431,500	430,900	431,800	300	300	422,390	422,390
7/1/97 - 6/30/98	557,300	558,500	557,600	558,900	300	400	545,727	545,727
7/1/98 - 6/30/99	646,400	647,900	646,500	648,100	100	200	631,601	631,601
7/1/99 - 6/30/00	705,400	707,200	705,400	707,300	0	100	687,583	687,583
7/1/00 - 6/30/01	759,200	761,400	758,900	761,100	(300)	(300)	737,973	737,973
7/1/01 - 6/30/02	352,600	353,700	354,800	355,900	2,200	2,200	344,140	344,140
7/1/02 - 6/30/03	1,145,200	1,149,300	1,144,200	1,148,300	(1,000)	(1,000)	1,106,166	1,106,166
7/1/03 - 6/30/04	1,000,700	1,004,600	999,600	1,003,400	(1,100)	(1,200)	962,971	962,971
7/1/04 - 6/30/05	209,800	210,700	209,500	210,400	(300)	(300)	201,102	201,102
7/1/05 - 6/30/06	816,000	819,900	814,400	818,100	(1,600)	(1,800)	778,823	778,823
7/1/06 - 6/30/07	388,300	390,300	387,200	389,200	(1,100)	(1,100)	368,698	368,698
7/1/07 - 6/30/08	1,386,300	1,394,500	1,381,900	1,389,600	(4,400)	(4,900)	1,308,936	1,308,936
7/1/08 - 6/30/09	577,000	580,700	575,100	578,600	(1,900)	(2,100)	541,635	541,635
7/1/09 - 6/30/10	594,900	599,100	593,000	597,000	(1,900)	(2,100)	555,149	555,149
7/1/10 - 6/30/11	749,500	755,200	747,000	752,500	(2,500)	(2,700)	695,093	695,093
7/1/11 - 6/30/12	1,154,100	1,163,600	1,191,600	1,201,000	37,500	37,400	1,101,780	1,101,780
7/1/12 - 6/30/13	444,800	448,800	442,800	446,600	(2,000)	(2,200)	406,699	406,699
7/1/13 - 6/30/14	724,900	732,000	721,700	728,500	(3,200)	(3,500)	657,315	657,315
7/1/14 - 6/30/15	588,000	596,900	619,900	626,400	31,900	29,500	558,986	558,986
7/1/15 - 6/30/16	827,100	841,200	880,100	894,600	53,000	53,400	784,362	784,362
7/1/16 - 6/30/17	237,200	241,700	295,600	301,100	58,400	59,400	259,030	259,030
7/1/17 - 6/30/18	419,500	430,200	407,900	416,800	(11,600)	(13,400)	348,871	348,871
7/1/18 - 6/30/19	614,700	636,100	931,800	957,700	317,100	321,600	759,960	759,960
7/1/19 - 6/30/20	314,000	368,000	240,200	266,000	(73,800)	(102,000)	68,807	68,807
7/1/20 - 6/30/21	415,000	477,000	390,000	431,000	(25,000)	(46,000)	205,283	205,283
7/1/21 - 6/30/22	479,000	571,000	381,000	414,000	(98,000)	(157,000)	230,676	230,676
Total	40,267,417	40,607,017	40,552,984	40,783,584	285,567	176,567	38,964,216	38,964,216

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(3) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(4) From Section V, Exhibit I, Sheet 6, Column (11)
(5) From Section V, Exhibit I, Sheet 6, Column (12)
(6) = (4) - (2)
(7) = (5) - (3)
(8) Provided by Entity
(9) Provided by Entity

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Selection of Ultimate Loss

Accident Year	Payroll (00)'s	Unlimited Paid Loss @ 06/30/2023	Unlimited Reported Loss @ 06/30/2023	Ultimate Loss Indications: Paid LDM	Ultimate Loss Indications: Expected Loss	Ultimate Loss Indications: Paid B-F	Ultimate Loss Indications: Frequency Severity	Prior Selected Ultimate Loss: Low	Prior Selected Ultimate Loss: High	Selected Ultimate Loss: Low	Selected Ultimate Loss: High	Ultimate Loss Rates: Low	Ultimate Loss Rates: High	Ultimate Loss Severity: Low	Ultimate Loss Severity: High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Prior to 7/1/1993		20,652,284	20,652,284	20,966,882	0		0	20,662,017	20,663,017	20,652,284	20,652,284				
7/1/93 - 6/30/94	1,771,840	2,029,326	2,029,326	2,062,932	223,642	2,032,970	0	2,037,400	2,040,700	2,061,300	2,064,600	1.16	1.17		
7/1/94 - 6/30/95	1,883,910	521,127	521,127	530,499	239,935	525,366	0	529,900	530,800	530,000	531,000	0.28	0.28		
7/1/95 - 6/30/96	2,017,510	491,723	491,723	501,319	259,102	496,683	0	500,600	501,500	500,800	501,800	0.25	0.25		
7/1/96 - 6/30/97	2,318,720	422,390	422,390	431,331	300,837	428,626	0	430,600	431,500	430,900	431,800	0.19	0.19		
7/1/97 - 6/30/98	2,322,370	545,727	545,727	558,254	305,151	552,574	0	557,300	558,500	557,600	558,900	0.24	0.24		
7/1/98 - 6/30/99	2,320,750	631,601	631,601	647,324	309,208	639,111	0	646,400	647,900	646,500	648,100	0.28	0.28		
7/1/99 - 6/30/00	2,118,190	687,583	687,583	706,362	287,191	695,218	0	705,400	707,200	705,400	707,300	0.33	0.33		
7/1/00 - 6/30/01	2,150,990	737,973	737,973	759,960	298,512	746,610	0	759,200	761,400	758,900	761,100	0.35	0.35		
7/1/01 - 6/30/02	2,277,970	344,140	344,140	355,368	321,975	354,313	0	352,600	353,700	354,800	355,900	0.16	0.16		
7/1/02 - 6/30/03	2,420,080	1,106,166	1,106,166	1,146,254	343,633	1,118,184	0	1,145,200	1,149,300	1,144,200	1,148,300	0.47	0.47		
7/1/03 - 6/30/04	2,767,580	962,971	962,971	1,001,520	393,122	978,102	0	1,000,700	1,004,600	999,600	1,003,400	0.36	0.36		
7/1/04 - 6/30/05	2,603,780	201,102	201,102	209,928	372,022	216,743	0	209,800	210,700	209,500	210,400	0.08	0.08		
7/1/05 - 6/30/06	3,177,410	778,823	778,823	816,242	458,634	799,848	0	816,000	819,900	814,400	818,100	0.26	0.26		
7/1/06 - 6/30/07	3,259,220	368,698	368,698	388,210	475,617	392,603	0	388,300	390,300	387,200	389,200	0.12	0.12		
7/1/07 - 6/30/08	3,541,300	1,308,936	1,308,936	1,385,758	522,530	1,337,903	0	1,386,300	1,394,500	1,381,900	1,389,600	0.39	0.39		
7/1/08 - 6/30/09	3,623,090	541,635	541,635	576,851	540,008	574,602	0	577,000	580,700	575,100	578,600	0.16	0.16		
7/1/09 - 6/30/10	3,832,980	555,149	555,149	594,982	573,710	593,558	0	594,900	599,100	593,000	597,000	0.15	0.16		
7/1/10 - 6/30/11	3,949,240	695,093	695,093	749,769	591,332	738,215	0	749,500	755,200	747,000	752,500	0.19	0.19		
7/1/11 - 6/30/12	3,819,430	1,101,780	1,101,780	1,196,300	575,167	1,147,224	0	1,154,100	1,163,600	1,191,600	1,201,000	0.31	0.31		
7/1/12 - 6/30/13	3,847,630	406,699	406,699	444,659	584,265	456,577	1,092,615	444,800	448,800	442,800	446,600	0.12	0.12	7,907	7,975
7/1/13 - 6/30/14	3,645,820	657,315	657,315	725,097	556,319	709,320	706,799	724,900	732,000	721,700	728,500	0.20	0.20	20,620	20,814
7/1/14 - 6/30/15	3,705,430	558,986	558,986	623,143	568,380	617,505	501,820	588,000	596,900	619,900	626,400	0.17	0.17	25,829	26,100
7/1/15 - 6/30/16	3,826,020	784,362	784,362	887,355	591,352	852,998	672,720	827,100	841,200	880,100	894,600	0.23	0.23	28,390	28,858
7/1/16 - 6/30/17	3,953,240	259,030	259,030	298,306	616,056	340,142	495,794	237,200	241,700	295,600	301,100	0.07	0.08	13,436	13,686
7/1/17 - 6/30/18	3,987,220	348,871	348,871	412,327	627,098	445,380	655,951	419,500	430,200	407,900	416,800	0.10	0.10	14,568	14,886
7/1/18 - 6/30/19	4,108,260	759,960	759,960	944,727	652,596	887,593	755,499	614,700	636,100	931,800	957,700	0.23	0.23	30,058	30,894
7/1/19 - 6/30/20	4,245,650	68,807	68,807	94,326	681,333	253,136	583,265	314,000	368,000	240,200	266,000	0.06	0.06	10,443	11,565
7/1/20 - 6/30/21	4,355,634	205,283	205,283	344,443	709,028	491,740	476,919	415,000	477,000	390,000	431,000	0.09	0.10	21,667	23,944
7/1/21 - 6/30/22	4,584,348	230,676	230,676	545,027	764,430	671,570	397,298	479,000	571,000	381,000	414,000	0.08	0.09	26,808	29,130
7/1/22 - 6/30/23	5,124,373	119,020	119,020	644,493	871,417	829,510	611,892			661,000	781,000	0.13	0.15	31,721	37,480
Total	97,559,985	39,083,236	39,083,236	41,549,947	14,613,601	20,923,923	6,950,572	40,267,417	40,607,017	41,213,984	41,564,584				

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	From Section V, Exhibit I, Sheet 10, Column (7)
(6)	From Section V, Exhibit I, Sheet 7, Column (4)
(7)	From Section V, Exhibit I, Sheet 7, Column (10)
(8)	From Section V, Exhibit I, Sheet 9, Column (12)
(9)	From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(10)	From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(11)	Selected by Deloitte Consulting LLP
(12)	Selected by Deloitte Consulting LLP
(13)	= (11) / (2)
(14)	= (12) / (2)
(15)	(11) Divided by Ultimate Claims From Section V, Exhibit I, Sheet 13, Column (7)
(16)	(12) Divided by Ultimate Claims From Section V, Exhibit I, Sheet 13, Column (7)

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Indemnity (Including Lump Sum)

Section V
Exhibit I
Sheet 7

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Bornhuetter-Ferguson Method

Accident Year	Payroll (00)'s	Initial Expected Loss Rates	Initial Expected Loss	Expected % of Paid Loss	Expected Paid Loss	Unlimited Actual Paid Loss	Expected % of Unpaid Loss	Expected Unpaid Loss	Unlimited Indicated Ultimate Loss	Unlimited Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
7/1/93 - 6/30/94	1,771,840	0.13	223,642	98.4%	219,999	2,029,326	1.6%	3,643	2,032,970	1.15
7/1/94 - 6/30/95	1,883,910	0.13	239,935	98.2%	235,696	521,127	1.8%	4,239	525,366	0.28
7/1/95 - 6/30/96	2,017,510	0.13	259,102	98.1%	254,143	491,723	1.9%	4,960	496,683	0.25
7/1/96 - 6/30/97	2,318,720	0.13	300,837	97.9%	294,601	422,390	2.1%	6,236	428,626	0.18
7/1/97 - 6/30/98	2,322,370	0.13	305,151	97.8%	298,303	545,727	2.2%	6,847	552,574	0.24
7/1/98 - 6/30/99	2,320,750	0.13	309,208	97.6%	301,698	631,601	2.4%	7,510	639,111	0.28
7/1/99 - 6/30/00	2,118,190	0.14	287,191	97.3%	279,556	687,583	2.7%	7,635	695,218	0.33
7/1/00 - 6/30/01	2,150,990	0.14	298,512	97.1%	289,875	737,973	2.9%	8,637	746,610	0.35
7/1/01 - 6/30/02	2,277,970	0.14	321,975	96.8%	311,803	344,140	3.2%	10,172	354,313	0.16
7/1/02 - 6/30/03	2,420,080	0.14	343,633	96.5%	331,616	1,106,166	3.5%	12,018	1,118,184	0.46
7/1/03 - 6/30/04	2,767,580	0.14	393,122	96.2%	377,991	962,971	3.8%	15,131	978,102	0.35
7/1/04 - 6/30/05	2,603,780	0.14	372,022	95.8%	356,381	201,102	4.2%	15,641	216,743	0.08
7/1/05 - 6/30/06	3,177,410	0.14	458,634	95.4%	437,609	778,823	4.6%	21,025	799,848	0.25
7/1/06 - 6/30/07	3,259,220	0.15	475,617	95.0%	451,712	368,698	5.0%	23,905	392,603	0.12
7/1/07 - 6/30/08	3,541,300	0.15	522,530	94.5%	493,563	1,308,936	5.5%	28,968	1,337,903	0.38
7/1/08 - 6/30/09	3,623,090	0.15	540,008	93.9%	507,040	541,635	6.1%	32,967	574,602	0.16
7/1/09 - 6/30/10	3,832,980	0.15	573,710	93.3%	535,302	555,149	6.7%	38,409	593,558	0.15
7/1/10 - 6/30/11	3,949,240	0.15	591,332	92.7%	548,210	695,093	7.3%	43,122	738,215	0.19
7/1/11 - 6/30/12	3,819,430	0.15	575,167	92.1%	529,723	1,101,780	7.9%	45,444	1,147,224	0.30
7/1/12 - 6/30/13	3,847,630	0.15	584,265	91.5%	534,387	406,699	8.5%	49,878	456,577	0.12
7/1/13 - 6/30/14	3,645,820	0.15	556,319	90.7%	504,314	657,315	9.3%	52,005	709,320	0.19
7/1/14 - 6/30/15	3,705,430	0.15	568,380	89.7%	509,861	558,986	10.3%	58,519	617,505	0.17
7/1/15 - 6/30/16	3,826,020	0.15	591,352	88.4%	522,715	784,362	11.6%	68,637	852,998	0.22
7/1/16 - 6/30/17	3,953,240	0.16	616,056	86.8%	534,944	259,030	13.2%	81,112	340,142	0.09
7/1/17 - 6/30/18	3,987,220	0.16	627,098	84.6%	530,589	348,871	15.4%	96,509	445,380	0.11
7/1/18 - 6/30/19	4,108,260	0.16	652,596	80.4%	524,963	759,960	19.6%	127,633	887,593	0.22
7/1/19 - 6/30/20	4,245,650	0.16	681,333	72.9%	497,005	68,807	27.1%	184,329	253,136	0.06
7/1/20 - 6/30/21	4,355,634	0.16	709,028	59.6%	422,571	205,283	40.4%	286,456	491,740	0.11
7/1/21 - 6/30/22	4,584,348	0.17	764,430	42.3%	323,535	230,676	57.7%	440,894	671,570	0.15
7/1/22 - 6/30/23	5,124,373	0.17	871,417	18.5%	160,926	119,020	81.5%	710,491	829,510	0.16
Total	97,559,985		14,613,601		12,120,630	18,430,952		2,492,972	20,923,923	

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	From Section V, Exhibit I, Sheet 8, Column (13)
(4)	= (2) x (3)
(5)	= 1 / Section V, Exhibit I, Sheet 10, Column (6)
(6)	= (4) x (5)
(7)	Provided by Entity
(8)	= 1 - (5)
(9)	= (4) x (8)
(10)	= (7) + (9)
(11)	= (10) / (2)

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Calculation of Initial Expected Loss Rates

Accident Year	Payroll (00)'s	Payroll Trend	Loss Development Unlimited Indicated Ultimate Loss Paid	Loss Development Unlimited Indicated Ultimate Loss Reported	Selected Initial Ultimate Loss	Loss Trend Factor	Benefit Level Adjustment Factors	Trended Ultimate	On-level Loss Rates	Detrended Loss Rates	Prior Expected Loss Rates	Initial Expected Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
7/1/93 - 6/30/94	1,771,840	2.357	2,062,932	2,062,932	20,652,284	2.357	1.347	65,569,881	***15.70***	0.13	0.12	0.13
7/1/94 - 6/30/95	1,883,910	2.288	530,499	530,499	2,062,950	2.288	1.335	6,302,068	1.46	0.13	0.12	0.13
7/1/95 - 6/30/96	2,017,510	2.221	501,319	501,319	530,500	2.221	1.324	1,560,343	0.35	0.13	0.12	0.13
7/1/96 - 6/30/97	2,318,720	2.157	431,331	431,331	501,300	2.157	1.311	1,416,994	0.28	0.13	0.12	0.13
7/1/97 - 6/30/98	2,322,370	2.094	558,254	558,254	431,350	2.094	1.294	1,168,861	0.24	0.13	0.12	0.13
7/1/98 - 6/30/99	2,320,750	2.033	647,324	647,324	558,250	2.033	1.276	1,448,389	0.31	0.13	0.12	0.13
7/1/99 - 6/30/00	2,118,190	1.974	706,362	706,362	647,300	1.974	1.254	1,602,289	0.38	0.14	0.13	0.14
7/1/00 - 6/30/01	2,150,990	1.916	759,960	759,960	706,350	1.916	1.225	1,658,442	0.40	0.14	0.13	0.14
7/1/01 - 6/30/02	2,277,970	1.860	355,368	355,368	760,000	1.860	1.203	1,701,008	0.40	0.14	0.13	0.14
7/1/02 - 6/30/03	2,420,080	1.806	1,146,254	1,146,254	355,350	1.806	1.198	768,635	0.18	0.14	0.13	0.14
7/1/03 - 6/30/04	2,767,580	1.754	1,001,520	1,001,520	1,146,250	1.754	1.197	2,406,270	0.50	0.14	0.13	0.14
7/1/04 - 6/30/05	2,603,780	1.702	209,928	209,928	1,001,500	1.702	1.190	2,029,277	0.46	0.14	0.13	0.14
7/1/05 - 6/30/06	3,177,410	1.653	816,242	816,242	209,950	1.653	1.178	408,829	0.08	0.14	0.14	0.14
7/1/06 - 6/30/07	3,259,220	1.605	388,210	388,210	816,250	1.605	1.165	1,526,371	0.29	0.15	0.14	0.15
7/1/07 - 6/30/08	3,541,300	1.558	1,385,758	1,385,758	388,200	1.558	1.152	697,028	0.13	0.15	0.14	0.15
7/1/08 - 6/30/09	3,623,090	1.513	576,851	576,851	1,385,750	1.513	1.141	2,391,500	0.44	0.15	0.14	0.15
7/1/09 - 6/30/10	3,832,980	1.469	594,982	594,982	576,850	1.469	1.136	962,445	0.17	0.15	0.14	0.15
7/1/10 - 6/30/11	3,949,240	1.426	749,769	749,769	595,000	1.426	1.136	963,454	0.17	0.15	0.14	0.15
7/1/11 - 6/30/12	3,819,430	1.384	1,196,300	1,196,300	749,750	1.384	1.129	1,171,967	0.22	0.15	0.14	0.15
7/1/12 - 6/30/13	3,847,630	1.344	444,659	444,659	1,196,300	1.344	1.120	1,800,448	0.35	0.15	0.14	0.15
7/1/13 - 6/30/14	3,645,820	1.305	725,097	725,097	444,700	1.305	1.114	646,634	0.14	0.15	0.14	0.15
7/1/14 - 6/30/15	3,705,430	1.267	623,143	623,143	725,100	1.267	1.109	1,018,311	0.22	0.15	0.14	0.15
7/1/15 - 6/30/16	3,826,020	1.230	887,355	887,355	623,150	1.230	1.100	843,217	0.18	0.15	0.14	0.15
7/1/16 - 6/30/17	3,953,240	1.194	298,306	298,306	887,350	1.194	1.091	1,156,209	0.24	0.16	0.15	0.16
7/1/17 - 6/30/18	3,987,220	1.159	412,327	412,327	298,350	1.159	1.081	373,966	0.08	0.16	0.15	0.16
7/1/18 - 6/30/19	4,108,260	1.126	944,727	944,727	412,350	1.126	1.071	496,837	0.11	0.16	0.15	0.16
7/1/19 - 6/30/20	4,245,650	1.093	94,326	94,326	944,750	1.093	1.060	1,093,952	0.24	0.16	0.15	0.16
7/1/20 - 6/30/21	4,355,634	1.061	344,443	344,443	344,443	1.061	1.045	381,738	***0.08***	0.16	0.15	0.16
7/1/21 - 6/30/22	4,584,348	1.030	545,027	545,027	545,027	1.030	1.020	572,507	***0.12***	0.17	0.16	0.17
7/1/22 - 6/30/23	5,124,373	1.000	644,493	644,493	644,493	1.000	1.000	644,493	***0.13***	0.17		0.17
			20,583,065	20,583,065				Last 3 Wtd Avg	0.14			
								Last 4 Wtd Avg	0.17			
								Last 5 Wtd Avg	0.17			
								All Per Wtd Avg	0.30			

(Note: numbers in bold and italics and with borders are excluded from the calculated averages)

Selected (14) 0.17

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Selected by Deloitte Consulting LLP
(4) From Section V, Exhibit I, Sheet 10, Column (7)
(5) From Section V, Exhibit I, Sheet 0, Column (7)
(6) Selected by Deloitte Consulting LLP
(7) Selected by Deloitte Consulting LLP
(8) Based on industry sources
(9) = (6) x (7) x (8)
(10) = (9) / [(2) x (3)]
(11) = (14) / (7) / (8) * (3)
(12) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(13) Selected for by Deloitte Consulting LLP Based on (14)
(14) Selected by Deloitte Consulting LLP

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Frequency Severity Method

Accident Year	Payroll (00)'s	Ultimate Reported Severity	Include For Fit	Exponential Fitted Reported Severity	Initial Selected Ultimate Severity	Selected Ultimate Claim Counts	Benefit Level Adjustment Factor	Selected Severity Trend	Trended Severity	On-Level Selected Ultimate Severity	Indicated Ultimate Loss	Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Prior to 7/1/1993			Exclude	41,225		0					0	
7/1/93 - 6/30/94	1,771,840		Exclude	39,740		0	1.347	2.357	0,000		0	0.00
7/1/94 - 6/30/95	1,883,910		Exclude	38,308		0	1.335	2.288	0,000		0	0.00
7/1/95 - 6/30/96	2,017,510		Exclude	36,928		0	1.324	2.221	0,000		0	0.00
7/1/96 - 6/30/97	2,318,720		Exclude	35,598		0	1.311	2.157	0,000		0	0.00
7/1/97 - 6/30/98	2,322,370		Exclude	34,315		0	1.294	2.094	0,000		0	0.00
7/1/98 - 6/30/99	2,320,750		Exclude	33,079		0	1.276	2.033	0,000		0	0.00
7/1/99 - 6/30/00	2,118,190		Exclude	31,887		0	1.254	1.974	0,000		0	0.00
7/1/00 - 6/30/01	2,150,990		Exclude	30,738		0	1.225	1.916	0,000		0	0.00
7/1/01 - 6/30/02	2,277,970		Exclude	29,631		0	1.203	1.860	0,000		0	0.00
7/1/02 - 6/30/03	2,420,080		Exclude	28,563		0	1.198	1.806	0,000		0	0.00
7/1/03 - 6/30/04	2,767,580		Exclude	27,534		0	1.197	1.754	0,000		0	0.00
7/1/04 - 6/30/05	2,603,780		Exclude	26,542		0	1.190	1.702	0,000		0	0.00
7/1/05 - 6/30/06	3,177,410		Exclude	25,586		0	1.178	1.653	0,000		0	0.00
7/1/06 - 6/30/07	3,259,220		Exclude	24,664		0	1.165	1.605	0,000		0	0.00
7/1/07 - 6/30/08	3,541,300		Exclude	23,775		0	1.152	1.558	0,000		0	0.00
7/1/08 - 6/30/09	3,623,090		Exclude	22,919		0	1.141	1.513	0,000		0	0.00
7/1/09 - 6/30/10	3,832,980		Exclude	22,093		0	1.136	1.469	0,000		0	0.00
7/1/10 - 6/30/11	3,949,240		Exclude	21,297		0	1.136	1.426	0,000		0	0.00
7/1/11 - 6/30/12	3,819,430		Exclude	20,530		0	1.129	1.384	0,000		0	0.00
7/1/12 - 6/30/13	3,847,630	7,940	Include	19,790	21,363	56	1.120	1.344	32,151	29,364	1,092,615	0.28
7/1/13 - 6/30/14	3,645,820	20,717	Include	19,077	12,706	35	1.114	1.305	18,475	29,364	706,799	0.19
7/1/14 - 6/30/15	3,705,430	25,964	Include	18,390	30,213	24	1.109	1.267	42,430	29,364	501,820	0.14
7/1/15 - 6/30/16	3,826,020	28,624	Include	17,727	20,102	31	1.100	1.230	27,201	29,364	672,720	0.18
7/1/16 - 6/30/17	3,953,240	13,559	Include	17,089	40,334	22	1.091	1.194	52,555	29,364	495,794	0.13
7/1/17 - 6/30/18	3,987,220	14,726	Include	16,473	10,655	28	1.081	1.159	13,356	29,364	655,951	0.16
7/1/18 - 6/30/19	4,108,260	30,475	Include	15,879	13,302	31	1.071	1.126	16,027	29,364	755,499	0.18
7/1/19 - 6/30/20	4,245,650	4,101	Include	15,307	41,076	23	1.060	1.093	47,563	29,364	583,265	0.14
7/1/20 - 6/30/21	4,355,634	19,136	Include	14,756	19,136	18	1.045	1.061	***21,208***	29,364	476,919	0.11
7/1/21 - 6/30/22	4,584,348	38,349	Exclude	14,224	38,349	14	1.020	1.030	***40,283***	29,364	397,298	0.09
7/1/22 - 6/30/23	5,124,373	30,929	Exclude	13,712	30,929	21	1.000	1.000	***30,929***	29,364	611,892	0.12
			Implied Trend	-3.6%	-19.4%			Last 5 Wtd Avg	29,364			
								Last 4 Wtd Avg	30,009			
								Last 3 Wtd Avg	23,960			
Total	97,559,985					303		Last 3 Avg	25,649		6,950,572	
								Selected	29,364			

Reported Exponential Regression	
Constant	9.489
X Coefficient	0.037
R Squared	0.023

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Section V, Exhibit I, Sheet 0, Column (7) / Section V, Exhibit I, Sheet 13, Column (7) x 1
(4) Years included for purposes of fit
(5) Result of Exponential fit of Column (3) * Column (8)
(6) Selected by Deloitte Consulting LLP
(7) From Section V, Exhibit I, Sheet 13, Column (7)
(8) Based on industry sources
(9) Selected by Deloitte Consulting LLP
(10) = (6) x (8) x (9)
(11) Selected by Deloitte Consulting, LLP
(12) Selected in column (11) x (7) / (8) / (9)
(13) = (12) / (3)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss Development Method

Accident Year	Age of Losses @ 06/30/2023	Retention	Payroll (00)'s	Unlimited Paid Loss @ 06/30/2023	Paid LDF	Indicated Ultimate Loss	Unlimited Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Prior to 7/1/1993	372.0	Unlimited		20,652,284	1.015	20,966,882	
7/1/93 - 6/30/94	360.0	Unlimited	1,771,840	2,029,326	1.017	2,062,932	1.16
7/1/94 - 6/30/95	348.0	Unlimited	1,883,910	521,127	1.018	530,499	0.28
7/1/95 - 6/30/96	336.0	Unlimited	2,017,510	491,723	1.020	501,319	0.25
7/1/96 - 6/30/97	324.0	Unlimited	2,318,720	422,390	1.021	431,331	0.19
7/1/97 - 6/30/98	312.0	Unlimited	2,322,370	545,727	1.023	558,254	0.24
7/1/98 - 6/30/99	300.0	Unlimited	2,320,750	631,601	1.025	647,324	0.28
7/1/99 - 6/30/00	288.0	Unlimited	2,118,190	687,583	1.027	706,362	0.33
7/1/00 - 6/30/01	276.0	Unlimited	2,150,990	737,973	1.030	759,960	0.35
7/1/01 - 6/30/02	264.0	Unlimited	2,277,970	344,140	1.033	355,368	0.16
7/1/02 - 6/30/03	252.0	Unlimited	2,420,080	1,106,166	1.036	1,146,254	0.47
7/1/03 - 6/30/04	240.0	Unlimited	2,767,580	962,971	1.040	1,001,520	0.36
7/1/04 - 6/30/05	228.0	Unlimited	2,603,780	201,102	1.044	209,928	0.08
7/1/05 - 6/30/06	216.0	Unlimited	3,177,410	778,823	1.048	816,242	0.26
7/1/06 - 6/30/07	204.0	Unlimited	3,259,220	368,698	1.053	388,210	0.12
7/1/07 - 6/30/08	192.0	Unlimited	3,541,300	1,308,936	1.059	1,385,758	0.39
7/1/08 - 6/30/09	180.0	Unlimited	3,623,090	541,635	1.065	576,851	0.16
7/1/09 - 6/30/10	168.0	Unlimited	3,832,980	555,149	1.072	594,982	0.16
7/1/10 - 6/30/11	156.0	Unlimited	3,949,240	695,093	1.079	749,769	0.19
7/1/11 - 6/30/12	144.0	Unlimited	3,819,430	1,101,780	1.086	1,196,300	0.31
7/1/12 - 6/30/13	132.0	Unlimited	3,847,630	406,699	1.093	444,659	0.12
7/1/13 - 6/30/14	120.0	Unlimited	3,645,820	657,315	1.103	725,097	0.20
7/1/14 - 6/30/15	108.0	Unlimited	3,705,430	558,986	1.115	623,143	0.17
7/1/15 - 6/30/16	96.0	Unlimited	3,826,020	784,362	1.131	887,355	0.23
7/1/16 - 6/30/17	84.0	Unlimited	3,953,240	259,030	1.152	298,306	0.08
7/1/17 - 6/30/18	72.0	Unlimited	3,987,220	348,871	1.182	412,327	0.10
7/1/18 - 6/30/19	60.0	Unlimited	4,108,260	759,960	1.243	944,727	0.23
7/1/19 - 6/30/20	48.0	Unlimited	4,245,650	68,807	1.371	94,326	0.02
7/1/20 - 6/30/21	36.0	Unlimited	4,355,634	205,283	1.678	344,443	0.08
7/1/21 - 6/30/22	24.0	Unlimited	4,584,348	230,676	2.363	545,027	0.12
7/1/22 - 6/30/23	12.0	Unlimited	5,124,373	119,020	5.415	644,493	0.13
Total			97,559,985	39,083,236		41,549,947	

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1)
(3) Provided by Entity
(4) Provided by Entity
(5) Provided by Entity
(6) From Section V, Exhibit I, Sheet 11
(7) = (5) x (6)
(8) = (7) / (4)

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development 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	348	360	372	As of 6/30/2023
Prior to 7/1/1993	38,073,742	12,322,012	13,872,370	15,159,402	16,101,687	17,126,951	17,552,084	18,030,569	18,466,220	18,678,446	18,839,632	18,999,398	19,229,249	19,342,774	19,774,400	19,900,150	20,031,390	20,166,230	20,357,648	20,511,211	20,629,947	20,652,284	20,652,284	20,652,284	20,652,284	20,652,284	20,652,284	20,652,284	20,652,284	20,652,284	20,652,284	20,652,284
7/1/93 - 6/30/94	247,518	712,112	1,128,958	1,314,694	1,519,364	1,522,698	1,541,882	1,577,894	1,592,573	1,592,751	1,592,751	1,657,303	1,676,872	1,697,432	1,715,927	1,734,892	1,756,366	1,775,388	1,795,090	1,815,015	1,835,078	1,855,382	1,876,019	1,896,627	1,917,607	1,938,969	1,960,715	1,982,863	2,005,329	2,029,326		2,029,326
7/1/94 - 6/30/95	205,179	412,527	533,287	638,297	533,940	533,940	533,940	534,111	534,111	534,111	534,111	521,127	521,127	521,127	521,127	521,127	521,127	521,127	521,127	521,127	521,127	521,127	521,127	521,127	521,127	521,127	521,127	521,127	521,127			521,127
7/1/95 - 6/30/96	155,417	431,013	763,656	455,689	456,144	456,144	456,723	456,723	491,723	491,723	491,723	491,723	491,723	491,723	491,723	491,723	491,723	491,723	491,723	491,723	491,723	491,723	491,723	491,723	491,723	491,723	491,723	491,723				491,723
7/1/96 - 6/30/97	112,433	385,118	296,302	324,676	427,879	433,561	422,390	422,390	422,390	422,390	422,390	422,390	422,390	422,390	422,390	422,390	422,390	422,390	422,390	422,390	422,390	422,390	422,390	422,390	422,390	422,390	422,390					422,390
7/1/97 - 6/30/98	242,227	207,983	311,600	498,169	544,899	545,727	545,727	545,727	545,727	545,727	545,727	545,727	545,727	545,727	545,727	545,727	545,727	545,727	545,727	545,727	545,727	545,727	545,727	545,727	545,727	545,727						545,727
7/1/98 - 6/30/99	58,149	232,256	381,869	593,545	630,354	627,837	629,207	629,408	629,546	629,546	629,546	629,546	631,001	631,001	631,601	631,601	631,601	631,601	631,601	631,601	631,601	631,601	631,601	631,601	631,601							631,601
7/1/99 - 6/30/00	144,725	396,534	520,950	569,327	602,734	623,526	655,976	685,976	685,976	685,976	685,976	685,976	687,583	687,583	687,583	687,583	687,583	687,583	687,583	687,583	687,583	687,583	687,583	687,583								687,583
7/1/00 - 6/30/01	103,272	302,247	449,100	568,277	608,054	674,741	690,186	737,973	737,973	737,973	737,973	737,973	737,973	737,973	737,973	737,973	737,973	737,973	737,973	737,973	737,973	737,973	737,973									737,973
7/1/01 - 6/30/02	111,843	178,158	259,385	315,446	339,569	339,569	339,569	339,569	341,709	341,709	341,709	341,709	341,709	341,709	341,709	341,709	341,709	341,709	341,709	341,709	341,709	344,140										344,140
7/1/02 - 6/30/03	103,346	230,892	338,148	371,035	493,982	573,386	660,661	700,816	772,654	822,359	872,847	923,548	974,853	1,031,942	1,084,018	1,105,118	1,105,988	1,105,988	1,106,166	1,106,166	1,106,166											1,106,166
7/1/03 - 6/30/04	158,939	431,873	588,674	813,313	899,409	962,971	962,971	962,971	962,971	962,971	962,971	962,971	962,971	962,971	962,971	962,971	962,971	962,971	962,971	962,971												962,971
7/1/04 - 6/30/05	66,383	103,442	178,589	178,589	178,589	178,589	178,589	192,745	201,102	201,102	201,102	201,102	201,102	201,102	201,102	201,102	201,102	201,102	201,102													201,102
7/1/05 - 6/30/06	148,922	314,710	456,237	708,823	748,823	778,823	778,823	778,823	778,823	778,823	778,823	778,823	778,823	778,823	778,823	778,823	778,823	778,823														778,823
7/1/06 - 6/30/07	129,667	292,028	353,698	368,698	368,698	368,698	368,698	368,698	368,698	368,698	368,698	368,698	368,698	368,698	368,698	368,698	368,698															368,698
7/1/07 - 6/30/08	199,585	626,548	965,562	1,253,096	1,284,003	1,380,995	1,380,995	1,303,649	1,303,649	1,303,679	1,308,857	1,308,857	1,308,857	1,308,857	1,308,936	1,308,936																1,308,936
7/1/08 - 6/30/09	126,394	222,250	303,425	479,096	479,707	488,635	490,735	490,735	500,937	512,635	541,635	541,635	541,635	541,635	541,635																	541,635
7/1/09 - 6/30/10	173,596	359,966	496,986	502,360	503,510	503,510	503,510	504,349	555,149	555,149	555,149	555,149	555,149	555,149																		555,149
7/1/10 - 6/30/11	204,108	411,900	497,595	591,138	641,462	661,262	680,957	695,093	695,093	695,093	695,093	695,093	695,093																			695,093
7/1/11 - 6/30/12	169,232	412,366	511,322	731,784	790,156	843,471	917,215	952,864	989,130	1,026,066	1,063,215	1,101,780																				1,101,780
7/1/12 - 6/30/13	159,666	277,306	315,791	405,810	406,699	406,699	406,699	406,699	406,699	406,699	406,699																					406,699
7/1/13 - 6/30/14	86,121	261,428	375,084	515,321	657,099	657,315	657,315	657,315	657,315	657,315																						657,315
7/1/14 - 6/30/15	49,642	100,069	188,369	257,327	337,433	449,331	497,969	528,469	558,986																							558,986
7/1/15 - 6/30/16	101,585	204,682	323,784	454,581	533,206	683,042	733,629	784,362																								784,362
7/1/16 - 6/30/17	54,297	113,090	156,875	158,296	164,818	207,335	259,030																									259,030
7/1/17 - 6/30/18	64,657	169,427	280,195	297,958	348,871	348,871																										348,871
7/1/18 - 6/30/19	98,685	217,164	317,448	472,010	759,960																											759,960
7/1/19 - 6/30/20	64,753	68,807	68,807	68,807																												68,807
7/1/20 - 6/30/21	81,128	138,340	205,283																													205,283
7/1/21 - 6/30/22	63,312	230,676																														230,676
7/1/22 - 6/30/23	119,020																															119,020
																																39,083,236

Accident Year	Age-to-Age Development Factors 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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993	***0.324***	***1.126***	***1.093***	***1.062***	***1.064***	***1.025***	***1.027***	***1.024***	***1.011***	***1.009***	***1.008***	***1.012***	***1.006***	***1.022***	***1.006***	***1.007***	***1.007***	***1.009***	***1.008***	***1.006***	***1.001***	***1.000***	***1.000***	***1.000***	***1.000***	***1.000***	***1.000***	***1.000***	***1.000***	***1.000***	
7/1/93 - 6/30/94	2.877	1.585	1.165	1.156	1.002	1.013	1.023	1.009	1.000	1.000	1.041	1.012	1.012	1.011	1.011	1.012	1.011	1.011	1.011	1.011	1.011	1.011	1.011	1.011	1.011	1.011	1.011	1.011	1.012		
7/1/94 - 6/30/95	2.011	1.293	1.197	0.837	1.000	1.000	1.000	1.000	1.000	1.000	0.976	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			
7/1/95 - 6/30/96	2.773	1.772	0.597	1.001	1.000	1.001	1.000	1.077	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	1.000	1.000				
7/1/96 - 6/30/97	3.425	0.769	1.096	1.318	1.013	0.974	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	1.000	1.000	1.000					
7/1/97 - 6/30/98	0.859	1.498	1.599	1.094	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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
7/1/98 - 6/30/99	3.994	1.644	1.554	1.062	0.996	1.002	1.000	1.000	1.000	1.000	1.000	1.002	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
7/1/99 - 6/30/00	2.740	1.314	1.093	1.059	1.034	1.052	1.046	1.000	1.000	1.000	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								
7/1/00 - 6/30/01	2.927	1.486	1.265	1.070	1.110	1.023	1.069	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									
7/1/01 - 6/30/02	1.593	1.456	1.216	1.076	1.000	1.000	1.000	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	1.007										
7/1/02 - 6/30/03	2.234	1.465	1.097	1.331	1.161	1.152	1.061	1.103	1.064	1.061	1.058	1.056	1.059	1.050	1.019	1.001	1.000	1.000	1.000	1.000											
7/1/03 - 6/30/04	2.717	1.363	1.382	1.106	1.071	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												
7/1/04 - 6/30/05	1.558	1.726	1.000	1.000	1.000	1.000	1.079	1.043	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000													
7/1/05 - 6/30/06	2.113	1.450	1.554	1.056	1.040	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000														
7/1/06 - 6/30/07	2.252	1.211	1.042	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															
7/1/07 - 6/30/08	3.139	1.541	1.298	1.025	1.076	1.000	0.944	1.000	1.000	1.004	1.000	1.000	1.000	1.000	1.000																
7/1/08 - 6/30/09	1.758	1.365	1.579	1.001	1.019	1.004	1.000	1.021	1.023	1.057	1.000	1.000	1.000	1.000																	
7/1/09 - 6/30/10	2.074	1.381	1.011	1.002	1.000	1.000	1.002	1.101	1.000	1.000	1.000	1.000	1.000																		
7/1/10 - 6/30/11	2.018	1.208	1.188	1.085	1.031	1.030	1.021	1.000	1.000	1.000	1.000	1.000																			
7/1/11 - 6/30/12	2.437	1.240	1.431	1.080	1.067	1.087	1.039	1.038	1.037	1.036	1.036																				
7/1/12 - 6/30/13	1.737	1.139	1.285	1.002	1.000	1.000	1.000	1.000	1.000	1.000																					
7/1/13 - 6/30/14	3.036	1.435	1.374	1.275	1.000	1.000	1.000	1.000	1.000																						
7/1/14 - 6/30/15	2.016	1.882	1.366	1.311	1.332	1.108	1.061	1.058																							
7/1/15 - 6/30/16	2.015	1.582	1.404	1.173	1.281	1.074	1.069																								
7/1/16 - 6/30/17	2.083	1.387	1.009	1.041	1.258	1.249																									
7/1/17 - 6/30/18	2.620	1.654	1.063	1.171	1.000																										
7/1/18 - 6/30/19	2.201	1.462	1.487	1.610																											
7/1/19 - 6/30/20	1.063	1.000	1.000																												
7/1/20 - 6/30/21	1.705	1.484																													
7/1/21 - 6/30/22	3.643																														

(Note: numbers in bold and italics and with borders are excluded from the calculated 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	336 - 348	348 - 360	360 - 372	372 - ULT
Last 3 Wtd Avg	2.093	1.394	1.259	1.372	1.184	1.113	1.043	1.019	1.018	1.017	1.017	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.007				
Last 5 Wtd Avg	2.213	1.455	1.265	1.307	1.149	1.063	1.036	1.021	1.011	1.021	1.009	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.005						
Last 9 Wtd Avg	2.264	1.439	1.325	1.194	1.086	1.050	1.009	1.022	1.008	1.012	1.006	1.008	1.009	1.008	1.003	1.000	1.000	1.000	1.000	1.000	1.004										
Last 12 Wtd Avg	2.176	1.367	1.286	1.129	1.074	1.033	1.009	1.017	1.012	1.015	1.011	1.007	1.007	1.006	1.003	1.000	1.000	1.002													
All Per Wtd Avg	2.292	1.408	1.224	1.103	1.052	1.026	1.015	1.018	1.007	1.009	1.011	1.006	1.007	1.006	1.004	1.002	1.002	1.002	1.002	1.003	1.004	1.004	1.004	1.005	1.005	1.006	1.007	1.009	1.012		
Industry																															
Age-to-Age	2.944	1.572	1.221	1.082	1.038	1.014	1.011	1.008	1.006	1.005	1.005	1.002	1.003	1.002	1.003	1.002	1.002	1.001	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	
Age-to-Ult	7.016	2.383	1.516	1.242	1.148	1.106	1.091	1.079	1.070	1.064	1.059	1.054	1.052	1.049	1.047	1.044	1.042	1.040	1.039	1.037	1.036	1.034	1.032	1.031	1.029	1.027	1.025	1.023	1.022	1.020	1.018
Prior Selected																															
Age-to-Age	2.257	1.396	1.224	1.088	1.054	1.016	1.014	1.012	1.009	1.008	1.007	1.007	1.006	1.006	1.006	1.005	1.005	1.004	1.004	1.004	1.003	1.003	1.003	1.002	1.002	1.001	1.001	1.001	1.001	1.001	
Age-to-Ult	5.110	2.264	1.621	1.325	1.218	1.155	1.137	1.121	1.108	1.099	1.090	1.082	1.075	1.069	1.062	1.056	1.050	1.045	1.041	1.037	1.033	1.030	1.027	1.025	1.022	1.020	1.019	1.018	1.017	1.016	1.015
Selected																															
Age-to-Age	2.292	1.408	1.224	1.103	1.052	1.026	1.018	1.015	1.011	1.009	1.007	1.007	1.006	1.006	1.006	1.005	1.005	1.004	1.004	1.004	1.004	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.001	1.001	
Age-to-Ult	5.415	2.363	1.678	1.371	1.243	1.182	1.152	1.131	1.115	1.103	1.093	1.086	1.079	1.072	1.065	1.059	1.053	1.048	1.044	1.040	1.036	1.033	1.030	1.027	1.025	1.023	1.021	1.020	1.018	1.017	1.015

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Indemnity (Including Lump Sum)

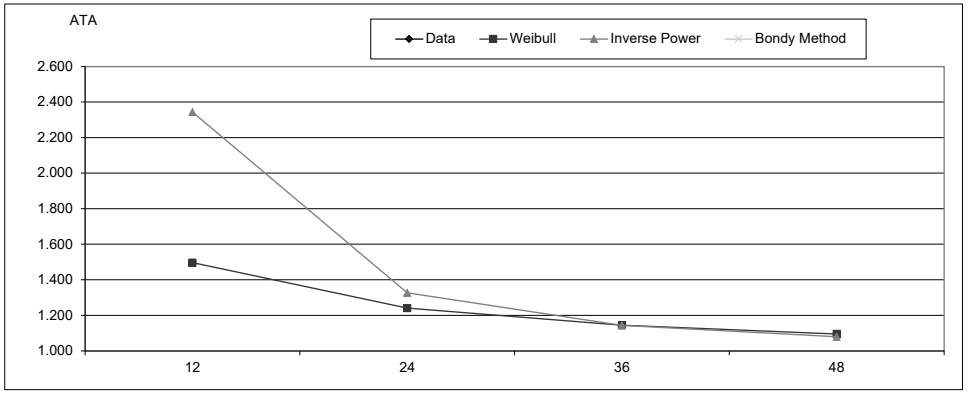
Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

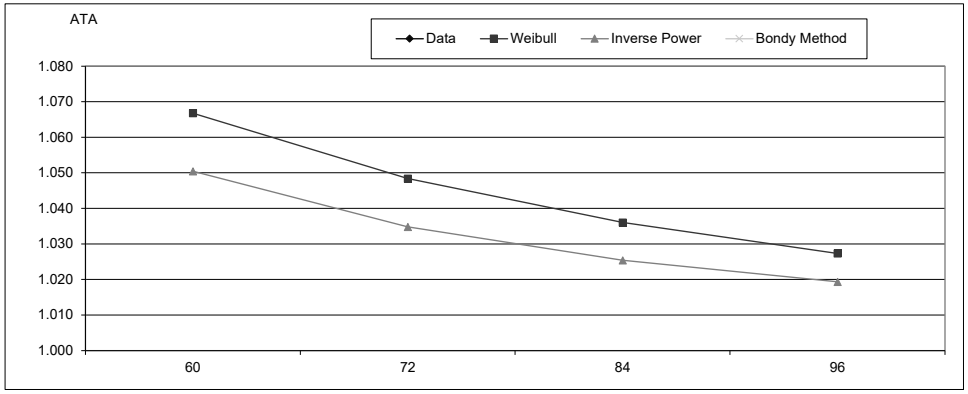
Curve Fitting Methods
Paid Loss

Tail at Period:	**31**	(To display in table)
Cut-off point:(<=Tail & <51)	**50**	(to run-out pattern)

Summary of Curve Fitting Methods

Method	Tail	R^2
Weibull	**1.003**	**0.908**
Inverse Power	**1.015**	**0.972**
Bondy Method		**N/A**





				Weibull		Inverse Power		Bondy Method			
									Sel. Decay Ratio=		
PERIOD	AGE	ATA	Use	**ATA***	**ATU***	**ATA***	**ATU***	Ln(ATA)	Decay	**ATA***	**ATU***
1	12	0.000	Exclude	**1.497**	3.095	**2.344**	4.904				
2	24	1.408	Include	**1.241**	2.068	**1.327**	2.092				
3	36	1.224	Include	**1.145**	1.667	**1.143**	1.577				
4	48	1.103	Include	**1.096**	1.456	**1.080**	1.379				
5	60	1.052	Include	**1.067**	1.329	**1.050**	1.278				
6	72	1.026	Include	**1.048**	1.246	**1.035**	1.216				
7	84	1.018	Include	**1.036**	1.188	**1.025**	1.175				
8	96	1.015	Include	**1.027**	1.147	**1.019**	1.146				
9	108	1.011	Include	**1.021**	1.117	**1.015**	1.125				
10	120	1.009	Include	**1.017**	1.093	**1.012**	1.108				
11	132	1.007	Include	**1.013**	1.076	**1.010**	1.094				
12	144	1.007	Include	**1.010**	1.062	**1.008**	1.083				
13	156	1.006	Include	**1.008**	1.051	**1.007**	1.074				
14	168	1.006	Include	**1.007**	1.042	**1.006**	1.067				
15	180	1.006	Include	**1.006**	1.035	**1.005**	1.060				
16	192	1.005	Include	**1.005**	1.029	**1.005**	1.054				
17	204	1.005	Include	**1.004**	1.025	**1.004**	1.049				
18	216	1.004	Include	**1.003**	1.021	**1.004**	1.045				
19	228	1.004	Include	**1.003**	1.018	**1.003**	1.041				
20	240	1.004	Include	**1.002**	1.015	**1.003**	1.038				
21	252	1.004	Include	**1.002**	1.013	**1.003**	1.035				
22	264	1.003	Include	**1.002**	1.011	**1.002**	1.032				
23	276	1.002	Include	**1.001**	1.009	**1.002**	1.029				
24	288	1.002	Include	**1.001**	1.008	**1.002**	1.027				
25	300	0.000	Exclude	**1.001**	1.007	**1.002**	1.025				
26	312	0.000	Exclude	**1.001**	1.006	**1.002**	1.023				
27	324	0.000	Exclude	**1.001**	1.005	**1.002**	1.021				
28	336	0.000	Exclude	**1.001**	1.004	**1.002**	1.020				
29	348	0.000	Exclude	**1.001**	1.004	**1.001**	1.018				
30	360	0.000	Exclude	**1.000**	1.003	**1.001**	1.017				
31	372	0.000	Exclude	**1.000**	1.003	**1.001**	1.015				
32	384	0.000	Exclude	**1.000**	1.002	**1.001**	1.014				
33	396	0.000	Exclude	**1.000**	1.002	**1.001**	1.013				
34	408	0.000	Exclude	**1.000**	1.002	**1.001**	1.012				
35	420	0.000	Exclude	**1.000**	1.002	**1.001**	1.011				
36	432	0.000	Exclude	**1.000**	1.001	**1.001**	1.010				
37	444	0.000	Exclude	**1.000**	1.001	**1.001**	1.009				
38	456	0.000	Exclude	**1.000**	1.001	**1.001**	1.008				
39	468	0.000	Exclude	**1.000**	1.001	**1.001**	1.007				
40	480	0.000	Exclude	**1.000**	1.001	**1.001**	1.006				
41	492	0.000	Exclude	**1.000**	1.001	**1.001**	1.006				
42	504	0.000	Exclude	**1.000**	1.000	**1.001**	1.005				
43	516	0.000	Exclude	**1.000**	1.000	**1.001**	1.004				
44	528	0.000	Exclude	**1.000**	1.000	**1.001**	1.004				
45	540	0.000	Exclude	**1.000**	1.000	**1.001**	1.003				
46	552	0.000	Exclude	**1.000**	1.000	**1.001**	1.003				
47	564	0.000	Exclude	**1.000**	1.000	**1.001**	1.002				
48	576	0.000	Exclude	**1.000**	1.000	**1.001**	1.001				
49	588	0.000	Exclude	**1.000**	1.000	**1.000**	1.001				
50	600	0.000	Exclude	**1.000**	1.000	**1.000**	1.000				

Unpaid Claim Analysis as of 06/30/2023

Ultimate Claim Count Development

Accident Year	Age of Counts @ 06/30/2023	Payroll (00)'s	Reported Claim Counts @ 06/30/2023	Reported Count Dev Factor	Indicated Ultimate Claim Counts	Selected Ultimate Claim Counts	Selected Ultimate Frequency	Selected Ultimate Frequency (Inflation-Adjusted)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	372.0		14	1.000	14			
7/1/93 - 6/30/94	360.0	1,771,840	2	1.000	2		0.00%	0.00%
7/1/94 - 6/30/95	348.0	1,883,910	3	1.000	3		0.00%	0.00%
7/1/95 - 6/30/96	336.0	2,017,510	1	1.000	1		0.00%	0.00%
7/1/96 - 6/30/97	324.0	2,318,720	2	1.000	2		0.00%	0.00%
7/1/97 - 6/30/98	312.0	2,322,370	2	1.000	2		0.00%	0.00%
7/1/98 - 6/30/99	300.0	2,320,750	2	1.000	2		0.00%	0.00%
7/1/99 - 6/30/00	288.0	2,118,190	1	1.000	1		0.00%	0.00%
7/1/00 - 6/30/01	276.0	2,150,990	3	1.000	3		0.00%	0.00%
7/1/01 - 6/30/02	264.0	2,277,970	2	1.000	2		0.00%	0.00%
7/1/02 - 6/30/03	252.0	2,420,080	3	1.000	3		0.00%	0.00%
7/1/03 - 6/30/04	240.0	2,767,580	2	1.000	2		0.00%	0.00%
7/1/04 - 6/30/05	228.0	2,603,780	3	1.000	3		0.00%	0.00%
7/1/05 - 6/30/06	216.0	3,177,410	4	1.000	4		0.00%	0.00%
7/1/06 - 6/30/07	204.0	3,259,220	1	1.000	1		0.00%	0.00%
7/1/07 - 6/30/08	192.0	3,541,300	5	1.000	5		0.00%	0.00%
7/1/08 - 6/30/09	180.0	3,623,090	3	1.000	3		0.00%	0.00%
7/1/09 - 6/30/10	168.0	3,832,980	6	1.000	6		0.00%	0.00%
7/1/10 - 6/30/11	156.0	3,949,240	11	1.000	11		0.00%	0.00%
7/1/11 - 6/30/12	144.0	3,819,430	42	1.000	42		0.00%	0.00%
7/1/12 - 6/30/13	132.0	3,847,630	56	1.000	56	56	14.55%	10.83%
7/1/13 - 6/30/14	120.0	3,645,820	35	1.000	35	35	9.60%	7.36%
7/1/14 - 6/30/15	108.0	3,705,430	24	1.000	24	24	6.48%	5.11%
7/1/15 - 6/30/16	96.0	3,826,020	31	1.000	31	31	8.10%	6.59%
7/1/16 - 6/30/17	84.0	3,953,240	22	1.000	22	22	5.57%	4.66%
7/1/17 - 6/30/18	72.0	3,987,220	28	1.000	28	28	7.02%	6.06%
7/1/18 - 6/30/19	60.0	4,108,260	31	1.000	31	31	7.55%	6.70%
7/1/19 - 6/30/20	48.0	4,245,650	23	1.000	23	23	5.42%	4.96%
7/1/20 - 6/30/21	36.0	4,355,634	18	1.000	18	18	4.13%	3.90%
7/1/21 - 6/30/22	24.0	4,584,348	14	1.015	14	14	3.10%	3.01%
7/1/22 - 6/30/23	12.0	5,124,373	17	1.143	19	21	4.07%	4.07%
Total		97,559,985	411		414	303		

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Age of (1)
(3)	Provided by Entity
(4)	Provided by Entity
(5)	From Section V, Exhibit I, Sheet 14
(6)	= (4) x (5)
(7)	Selected by Deloitte Consulting LLP
(8)	= (7) / (3)
(9)	= (7) / [(3) x Section V, Exhibit I, Sheet 8, Column (3)]

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Reported Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																															14	14
7/1/93 - 6/30/94																														2		2
7/1/94 - 6/30/95																													3			3
7/1/95 - 6/30/96																												1				1
7/1/96 - 6/30/97																											2					2
7/1/97 - 6/30/98																										2						2
7/1/98 - 6/30/99																									2							2
7/1/99 - 6/30/00																								1								1
7/1/00 - 6/30/01																							3									3
7/1/01 - 6/30/02																						2										2
7/1/02 - 6/30/03																					3											3
7/1/03 - 6/30/04																				2												2
7/1/04 - 6/30/05																			3													3
7/1/05 - 6/30/06																		4														4
7/1/06 - 6/30/07																	1															1
7/1/07 - 6/30/08																5																5
7/1/08 - 6/30/09															3																	3
7/1/09 - 6/30/10														6																		6
7/1/10 - 6/30/11													11																			11
7/1/11 - 6/30/12												42																				42
7/1/12 - 6/30/13	51	55	56	56	56	56	56	56	56	56	56																					56
7/1/13 - 6/30/14	28	35	35	35	35	35	35	35	35	35																						35
7/1/14 - 6/30/15	23	23	24	24	24	24	24	24	24																							24
7/1/15 - 6/30/16	27	31	31	31	31	31	31	31																								31
7/1/16 - 6/30/17	21	22	22	22	22	22	22																									22
7/1/17 - 6/30/18	23	28	28	28	28	28																										28
7/1/18 - 6/30/19	27	30	31	31	31																											31
7/1/19 - 6/30/20	23	23	23	23																												23
7/1/20 - 6/30/21	12	17	18																													18
7/1/21 - 6/30/22	12	14																														14
7/1/22 - 6/30/23	17																															17
																																411

Accident Year	Age-to-Age Development Factors																														
	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993																															
7/1/93 - 6/30/94																															
7/1/94 - 6/30/95																															
7/1/95 - 6/30/96																															
7/1/96 - 6/30/97																															
7/1/97 - 6/30/98																															
7/1/98 - 6/30/99																															
7/1/99 - 6/30/00																															
7/1/00 - 6/30/01																															
7/1/01 - 6/30/02																															
7/1/02 - 6/30/03																															
7/1/03 - 6/30/04																															
7/1/04 - 6/30/05																															
7/1/05 - 6/30/06																															
7/1/06 - 6/30/07																															
7/1/07 - 6/30/08																															
7/1/08 - 6/30/09																															
7/1/09 - 6/30/10																															
7/1/10 - 6/30/11																															
7/1/11 - 6/30/12																															
7/1/12 - 6/30/13	1.078	1.018	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000																					
7/1/13 - 6/30/14	1.250	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000																						
7/1/14 - 6/30/15	1.000	1.043	1.000	1.000	1.000	1.000	1.000	1.000																							
7/1/15 - 6/30/16	1.148	1.000	1.000	1.000	1.000	1.000	1.000																								
7/1/16 - 6/30/17	1.048	1.000	1.000	1.000	1.000	1.000																									
7/1/17 - 6/30/18	1.217	1.000	1.000	1.000	1.000																										
7/1/18 - 6/30/19	1.111	1.033	1.000	1.000																											
7/1/19 - 6/30/20	1.000	1.000	1.000																												
7/1/20 - 6/30/21	1.417	1.059																													
7/1/21 - 6/30/22	1.167																														
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																															
Last 3 Wtd Avg	1.149	1.029	1.000	1.000	1.000	1.000	1.000	1.000																							
Last 4 Wtd Avg	1.135	1.020	1.000	1.000	1.000	1.000	1.000																								
Last 5 Wtd Avg	1.155	1.017	1.000	1.000	1.000	1.000																									
All Per Wtd Avg	1.126	1.015	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000																					
Average ex Hi/Lo	1.127	1.014	1.000	1.000	1.000	1.000	1.000	1.000																							
Prior Selected																															
Age-to-Age	1.123	1.012	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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Age-to-Ult	1.137	1.012	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	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																															
Age-to-Age	1.126	1.015	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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Age-to-Ult	1.143	1.015	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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Reported Counts to Payroll (00)'s

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01		1,771,840
7/1/94 - 6/30/95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02			1,883,910
7/1/95 - 6/30/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				2,017,510
7/1/96 - 6/30/97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01					2,318,720
7/1/97 - 6/30/98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01						2,322,370
7/1/98 - 6/30/99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01							2,320,750
7/1/99 - 6/30/00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00								2,118,190
7/1/00 - 6/30/01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01									2,150,990
7/1/01 - 6/30/02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01										2,277,970
7/1/02 - 6/30/03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01											2,420,080
7/1/03 - 6/30/04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01												2,767,580
7/1/04 - 6/30/05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01													2,603,780
7/1/05 - 6/30/06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01														3,177,410
7/1/06 - 6/30/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00															3,259,220
7/1/07 - 6/30/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01																3,541,300
7/1/08 - 6/30/09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01																	3,623,090
7/1/09 - 6/30/10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02																		3,832,980
7/1/10 - 6/30/11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03																			3,949,240
7/1/11 - 6/30/12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11																				3,819,430
7/1/12 - 6/30/13	0.13	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15																					3,847,630
7/1/13 - 6/30/14	0.08	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10																						3,645,820
7/1/14 - 6/30/15	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06																							3,705,430
7/1/15 - 6/30/16	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08																								3,826,020
7/1/16 - 6/30/17	0.05	0.06	0.06	0.06	0.06	0.06	0.06																									3,953,240
7/1/17 - 6/30/18	0.06	0.07	0.07	0.07	0.07	0.07																										3,987,220
7/1/18 - 6/30/19	0.07	0.07	0.08	0.08	0.08																											4,108,260
7/1/19 - 6/30/20	0.05	0.05	0.05	0.05																												4,245,650
7/1/20 - 6/30/21	0.03	0.04	0.04																													4,355,634
7/1/21 - 6/30/22	0.03	0.03																														4,584,348
7/1/22 - 6/30/23	0.03																															5,124,373

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss Rates

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.14	0.40	0.64	0.74	0.86	0.86	0.87	0.89	0.90	0.90	0.90	0.94	0.95	0.96	0.97	0.98	0.99	1.00	1.01	1.02	1.04	1.05	1.06	1.07	1.08	1.09	1.11	1.12	1.13	1.15		1,771,840
7/1/94 - 6/30/95	0.11	0.22	0.28	0.34	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28			1,883,910
7/1/95 - 6/30/96	0.08	0.21	0.38	0.23	0.23	0.23	0.23	0.23	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24				2,017,510
7/1/96 - 6/30/97	0.05	0.17	0.13	0.14	0.18	0.19	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18					2,318,720
7/1/97 - 6/30/98	0.10	0.09	0.13	0.21	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23						2,322,370
7/1/98 - 6/30/99	0.03	0.10	0.16	0.26	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27							2,320,750
7/1/99 - 6/30/00	0.07	0.19	0.25	0.27	0.28	0.29	0.31	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32								2,118,190
7/1/00 - 6/30/01	0.05	0.14	0.21	0.26	0.28	0.31	0.32	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34									2,150,990
7/1/01 - 6/30/02	0.05	0.08	0.11	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15										2,277,970
7/1/02 - 6/30/03	0.04	0.10	0.14	0.15	0.20	0.24	0.27	0.29	0.32	0.34	0.36	0.38	0.40	0.43	0.45	0.46	0.46	0.46	0.46	0.46	0.46											2,420,080
7/1/03 - 6/30/04	0.06	0.16	0.21	0.29	0.32	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35												2,767,580
7/1/04 - 6/30/05	0.03	0.04	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08													2,603,780
7/1/05 - 6/30/06	0.05	0.10	0.14	0.22	0.24	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25														3,177,410
7/1/06 - 6/30/07	0.04	0.09	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11															3,259,220
7/1/07 - 6/30/08	0.06	0.18	0.27	0.35	0.36	0.39	0.39	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37																3,541,300
7/1/08 - 6/30/09	0.03	0.06	0.08	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.15																	3,623,090
7/1/09 - 6/30/10	0.05	0.09	0.13	0.13	0.13	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.14	0.14																		3,832,980
7/1/10 - 6/30/11	0.05	0.10	0.13	0.15	0.16	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18																			3,949,240
7/1/11 - 6/30/12	0.04	0.11	0.13	0.19	0.21	0.22	0.24	0.25	0.26	0.27	0.28	0.29																				3,819,430
7/1/12 - 6/30/13	0.04	0.07	0.08	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11																					3,847,630
7/1/13 - 6/30/14	0.02	0.07	0.10	0.14	0.18	0.18	0.18	0.18	0.18	0.18																						3,645,820
7/1/14 - 6/30/15	0.01	0.03	0.05	0.07	0.09	0.12	0.13	0.14	0.15																							3,705,430
7/1/15 - 6/30/16	0.03	0.05	0.08	0.12	0.14	0.18	0.19	0.21																								3,826,020
7/1/16 - 6/30/17	0.01	0.03	0.04	0.04	0.04	0.05	0.07																									3,953,240
7/1/17 - 6/30/18	0.02	0.04	0.07	0.07	0.09	0.09																										3,987,220
7/1/18 - 6/30/19	0.02	0.05	0.08	0.11	0.18																											4,108,260
7/1/19 - 6/30/20	0.02	0.02	0.02	0.02																												4,245,650
7/1/20 - 6/30/21	0.02	0.03	0.05																													4,355,634
7/1/21 - 6/30/22	0.01	0.05																														4,584,348
7/1/22 - 6/30/23	0.02																															5,124,373

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Indemnity (Including Lump Sum)

Section V
Exhibit I
Sheet 17

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Settlement Rates (Closed Claim Count / Ultimate Claim Count)

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
7/1/98 - 6/30/99																																
7/1/99 - 6/30/00																																
7/1/00 - 6/30/01																																
7/1/01 - 6/30/02																																
7/1/02 - 6/30/03																																
7/1/03 - 6/30/04																																
7/1/04 - 6/30/05																																
7/1/05 - 6/30/06																																
7/1/06 - 6/30/07																																
7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	0.00	0.46	0.80	0.89	0.95	0.98	0.98	0.98	1.00	1.00	1.00																					1.00
7/1/13 - 6/30/14	0.00	0.37	0.83	0.89	0.89	0.97	0.94	0.97	0.97	0.97																						0.97
7/1/14 - 6/30/15	0.00	0.50	0.83	0.92	0.92	0.88	0.96	0.92	0.96																							0.96
7/1/15 - 6/30/16	0.00	0.35	0.77	0.90	0.94	0.94	0.97	0.97																								0.97
7/1/16 - 6/30/17	0.00	0.36	0.77	0.91	0.95	0.95	0.95																									0.95
7/1/17 - 6/30/18	0.00	0.54	0.89	0.89	0.96	0.93																										0.93
7/1/18 - 6/30/19	0.00	0.61	0.90	0.90	0.90																											0.90
7/1/19 - 6/30/20	0.00	0.74	0.91	0.96																												0.96
7/1/20 - 6/30/21	0.00	0.28	0.83																													0.83
7/1/21 - 6/30/22	0.00	0.28																														0.28
7/1/22 - 6/30/23	0.00																															0.00

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Open Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993	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	0	0	0	0	0
7/1/93 - 6/30/94	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	0	0	1		1
7/1/94 - 6/30/95	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	0	0			0
7/1/95 - 6/30/96	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	0				0
7/1/96 - 6/30/97	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	1					1
7/1/97 - 6/30/98	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
7/1/98 - 6/30/99	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
7/1/99 - 6/30/00	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
7/1/00 - 6/30/01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									0
7/1/01 - 6/30/02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1										1
7/1/02 - 6/30/03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1											1
7/1/03 - 6/30/04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												0
7/1/04 - 6/30/05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0													0
7/1/05 - 6/30/06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														0
7/1/06 - 6/30/07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															0
7/1/07 - 6/30/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																0
7/1/08 - 6/30/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1																	1
7/1/09 - 6/30/10	0	0	0	0	0	0	0	0	0	0	0	0	0	1																		1
7/1/10 - 6/30/11	0	0	0	0	0	0	0	0	0	0	0	0	0																			0
7/1/11 - 6/30/12	0	0	0	0	0	0	0	0	0	0	0	1																				1
7/1/12 - 6/30/13	51	29	11	6	3	1	1	1	0	0	0																					0
7/1/13 - 6/30/14	28	22	6	4	4	1	2	1	1	1																						1
7/1/14 - 6/30/15	23	11	4	2	2	3	1	2	1																							1
7/1/15 - 6/30/16	27	20	7	3	2	2	1	1																								1
7/1/16 - 6/30/17	21	14	5	2	1	1	1																									1
7/1/17 - 6/30/18	23	13	3	3	1	2																										2
7/1/18 - 6/30/19	27	11	3	3	3																											3
7/1/19 - 6/30/20	23	6	2	1																												1
7/1/20 - 6/30/21	12	12	3																													3
7/1/21 - 6/30/22	12	10																														10
7/1/22 - 6/30/23	17																															17
																																47

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Medical

Section V
Exhibit II
Sheet 1

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Unpaid Loss & ALAE Estimates

Accident Year	Payroll (00)'s	Retention	Unlimited Paid Loss & ALAE @ 06/30/2023	Unlimited Reported Loss & ALAE @ 06/30/2023	Ultimate Loss & ALAE		Indicated Total Unpaid Loss & ALAE Estimates		Case Reserves	Indicated IBNR Estimate	
					Low	High	Low	High		Low	High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993		Unlimited	3,604,381	3,604,381	3,604,381	3,604,381	0	0	0	0	0
7/1/93 - 6/30/94	1,771,840	Unlimited	713,886	713,886	721,100	721,800	7,214	7,914	0	7,214	7,914
7/1/94 - 6/30/95	1,883,910	Unlimited	420,290	420,290	424,900	425,400	4,610	5,110	0	4,610	5,110
7/1/95 - 6/30/96	2,017,510	Unlimited	382,952	382,952	387,500	388,000	4,548	5,048	0	4,548	5,048
7/1/96 - 6/30/97	2,318,720	Unlimited	199,422	199,422	201,800	202,000	2,378	2,578	0	2,378	2,578
7/1/97 - 6/30/98	2,322,370	Unlimited	498,102	498,102	504,400	505,100	6,298	6,998	0	6,298	6,998
7/1/98 - 6/30/99	2,320,750	Unlimited	309,221	309,221	313,400	313,900	4,179	4,679	0	4,179	4,679
7/1/99 - 6/30/00	2,118,190	Unlimited	185,166	185,166	188,000	188,300	2,834	3,134	0	2,834	3,134
7/1/00 - 6/30/01	2,150,990	Unlimited	205,414	205,414	208,900	209,300	3,486	3,886	0	3,486	3,886
7/1/01 - 6/30/02	2,277,970	Unlimited	245,879	245,879	250,500	251,000	4,621	5,121	0	4,621	5,121
7/1/02 - 6/30/03	2,420,080	Unlimited	235,811	235,811	240,800	241,400	4,989	5,589	0	4,989	5,589
7/1/03 - 6/30/04	2,767,580	Unlimited	296,472	296,472	303,500	304,300	7,028	7,828	0	7,028	7,828
7/1/04 - 6/30/05	2,603,780	Unlimited	167,120	167,120	171,600	172,000	4,480	4,880	0	4,480	4,880
7/1/05 - 6/30/06	3,177,410	Unlimited	388,983	388,983	400,500	401,700	11,517	12,717	0	11,517	12,717
7/1/06 - 6/30/07	3,259,220	Unlimited	236,426	236,426	244,300	245,100	7,874	8,674	0	7,874	8,674
7/1/07 - 6/30/08	3,541,300	Unlimited	511,475	511,475	530,300	532,200	18,825	20,725	0	18,825	20,725
7/1/08 - 6/30/09	3,623,090	Unlimited	433,846	433,846	451,500	453,300	17,654	19,454	0	17,654	19,454
7/1/09 - 6/30/10	3,832,980	Unlimited	304,761	304,761	318,500	319,900	13,739	15,139	0	13,739	15,139
7/1/10 - 6/30/11	3,949,240	Unlimited	330,378	330,378	346,900	348,700	16,522	18,322	0	16,522	18,322
7/1/11 - 6/30/12	3,819,430	Unlimited	305,549	305,549	322,600	324,300	17,051	18,751	0	17,051	18,751
7/1/12 - 6/30/13	3,847,630	Unlimited	274,844	274,844	291,700	293,500	16,856	18,656	0	16,856	18,656
7/1/13 - 6/30/14	3,645,820	Unlimited	445,636	445,636	475,900	479,100	30,264	33,464	0	30,264	33,464
7/1/14 - 6/30/15	3,705,430	Unlimited	146,853	146,853	158,200	159,400	11,347	12,547	0	11,347	12,547
7/1/15 - 6/30/16	3,826,020	Unlimited	277,556	277,556	303,100	307,000	25,544	29,444	0	25,544	29,444
7/1/16 - 6/30/17	3,953,240	Unlimited	211,066	211,066	234,200	237,600	23,134	26,534	0	23,134	26,534
7/1/17 - 6/30/18	3,987,220	Unlimited	166,774	166,774	188,100	191,300	21,326	24,526	0	21,326	24,526
7/1/18 - 6/30/19	4,108,260	Unlimited	167,529	167,529	192,400	196,100	24,871	28,571	0	24,871	28,571
7/1/19 - 6/30/20	4,245,650	Unlimited	113,422	113,422	169,900	178,400	56,478	64,978	0	56,478	64,978
7/1/20 - 6/30/21	4,355,634	Unlimited	159,825	159,825	182,000	187,000	22,175	27,175	0	22,175	27,175
7/1/21 - 6/30/22	4,584,348	Unlimited	101,327	101,327	148,000	158,000	46,673	56,673	0	46,673	56,673
7/1/22 - 6/30/23	5,124,373	Unlimited	75,578	75,578	210,000	240,000	134,422	164,422	0	134,422	164,422
Total	97,559,985		12,115,947	12,115,947	12,688,881	12,779,481	572,934	663,534	0	572,934	663,534

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	Provided by Entity
(6)	From Section V, Exhibit II, Sheet 6, Column (11)
(7)	From Section V, Exhibit II, Sheet 6, Column (12)
(8)	= (6) - (4)
(9)	= (7) - (4)
(10)	= (5) - (4)
(11)	= (8) - (10)
(12)	= (9) - (10)

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Short-Term Portion

Accident Year	Age of Losses @ 06/30/2023	Selected Paid Test LDF @ 06/30/2023	Implied Paid LDF	Paid LDF	Cumulative Percent Paid	Incremental Percent Paid	Average Total Unpaid ss & ALAE Estimate	Undiscounted Cash Flow of Payments 2024
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
						0.10%		
Prior to 7/1/1993	372.0	1.010	1.000	1.010	99.03%	0.08%	0	0
7/1/93 - 6/30/94	360.0	1.011	1.011	1.011	98.95%	0.09%	7,564	583
7/1/94 - 6/30/95	348.0	1.012	1.012	1.012	98.86%	0.09%	4,860	369
7/1/95 - 6/30/96	336.0	1.012	1.013	1.012	98.77%	0.00%	4,798	360
7/1/96 - 6/30/97	324.0	1.012	1.012	1.012	98.77%	0.08%	2,478	10
7/1/97 - 6/30/98	312.0	1.013	1.013	1.013	98.68%	0.10%	6,648	426
7/1/98 - 6/30/99	300.0	1.014	1.014	1.014	98.58%	0.17%	4,429	308
7/1/99 - 6/30/00	288.0	1.016	1.016	1.016	98.41%	0.17%	2,984	320
7/1/00 - 6/30/01	276.0	1.018	1.018	1.018	98.24%	0.18%	3,686	363
7/1/01 - 6/30/02	264.0	1.020	1.020	1.020	98.06%	0.25%	4,871	454
7/1/02 - 6/30/03	252.0	1.022	1.022	1.022	97.81%	0.26%	5,289	606
7/1/03 - 6/30/04	240.0	1.025	1.025	1.025	97.55%	0.27%	7,428	774
7/1/04 - 6/30/05	228.0	1.028	1.028	1.028	97.28%	0.31%	4,680	461
7/1/05 - 6/30/06	216.0	1.031	1.031	1.031	96.97%	0.34%	12,117	1,246
7/1/06 - 6/30/07	204.0	1.035	1.035	1.035	96.63%	0.35%	8,274	846
7/1/07 - 6/30/08	192.0	1.039	1.039	1.039	96.28%	0.38%	19,775	1,852
7/1/08 - 6/30/09	180.0	1.043	1.043	1.043	95.90%	0.43%	18,554	1,710
7/1/09 - 6/30/10	168.0	1.047	1.047	1.047	95.47%	0.48%	14,439	1,371
7/1/10 - 6/30/11	156.0	1.053	1.053	1.053	94.99%	0.52%	17,422	1,673
7/1/11 - 6/30/12	144.0	1.059	1.059	1.059	94.47%	0.53%	17,901	1,690
7/1/12 - 6/30/13	132.0	1.065	1.065	1.065	93.94%	0.61%	17,756	1,551
7/1/13 - 6/30/14	120.0	1.071	1.072	1.071	93.33%	0.87%	31,864	2,893
7/1/14 - 6/30/15	108.0	1.082	1.081	1.082	92.46%	1.47%	11,947	1,377
7/1/15 - 6/30/16	96.0	1.099	1.099	1.099	90.99%	1.52%	27,494	4,491
7/1/16 - 6/30/17	84.0	1.118	1.118	1.118	89.47%	1.54%	24,834	3,584
7/1/17 - 6/30/18	72.0	1.137	1.137	1.137	87.93%	1.70%	22,926	2,928
7/1/18 - 6/30/19	60.0	1.160	1.160	1.160	86.23%	2.03%	26,721	3,292
7/1/19 - 6/30/20	48.0	1.188	1.535	1.188	84.20%	4.34%	60,728	7,820
7/1/20 - 6/30/21	36.0	1.252	1.154	1.252	79.86%	8.89%	24,675	5,318
7/1/21 - 6/30/22	24.0	1.409	1.510	1.409	70.97%	32.54%	51,673	15,817
7/1/22 - 6/30/23	12.0	2.602	2.977	2.602	38.44%	38.44%	149,422	78,971
Total							618,234	143,467

	Undiscounted	Discounted			
Short-Term Portion	23%	28%	(10)	Interest Rate	4%

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1) @ 06/30/2023
(3) From Section V, Exhibit II, Sheet 10, Column (6)
(4) Average Ultimate Loss Divided by Paid Loss From Section V, Exhibit II, Sheet 6
(5) Selected
(6) = 1 / (5)
(7) = (6) from Current Age - (6) from Subsequent Age
(8) From Section V, Exhibit II, Sheet 3
(9) - (9) Based on (5)

Commonwealth of Massachusetts Section V
UMass Medical Center Exhibit II
UMassMedical - Medical Sheet 3

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Discounted at (4%) Unpaid Loss & ALAE Estimate

Accident Year	Indicated Total Unpaid Loss & ALAE Estimate Low	Indicated Total Unpaid Loss & ALAE Estimate High	Discount Factor	Discounted Total Unpaid Loss & ALAE Estimate Low	Discounted Total Unpaid Loss & ALAE Estimate High
(1)	(2)	(3)	(4)	(5)	(6)
Prior to 7/1/1993	0	0	1.000	0	0
7/1/93 - 6/30/94	7,214	7,914	0.981	7,074	7,760
7/1/94 - 6/30/95	4,610	5,110	0.946	4,360	4,833
7/1/95 - 6/30/96	4,548	5,048	0.915	4,160	4,617
7/1/96 - 6/30/97	2,378	2,578	0.880	2,092	2,268
7/1/97 - 6/30/98	6,298	6,998	0.855	5,383	5,981
7/1/98 - 6/30/99	4,179	4,679	0.833	3,480	3,897
7/1/99 - 6/30/00	2,834	3,134	0.820	2,324	2,570
7/1/00 - 6/30/01	3,486	3,886	0.808	2,815	3,138
7/1/01 - 6/30/02	4,621	5,121	0.795	3,676	4,073
7/1/02 - 6/30/03	4,989	5,589	0.790	3,939	4,413
7/1/03 - 6/30/04	7,028	7,828	0.782	5,498	6,124
7/1/04 - 6/30/05	4,480	4,880	0.775	3,470	3,780
7/1/05 - 6/30/06	11,517	12,717	0.769	8,858	9,781
7/1/06 - 6/30/07	7,874	8,674	0.764	6,017	6,629
7/1/07 - 6/30/08	18,825	20,725	0.758	14,266	15,706
7/1/08 - 6/30/09	17,654	19,454	0.752	13,274	14,627
7/1/09 - 6/30/10	13,739	15,139	0.747	10,269	11,316
7/1/10 - 6/30/11	16,522	18,322	0.744	12,290	13,628
7/1/11 - 6/30/12	17,051	18,751	0.740	12,623	13,881
7/1/12 - 6/30/13	16,856	18,656	0.735	12,394	13,718
7/1/13 - 6/30/14	30,264	33,464	0.732	22,149	24,491
7/1/14 - 6/30/15	11,347	12,547	0.736	8,347	9,230
7/1/15 - 6/30/16	25,544	29,444	0.752	19,208	22,141
7/1/16 - 6/30/17	23,134	26,534	0.760	17,587	20,171
7/1/17 - 6/30/18	21,326	24,526	0.763	16,269	18,710
7/1/18 - 6/30/19	24,871	28,571	0.764	19,000	21,827
7/1/19 - 6/30/20	56,478	64,978	0.766	43,276	49,790
7/1/20 - 6/30/21	22,175	27,175	0.789	17,503	21,450
7/1/21 - 6/30/22	46,673	56,673	0.827	38,589	46,857
7/1/22 - 6/30/23	134,422	164,422	0.893	120,050	146,842
Total	572,934	663,534		460,240	534,249

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	From Section V, Exhibit II, Sheet 1, Column (8)
(3)	From Section V, Exhibit II, Sheet 1, Column (9)
(4)	From Section V, Exhibit II, Sheet 0, Column (8)
(5)	= (2) x (4)
(6)	= (3) x (4)

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Medical

Section V
Exhibit II
Sheet 4

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Actual vs Expected - Paid Loss & ALAE Emergence

Accident Year	Selected Low Ultimate Loss & ALAE @ 06/30/2022	Selected High Ultimate Loss & ALAE @ 06/30/2022	Unlimited Paid Loss & ALAE @ 06/30/2022	Unlimited Paid Loss & ALAE @ 06/30/2023	Paid LDF @ 06/30/2022	Projected Paid LDF @ 06/30/2023	Method 1 Low Expected Paid Emergence Loss & ALAE @ 06/30/2023	Method 1 High Expected Paid Emergence Loss & ALAE @ 06/30/2023	Actual Paid Emergence Loss & ALAE @ 06/30/2023	Actual - Expected Method 1 Low Paid	Actual - Expected Method 1 High Paid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993	3,608,485	3,608,885	3,604,381	3,604,381	1.011	1.010	408	448	0	(408)	(448)
7/1/93 - 6/30/94	719,600	720,400	711,601	713,886	1.012	1.011	599	658	2,285	1,687	1,627
7/1/94 - 6/30/95	425,400	425,900	420,290	420,290	1.013	1.012	378	415	0	(378)	(415)
7/1/95 - 6/30/96	388,000	388,500	382,952	382,952	1.014	1.013	370	406	0	(370)	(406)
7/1/96 - 6/30/97	202,000	202,300	199,273	199,422	1.014	1.014	98	108	149	51	41
7/1/97 - 6/30/98	505,300	506,000	498,102	498,102	1.015	1.014	426	467	0	(426)	(467)
7/1/98 - 6/30/99	314,000	314,500	309,221	309,221	1.016	1.015	278	307	0	(278)	(307)
7/1/99 - 6/30/00	188,200	188,600	185,166	185,166	1.017	1.016	223	252	0	(223)	(252)
7/1/00 - 6/30/01	209,100	209,500	205,414	205,414	1.019	1.017	283	314	0	(283)	(314)
7/1/01 - 6/30/02	246,800	247,300	242,040	245,879	1.021	1.019	379	419	3,839	3,460	3,420
7/1/02 - 6/30/03	239,100	239,600	234,111	235,811	1.022	1.021	374	412	1,700	1,326	1,288
7/1/03 - 6/30/04	303,400	304,200	296,472	296,472	1.025	1.022	678	756	0	(678)	(756)
7/1/04 - 6/30/05	171,500	171,900	167,120	167,120	1.028	1.025	426	465	0	(426)	(465)
7/1/05 - 6/30/06	400,300	401,500	388,983	388,983	1.031	1.028	1,138	1,259	0	(1,138)	(1,259)
7/1/06 - 6/30/07	244,100	245,000	236,426	236,426	1.034	1.031	796	889	0	(796)	(889)
7/1/07 - 6/30/08	530,100	532,000	511,475	511,475	1.038	1.034	1,846	2,034	0	(1,846)	(2,034)
7/1/08 - 6/30/09	447,200	449,000	429,942	433,846	1.042	1.038	1,566	1,730	3,905	2,338	2,175
7/1/09 - 6/30/10	315,700	317,100	302,070	304,761	1.047	1.042	1,407	1,551	2,691	1,284	1,139
7/1/10 - 6/30/11	347,000	348,800	330,378	330,378	1.053	1.047	1,704	1,888	0	(1,704)	(1,888)
7/1/11 - 6/30/12	322,600	324,400	305,483	305,549	1.059	1.053	1,661	1,836	66	(1,595)	(1,770)
7/1/12 - 6/30/13	292,100	293,900	274,844	274,844	1.066	1.059	1,680	1,855	0	(1,680)	(1,855)
7/1/13 - 6/30/14	476,700	480,000	445,355	445,636	1.074	1.066	3,235	3,575	281	(2,954)	(3,295)
7/1/14 - 6/30/15	158,300	160,000	146,853	146,853	1.084	1.074	1,258	1,444	0	(1,258)	(1,444)
7/1/15 - 6/30/16	303,900	307,800	277,478	277,556	1.102	1.084	4,368	5,013	78	(4,290)	(4,935)
7/1/16 - 6/30/17	230,500	234,000	207,126	211,066	1.121	1.102	3,294	3,787	3,940	646	153
7/1/17 - 6/30/18	187,000	190,300	164,894	166,774	1.144	1.121	3,154	3,624	1,880	(1,273)	(1,744)
7/1/18 - 6/30/19	274,200	290,500	166,154	167,529	1.171	1.144	14,996	17,259	1,375	(13,621)	(15,884)
7/1/19 - 6/30/20	209,000	231,000	110,044	113,422	1.233	1.171	22,472	27,467	3,378	(19,094)	(24,089)
7/1/20 - 6/30/21	220,000	234,000	154,383	159,825	1.390	1.233	21,369	25,928	5,442	(15,927)	(20,486)
7/1/21 - 6/30/22	205,000	240,000	46,147	101,327	2.584	1.390	86,118	105,092	55,180	(30,937)	(49,912)
Total	12,684,585	12,806,885	11,954,179	12,040,368			176,979	211,661	86,189	(90,790)	(125,472)

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Selected by Deloitte Consulting LLP @ 06/30/2022
(3)	Selected by Deloitte Consulting LLP @ 06/30/2022
(4)	Provided by Entity
(5)	Provided by Entity
(6)	Selected by Deloitte Consulting LLP @ 06/30/2022
(7)	Interpolated From (6)
(8)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((2) - (4))
(9)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((3) - (4))
(10)	= (5) - (4)
(11)	= (10) - (8)
(12)	= (10) - (9)

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Medical

Section V
Exhibit II
Sheet 5

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Ultimate Loss & ALAE Runoff

Accident Year	Ultimate Loss & ALAE @ 06/30/2022 Low	Ultimate Loss & ALAE @ 06/30/2022 High	Ultimate Loss & ALAE @ 06/30/2023 Low	Ultimate Loss & ALAE @ 06/30/2023 High	Deloitte Change Low	Deloitte Change High	Paid Loss & ALAE @ 06/30/2023	Reported Loss & ALAE @ 06/30/2023
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	3,608,485	3,608,885	3,604,381	3,604,381	(4,104)	(4,504)	3,604,381	3,604,381
7/1/93 - 6/30/94	719,600	720,400	721,100	721,800	1,500	1,400	713,886	713,886
7/1/94 - 6/30/95	425,400	425,900	424,900	425,400	(500)	(500)	420,290	420,290
7/1/95 - 6/30/96	388,000	388,500	387,500	388,000	(500)	(500)	382,952	382,952
7/1/96 - 6/30/97	202,000	202,300	201,800	202,000	(200)	(300)	199,422	199,422
7/1/97 - 6/30/98	505,300	506,000	504,400	505,100	(900)	(900)	498,102	498,102
7/1/98 - 6/30/99	314,000	314,500	313,400	313,900	(600)	(600)	309,221	309,221
7/1/99 - 6/30/00	188,200	188,600	188,000	188,300	(200)	(300)	185,166	185,166
7/1/00 - 6/30/01	209,100	209,500	208,900	209,300	(200)	(200)	205,414	205,414
7/1/01 - 6/30/02	246,800	247,300	250,500	251,000	3,700	3,700	245,879	245,879
7/1/02 - 6/30/03	239,100	239,600	240,800	241,400	1,700	1,800	235,811	235,811
7/1/03 - 6/30/04	303,400	304,200	303,500	304,300	100	100	296,472	296,472
7/1/04 - 6/30/05	171,500	171,900	171,600	172,000	100	100	167,120	167,120
7/1/05 - 6/30/06	400,300	401,500	400,500	401,700	200	200	388,983	388,983
7/1/06 - 6/30/07	244,100	245,000	244,300	245,100	200	100	236,426	236,426
7/1/07 - 6/30/08	530,100	532,000	530,300	532,200	200	200	511,475	511,475
7/1/08 - 6/30/09	447,200	449,000	451,500	453,300	4,300	4,300	433,846	433,846
7/1/09 - 6/30/10	315,700	317,100	318,500	319,900	2,800	2,800	304,761	304,761
7/1/10 - 6/30/11	347,000	348,800	346,900	348,700	(100)	(100)	330,378	330,378
7/1/11 - 6/30/12	322,600	324,400	322,600	324,300	0	(100)	305,549	305,549
7/1/12 - 6/30/13	292,100	293,900	291,700	293,500	(400)	(400)	274,844	274,844
7/1/13 - 6/30/14	476,700	480,000	475,900	479,100	(800)	(900)	445,636	445,636
7/1/14 - 6/30/15	158,300	160,000	158,200	159,400	(100)	(600)	146,853	146,853
7/1/15 - 6/30/16	303,900	307,800	303,100	307,000	(800)	(800)	277,556	277,556
7/1/16 - 6/30/17	230,500	234,000	234,200	237,600	3,700	3,600	211,066	211,066
7/1/17 - 6/30/18	187,000	190,300	188,100	191,300	1,100	1,000	166,774	166,774
7/1/18 - 6/30/19	274,200	290,500	192,400	196,100	(81,800)	(94,400)	167,529	167,529
7/1/19 - 6/30/20	209,000	231,000	169,900	178,400	(39,100)	(52,600)	113,422	113,422
7/1/20 - 6/30/21	220,000	234,000	182,000	187,000	(38,000)	(47,000)	159,825	159,825
7/1/21 - 6/30/22	205,000	240,000	148,000	158,000	(57,000)	(82,000)	101,327	101,327
Total	12,684,585	12,806,885	12,478,881	12,539,481	(205,704)	(267,404)	12,040,368	12,040,368

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(3) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(4) From Section V, Exhibit II, Sheet 6, Column (11)
(5) From Section V, Exhibit II, Sheet 6, Column (12)
(6) = (4) - (2)
(7) = (5) - (3)
(8) Provided by Entity
(9) Provided by Entity

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Selection of Ultimate Loss & ALAE

Accident Year	Payroll (00)'s	Unlimited Paid Loss & ALAE @ 06/30/2023	Unlimited Reported Loss & ALAE @ 06/30/2023	Ultimate Loss & ALAE Indications: Paid LDM	Ultimate Loss & ALAE Indications: Expected Loss & ALAE	Ultimate Loss & ALAE Indications: Paid B-F	Ultimate Loss & ALAE Indications: Frequency Severity	Prior Selected Ultimate Loss & ALAE: Low	Prior Selected Ultimate Loss & ALAE: High	Selected Ultimate Loss & ALAE: Low	Selected Ultimate Loss & ALAE: High	Ultimate Loss & ALAE Rates: Low	Ultimate Loss & ALAE Rates: High	Ultimate Loss & ALAE Severity: Low	Ultimate Loss & ALAE Severity: High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Prior to 7/1/1993		3,604,381	3,604,381	3,639,675	0		0	3,608,485	3,608,885	3,604,381	3,604,381				
7/1/93 - 6/30/94	1,771,840	713,886	713,886	721,467	72,202	714,645	0	719,600	720,400	721,100	721,800	0.41	0.41		
7/1/94 - 6/30/95	1,883,910	420,290	420,290	425,124	78,001	421,177	0	425,400	425,900	424,900	425,400	0.23	0.23		
7/1/95 - 6/30/96	2,017,510	382,952	382,952	387,719	85,114	383,998	0	388,000	388,500	387,500	388,000	0.19	0.19		
7/1/96 - 6/30/97	2,318,720	199,422	199,422	201,915	99,254	200,648	0	202,000	202,300	201,800	202,000	0.09	0.09		
7/1/97 - 6/30/98	2,322,370	498,102	498,102	504,760	100,338	499,426	0	505,300	506,000	504,400	505,100	0.22	0.22		
7/1/98 - 6/30/99	2,320,750	309,221	309,221	313,667	100,755	310,649	0	314,000	314,500	313,400	313,900	0.14	0.14		
7/1/99 - 6/30/00	2,118,190	185,166	185,166	188,154	92,882	186,641	0	188,200	188,600	188,000	188,300	0.09	0.09		
7/1/00 - 6/30/01	2,150,990	205,414	205,414	209,097	96,233	207,109	0	209,100	209,500	208,900	209,300	0.10	0.10		
7/1/01 - 6/30/02	2,277,970	245,879	245,879	250,750	103,679	247,893	0	246,800	247,300	250,500	251,000	0.11	0.11		
7/1/02 - 6/30/03	2,420,080	235,811	235,811	241,101	113,493	238,301	0	239,100	239,600	240,800	241,400	0.10	0.10		
7/1/03 - 6/30/04	2,767,580	296,472	296,472	303,915	133,826	299,749	0	303,400	304,200	303,500	304,300	0.11	0.11		
7/1/04 - 6/30/05	2,603,780	167,120	167,120	171,787	127,398	170,581	0	171,500	171,900	171,600	172,000	0.07	0.07		
7/1/05 - 6/30/06	3,177,410	388,983	388,983	401,129	156,945	393,735	0	400,300	401,500	400,500	401,700	0.13	0.13		
7/1/06 - 6/30/07	3,259,220	236,426	236,426	244,679	161,767	241,882	0	244,100	245,000	244,300	245,100	0.07	0.08		
7/1/07 - 6/30/08	3,541,300	511,475	511,475	531,245	176,621	518,048	0	530,100	532,000	530,300	532,200	0.15	0.15		
7/1/08 - 6/30/09	3,623,090	433,846	433,846	452,391	183,730	441,378	0	447,200	449,000	451,500	453,300	0.12	0.13		
7/1/09 - 6/30/10	3,832,980	304,761	304,761	319,220	198,431	313,749	0	315,700	317,100	318,500	319,900	0.08	0.08		
7/1/10 - 6/30/11	3,949,240	330,378	330,378	347,807	206,244	340,713	0	347,000	348,800	346,900	348,700	0.09	0.09		
7/1/11 - 6/30/12	3,819,430	305,549	305,549	323,446	200,433	316,639	0	322,600	324,400	322,600	324,300	0.08	0.08		
7/1/12 - 6/30/13	3,847,630	274,844	274,844	292,582	202,893	287,144	379,424	292,100	293,900	291,700	293,500	0.08	0.08	5,209	5,241
7/1/13 - 6/30/14	3,645,820	445,636	445,636	477,475	193,185	458,518	245,440	476,700	480,000	475,900	479,100	0.13	0.13	13,597	13,689
7/1/14 - 6/30/15	3,705,430	146,853	146,853	158,824	197,297	161,724	174,192	158,300	160,000	158,200	159,400	0.04	0.04	6,592	6,642
7/1/15 - 6/30/16	3,826,020	277,556	277,556	305,037	204,706	295,998	232,873	303,900	307,800	303,100	307,000	0.08	0.08	9,777	9,903
7/1/16 - 6/30/17	3,953,240	211,066	211,066	235,903	212,540	233,443	171,049	230,500	234,000	234,200	237,600	0.06	0.06	10,645	10,800
7/1/17 - 6/30/18	3,987,220	166,774	166,774	189,667	215,407	192,774	225,318	187,000	190,300	188,100	191,300	0.05	0.05	6,718	6,832
7/1/18 - 6/30/19	4,108,260	167,529	167,529	194,272	223,024	198,230	258,191	274,200	290,500	192,400	196,100	0.05	0.05	6,206	6,326
7/1/19 - 6/30/20	4,245,650	113,422	113,422	134,706	231,601	150,016	198,266	209,000	231,000	169,900	178,400	0.04	0.04	7,387	7,757
7/1/20 - 6/30/21	4,355,634	159,825	159,825	200,134	238,754	207,913	160,595	220,000	234,000	182,000	187,000	0.04	0.04	10,111	10,389
7/1/21 - 6/30/22	4,584,348	101,327	101,327	142,768	252,511	174,622	131,238	205,000	240,000	148,000	158,000	0.03	0.03	10,414	11,117
7/1/22 - 6/30/23	5,124,373	75,578	75,578	196,629	283,626	250,187	199,157			210,000	240,000	0.04	0.05	10,078	11,517
Total	97,559,985	12,115,947	12,115,947	12,707,047	4,942,891	9,057,534	2,375,744	12,684,585	12,806,885	12,688,881	12,779,481				

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	From Section V, Exhibit II, Sheet 10, Column (7)
(6)	From Section V, Exhibit II, Sheet 7, Column (4)
(7)	From Section V, Exhibit II, Sheet 7, Column (10)
(8)	From Section V, Exhibit II, Sheet 9, Column (12)
(9)	From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(10)	From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(11)	Selected by Deloitte Consulting LLP
(12)	Selected by Deloitte Consulting LLP
(13)	= (11) / (2)
(14)	= (12) / (2)
(15)	(11) Divided by Ultimate Claims From Section V, Exhibit II, Sheet 13, Column (7)
(16)	(12) Divided by Ultimate Claims From Section V, Exhibit II, Sheet 13, Column (7)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Bornhuetter-Ferguson Method

Accident Year	Payroll (00)'s	Initial Expected Loss & ALAE Rates	Initial Expected Loss & ALAE	Expected % of Paid Loss & ALAE	Expected Paid Loss & ALAE	Unlimited Actual Paid Loss & ALAE	Expected % of Unpaid Loss & ALAE	Expected Unpaid Loss & ALAE	Unlimited Indicated Ultimate Loss & ALAE	Unlimited Indicated Ultimate Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
7/1/93 - 6/30/94	1,771,840	0.04	72,202	98.9%	71,443	713,886	1.1%	759	714,645	0.40
7/1/94 - 6/30/95	1,883,910	0.04	78,001	98.9%	77,114	420,290	1.1%	887	421,177	0.22
7/1/95 - 6/30/96	2,017,510	0.04	85,114	98.8%	84,067	382,952	1.2%	1,046	383,998	0.19
7/1/96 - 6/30/97	2,318,720	0.04	99,254	98.8%	98,029	199,422	1.2%	1,225	200,648	0.09
7/1/97 - 6/30/98	2,322,370	0.04	100,338	98.7%	99,015	498,102	1.3%	1,323	499,426	0.22
7/1/98 - 6/30/99	2,320,750	0.04	100,755	98.6%	99,327	309,221	1.4%	1,428	310,649	0.13
7/1/99 - 6/30/00	2,118,190	0.04	92,882	98.4%	91,408	185,166	1.6%	1,475	186,641	0.09
7/1/00 - 6/30/01	2,150,990	0.04	96,233	98.2%	94,538	205,414	1.8%	1,695	207,109	0.10
7/1/01 - 6/30/02	2,277,970	0.05	103,679	98.1%	101,665	245,879	1.9%	2,014	247,893	0.11
7/1/02 - 6/30/03	2,420,080	0.05	113,493	97.8%	111,003	235,811	2.2%	2,490	238,301	0.10
7/1/03 - 6/30/04	2,767,580	0.05	133,826	97.6%	130,548	296,472	2.4%	3,278	299,749	0.11
7/1/04 - 6/30/05	2,603,780	0.05	127,398	97.3%	123,937	167,120	2.7%	3,461	170,581	0.07
7/1/05 - 6/30/06	3,177,410	0.05	156,945	97.0%	152,192	388,983	3.0%	4,752	393,735	0.12
7/1/06 - 6/30/07	3,259,220	0.05	161,767	96.6%	156,311	236,426	3.4%	5,456	241,882	0.07
7/1/07 - 6/30/08	3,541,300	0.05	176,621	96.3%	170,048	511,475	3.7%	6,573	518,048	0.15
7/1/08 - 6/30/09	3,623,090	0.05	183,730	95.9%	176,199	433,846	4.1%	7,532	441,378	0.12
7/1/09 - 6/30/10	3,832,980	0.05	198,431	95.5%	189,442	304,761	4.5%	8,988	313,749	0.08
7/1/10 - 6/30/11	3,949,240	0.05	206,244	95.0%	195,910	330,378	5.0%	10,335	340,713	0.09
7/1/11 - 6/30/12	3,819,430	0.05	200,433	94.5%	189,343	305,549	5.5%	11,090	316,639	0.08
7/1/12 - 6/30/13	3,847,630	0.05	202,893	93.9%	190,593	274,844	6.1%	12,301	287,144	0.07
7/1/13 - 6/30/14	3,645,820	0.05	193,185	93.3%	180,303	445,636	6.7%	12,882	458,518	0.13
7/1/14 - 6/30/15	3,705,430	0.05	197,297	92.5%	182,426	146,853	7.5%	14,871	161,724	0.04
7/1/15 - 6/30/16	3,826,020	0.05	204,706	91.0%	186,264	277,556	9.0%	18,442	295,998	0.08
7/1/16 - 6/30/17	3,953,240	0.05	212,540	89.5%	190,163	211,066	10.5%	22,377	233,443	0.06
7/1/17 - 6/30/18	3,987,220	0.05	215,407	87.9%	189,407	166,774	12.1%	26,000	192,774	0.05
7/1/18 - 6/30/19	4,108,260	0.05	223,024	86.2%	192,322	167,529	13.8%	30,701	198,230	0.05
7/1/19 - 6/30/20	4,245,650	0.05	231,601	84.2%	195,007	113,422	15.8%	36,594	150,016	0.04
7/1/20 - 6/30/21	4,355,634	0.05	238,754	79.9%	190,666	159,825	20.1%	48,088	207,913	0.05
7/1/21 - 6/30/22	4,584,348	0.06	252,511	71.0%	179,216	101,327	29.0%	73,295	174,622	0.04
7/1/22 - 6/30/23	5,124,373	0.06	283,626	38.4%	109,017	75,578	61.6%	174,609	250,187	0.05
Total	97,559,985		4,942,891		4,396,923	8,511,566		545,968	9,057,534	

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	From Section V, Exhibit II, Sheet 8, Column (13)
(4)	= (2) x (3)
(5)	= 1 / Section V, Exhibit II, Sheet 10, Column (6)
(6)	= (4) x (5)
(7)	Provided by Entity
(8)	= 1 - (5)
(9)	= (4) x (8)
(10)	= (7) + (9)
(11)	= (10) / (2)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Calculation of Initial Expected Loss & ALAE Rates

Accident Year	Payroll (00)'s	Payroll Trend	Loss Development Unlimited Indicated Ultimate Loss & ALAE Paid	Loss Development Unlimited Indicated Ultimate Loss & ALAE Reported	Selected Initial Ultimate Loss & ALAE	Loss & ALAE Trend Factor	Benefit Level Adjustment Factors	Trended Ultimate	On-level Loss & ALAE Rates	Detrended Loss & ALAE Rates	Prior Expected Loss & ALAE Rates	Initial Expected Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
7/1/93 - 6/30/94	1,771,840	2.357	721,467	721,467	3,604,381	2.712	1.180	11,537,025	2.76	0.04	0.05	0.04
7/1/94 - 6/30/95	1,883,910	2.288	425,124	425,124	721,450	2.620	1.167	2,206,565	0.51	0.04	0.05	0.04
7/1/95 - 6/30/96	2,017,510	2.221	387,719	387,719	425,150	2.532	1.151	1,238,995	0.28	0.04	0.06	0.04
7/1/96 - 6/30/97	2,318,720	2.157	201,915	201,915	387,750	2.446	1.140	1,081,249	0.22	0.04	0.06	0.04
7/1/97 - 6/30/98	2,322,370	2.094	504,760	504,760	201,900	2.363	1.135	541,548	0.11	0.04	0.06	0.04
7/1/98 - 6/30/99	2,320,750	2.033	313,667	313,667	504,750	2.283	1.135	1,308,087	0.28	0.04	0.06	0.04
7/1/99 - 6/30/00	2,118,190	1.974	188,154	188,154	313,650	2.206	1.129	781,338	0.19	0.04	0.06	0.04
7/1/00 - 6/30/01	2,150,990	1.916	209,097	209,097	188,150	2.132	1.112	446,010	0.11	0.04	0.06	0.04
7/1/01 - 6/30/02	2,277,970	1.860	250,750	250,750	209,100	2.059	1.098	473,039	0.11	0.05	0.06	0.05
7/1/02 - 6/30/03	2,420,080	1.806	241,101	241,101	250,750	1.990	1.071	534,504	0.12	0.05	0.06	0.05
7/1/03 - 6/30/04	2,767,580	1.754	303,915	303,915	241,100	1.923	1.044	483,918	0.10	0.05	0.06	0.05
7/1/04 - 6/30/05	2,603,780	1.702	171,787	171,787	303,900	1.857	1.037	585,261	0.13	0.05	0.06	0.05
7/1/05 - 6/30/06	3,177,410	1.653	401,129	401,129	171,800	1.795	1.032	318,192	0.06	0.05	0.06	0.05
7/1/06 - 6/30/07	3,259,220	1.605	244,679	244,679	401,100	1.734	1.032	717,758	0.14	0.05	0.07	0.05
7/1/07 - 6/30/08	3,541,300	1.558	531,245	531,245	244,700	1.675	1.032	423,077	0.08	0.05	0.07	0.05
7/1/08 - 6/30/09	3,623,090	1.513	452,391	452,391	531,250	1.619	1.020	877,049	0.16	0.05	0.07	0.05
7/1/09 - 6/30/10	3,832,980	1.469	319,220	319,220	452,400	1.564	1.004	710,298	0.13	0.05	0.07	0.05
7/1/10 - 6/30/11	3,949,240	1.426	347,807	347,807	319,200	1.511	1.000	482,333	0.09	0.05	0.07	0.05
7/1/11 - 6/30/12	3,819,430	1.384	323,446	323,446	347,800	1.460	1.000	507,777	0.10	0.05	0.07	0.05
7/1/12 - 6/30/13	3,847,630	1.344	292,582	292,582	323,450	1.411	1.000	456,258	0.09	0.05	0.07	0.05
7/1/13 - 6/30/14	3,645,820	1.305	477,475	477,475	292,600	1.363	1.000	398,784	0.08	0.05	0.07	0.05
7/1/14 - 6/30/15	3,705,430	1.267	158,824	158,824	477,500	1.317	1.000	628,776	0.13	0.05	0.07	0.05
7/1/15 - 6/30/16	3,826,020	1.230	305,037	305,037	158,800	1.272	1.000	202,038	0.04	0.05	0.07	0.05
7/1/16 - 6/30/17	3,953,240	1.194	235,903	235,903	305,050	1.229	1.000	374,984	0.08	0.05	0.07	0.05
7/1/17 - 6/30/18	3,987,220	1.159	189,667	189,667	235,900	1.188	1.000	280,175	0.06	0.05	0.07	0.05
7/1/18 - 6/30/19	4,108,260	1.126	194,272	194,272	189,700	1.148	1.000	217,685	0.05	0.05	0.07	0.05
7/1/19 - 6/30/20	4,245,650	1.093	134,706	134,706	194,250	1.109	1.000	215,368	0.05	0.05	0.07	0.05
7/1/20 - 6/30/21	4,355,634	1.061	200,134	200,134	200,134	1.071	1.000	214,389	***0.05***	0.05	0.07	0.05
7/1/21 - 6/30/22	4,584,348	1.030	142,768	142,768	142,768	1.035	1.000	147,765	***0.03***	0.06	0.07	0.06
7/1/22 - 6/30/23	5,124,373	1.000	196,629	196,629	196,629	1.000	1.000	196,629	***0.04***	0.06		0.06
			9,067,372	9,067,372				Last 3 Wtd Avg	0.05			
								Last 4 Wtd Avg	0.06			
								Last 5 Wtd Avg	0.06			
								All Per Wtd Avg	0.22			

(Note: numbers in bold and italics and with borders are excluded from the calculated averages)

Selected (14) 0.06

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Selected by Deloitte Consulting LLP
(4) From Section V, Exhibit II, Sheet 10, Column (7)
(5) From Section V, Exhibit II, Sheet 0, Column (7)
(6) Selected by Deloitte Consulting LLP
(7) Selected by Deloitte Consulting LLP
(8) Based on industry sources
(9) = (6) x (7) x (8)
(10) = (9) / [(2) x (3)]
(11) = (14) / (7) / (8) * (3)
(12) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(13) Selected for by Deloitte Consulting LLP Based on (14)
(14) Selected by Deloitte Consulting LLP

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Frequency Severity Method

Accident Year	Payroll (00)'s	Ultimate Reported Severity	Include For Fit	Exponential Fitted Reported Severity	Initial Selected Ultimate Severity	Selected Ultimate Claim Counts	Benefit Level Adjustment Factor	Selected Severity Trend	Trended Severity	On-Level Selected Ultimate Severity	Indicated Ultimate Loss & ALAE	Indicated Ultimate Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Prior to 7/1/1993			Exclude	8,016		0					0	
7/1/93 - 6/30/94	1,771,840		Exclude	8,016		0	1.180	2.712	0,000		0	0.00
7/1/94 - 6/30/95	1,883,910		Exclude	8,016		0	1.167	2.620	0,000		0	0.00
7/1/95 - 6/30/96	2,017,510		Exclude	8,017		0	1.151	2.532	0,000		0	0.00
7/1/96 - 6/30/97	2,318,720		Exclude	8,017		0	1.140	2.446	0,000		0	0.00
7/1/97 - 6/30/98	2,322,370		Exclude	8,017		0	1.135	2.363	0,000		0	0.00
7/1/98 - 6/30/99	2,320,750		Exclude	8,017		0	1.135	2.283	0,000		0	0.00
7/1/99 - 6/30/00	2,118,190		Exclude	8,018		0	1.129	2.206	0,000		0	0.00
7/1/00 - 6/30/01	2,150,990		Exclude	8,018		0	1.112	2.132	0,000		0	0.00
7/1/01 - 6/30/02	2,277,970		Exclude	8,018		0	1.098	2.059	0,000		0	0.00
7/1/02 - 6/30/03	2,420,080		Exclude	8,018		0	1.071	1.990	0,000		0	0.00
7/1/03 - 6/30/04	2,767,580		Exclude	8,019		0	1.044	1.923	0,000		0	0.00
7/1/04 - 6/30/05	2,603,780		Exclude	8,019		0	1.037	1.857	0,000		0	0.00
7/1/05 - 6/30/06	3,177,410		Exclude	8,019		0	1.032	1.795	0,000		0	0.00
7/1/06 - 6/30/07	3,259,220		Exclude	8,019		0	1.032	1.734	0,000		0	0.00
7/1/07 - 6/30/08	3,541,300		Exclude	8,020		0	1.032	1.675	0,000		0	0.00
7/1/08 - 6/30/09	3,623,090		Exclude	8,020		0	1.020	1.619	0,000		0	0.00
7/1/09 - 6/30/10	3,832,980		Exclude	8,020		0	1.004	1.564	0,000		0	0.00
7/1/10 - 6/30/11	3,949,240		Exclude	8,020		0	1.000	1.511	0,000		0	0.00
7/1/11 - 6/30/12	3,819,430		Exclude	8,021		0	1.000	1.460	0,000		0	0.00
7/1/12 - 6/30/13	3,847,630	5,225	Include	8,021	5,776	56	1.000	1.411	8,147	9,557	379,424	0.10
7/1/13 - 6/30/14	3,645,820	13,642	Include	8,021	8,360	35	1.000	1.363	11,394	9,557	245,440	0.07
7/1/14 - 6/30/15	3,705,430	6,618	Include	8,021	19,896	24	1.000	1.317	26,199	9,557	174,192	0.05
7/1/15 - 6/30/16	3,826,020	9,840	Include	8,022	5,123	31	1.000	1.272	6,517	9,557	232,873	0.06
7/1/16 - 6/30/17	3,953,240	10,723	Include	8,022	13,866	22	1.000	1.229	17,045	9,557	171,049	0.04
7/1/17 - 6/30/18	3,987,220	6,774	Include	8,022	8,425	28	1.000	1.188	10,006	9,557	225,318	0.06
7/1/18 - 6/30/19	4,108,260	6,267	Include	8,022	6,119	31	1.000	1.148	7,022	9,557	258,191	0.06
7/1/19 - 6/30/20	4,245,650	5,857	Include	8,023	8,446	23	1.000	1.109	9,364	9,557	198,266	0.05
7/1/20 - 6/30/21	4,355,634	11,119	Include	8,023	11,119	18	1.000	1.071	***11,911***	9,557	160,595	0.04
7/1/21 - 6/30/22	4,584,348	10,045	Exclude	8,023	10,045	14	1.000	1.035	***10,397***	9,557	131,238	0.03
7/1/22 - 6/30/23	5,124,373	9,436	Exclude	8,024	9,436	21	1.000	1.000	***9,436***	9,557	199,157	0.04
			Implied Trend	0.0%	-6.1%			Last 5 Wtd Avg	9,557			
								Last 4 Wtd Avg	10,464			
								Last 3 Wtd Avg	8,698			
Total	97,559,985					303		Last 3 Avg	8,797		2,375,744	
								Selected	9,557			

Reported Exponential Regressio	
Constant	8.990
X Coefficient	(0.000)
R Squared	0.000

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Section V, Exhibit II, Sheet 0, Column (7) / Section V, Exhibit II, Sheet 13, Column (7) x 1
(4) Years included for purposes of fit
(5) Result of Exponential fit of Column (3) * Column (8)
(6) Selected by Deloitte Consulting LLP
(7) From Section V, Exhibit II, Sheet 13, Column (7)
(8) Based on industry sources
(9) Selected by Deloitte Consulting LLP
(10) = (6) x (8) x (9)
(11) Selected by Deloitte Consulting, LLP
(12) Selected in column (11) x (7) / (8) / (9)
(13) = (12) / (3)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss & ALAE Development Method

Accident Year	Age of Losses @ 06/30/2023	Retention	Payroll (00)'s	Unlimited Paid Loss & ALAE @ 06/30/2023	Paid LDF	Indicated Ultimate Loss & ALAE	Unlimited Indicated Ultimate Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Prior to 7/1/1993	372.0	Unlimited		3,604,381	1.010	3,639,675	
7/1/93 - 6/30/94	360.0	Unlimited	1,771,840	713,886	1.011	721,467	0.41
7/1/94 - 6/30/95	348.0	Unlimited	1,883,910	420,290	1.012	425,124	0.23
7/1/95 - 6/30/96	336.0	Unlimited	2,017,510	382,952	1.012	387,719	0.19
7/1/96 - 6/30/97	324.0	Unlimited	2,318,720	199,422	1.012	201,915	0.09
7/1/97 - 6/30/98	312.0	Unlimited	2,322,370	498,102	1.013	504,760	0.22
7/1/98 - 6/30/99	300.0	Unlimited	2,320,750	309,221	1.014	313,667	0.14
7/1/99 - 6/30/00	288.0	Unlimited	2,118,190	185,166	1.016	188,154	0.09
7/1/00 - 6/30/01	276.0	Unlimited	2,150,990	205,414	1.018	209,097	0.10
7/1/01 - 6/30/02	264.0	Unlimited	2,277,970	245,879	1.020	250,750	0.11
7/1/02 - 6/30/03	252.0	Unlimited	2,420,080	235,811	1.022	241,101	0.10
7/1/03 - 6/30/04	240.0	Unlimited	2,767,580	296,472	1.025	303,915	0.11
7/1/04 - 6/30/05	228.0	Unlimited	2,603,780	167,120	1.028	171,787	0.07
7/1/05 - 6/30/06	216.0	Unlimited	3,177,410	388,983	1.031	401,129	0.13
7/1/06 - 6/30/07	204.0	Unlimited	3,259,220	236,426	1.035	244,679	0.08
7/1/07 - 6/30/08	192.0	Unlimited	3,541,300	511,475	1.039	531,245	0.15
7/1/08 - 6/30/09	180.0	Unlimited	3,623,090	433,846	1.043	452,391	0.12
7/1/09 - 6/30/10	168.0	Unlimited	3,832,980	304,761	1.047	319,220	0.08
7/1/10 - 6/30/11	156.0	Unlimited	3,949,240	330,378	1.053	347,807	0.09
7/1/11 - 6/30/12	144.0	Unlimited	3,819,430	305,549	1.059	323,446	0.08
7/1/12 - 6/30/13	132.0	Unlimited	3,847,630	274,844	1.065	292,582	0.08
7/1/13 - 6/30/14	120.0	Unlimited	3,645,820	445,636	1.071	477,475	0.13
7/1/14 - 6/30/15	108.0	Unlimited	3,705,430	146,853	1.082	158,824	0.04
7/1/15 - 6/30/16	96.0	Unlimited	3,826,020	277,556	1.099	305,037	0.08
7/1/16 - 6/30/17	84.0	Unlimited	3,953,240	211,066	1.118	235,903	0.06
7/1/17 - 6/30/18	72.0	Unlimited	3,987,220	166,774	1.137	189,667	0.05
7/1/18 - 6/30/19	60.0	Unlimited	4,108,260	167,529	1.160	194,272	0.05
7/1/19 - 6/30/20	48.0	Unlimited	4,245,650	113,422	1.188	134,706	0.03
7/1/20 - 6/30/21	36.0	Unlimited	4,355,634	159,825	1.252	200,134	0.05
7/1/21 - 6/30/22	24.0	Unlimited	4,584,348	101,327	1.409	142,768	0.03
7/1/22 - 6/30/23	12.0	Unlimited	5,124,373	75,578	2.602	196,629	0.04
Total			97,559,985	12,115,947		12,707,047	

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1)
(3) Provided by Entity
(4) Provided by Entity
(5) Provided by Entity
(6) From Section V, Exhibit II, Sheet 11
(7) = (5) x (6)
(8) = (7) / (4)

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss & ALAE

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																																		As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993	7,601,458	3,107,943	3,375,622	3,503,815	3,595,381	3,648,443	3,499,549	3,536,654	3,554,347	3,572,003	3,578,738	3,586,702	3,588,688	3,588,688	3,589,546	3,590,796	3,594,756	3,598,266	3,603,131	3,604,381	3,604,381	3,604,381	3,604,381	3,604,381	3,604,381	3,604,381	3,604,381	3,604,381	3,604,381	3,604,381	3,604,381	3,604,381	3,604,381
7/1/93 - 6/30/94	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	693,434	694,829	694,829	694,829	694,829	698,855	701,214	705,470	708,162	709,532	710,384	711,053	711,601	713,886			713,886
7/1/94 - 6/30/95	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	416,151	416,388	416,634	416,984	417,700	418,185	418,614	419,003	419,416	419,765	420,157	420,280	420,290	420,290				420,290
7/1/95 - 6/30/96	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	382,952	382,952	382,952	382,952	382,952	382,952	382,952	382,952	382,952	382,952	382,952	382,952	382,952	382,952					382,952
7/1/96 - 6/30/97	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	194,724	195,455	195,912	196,118	196,391	196,764	197,154	197,390	197,597	197,746	197,837	199,145	199,273	199,422						199,422
7/1/97 - 6/30/98	153,489	249,584	276,046	301,383	308,237	314,372	326,267	379,647	404,376	420,822	440,261	450,569	452,424	455,322	458,466	462,440	470,684	482,508	490,581	496,849	497,988	498,102	498,102	498,102	498,102	498,102							498,102
7/1/98 - 6/30/99	74,009	144,825	187,509	205,821	213,634	225,729	262,895	277,050	296,551	301,615	304,333	305,562	306,665	306,876	308,775	309,221	309,221	309,221	309,221	309,221	309,221	309,221	309,221	309,221	309,221								309,221
7/1/99 - 6/30/00	42,966	116,743	129,805	138,406	149,847	152,795	156,525	163,267	168,512	177,868	177,868	177,992	185,166	185,166	185,166	185,166	185,166	185,166	185,166	185,166	185,166	185,166	185,166	185,166									185,166
7/1/00 - 6/30/01	66,977	112,847	134,511	164,585	186,174	191,353	193,876	196,194	197,019	200,449	202,529	202,659	204,334	205,414	205,414	205,414	205,414	205,414	205,414	205,414	205,414	205,414	205,414										205,414
7/1/01 - 6/30/02	51,704	99,105	124,129	132,683	137,298	144,909	146,854	147,302	174,745	189,334	201,469	209,357	215,153	219,704	222,933	226,700	230,628	231,419	232,397	239,386	242,040	245,879											245,879
7/1/02 - 6/30/03	24,338	126,639	167,817	173,658	176,063	176,926	181,096	186,492	190,822	196,704	200,649	205,236	213,052	217,199	225,006	226,298	234,111	234,111	234,111	234,111	235,811												235,811
7/1/03 - 6/30/04	83,690	216,265	266,643	284,876	292,325	295,052	295,295	296,029	296,255	296,406	296,406	296,406	296,472	296,472	296,472	296,472	296,472	296,472	296,472	296,472													296,472
7/1/04 - 6/30/05	70,794	151,383	161,299	162,118	162,383	162,449	162,848	165,224	165,326	165,630	165,860	165,926	166,093	166,285	166,351	166,417	166,742	167,120	167,120														167,120
7/1/05 - 6/30/06	111,267	215,773	247,375	290,539	295,723	304,040	318,675	338,665	353,952	368,605	379,144	382,941	386,683	388,399	388,888	388,949	388,983	388,983															388,983
7/1/06 - 6/30/07	135,214	210,808	235,383	235,931	236,426	236,426	236,426	236,426	236,426	236,426	236,426	236,426	236,426	236,426	236,426	236,426	236,426																236,426
7/1/07 - 6/30/08	163,349	354,750	465,422	484,430	499,466	501,371	504,834	510,318	510,600	510,739	510,878	511,029	511,242	511,327	511,475	511,475																	511,475
7/1/08 - 6/30/09	147,783	237,019	285,263	290,878	306,506	324,891	337,192	379,620	391,150	425,184	428,045	428,851	429,750	429,942	433,846																		433,846
7/1/09 - 6/30/10	151,041	251,654	264,987	272,186	276,806	280,212	281,833	287,487	290,764	291,711	295,049	297,932	302,070	304,761																			304,761
7/1/10 - 6/30/11	207,552	306,733	317,840	322,382	326,484	328,928	330,378	330,378	330,378	330,378	330,378	330,378	330,378																				330,378
7/1/11 - 6/30/12	139,332	221,372	251,762	270,283	297,084	298,256	300,449	300,537	302,132	304,636	305,483	305,549																					305,549
7/1/12 - 6/30/13	128,223	224,171	256,819	267,205	270,687	273,288	274,130	274,844	274,844	274,844	274,844																						274,844
7/1/13 - 6/30/14	99,522	206,623	252,452	419,049	436,707	438,458	442,906	445,157	445,355	445,636																							445,636
7/1/14 - 6/30/15	68,762	116,468	133,363	140,457	143,342	146,083	146,853	146,853	146,853																								146,853
7/1/15 - 6/30/16	152,780	258,891	268,877	271,408	271,408	276,638	277,478	277,556																									277,556
7/1/16 - 6/30/17	95,466	186,703	200,928	202,758	205,151	207,126	211,066																										211,066
7/1/17 - 6/30/18	89,728	156,594	163,790	164,758	164,894	166,774																											166,774
7/1/18 - 6/30/19	104,778	148,083	156,292	166,154	167,529																												167,529
7/1/19 - 6/30/20	77,372	103,420	110,044	113,422																													113,422
7/1/20 - 6/30/21	111,577	154,383	159,825																														159,825
7/1/21 - 6/30/22	46,147	101,327																															101,327
7/1/22 - 6/30/23	75,578																																75,578
																																	12,115,947

Accident Year	Age-to-Age Development Factors																														
	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993	***0.409***	***1.086***	***1.038***	***1.026***	***1.015***	***0.959***	***1.011***	***1.005***	***1.005***	***1.002***	***1.002***	***1.001***	***1.000***	***1.000***	***1.000***	***1.001***	***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***	
7/1/93 - 6/30/94	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	1.002	1.002	1.000	1.000	1.000	1.006	1.003	1.006	1.004	1.002	1.001	1.001	1.001	1.003		
7/1/94 - 6/30/95	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	1.002	1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000			
7/1/95 - 6/30/96	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	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				
7/1/96 - 6/30/97	2.104	0.623	1.048	1.043	1.015	1.002	1.003	1.004	1.004	1.004	1.005	1.004	1.004	1.004	1.002	1.001	1.001	1.002	1.002	1.001	1.001	1.001	1.000	1.007	1.001	1.001					
7/1/97 - 6/30/98	1.626	1.106	1.092	1.023	1.020	1.038	1.164	1.065	1.041	1.046	1.023	1.004	1.006	1.007	1.009	1.018	1.025	1.017	1.013	1.002	1.000	1.000	1.000	1.000	1.000						
7/1/98 - 6/30/99	1.957	1.295	1.098	1.038	1.057	1.165	1.054	1.070	1.017	1.009	1.004	1.004	1.001	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
7/1/99 - 6/30/00	2.717	1.112	1.066	1.083	1.020	1.024	1.043	1.032	1.056	1.000	1.001	1.040	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000								
7/1/00 - 6/30/01	1.685	1.192	1.224	1.131	1.028	1.013	1.012	1.004	1.017	1.010	1.001	1.008	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000									
7/1/01 - 6/30/02	1.917	1.252	1.069	1.035	1.055	1.013	1.003	1.186	1.083	1.064	1.039	1.028	1.021	1.015	1.017	1.017	1.003	1.004	1.030	1.011	1.016										
7/1/02 - 6/30/03	5.203	1.325	1.035	1.014	1.005	1.024	1.030	1.023	1.031	1.020	1.023	1.038	1.019	1.036	1.006	1.035	1.000	1.000	1.000	1.007											
7/1/03 - 6/30/04	2.584	1.233	1.068	1.026	1.009	1.001	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												
7/1/04 - 6/30/05	2.138	1.066	1.005	1.002	1.000	1.002	1.015	1.001	1.002	1.001	1.000	1.001	1.001	1.000	1.000	1.002	1.002	1.000													
7/1/05 - 6/30/06	1.939	1.146	1.174	1.018	1.028	1.048	1.063	1.045	1.041	1.029	1.010	1.010	1.004	1.001	1.000	1.000	1.000														
7/1/06 - 6/30/07	1.559	1.117	1.002	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															
7/1/07 - 6/30/08	2.172	1.312	1.041	1.031	1.004	1.007	1.011	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000																
7/1/08 - 6/30/09	1.604	1.204	1.020	1.054	1.060	1.038	1.126	1.030	1.087	1.007	1.002	1.002	1.000	1.009																	
7/1/09 - 6/30/10	1.666	1.053	1.027	1.017	1.012	1.006	1.020	1.011	1.003	1.011	1.010	1.014	1.009																		
7/1/10 - 6/30/11	1.478	1.036	1.014	1.013	1.007	1.004	1.000	1.000	1.000	1.000	1.000	1.000																			
7/1/11 - 6/30/12	1.589	1.137	1.074	1.099	1.004	1.007	1.000	1.005	1.008	1.003	1.000																				
7/1/12 - 6/30/13	1.748	1.146	1.040	1.013	1.010	1.003	1.003	1.000	1.000	1.000																					
7/1/13 - 6/30/14	2.076	1.222	1.660	1.042	1.004	1.010	1.005	1.000	1.001																						
7/1/14 - 6/30/15	1.694	1.145	1.053	1.021	1.019	1.005	1.000	1.000																							
7/1/15 - 6/30/16	1.695	1.039	1.009	1.000	1.019	1.003	1.000																								
7/1/16 - 6/30/17	1.956	1.076	1.009	1.012	1.010	1.019																									
7/1/17 - 6/30/18	1.745	1.046	1.006	1.001	1.011																										
7/1/18 - 6/30/19	1.413	1.055	1.063	1.008																											
7/1/19 - 6/30/20	1.337	1.064	1.031																												
7/1/20 - 6/30/21	1.384	1.035																													
7/1/21 - 6/30/22	2.196																														
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																															
Last 3 Wtd Avg	1.528	1.050	1.033	1.007	1.014	1.009	1.003	1.000	1.003	1.001	1.003	1.005	1.002	1.003	1.000	1.000	1.000	1.000	1.009	1.006	1.006	1.000	1.000	1.001	1.000	1.000	1.000				
Last 5 Wtd Avg	1.545	1.056	1.021	1.007	1.011	1.008	1.002	1.001	1.002	1.004	1.002	1.003	1.003	1.003	1.000	1.006	1.001	1.001	1.006	1.004	1.003	1.000	1.000	1.001	1.001						
Last 9 Wtd Avg	1.693	1.095	1.123	1.026	1.010	1.011	1.020	1.006	1.017	1.006	1.003	1.006	1.005	1.006	1.002	1.005	1.005	1.004	1.005	1.002	1.003										
Last 12 Wtd Avg	1.654	1.086	1.090	1.029	1.013	1.013	1.022	1.009	1.016	1.009	1.006	1.009	1.004	1.006	1.003	1.006	1.004	1.003													
All Per Wtd Avg	1.846	1.125	1.054	1.020	1.006	1.016	1.024	1.018	1.017	1.009	1.006	1.006	1.004	1.005	1.003	1.005	1.004	1.003	1.004	1.002	1.003	1.001	1.002	1.002	1.001	1.001	1.000	1.000	1.003		
Industry																															
Age-to-Age	1.952	1.143	1.054	1.022	1.017	1.007	1.012	1.008	1.009	1.008	1.007	1.008	1.007	1.008	1.007	1.007	1.008	1.007	1.004	1.004	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.004	1.004	
Age-to-Ult	2.959	1.516	1.326	1.258	1.231	1.210	1.202	1.188	1.179	1.168	1.159	1.151	1.142	1.134	1.125	1.117	1.109	1.100	1.092	1.088	1.083	1.078	1.073	1.068	1.063	1.058	1.052	1.047	1.043	1.038	1.034
Prior Selected																															
Age-to-Age	1.859	1.127	1.053	1.024	1.021	1.017	1.017	1.009	1.008	1.006	1.006	1.005	1.005	1.004	1.004	1.004	1.003	1.003	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	
Age-to-Ult	2.584	1.390	1.233	1.171	1.144	1.121	1.102	1.084	1.074	1.066	1.059	1.053	1.047	1.042	1.038	1.034	1.031	1.028	1.025	1.022	1.021	1.019	1.017	1.016	1.015	1.014	1.014	1.013	1.012	1.011	1.010
Selected																															
Age-to-Age	1.846	1.125	1.054	1.024	1.020	1.018	1.017	1.016	1.009	1.006	1.006	1.006	1.005	1.005	1.004	1.004	1.004	1.003	1.003	1.003	1.003	1.002	1.002	1.002	1.001	1.001	1.000	1.001	1.001	1.001	
Age-to-Ult	2.602	1.409	1.252	1.188	1.160	1.137	1.118	1.099	1.082	1.071	1.065	1.059	1.053	1.047	1.043	1.039	1.035	1.031	1.028	1.025	1.022	1.020	1.018	1.016	1.014	1.013	1.012	1.012	1.012	1.011	1.010

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Medical

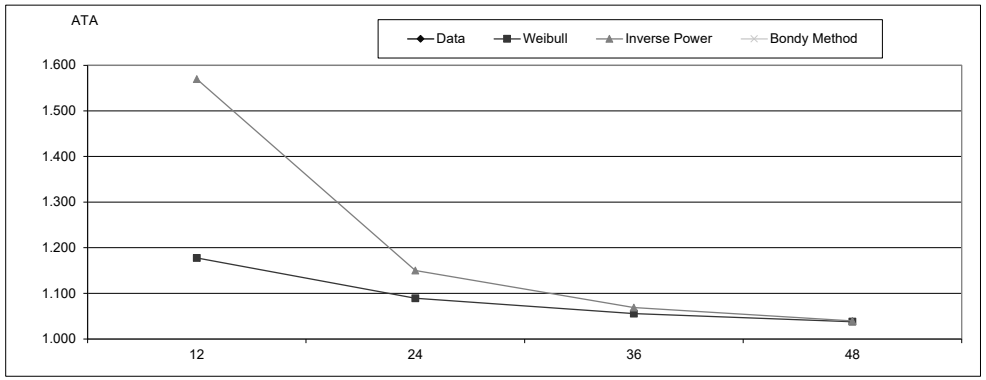
Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

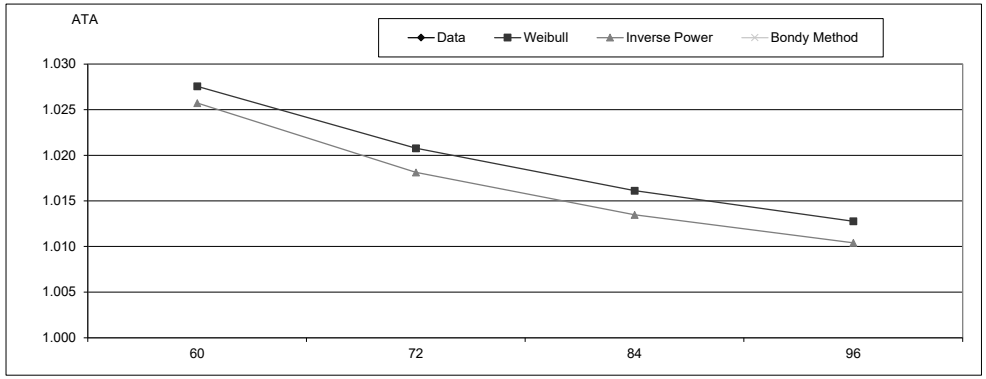
Curve Fitting Methods
Paid Loss & ALAE

Tail at Period:	**31**	(To display in table)
Cut-off point:(<=Tail & <51)	**50**	(to run-out pattern)

Summary of Curve Fitting Methods

Method	Tail	R^2
Weibull	**1.005**	**0.916**
Inverse Power	**1.010**	**0.808**
Bondy Method		**N/A**





				Weibull		Inverse Power		Bondy Method			
									Sel. Decay Ratio=		
PERIOD	AGE	ATA	Use	**ATA***	**ATU***	**ATA***	**ATU***	Ln(ATA)	Decay	**ATA***	**ATU***
1	12	0.000	Exclude	**1.178**	1.629	**1.570**	2.298				
2	24	1.125	Include	**1.089**	1.383	**1.150**	1.464				
3	36	1.054	Include	**1.056**	1.270	**1.069**	1.273				
4	48	1.024	Include	**1.038**	1.203	**1.040**	1.191				
5	60	1.020	Include	**1.028**	1.159	**1.026**	1.145				
6	72	1.018	Include	**1.021**	1.128	**1.018**	1.117				
7	84	1.017	Include	**1.016**	1.105	**1.013**	1.097				
8	96	1.016	Include	**1.013**	1.087	**1.010**	1.082				
9	108	1.009	Include	**1.010**	1.074	**1.008**	1.071				
10	120	1.006	Include	**1.008**	1.063	**1.007**	1.062				
11	132	1.006	Include	**1.007**	1.054	**1.006**	1.055				
12	144	1.006	Include	**1.006**	1.047	**1.005**	1.049				
13	156	1.005	Include	**1.005**	1.040	**1.004**	1.044				
14	168	1.005	Include	**1.004**	1.035	**1.004**	1.040				
15	180	1.004	Include	**1.004**	1.031	**1.003**	1.036				
16	192	1.004	Include	**1.003**	1.027	**1.003**	1.033				
17	204	1.004	Include	**1.003**	1.024	**1.002**	1.030				
18	216	1.003	Include	**1.002**	1.021	**1.002**	1.028				
19	228	1.003	Include	**1.002**	1.019	**1.002**	1.025				
20	240	1.003	Include	**1.002**	1.017	**1.002**	1.023				
21	252	1.003	Include	**1.002**	1.015	**1.002**	1.022				
22	264	1.002	Include	**1.001**	1.014	**1.001**	1.020				
23	276	1.002	Include	**1.001**	1.012	**1.001**	1.018				
24	288	1.002	Include	**1.001**	1.011	**1.001**	1.017				
25	300	1.001	Include	**1.001**	1.010	**1.001**	1.016				
26	312	1.001	Include	**1.001**	1.009	**1.001**	1.015				
27	324	1.000	Include	**1.001**	1.008	**1.001**	1.013				
28	336	0.000	Exclude	**1.001**	1.007	**1.001**	1.012				
29	348	0.000	Exclude	**1.001**	1.006	**1.001**	1.012				
30	360	0.000	Exclude	**1.001**	1.006	**1.001**	1.011				
31	372	0.000	Exclude	**1.001**	1.005	**1.001**	1.010				
32	384	0.000	Exclude	**1.000**	1.005	**1.001**	1.009				
33	396	0.000	Exclude	**1.000**	1.004	**1.001**	1.008				
34	408	0.000	Exclude	**1.000**	1.004	**1.001**	1.008				
35	420	0.000	Exclude	**1.000**	1.003	**1.001**	1.007				
36	432	0.000	Exclude	**1.000**	1.003	**1.001**	1.006				
37	444	0.000	Exclude	**1.000**	1.003	**1.001**	1.006				
38	456	0.000	Exclude	**1.000**	1.002	**1.001**	1.005				
39	468	0.000	Exclude	**1.000**	1.002	**1.000**	1.005				
40	480	0.000	Exclude	**1.000**	1.002	**1.000**	1.004				
41	492	0.000	Exclude	**1.000**	1.002	**1.000**	1.004				
42	504	0.000	Exclude	**1.000**	1.001	**1.000**	1.003				
43	516	0.000	Exclude	**1.000**	1.001	**1.000**	1.003				
44	528	0.000	Exclude	**1.000**	1.001	**1.000**	1.002				
45	540	0.000	Exclude	**1.000**	1.001	**1.000**	1.002				
46	552	0.000	Exclude	**1.000**	1.001	**1.000**	1.002				
47	564	0.000	Exclude	**1.000**	1.000	**1.000**	1.001				
48	576	0.000	Exclude	**1.000**	1.000	**1.000**	1.001				
49	588	0.000	Exclude	**1.000**	1.000	**1.000**	1.001				
50	600	0.000	Exclude	**1.000**	1.000	**1.000**	1.000				

Unpaid Claim Analysis as of 06/30/2023

Ultimate Claim Count Development

Accident Year	Age of Counts @ 06/30/2023	Payroll (00)'s	Reported Claim Counts @ 06/30/2023	Reported Count Dev Factor	Indicated Ultimate Claim Counts	Selected Ultimate Claim Counts	Selected Ultimate Frequency	Selected Ultimate Frequency (Inflation-Adjusted)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	372.0		14	1.000	14			
7/1/93 - 6/30/94	360.0	1,771,840	2	1.000	2		0.00%	0.00%
7/1/94 - 6/30/95	348.0	1,883,910	3	1.000	3		0.00%	0.00%
7/1/95 - 6/30/96	336.0	2,017,510	1	1.000	1		0.00%	0.00%
7/1/96 - 6/30/97	324.0	2,318,720	2	1.000	2		0.00%	0.00%
7/1/97 - 6/30/98	312.0	2,322,370	2	1.000	2		0.00%	0.00%
7/1/98 - 6/30/99	300.0	2,320,750	2	1.000	2		0.00%	0.00%
7/1/99 - 6/30/00	288.0	2,118,190	1	1.000	1		0.00%	0.00%
7/1/00 - 6/30/01	276.0	2,150,990	3	1.000	3		0.00%	0.00%
7/1/01 - 6/30/02	264.0	2,277,970	2	1.000	2		0.00%	0.00%
7/1/02 - 6/30/03	252.0	2,420,080	3	1.000	3		0.00%	0.00%
7/1/03 - 6/30/04	240.0	2,767,580	2	1.000	2		0.00%	0.00%
7/1/04 - 6/30/05	228.0	2,603,780	3	1.000	3		0.00%	0.00%
7/1/05 - 6/30/06	216.0	3,177,410	4	1.000	4		0.00%	0.00%
7/1/06 - 6/30/07	204.0	3,259,220	1	1.000	1		0.00%	0.00%
7/1/07 - 6/30/08	192.0	3,541,300	5	1.000	5		0.00%	0.00%
7/1/08 - 6/30/09	180.0	3,623,090	3	1.000	3		0.00%	0.00%
7/1/09 - 6/30/10	168.0	3,832,980	6	1.000	6		0.00%	0.00%
7/1/10 - 6/30/11	156.0	3,949,240	11	1.000	11		0.00%	0.00%
7/1/11 - 6/30/12	144.0	3,819,430	42	1.000	42		0.00%	0.00%
7/1/12 - 6/30/13	132.0	3,847,630	56	1.000	56	56	14.55%	10.83%
7/1/13 - 6/30/14	120.0	3,645,820	35	1.000	35	35	9.60%	7.36%
7/1/14 - 6/30/15	108.0	3,705,430	24	1.000	24	24	6.48%	5.11%
7/1/15 - 6/30/16	96.0	3,826,020	31	1.000	31	31	8.10%	6.59%
7/1/16 - 6/30/17	84.0	3,953,240	22	1.000	22	22	5.57%	4.66%
7/1/17 - 6/30/18	72.0	3,987,220	28	1.000	28	28	7.02%	6.06%
7/1/18 - 6/30/19	60.0	4,108,260	31	1.000	31	31	7.55%	6.70%
7/1/19 - 6/30/20	48.0	4,245,650	23	1.000	23	23	5.42%	4.96%
7/1/20 - 6/30/21	36.0	4,355,634	18	1.000	18	18	4.13%	3.90%
7/1/21 - 6/30/22	24.0	4,584,348	14	1.015	14	14	3.10%	3.01%
7/1/22 - 6/30/23	12.0	5,124,373	17	1.143	19	21	4.07%	4.07%
Total		97,559,985	411		414	303		

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Age of (1)
(3)	Provided by Entity
(4)	Provided by Entity
(5)	From Section V, Exhibit II, Sheet 14
(6)	= (4) x (5)
(7)	Selected by Deloitte Consulting LLP
(8)	= (7) / (3)
(9)	= (7) / [(3) x Section V, Exhibit II, Sheet 8, Column (3)]

Unpaid Claim Analysis as of 06/30/2023

Reported Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																															14	14
7/1/93 - 6/30/94																														2		2
7/1/94 - 6/30/95																													3			3
7/1/95 - 6/30/96																												1				1
7/1/96 - 6/30/97																											2					2
7/1/97 - 6/30/98																										2						2
7/1/98 - 6/30/99																									2							2
7/1/99 - 6/30/00																								1								1
7/1/00 - 6/30/01																							3									3
7/1/01 - 6/30/02																						2										2
7/1/02 - 6/30/03																					3											3
7/1/03 - 6/30/04																				2												2
7/1/04 - 6/30/05																			3													3
7/1/05 - 6/30/06																		4														4
7/1/06 - 6/30/07																	1															1
7/1/07 - 6/30/08																5																5
7/1/08 - 6/30/09															3																	3
7/1/09 - 6/30/10														6																		6
7/1/10 - 6/30/11													11																			11
7/1/11 - 6/30/12												42																				42
7/1/12 - 6/30/13	51	55	56	56	56	56	56	56	56	56	56																					56
7/1/13 - 6/30/14	28	35	35	35	35	35	35	35	35	35																						35
7/1/14 - 6/30/15	23	23	24	24	24	24	24	24	24																							24
7/1/15 - 6/30/16	27	31	31	31	31	31	31	31																								31
7/1/16 - 6/30/17	21	22	22	22	22	22	22																									22
7/1/17 - 6/30/18	23	28	28	28	28	28																										28
7/1/18 - 6/30/19	27	30	31	31	31																											31
7/1/19 - 6/30/20	23	23	23	23																												23
7/1/20 - 6/30/21	12	17	18																													18
7/1/21 - 6/30/22	12	14																														14
7/1/22 - 6/30/23	17																															17
																																411

Accident Year	Age-to-Age Development Factors																														
	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993																															
7/1/93 - 6/30/94																															
7/1/94 - 6/30/95																															
7/1/95 - 6/30/96																															
7/1/96 - 6/30/97																															
7/1/97 - 6/30/98																															
7/1/98 - 6/30/99																															
7/1/99 - 6/30/00																															
7/1/00 - 6/30/01																															
7/1/01 - 6/30/02																															
7/1/02 - 6/30/03																															
7/1/03 - 6/30/04																															
7/1/04 - 6/30/05																															
7/1/05 - 6/30/06																															
7/1/06 - 6/30/07																															
7/1/07 - 6/30/08																															
7/1/08 - 6/30/09																															
7/1/09 - 6/30/10																															
7/1/10 - 6/30/11																															
7/1/11 - 6/30/12																															
7/1/12 - 6/30/13	1.078	1.018	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000																					
7/1/13 - 6/30/14	1.250	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000																						
7/1/14 - 6/30/15	1.000	1.043	1.000	1.000	1.000	1.000	1.000	1.000																							
7/1/15 - 6/30/16	1.148	1.000	1.000	1.000	1.000	1.000	1.000																								
7/1/16 - 6/30/17	1.048	1.000	1.000	1.000	1.000	1.000																									
7/1/17 - 6/30/18	1.217	1.000	1.000	1.000	1.000																										
7/1/18 - 6/30/19	1.111	1.033	1.000	1.000																											
7/1/19 - 6/30/20	1.000	1.000	1.000																												
7/1/20 - 6/30/21	1.417	1.059																													
7/1/21 - 6/30/22	1.167																														
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																															
Last 3 Wtd Avg	1.149	1.029	1.000	1.000	1.000	1.000	1.000	1.000																							
Last 4 Wtd Avg	1.135	1.020	1.000	1.000	1.000	1.000	1.000																								
Last 5 Wtd Avg	1.155	1.017	1.000	1.000	1.000	1.000																									
All Per Wtd Avg	1.126	1.015	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000																					
Average ex Hi/Lo	1.127	1.014	1.000	1.000	1.000	1.000	1.000	1.000																							
Prior Selected																															
Age-to-Age	1.123	1.012	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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Age-to-Ult	1.137	1.012	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	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																															
Age-to-Age	1.126	1.015	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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Age-to-Ult	1.143	1.015	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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Unpaid Claim Analysis as of 06/30/2023

Reported Counts to Payroll (00)'s

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01		1,771,840
7/1/94 - 6/30/95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02			1,883,910
7/1/95 - 6/30/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				2,017,510
7/1/96 - 6/30/97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01					2,318,720
7/1/97 - 6/30/98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01						2,322,370
7/1/98 - 6/30/99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01							2,320,750
7/1/99 - 6/30/00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00								2,118,190
7/1/00 - 6/30/01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01									2,150,990
7/1/01 - 6/30/02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01										2,277,970
7/1/02 - 6/30/03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01											2,420,080
7/1/03 - 6/30/04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01												2,767,580
7/1/04 - 6/30/05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01													2,603,780
7/1/05 - 6/30/06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01														3,177,410
7/1/06 - 6/30/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00															3,259,220
7/1/07 - 6/30/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01																3,541,300
7/1/08 - 6/30/09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01																	3,623,090
7/1/09 - 6/30/10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02																		3,832,980
7/1/10 - 6/30/11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03																			3,949,240
7/1/11 - 6/30/12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11																				3,819,430
7/1/12 - 6/30/13	0.13	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15																					3,847,630
7/1/13 - 6/30/14	0.08	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10																						3,645,820
7/1/14 - 6/30/15	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06																							3,705,430
7/1/15 - 6/30/16	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08																								3,826,020
7/1/16 - 6/30/17	0.05	0.06	0.06	0.06	0.06	0.06	0.06																									3,953,240
7/1/17 - 6/30/18	0.06	0.07	0.07	0.07	0.07	0.07																										3,987,220
7/1/18 - 6/30/19	0.07	0.07	0.08	0.08	0.08																											4,108,260
7/1/19 - 6/30/20	0.05	0.05	0.05	0.05																												4,245,650
7/1/20 - 6/30/21	0.03	0.04	0.04																													4,355,634
7/1/21 - 6/30/22	0.03	0.03																														4,584,348
7/1/22 - 6/30/23	0.03																															5,124,373

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss & ALAE Rates

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														Payroll
	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	348	360	372	(00)'s
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.17	0.34	0.38	0.40	0.41	0.38	0.38	0.38	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40		1,771,840
7/1/94 - 6/30/95	0.12	0.20	0.23	0.24	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22			1,883,910
7/1/95 - 6/30/96	0.08	0.20	0.25	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19				2,017,510
7/1/96 - 6/30/97	0.06	0.12	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09					2,318,720
7/1/97 - 6/30/98	0.07	0.11	0.12	0.13	0.13	0.14	0.14	0.16	0.17	0.18	0.19	0.19	0.19	0.20	0.20	0.20	0.20	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21						2,322,370
7/1/98 - 6/30/99	0.03	0.06	0.08	0.09	0.09	0.10	0.11	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13							2,320,750
7/1/99 - 6/30/00	0.02	0.06	0.06	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09								2,118,190
7/1/00 - 6/30/01	0.03	0.05	0.06	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10									2,150,990
7/1/01 - 6/30/02	0.02	0.04	0.05	0.06	0.06	0.06	0.06	0.06	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.11										2,277,970
7/1/02 - 6/30/03	0.01	0.05	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10											2,420,080
7/1/03 - 6/30/04	0.03	0.08	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11												2,767,580
7/1/04 - 6/30/05	0.03	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06													2,603,780
7/1/05 - 6/30/06	0.04	0.07	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12														3,177,410
7/1/06 - 6/30/07	0.04	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07															3,259,220
7/1/07 - 6/30/08	0.05	0.10	0.13	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14																3,541,300
7/1/08 - 6/30/09	0.04	0.07	0.08	0.08	0.08	0.09	0.09	0.10	0.11	0.12	0.12	0.12	0.12	0.12	0.12																	3,623,090
7/1/09 - 6/30/10	0.04	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08																		3,832,980
7/1/10 - 6/30/11	0.05	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08																			3,949,240
7/1/11 - 6/30/12	0.04	0.06	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08																				3,819,430
7/1/12 - 6/30/13	0.03	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07																					3,847,630
7/1/13 - 6/30/14	0.03	0.06	0.07	0.11	0.12	0.12	0.12	0.12	0.12	0.12																						3,645,820
7/1/14 - 6/30/15	0.02	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04																							3,705,430
7/1/15 - 6/30/16	0.04	0.07	0.07	0.07	0.07	0.07	0.07	0.07																								3,826,020
7/1/16 - 6/30/17	0.02	0.05	0.05	0.05	0.05	0.05	0.05																									3,953,240
7/1/17 - 6/30/18	0.02	0.04	0.04	0.04	0.04	0.04																										3,987,220
7/1/18 - 6/30/19	0.03	0.04	0.04	0.04	0.04																											4,108,260
7/1/19 - 6/30/20	0.02	0.02	0.03	0.03																												4,245,650
7/1/20 - 6/30/21	0.03	0.04	0.04																													4,355,634
7/1/21 - 6/30/22	0.01	0.02																														4,584,348
7/1/22 - 6/30/23	0.01																															5,124,373

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Medical

Section V
Exhibit II
Sheet 17

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Settlement Rates (Closed Claim Count / Ultimate Claim Count)

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
7/1/98 - 6/30/99																																
7/1/99 - 6/30/00																																
7/1/00 - 6/30/01																																
7/1/01 - 6/30/02																																
7/1/02 - 6/30/03																																
7/1/03 - 6/30/04																																
7/1/04 - 6/30/05																																
7/1/05 - 6/30/06																																
7/1/06 - 6/30/07																																
7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	0.00	0.46	0.80	0.89	0.95	0.98	0.98	0.98	1.00	1.00	1.00																					1.00
7/1/13 - 6/30/14	0.00	0.37	0.83	0.89	0.89	0.97	0.94	0.97	0.97	0.97																						0.97
7/1/14 - 6/30/15	0.00	0.50	0.83	0.92	0.92	0.88	0.96	0.92	0.96																							0.96
7/1/15 - 6/30/16	0.00	0.35	0.77	0.90	0.94	0.94	0.97	0.97																								0.97
7/1/16 - 6/30/17	0.00	0.36	0.77	0.91	0.95	0.95	0.95																									0.95
7/1/17 - 6/30/18	0.00	0.54	0.89	0.89	0.96	0.93																										0.93
7/1/18 - 6/30/19	0.00	0.61	0.90	0.90	0.90																											0.90
7/1/19 - 6/30/20	0.00	0.74	0.91	0.96																												0.96
7/1/20 - 6/30/21	0.00	0.28	0.83																													0.83
7/1/21 - 6/30/22	0.00	0.28																														0.28
7/1/22 - 6/30/23	0.00																															0.00

Commonwealth of Massachusetts
UMass Medical Center
UMassMedical - Medical

Section V
Exhibit II
Sheet 18

Unpaid Claim Analysis as of 06/30/2023

Open Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993	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	0	0	0	0	0
7/1/93 - 6/30/94	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	0	0	1		1
7/1/94 - 6/30/95	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	0	0			0
7/1/95 - 6/30/96	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	0				0
7/1/96 - 6/30/97	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	1					1
7/1/97 - 6/30/98	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
7/1/98 - 6/30/99	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
7/1/99 - 6/30/00	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
7/1/00 - 6/30/01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									0
7/1/01 - 6/30/02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1										1
7/1/02 - 6/30/03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1											1
7/1/03 - 6/30/04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												0
7/1/04 - 6/30/05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0													0
7/1/05 - 6/30/06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														0
7/1/06 - 6/30/07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															0
7/1/07 - 6/30/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																0
7/1/08 - 6/30/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1																	1
7/1/09 - 6/30/10	0	0	0	0	0	0	0	0	0	0	0	0	0	1																		1
7/1/10 - 6/30/11	0	0	0	0	0	0	0	0	0	0	0	0	0																			0
7/1/11 - 6/30/12	0	0	0	0	0	0	0	0	0	0	0	1																				1
7/1/12 - 6/30/13	51	29	11	6	3	1	1	1	0	0	0																					0
7/1/13 - 6/30/14	28	22	6	4	4	1	2	1	1	1																						1
7/1/14 - 6/30/15	23	11	4	2	2	3	1	2	1																							1
7/1/15 - 6/30/16	27	20	7	3	2	2	1	1																								1
7/1/16 - 6/30/17	21	14	5	2	1	1	1																									1
7/1/17 - 6/30/18	23	13	3	3	1	2																										2
7/1/18 - 6/30/19	27	11	3	3	3																											3
7/1/19 - 6/30/20	23	6	2	1																												1
7/1/20 - 6/30/21	12	12	3																													3
7/1/21 - 6/30/22	12	10																														10
7/1/22 - 6/30/23	17																															17
																																47

Commonwealth of Massachusetts
Other Colleges and Universities
Other C&U - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Unpaid Loss Estimates

Accident Year	Payroll (00)'s	Retention	Unlimited Paid Loss @ 06/30/2023	Unlimited Reported Loss @ 06/30/2023	Ultimate Loss Low	Ultimate Loss High	Indicated Total Unpaid Loss Estimates Low	Indicated Total Unpaid Loss Estimates High	Case Reserves	Indicated IBNR Estimate Low	Indicated IBNR Estimate High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993		Unlimited	22,061,830	22,061,830	23,766,439	24,145,240	1,704,608	2,083,410	0	1,704,608	2,083,410
7/1/93 - 6/30/94	5,848,530	Unlimited	1,317,192	1,317,192	1,354,400	1,358,300	37,208	41,108	0	37,208	41,108
7/1/94 - 6/30/95	5,877,010	Unlimited	1,817,354	1,817,354	1,817,354	1,817,354	0	0	0	0	0
7/1/95 - 6/30/96	6,148,680	Unlimited	1,269,047	1,269,047	1,269,047	1,269,047	0	0	0	0	0
7/1/96 - 6/30/97	7,006,860	Unlimited	1,179,732	1,179,732	1,227,000	1,232,000	47,268	52,268	0	47,268	52,268
7/1/97 - 6/30/98	6,844,150	Unlimited	2,625,461	2,625,461	2,749,900	2,763,000	124,439	137,539	0	124,439	137,539
7/1/98 - 6/30/99	7,077,960	Unlimited	1,626,118	1,626,118	1,716,400	1,725,900	90,282	99,782	0	90,282	99,782
7/1/99 - 6/30/00	7,604,770	Unlimited	1,182,336	1,182,336	1,260,700	1,269,000	78,364	86,664	0	78,364	86,664
7/1/00 - 6/30/01	8,116,000	Unlimited	1,889,024	1,889,024	2,039,200	2,055,000	150,176	165,976	0	150,176	165,976
7/1/01 - 6/30/02	8,350,380	Unlimited	2,698,870	2,698,870	2,698,870	2,698,870	0	0	0	0	0
7/1/02 - 6/30/03	8,253,400	Unlimited	1,438,134	1,438,134	1,594,300	1,610,800	156,166	172,666	0	156,166	172,666
7/1/03 - 6/30/04	8,492,160	Unlimited	1,501,155	1,501,155	1,501,155	1,501,155	0	0	0	0	0
7/1/04 - 6/30/05	9,925,080	Unlimited	1,023,565	1,023,565	1,023,565	1,023,565	0	0	0	0	0
7/1/05 - 6/30/06	9,628,780	Unlimited	1,716,467	1,716,467	1,995,200	2,024,600	278,733	308,133	0	278,733	308,133
7/1/06 - 6/30/07	10,329,300	Unlimited	968,709	968,709	1,146,100	1,164,700	177,391	195,991	0	177,391	195,991
7/1/07 - 6/30/08	10,635,970	Unlimited	2,917,340	2,917,340	3,513,000	3,575,700	595,660	658,360	0	595,660	658,360
7/1/08 - 6/30/09	10,738,050	Unlimited	2,242,694	2,242,694	2,749,500	2,802,800	506,806	560,106	0	506,806	560,106
7/1/09 - 6/30/10	10,847,490	Unlimited	3,819,424	3,819,424	4,770,100	4,870,200	950,676	1,050,776	0	950,676	1,050,776
7/1/10 - 6/30/11	11,341,640	Unlimited	2,458,081	2,458,081	3,128,700	3,199,300	670,619	741,219	0	670,619	741,219
7/1/11 - 6/30/12	12,026,740	Unlimited	2,327,743	2,327,743	3,021,000	3,094,000	693,257	766,257	0	693,257	766,257
7/1/12 - 6/30/13	12,847,410	Unlimited	2,357,828	2,357,828	3,121,800	3,202,200	763,972	844,372	0	763,972	844,372
7/1/13 - 6/30/14	13,469,020	Unlimited	2,519,760	2,519,760	3,403,900	3,497,000	884,140	977,240	0	884,140	977,240
7/1/14 - 6/30/15	14,040,930	Unlimited	2,317,082	2,317,082	3,211,300	3,305,400	894,218	988,318	0	894,218	988,318
7/1/15 - 6/30/16	14,546,120	Unlimited	3,594,025	3,594,025	5,101,800	5,328,800	1,507,775	1,734,775	0	1,507,775	1,734,775
7/1/16 - 6/30/17	14,615,880	Unlimited	2,689,860	2,689,860	4,021,400	4,221,800	1,331,540	1,531,940	0	1,331,540	1,531,940
7/1/17 - 6/30/18	14,577,400	Unlimited	2,388,992	2,388,992	3,805,700	4,019,000	1,416,708	1,630,008	0	1,416,708	1,630,008
7/1/18 - 6/30/19	15,002,050	Unlimited	1,700,330	1,700,330	2,947,800	3,135,600	1,247,470	1,435,270	0	1,247,470	1,435,270
7/1/19 - 6/30/20	15,086,780	Unlimited	1,042,113	1,042,113	2,692,400	2,940,800	1,650,287	1,898,687	0	1,650,287	1,898,687
7/1/20 - 6/30/21	14,138,618	Unlimited	1,349,932	1,349,932	3,079,000	3,463,000	1,729,068	2,113,068	0	1,729,068	2,113,068
7/1/21 - 6/30/22	15,119,517	Unlimited	776,521	776,521	3,091,000	3,606,000	2,314,479	2,829,479	0	2,314,479	2,829,479
7/1/22 - 6/30/23	15,459,627	Unlimited	438,372	438,372	3,435,000	4,101,000	2,996,628	3,662,628	0	2,996,628	3,662,628
Total	323,996,302		79,255,091	79,255,091	102,253,030	106,021,132	22,997,939	26,766,041	0	22,997,939	26,766,041

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	Provided by Entity
(6)	From Section VI, Exhibit I, Sheet 6, Column (11)
(7)	From Section VI, Exhibit I, Sheet 6, Column (12)
(8)	= (6) - (4)
(9)	= (7) - (4)
(10)	= (5) - (4)
(11)	= (8) - (10)
(12)	= (9) - (10)

Commonwealth of Massachusetts
Other Colleges and Universities
Other C&U - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Short-Term Portion

Accident Year	Age of Losses @ 06/30/2023	Selected Paid Test LDF @ 06/30/2023	Implied Paid LDF	Paid LDF	Cumulative Percent Paid	Incremental Percent Paid	Average Total Unpaid Loss Estimate	Undiscounted Cash Flow of Payments 2024
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
						0.26%		
Prior to 7/1/1993	372.0	1.027	1.086	1.027	97.40%	0.29%	1,894,009	187,167
7/1/93 - 6/30/94	360.0	1.030	1.030	1.030	97.11%	0.32%	39,158	3,939
7/1/94 - 6/30/95	348.0	1.033	1.000	1.033	96.79%	0.35%	0	0
7/1/95 - 6/30/96	336.0	1.037	1.000	1.037	96.44%	0.49%	0	0
7/1/96 - 6/30/97	324.0	1.042	1.042	1.042	95.95%	0.70%	49,768	6,019
7/1/97 - 6/30/98	312.0	1.050	1.050	1.050	95.25%	0.77%	130,989	19,425
7/1/98 - 6/30/99	300.0	1.058	1.058	1.058	94.48%	1.00%	95,032	13,268
7/1/99 - 6/30/00	288.0	1.070	1.070	1.070	93.48%	1.20%	82,514	12,645
7/1/00 - 6/30/01	276.0	1.084	1.084	1.084	92.28%	1.22%	158,076	24,566
7/1/01 - 6/30/02	264.0	1.098	1.000	1.098	91.06%	1.32%	0	0
7/1/02 - 6/30/03	252.0	1.114	1.114	1.114	89.74%	1.31%	164,416	21,150
7/1/03 - 6/30/04	240.0	1.131	1.000	1.131	88.43%	1.49%	0	0
7/1/04 - 6/30/05	228.0	1.150	1.000	1.150	86.93%	1.53%	0	0
7/1/05 - 6/30/06	216.0	1.171	1.171	1.171	85.40%	1.56%	293,433	30,794
7/1/06 - 6/30/07	204.0	1.193	1.193	1.193	83.84%	1.53%	186,691	18,019
7/1/07 - 6/30/08	192.0	1.215	1.215	1.215	82.31%	1.52%	627,010	54,330
7/1/08 - 6/30/09	180.0	1.238	1.238	1.238	80.78%	1.55%	533,456	42,316
7/1/09 - 6/30/10	168.0	1.262	1.262	1.262	79.24%	1.55%	1,000,726	74,505
7/1/10 - 6/30/11	156.0	1.287	1.287	1.287	77.69%	1.56%	705,919	49,044
7/1/11 - 6/30/12	144.0	1.313	1.314	1.313	76.13%	1.56%	729,757	47,575
7/1/12 - 6/30/13	132.0	1.341	1.341	1.341	74.57%	1.54%	804,172	49,482
7/1/13 - 6/30/14	120.0	1.369	1.369	1.369	73.03%	1.91%	930,690	53,185
7/1/14 - 6/30/15	108.0	1.406	1.406	1.406	71.11%	2.20%	941,268	62,379
7/1/15 - 6/30/16	96.0	1.451	1.451	1.451	68.91%	3.65%	1,621,275	114,703
7/1/16 - 6/30/17	84.0	1.532	1.532	1.532	65.26%	4.20%	1,431,740	150,442
7/1/17 - 6/30/18	72.0	1.638	1.638	1.638	61.06%	5.16%	1,523,358	164,328
7/1/18 - 6/30/19	60.0	1.789	1.789	1.789	55.90%	6.65%	1,341,370	156,993
7/1/19 - 6/30/20	48.0	2.030	2.703	2.030	49.25%	9.21%	1,774,487	232,412
7/1/20 - 6/30/21	36.0	2.497	2.423	2.497	40.05%	12.44%	1,921,068	295,038
7/1/21 - 6/30/22	24.0	3.622	4.312	3.622	27.61%	15.19%	2,571,979	441,997
7/1/22 - 6/30/23	12.0	8.056	8.595	8.056	12.41%	12.41%	3,329,628	577,576
Total							24,881,990	2,903,299

	Undiscounted	Discounted			
Short-Term Portion	12%	14%	(10)	Interest Rate	4%

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1) @ 06/30/2023
(3) From Section VI, Exhibit I, Sheet 10, Column (6)
(4) Average Ultimate Loss Divided by Paid Loss From Section VI, Exhibit I, Sheet 6
(5) Selected
(6) = 1 / (5)
(7) = (6) from Current Age - (6) from Subsequent Age
(8) From Section VI, Exhibit I, Sheet 3
(9) - (9) Based on (5)

Commonwealth of Massachusetts
Other Colleges and Universities
Other C&U - Indemnity (Including Lump Sum)

Section VI
Exhibit I
Sheet 3

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Discounted at (4%) Unpaid Loss Estimate

Accident Year	Indicated Total Unpaid Loss Estimate Low	Indicated Total Unpaid Loss Estimate High	Discount Factor	Discounted Total Unpaid Loss Estimate Low	Discounted Total Unpaid Loss Estimate High
(1)	(2)	(3)	(4)	(5)	(6)
Prior to 7/1/1993	1,704,608	2,083,410	1.000	1,704,608	2,083,410
7/1/93 - 6/30/94	37,208	41,108	0.981	36,486	40,310
7/1/94 - 6/30/95	0	0	0.947	0	0
7/1/95 - 6/30/96	0	0	0.917	0	0
7/1/96 - 6/30/97	47,268	52,268	0.894	42,250	46,720
7/1/97 - 6/30/98	124,439	137,539	0.877	109,186	120,680
7/1/98 - 6/30/99	90,282	99,782	0.863	77,895	86,091
7/1/99 - 6/30/00	78,364	86,664	0.853	66,824	73,902
7/1/00 - 6/30/01	150,176	165,976	0.845	126,885	140,235
7/1/01 - 6/30/02	0	0	0.835	0	0
7/1/02 - 6/30/03	156,166	172,666	0.826	128,996	142,625
7/1/03 - 6/30/04	0	0	0.815	0	0
7/1/04 - 6/30/05	0	0	0.806	0	0
7/1/05 - 6/30/06	278,733	308,133	0.797	222,148	245,580
7/1/06 - 6/30/07	177,391	195,991	0.787	139,610	154,248
7/1/07 - 6/30/08	595,660	658,360	0.776	462,317	510,981
7/1/08 - 6/30/09	506,806	560,106	0.765	387,644	428,412
7/1/09 - 6/30/10	950,676	1,050,776	0.754	716,531	791,977
7/1/10 - 6/30/11	670,619	741,219	0.742	497,931	550,351
7/1/11 - 6/30/12	693,257	766,257	0.731	506,992	560,379
7/1/12 - 6/30/13	763,972	844,372	0.720	550,259	608,168
7/1/13 - 6/30/14	884,140	977,240	0.709	626,871	692,880
7/1/14 - 6/30/15	894,218	988,318	0.702	627,340	693,356
7/1/15 - 6/30/16	1,507,775	1,734,775	0.696	1,049,741	1,207,783
7/1/16 - 6/30/17	1,331,540	1,531,940	0.702	934,921	1,075,629
7/1/17 - 6/30/18	1,416,708	1,630,008	0.708	1,003,141	1,154,174
7/1/18 - 6/30/19	1,247,470	1,435,270	0.716	893,097	1,027,548
7/1/19 - 6/30/20	1,650,287	1,898,687	0.727	1,199,197	1,379,700
7/1/20 - 6/30/21	1,729,068	2,113,068	0.742	1,282,970	1,567,898
7/1/21 - 6/30/22	2,314,479	2,829,479	0.759	1,757,540	2,148,614
7/1/22 - 6/30/23	2,996,628	3,662,628	0.774	2,318,191	2,833,409
Total	22,997,939	26,766,041		17,469,569	20,365,057

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From Section VI, Exhibit I, Sheet 1, Column (8)
(3) From Section VI, Exhibit I, Sheet 1, Column (9)
(4) From Section VI, Exhibit I, Sheet 0, Column (8)
(5) = (2) x (4)
(6) = (3) x (4)

Commonwealth of Massachusetts
Other Colleges and Universities
Other C&U - Indemnity (Including Lump Sum)

Section VI
Exhibit I
Sheet 4

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Actual vs Expected - Paid Loss Emergence

Accident Year	Selected Low Ultimate Loss @ 06/30/2022	Selected High Ultimate Loss @ 06/30/2022	Unlimited Paid Loss @ 06/30/2022	Unlimited Paid Loss @ 06/30/2023	Paid LDF @ 06/30/2022	Projected Paid LDF @ 06/30/2023	Method 1 Low Expected Paid Emergence Loss @ 06/30/2023	Method 1 High Expected Paid Emergence Loss @ 06/30/2023	Actual Paid Emergence Loss @ 06/30/2023	Actual - Expected Method 1 Low Paid	Actual - Expected Method 1 High Paid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993	23,660,546	24,035,228	21,974,476	22,061,830	1.032	1.028	166,248	203,192	87,355	(78,893)	(115,837)
7/1/93 - 6/30/94	1,334,300	1,338,800	1,290,992	1,317,192	1.035	1.032	4,242	4,683	26,200	21,958	21,517
7/1/94 - 6/30/95	1,817,354	1,817,354	1,817,354	1,817,354	1.039	1.035	0	0	0	0	0
7/1/95 - 6/30/96	1,269,047	1,269,047	1,269,047	1,269,047	1.043	1.039	0	0	0	0	0
7/1/96 - 6/30/97	1,234,600	1,240,300	1,179,732	1,179,732	1.049	1.043	5,886	6,497	0	(5,886)	(6,497)
7/1/97 - 6/30/98	2,735,100	2,750,600	2,587,965	2,625,461	1.060	1.049	25,629	28,329	37,496	11,867	9,167
7/1/98 - 6/30/99	1,737,000	1,748,700	1,626,118	1,626,118	1.072	1.060	17,385	19,219	0	(17,385)	(19,219)
7/1/99 - 6/30/00	1,278,700	1,288,800	1,182,336	1,182,336	1.086	1.072	14,660	16,196	0	(14,660)	(16,196)
7/1/00 - 6/30/01	2,029,300	2,047,900	1,852,304	1,889,024	1.101	1.086	23,980	26,500	36,720	12,740	10,220
7/1/01 - 6/30/02	2,698,870	2,698,870	2,698,870	2,698,870	1.117	1.101	0	0	0	0	0
7/1/02 - 6/30/03	1,622,400	1,641,800	1,438,134	1,438,134	1.135	1.117	21,667	23,948	0	(21,667)	(23,948)
7/1/03 - 6/30/04	1,500,008	1,500,008	1,500,008	1,501,155	1.154	1.135	0	0	1,147	1,147	1,147
7/1/04 - 6/30/05	1,023,565	1,023,565	1,023,565	1,023,565	1.173	1.154	0	0	0	0	0
7/1/05 - 6/30/06	1,990,700	2,023,200	1,682,220	1,716,467	1.193	1.173	27,260	30,131	34,247	6,988	4,116
7/1/06 - 6/30/07	1,165,300	1,186,000	968,708	968,709	1.214	1.193	15,924	17,600	1	(15,923)	(17,599)
7/1/07 - 6/30/08	3,488,200	3,555,500	2,849,536	2,917,340	1.236	1.214	49,672	54,906	67,804	18,133	12,898
7/1/08 - 6/30/09	2,725,200	2,781,800	2,187,498	2,242,694	1.259	1.236	38,365	42,403	55,196	16,831	12,793
7/1/09 - 6/30/10	4,726,800	4,832,200	3,724,967	3,819,424	1.283	1.259	68,415	75,613	94,457	26,042	18,844
7/1/10 - 6/30/11	3,177,600	3,253,300	2,458,081	2,458,081	1.308	1.283	45,523	50,313	0	(45,523)	(50,313)
7/1/11 - 6/30/12	3,066,200	3,144,000	2,327,743	2,327,743	1.334	1.308	43,677	48,278	0	(43,677)	(48,278)
7/1/12 - 6/30/13	3,051,300	3,133,600	2,268,780	2,357,828	1.363	1.334	47,024	51,970	89,048	42,023	37,078
7/1/13 - 6/30/14	3,413,600	3,512,400	2,474,682	2,519,760	1.399	1.363	62,627	69,218	45,078	(17,549)	(24,140)
7/1/14 - 6/30/15	3,143,100	3,280,900	2,227,797	2,317,082	1.442	1.399	62,820	72,278	89,285	26,465	17,008
7/1/15 - 6/30/16	4,795,600	5,029,100	3,244,465	3,594,025	1.514	1.442	151,274	174,046	349,560	198,287	175,515
7/1/16 - 6/30/17	3,978,000	4,196,700	2,525,181	2,689,860	1.619	1.514	162,175	186,588	164,679	2,504	(21,909)
7/1/17 - 6/30/18	3,785,500	4,023,500	2,204,288	2,388,992	1.771	1.619	193,385	222,493	184,705	(8,681)	(37,789)
7/1/18 - 6/30/19	3,059,800	3,283,400	1,574,209	1,700,330	2.015	1.771	201,181	231,462	126,121	(75,060)	(105,341)
7/1/19 - 6/30/20	2,576,000	2,975,000	780,868	1,042,113	2.469	2.015	275,570	336,820	261,245	(14,325)	(75,575)
7/1/20 - 6/30/21	3,143,000	3,625,000	973,126	1,349,932	3.566	2.469	375,741	459,206	376,806	1,065	(82,399)
7/1/21 - 6/30/22	3,333,000	4,008,000	296,116	776,521	7.904	3.566	535,020	653,937	480,404	(54,616)	(173,533)
Total	98,559,690	102,244,572	76,209,164	78,816,719			2,635,350	3,105,827	2,607,555	(27,795)	(498,272)

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Selected by Deloitte Consulting LLP @ 06/30/2022
(3)	Selected by Deloitte Consulting LLP @ 06/30/2022
(4)	Provided by Entity
(5)	Provided by Entity
(6)	Selected by Deloitte Consulting LLP @ 06/30/2022
(7)	Interpolated From (6)
(8)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((2) - (4))
(9)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((3) - (4))
(10)	= (5) - (4)
(11)	= (10) - (8)
(12)	= (10) - (9)

Commonwealth of Massachusetts
Other Colleges and Universities
Other C&U - Indemnity (Including Lump Sum)

Section VI
Exhibit I
Sheet 5

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Ultimate Loss Runoff

Accident Year	Ultimate Loss @ 06/30/2022 Low	Ultimate Loss @ 06/30/2022 High	Ultimate Loss @ 06/30/2023 Low	Ultimate Loss @ 06/30/2023 High	Deloitte Change Low	Deloitte Change High	Paid Loss @ 06/30/2023	Reported Loss @ 06/30/2023
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	23,660,546	24,035,228	23,766,439	24,145,240	105,893	110,012	22,061,830	22,061,830
7/1/93 - 6/30/94	1,334,300	1,338,800	1,354,400	1,358,300	20,100	19,500	1,317,192	1,317,192
7/1/94 - 6/30/95	1,817,354	1,817,354	1,817,354	1,817,354	0	0	1,817,354	1,817,354
7/1/95 - 6/30/96	1,269,047	1,269,047	1,269,047	1,269,047	0	0	1,269,047	1,269,047
7/1/96 - 6/30/97	1,234,600	1,240,300	1,227,000	1,232,000	(7,600)	(8,300)	1,179,732	1,179,732
7/1/97 - 6/30/98	2,735,100	2,750,600	2,749,900	2,763,000	14,800	12,400	2,625,461	2,625,461
7/1/98 - 6/30/99	1,737,000	1,748,700	1,716,400	1,725,900	(20,600)	(22,800)	1,626,118	1,626,118
7/1/99 - 6/30/00	1,278,700	1,288,800	1,260,700	1,269,000	(18,000)	(19,800)	1,182,336	1,182,336
7/1/00 - 6/30/01	2,029,300	2,047,900	2,039,200	2,055,000	9,900	7,100	1,889,024	1,889,024
7/1/01 - 6/30/02	2,698,870	2,698,870	2,698,870	2,698,870	0	0	2,698,870	2,698,870
7/1/02 - 6/30/03	1,622,400	1,641,800	1,594,300	1,610,800	(28,100)	(31,000)	1,438,134	1,438,134
7/1/03 - 6/30/04	1,500,008	1,500,008	1,501,155	1,501,155	1,147	1,147	1,501,155	1,501,155
7/1/04 - 6/30/05	1,023,565	1,023,565	1,023,565	1,023,565	0	0	1,023,565	1,023,565
7/1/05 - 6/30/06	1,990,700	2,023,200	1,995,200	2,024,600	4,500	1,400	1,716,467	1,716,467
7/1/06 - 6/30/07	1,165,300	1,186,000	1,146,100	1,164,700	(19,200)	(21,300)	968,709	968,709
7/1/07 - 6/30/08	3,488,200	3,555,500	3,513,000	3,575,700	24,800	20,200	2,917,340	2,917,340
7/1/08 - 6/30/09	2,725,200	2,781,800	2,749,500	2,802,800	24,300	21,000	2,242,694	2,242,694
7/1/09 - 6/30/10	4,726,800	4,832,200	4,770,100	4,870,200	43,300	38,000	3,819,424	3,819,424
7/1/10 - 6/30/11	3,177,600	3,253,300	3,128,700	3,199,300	(48,900)	(54,000)	2,458,081	2,458,081
7/1/11 - 6/30/12	3,066,200	3,144,000	3,021,000	3,094,000	(45,200)	(50,000)	2,327,743	2,327,743
7/1/12 - 6/30/13	3,051,300	3,133,600	3,121,800	3,202,200	70,500	68,600	2,357,828	2,357,828
7/1/13 - 6/30/14	3,413,600	3,512,400	3,403,900	3,497,000	(9,700)	(15,400)	2,519,760	2,519,760
7/1/14 - 6/30/15	3,143,100	3,280,900	3,211,300	3,305,400	68,200	24,500	2,317,082	2,317,082
7/1/15 - 6/30/16	4,795,600	5,029,100	5,101,800	5,328,800	306,200	299,700	3,594,025	3,594,025
7/1/16 - 6/30/17	3,978,000	4,196,700	4,021,400	4,221,800	43,400	25,100	2,689,860	2,689,860
7/1/17 - 6/30/18	3,785,500	4,023,500	3,805,700	4,019,000	20,200	(4,500)	2,388,992	2,388,992
7/1/18 - 6/30/19	3,059,800	3,283,400	2,947,800	3,135,600	(112,000)	(147,800)	1,700,330	1,700,330
7/1/19 - 6/30/20	2,576,000	2,975,000	2,692,400	2,940,800	116,400	(34,200)	1,042,113	1,042,113
7/1/20 - 6/30/21	3,143,000	3,625,000	3,079,000	3,463,000	(64,000)	(162,000)	1,349,932	1,349,932
7/1/21 - 6/30/22	3,333,000	4,008,000	3,091,000	3,606,000	(242,000)	(402,000)	776,521	776,521
Total	98,559,690	102,244,572	98,818,030	101,920,132	258,340	(324,440)	78,816,719	78,816,719

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(3) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(4) From Section VI, Exhibit I, Sheet 6, Column (11)
(5) From Section VI, Exhibit I, Sheet 6, Column (12)
(6) = (4) - (2)
(7) = (5) - (3)
(8) Provided by Entity
(9) Provided by Entity

Commonwealth of Massachusetts
Other Colleges and Universities
Other C&U - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Selection of Ultimate Loss

Accident Year	Payroll (00)'s	Unlimited Paid Loss @ 06/30/2023	Unlimited Reported Loss @ 06/30/2023	Ultimate Loss Indications: Paid LDM	Ultimate Loss Indications: Expected Loss	Ultimate Loss Indications: Paid B-F	Ultimate Loss Indications: Frequency Severity	Prior Selected Ultimate Loss: Low	Prior Selected Ultimate Loss: High	Selected Ultimate Loss: Low	Selected Ultimate Loss: High	Ultimate Loss Rates: Low	Ultimate Loss Rates: High	Ultimate Loss Severity: Low	Ultimate Loss Severity: High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Prior to 7/1/1993		22,061,830	22,061,830	22,649,698	0		0	23,660,546	24,035,228	23,766,439	24,145,240				
7/1/93 - 6/30/94	5,848,530	1,317,192	1,317,192	1,356,332	1,294,680	1,354,553	0	1,334,300	1,338,800	1,354,400	1,358,300	0.23	0.23		
7/1/94 - 6/30/95	5,877,010	1,817,354	1,817,354	1,877,535	1,312,734	1,859,432	0	1,817,354	1,817,354	1,817,354	1,817,354	0.31	0.31		
7/1/95 - 6/30/96	6,148,680	1,269,047	1,269,047	1,315,861	1,384,920	1,318,317	0	1,269,047	1,269,047	1,269,047	1,269,047	0.21	0.21		
7/1/96 - 6/30/97	7,006,860	1,179,732	1,179,732	1,229,490	1,594,386	1,244,257	0	1,234,600	1,240,300	1,227,000	1,232,000	0.18	0.18		
7/1/97 - 6/30/98	6,844,150	2,625,461	2,625,461	2,756,439	1,577,211	2,700,406	0	2,735,100	2,750,600	2,749,900	2,763,000	0.40	0.40		
7/1/98 - 6/30/99	7,077,960	1,626,118	1,626,118	1,721,174	1,653,932	1,717,461	0	1,737,000	1,748,700	1,716,400	1,725,900	0.24	0.24		
7/1/99 - 6/30/00	7,604,770	1,182,336	1,182,336	1,264,832	1,808,337	1,300,281	0	1,278,700	1,288,800	1,260,700	1,269,000	0.17	0.17		
7/1/00 - 6/30/01	8,116,000	1,889,024	1,889,024	2,047,111	1,975,391	2,041,572	0	2,029,300	2,047,900	2,039,200	2,055,000	0.25	0.25		
7/1/01 - 6/30/02	8,350,380	2,698,870	2,698,870	2,963,856	2,069,988	2,883,939	0	2,698,870	2,698,870	2,698,870	2,698,870	0.32	0.32		
7/1/02 - 6/30/03	8,253,400	1,438,134	1,438,134	1,602,565	2,055,351	1,649,023	0	1,622,400	1,641,800	1,594,300	1,610,800	0.19	0.20		
7/1/03 - 6/30/04	8,492,160	1,501,155	1,501,155	1,697,632	2,115,597	1,746,006	0	1,500,008	1,500,008	1,501,155	1,501,155	0.18	0.18		
7/1/04 - 6/30/05	9,925,080	1,023,565	1,023,565	1,177,413	2,487,060	1,348,540	0	1,023,565	1,023,565	1,023,565	1,023,565	0.10	0.10		
7/1/05 - 6/30/06	9,628,780	1,716,467	1,716,467	2,009,884	2,437,537	2,072,316	0	1,990,700	2,023,200	1,995,200	2,024,600	0.21	0.21		
7/1/06 - 6/30/07	10,329,300	968,709	968,709	1,155,402	2,643,639	1,395,875	0	1,165,300	1,186,000	1,146,100	1,164,700	0.11	0.11		
7/1/07 - 6/30/08	10,635,970	2,917,340	2,917,340	3,544,383	2,752,411	3,404,274	0	3,488,200	3,555,500	3,513,000	3,575,700	0.33	0.34		
7/1/08 - 6/30/09	10,738,050	2,242,694	2,242,694	2,776,141	2,806,943	2,782,059	0	2,725,200	2,781,800	2,749,500	2,802,800	0.26	0.26		
7/1/09 - 6/30/10	10,847,490	3,819,424	3,819,424	4,820,137	2,847,560	4,410,609	0	4,726,800	4,832,200	4,770,100	4,870,200	0.44	0.45		
7/1/10 - 6/30/11	11,341,640	2,458,081	2,458,081	3,164,009	2,978,386	3,122,595	0	3,177,600	3,253,300	3,128,700	3,199,300	0.28	0.28		
7/1/11 - 6/30/12	12,026,740	2,327,743	2,327,743	3,057,476	3,176,368	3,085,852	0	3,066,200	3,144,000	3,021,000	3,094,000	0.25	0.26		
7/1/12 - 6/30/13	12,847,410	2,357,828	2,357,828	3,161,985	3,421,527	3,227,991	3,684,569	3,051,300	3,133,600	3,121,800	3,202,200	0.24	0.25	28,124	28,849
7/1/13 - 6/30/14	13,469,020	2,519,760	2,519,760	3,450,471	3,604,558	3,492,033	3,641,819	3,413,600	3,512,400	3,403,900	3,497,000	0.25	0.26	32,112	32,991
7/1/14 - 6/30/15	14,040,930	2,317,082	2,317,082	3,258,351	3,777,318	3,408,270	3,806,319	3,143,100	3,280,900	3,211,300	3,305,400	0.23	0.24	30,012	30,892
7/1/15 - 6/30/16	14,546,120	3,594,025	3,594,025	5,215,329	3,943,060	4,819,815	4,024,238	4,795,600	5,029,100	5,101,800	5,328,800	0.35	0.37	46,806	48,888
7/1/16 - 6/30/17	14,615,880	2,689,860	2,689,860	4,121,592	3,994,658	4,077,499	3,565,708	3,978,000	4,196,700	4,021,400	4,221,800	0.28	0.29	43,241	45,396
7/1/17 - 6/30/18	14,577,400	2,388,992	2,388,992	3,912,382	4,020,986	3,954,670	5,460,324	3,785,500	4,023,500	3,805,700	4,019,000	0.26	0.28	27,779	29,336
7/1/18 - 6/30/19	15,002,050	1,700,330	1,700,330	3,041,680	4,179,501	3,543,447	3,659,748	3,059,800	3,283,400	2,947,800	3,135,600	0.20	0.21	33,397	35,524
7/1/19 - 6/30/20	15,086,780	1,042,113	1,042,113	2,115,764	4,246,190	3,196,855	2,816,621	2,576,000	2,975,000	2,692,400	2,940,800	0.18	0.19	41,241	45,046
7/1/20 - 6/30/21	14,138,618	1,349,932	1,349,932	3,370,861	4,036,510	3,769,937	2,771,940	3,143,000	3,625,000	3,079,000	3,463,000	0.22	0.24	50,071	56,315
7/1/21 - 6/30/22	15,119,517	776,521	776,521	2,812,853	4,421,659	3,977,530	2,719,238	3,333,000	4,008,000	3,091,000	3,606,000	0.20	0.24	54,062	63,070
7/1/22 - 6/30/23	15,459,627	438,372	438,372	3,531,610	4,610,750	4,476,798	3,059,576			3,435,000	4,101,000	0.22	0.27	56,088	66,963
Total	323,996,302	79,255,091	79,255,091	102,180,247	85,229,149	83,382,211	39,210,101	98,559,690	102,244,572	102,253,030	106,021,132				

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	From Section VI, Exhibit I, Sheet 10, Column (7)
(6)	From Section VI, Exhibit I, Sheet 7, Column (4)
(7)	From Section VI, Exhibit I, Sheet 7, Column (10)
(8)	From Section VI, Exhibit I, Sheet 9, Column (12)
(9)	From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(10)	From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(11)	Selected by Deloitte Consulting LLP
(12)	Selected by Deloitte Consulting LLP
(13)	= (11) / (2)
(14)	= (12) / (2)
(15)	(11) Divided by Ultimate Claims From Section VI, Exhibit I, Sheet 13, Column (7)
(16)	(12) Divided by Ultimate Claims From Section VI, Exhibit I, Sheet 13, Column (7)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Bornhuetter-Ferguson Method

Accident Year	Payroll (00)'s	Initial Expected Loss Rates	Initial Expected Loss	Expected % of Paid Loss	Expected Paid Loss	Unlimited Actual Paid Loss	Expected % of Unpaid Loss	Expected Unpaid Loss	Unlimited Indicated Ultimate Loss	Unlimited Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
7/1/93 - 6/30/94	5,848,530	0.22	1,294,680	97.1%	1,257,319	1,317,192	2.9%	37,361	1,354,553	0.23
7/1/94 - 6/30/95	5,877,010	0.22	1,312,734	96.8%	1,270,657	1,817,354	3.2%	42,077	1,859,432	0.32
7/1/95 - 6/30/96	6,148,680	0.23	1,384,920	96.4%	1,335,650	1,269,047	3.6%	49,270	1,318,317	0.21
7/1/96 - 6/30/97	7,006,860	0.23	1,594,386	96.0%	1,529,861	1,179,732	4.0%	64,526	1,244,257	0.18
7/1/97 - 6/30/98	6,844,150	0.23	1,577,211	95.2%	1,502,266	2,625,461	4.8%	74,945	2,700,406	0.39
7/1/98 - 6/30/99	7,077,960	0.23	1,653,932	94.5%	1,562,589	1,626,118	5.5%	91,343	1,717,461	0.24
7/1/99 - 6/30/00	7,604,770	0.24	1,808,337	93.5%	1,690,392	1,182,336	6.5%	117,945	1,300,281	0.17
7/1/00 - 6/30/01	8,116,000	0.24	1,975,391	92.3%	1,822,843	1,889,024	7.7%	152,548	2,041,572	0.25
7/1/01 - 6/30/02	8,350,380	0.25	2,069,988	91.1%	1,884,919	2,698,870	8.9%	185,069	2,883,939	0.35
7/1/02 - 6/30/03	8,253,400	0.25	2,055,351	89.7%	1,844,462	1,438,134	10.3%	210,889	1,649,023	0.20
7/1/03 - 6/30/04	8,492,160	0.25	2,115,597	88.4%	1,870,747	1,501,155	11.6%	244,850	1,746,006	0.21
7/1/04 - 6/30/05	9,925,080	0.25	2,487,060	86.9%	2,162,085	1,023,565	13.1%	324,975	1,348,540	0.14
7/1/05 - 6/30/06	9,628,780	0.25	2,437,537	85.4%	2,081,689	1,716,467	14.6%	355,849	2,072,316	0.22
7/1/06 - 6/30/07	10,329,300	0.26	2,643,639	83.8%	2,216,473	968,709	16.2%	427,166	1,395,875	0.14
7/1/07 - 6/30/08	10,635,970	0.26	2,752,411	82.3%	2,265,477	2,917,340	17.7%	486,934	3,404,274	0.32
7/1/08 - 6/30/09	10,738,050	0.26	2,806,943	80.8%	2,267,577	2,242,694	19.2%	539,366	2,782,059	0.26
7/1/09 - 6/30/10	10,847,490	0.26	2,847,560	79.2%	2,256,375	3,819,424	20.8%	591,185	4,410,609	0.41
7/1/10 - 6/30/11	11,341,640	0.26	2,978,386	77.7%	2,313,873	2,458,081	22.3%	664,514	3,122,595	0.28
7/1/11 - 6/30/12	12,026,740	0.26	3,176,368	76.1%	2,418,260	2,327,743	23.9%	758,109	3,085,852	0.26
7/1/12 - 6/30/13	12,847,410	0.27	3,421,527	74.6%	2,551,363	2,357,828	25.4%	870,163	3,227,991	0.25
7/1/13 - 6/30/14	13,469,020	0.27	3,604,558	73.0%	2,632,284	2,519,760	27.0%	972,273	3,492,033	0.26
7/1/14 - 6/30/15	14,040,930	0.27	3,777,318	71.1%	2,686,130	2,317,082	28.9%	1,091,187	3,408,270	0.24
7/1/15 - 6/30/16	14,546,120	0.27	3,943,060	68.9%	2,717,270	3,594,025	31.1%	1,225,790	4,819,815	0.33
7/1/16 - 6/30/17	14,615,880	0.27	3,994,658	65.3%	2,607,019	2,689,860	34.7%	1,387,639	4,077,499	0.28
7/1/17 - 6/30/18	14,577,400	0.28	4,020,986	61.1%	2,455,308	2,388,992	38.9%	1,565,677	3,954,670	0.27
7/1/18 - 6/30/19	15,002,050	0.28	4,179,501	55.9%	2,336,384	1,700,330	44.1%	1,843,117	3,543,447	0.24
7/1/19 - 6/30/20	15,086,780	0.28	4,246,190	49.3%	2,091,448	1,042,113	50.7%	2,154,742	3,196,855	0.21
7/1/20 - 6/30/21	14,138,618	0.29	4,036,510	40.0%	1,616,506	1,349,932	60.0%	2,420,004	3,769,937	0.27
7/1/21 - 6/30/22	15,119,517	0.29	4,421,659	27.6%	1,220,650	776,521	72.4%	3,201,009	3,977,530	0.26
7/1/22 - 6/30/23	15,459,627	0.30	4,610,750	12.4%	572,323	438,372	87.6%	4,038,426	4,476,798	0.29
Total	323,996,302		85,229,149		59,040,199	57,193,261		26,188,950	83,382,211	

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	From Section VI, Exhibit I, Sheet 8, Column (13)
(4)	= (2) x (3)
(5)	= 1 / Section VI, Exhibit I, Sheet 10, Column (6)
(6)	= (4) x (5)
(7)	Provided by Entity
(8)	= 1 - (5)
(9)	= (4) x (8)
(10)	= (7) + (9)
(11)	= (10) / (2)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Calculation of Initial Expected Loss Rates

Accident Year	Payroll (00)'s	Payroll Trend	Loss Development Unlimited Indicated Ultimate Loss Paid	Reported	Selected Initial Ultimate Loss	Loss Trend Factor	Benefit Level Adjustment Factors	Trended Ultimate	On-level Loss Rates	Detrended Loss Rates	Prior Expected Loss Rates	Initial Expected Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
7/1/93 - 6/30/94	5,848,530	2.357	1,356,332	1,356,332	23,955,839	2.357	1.347	76,058,491	***5.52***	0.22	0.24	0.22
7/1/94 - 6/30/95	5,877,010	2.288	1,877,535	1,877,535	1,356,350	2.288	1.335	4,143,489	0.31	0.22	0.24	0.22
7/1/95 - 6/30/96	6,148,680	2.221	1,315,861	1,315,861	1,817,354	2.221	1.324	5,345,329	0.39	0.23	0.24	0.23
7/1/96 - 6/30/97	7,006,860	2.157	1,229,490	1,229,490	1,269,047	2.157	1.311	3,587,137	0.24	0.23	0.24	0.23
7/1/97 - 6/30/98	6,844,150	2.094	2,756,439	2,756,439	1,229,500	2.094	1.294	3,331,666	0.23	0.23	0.24	0.23
7/1/98 - 6/30/99	7,077,960	2.033	1,721,174	1,721,174	2,756,450	2.033	1.276	7,151,655	0.50	0.23	0.25	0.23
7/1/99 - 6/30/00	7,604,770	1.974	1,264,832	1,264,832	1,721,150	1.974	1.254	4,260,436	0.28	0.24	0.25	0.24
7/1/00 - 6/30/01	8,116,000	1.916	2,047,111	2,047,111	1,264,850	1.916	1.225	2,969,747	0.19	0.24	0.26	0.24
7/1/01 - 6/30/02	8,350,380	1.860	2,963,856	2,963,856	2,047,100	1.860	1.203	4,581,754	0.29	0.25	0.26	0.25
7/1/02 - 6/30/03	8,253,400	1.806	1,602,565	1,602,565	2,698,870	1.806	1.198	5,837,755	0.39	0.25	0.26	0.25
7/1/03 - 6/30/04	8,492,160	1.754	1,697,632	1,697,632	1,602,550	1.754	1.197	3,364,159	0.23	0.25	0.26	0.25
7/1/04 - 6/30/05	9,925,080	1.702	1,177,413	1,177,413	1,501,155	1.702	1.190	3,041,697	0.18	0.25	0.27	0.25
7/1/05 - 6/30/06	9,628,780	1.653	2,009,884	2,009,884	1,023,565	1.653	1.178	1,993,153	0.13	0.25	0.27	0.25
7/1/06 - 6/30/07	10,329,300	1.605	1,155,402	1,155,402	2,009,900	1.605	1.165	3,758,473	0.23	0.26	0.27	0.26
7/1/07 - 6/30/08	10,635,970	1.558	3,544,383	3,544,383	1,155,400	1.558	1.152	2,074,565	0.13	0.26	0.27	0.26
7/1/08 - 6/30/09	10,738,050	1.513	2,776,141	2,776,141	3,544,350	1.513	1.141	6,116,770	0.38	0.26	0.28	0.26
7/1/09 - 6/30/10	10,847,490	1.469	4,820,137	4,820,137	2,776,150	1.469	1.136	4,631,863	0.29	0.26	0.28	0.26
7/1/10 - 6/30/11	11,341,640	1.426	3,164,009	3,164,009	4,820,150	1.426	1.136	7,805,030	0.48	0.26	0.28	0.26
7/1/11 - 6/30/12	12,026,740	1.384	3,057,476	3,057,476	3,164,000	1.384	1.129	4,945,788	0.30	0.26	0.28	0.26
7/1/12 - 6/30/13	12,847,410	1.344	3,161,985	3,161,985	3,057,500	1.344	1.120	4,601,579	0.27	0.27	0.28	0.27
7/1/13 - 6/30/14	13,469,020	1.305	3,450,471	3,450,471	3,162,000	1.305	1.114	4,597,835	0.26	0.27	0.28	0.27
7/1/14 - 6/30/15	14,040,930	1.267	3,258,351	3,258,351	3,450,450	1.267	1.109	4,845,721	0.27	0.27	0.29	0.27
7/1/15 - 6/30/16	14,546,120	1.230	5,215,329	5,215,329	3,258,350	1.230	1.100	4,409,046	0.25	0.27	0.29	0.27
7/1/16 - 6/30/17	14,615,880	1.194	4,121,592	4,121,592	5,215,300	1.194	1.091	6,795,486	0.39	0.27	0.29	0.27
7/1/17 - 6/30/18	14,577,400	1.159	3,912,382	3,912,382	4,121,600	1.159	1.081	5,166,210	0.31	0.28	0.29	0.28
7/1/18 - 6/30/19	15,002,050	1.126	3,041,680	3,041,680	3,912,350	1.126	1.071	4,713,954	0.28	0.28	0.30	0.28
7/1/19 - 6/30/20	15,086,780	1.093	2,115,764	2,115,764	3,041,700	1.093	1.060	3,522,067	0.21	0.28	0.30	0.28
7/1/20 - 6/30/21	14,138,618	1.061	3,370,861	3,370,861	3,370,861	1.061	1.045	3,735,843	***0.25***	0.29	0.30	0.29
7/1/21 - 6/30/22	15,119,517	1.030	2,812,853	2,812,853	2,812,853	1.030	1.020	2,954,673	***0.19***	0.29	0.31	0.29
7/1/22 - 6/30/23	15,459,627	1.000	3,531,610	3,531,610	3,531,610	1.000	1.000	3,531,610	***0.23***	0.30		0.30
			79,530,549	79,530,549				Last 3 Wtd Avg	0.27			
								Last 4 Wtd Avg	0.30			
								Last 5 Wtd Avg	0.29			
								All Per Wtd Avg	0.28			

(Note: numbers in bold and italics and with borders are excluded from the calculated averages)

Selected (14) 0.30

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Selected by Deloitte Consulting LLP
(4) From Section VI, Exhibit I, Sheet 10, Column (7)
(5) From Section VI, Exhibit I, Sheet 0, Column (7)
(6) Selected by Deloitte Consulting LLP
(7) Selected by Deloitte Consulting LLP
(8) Based on industry sources
(9) = (6) x (7) x (8)
(10) = (9) / [(2) x (3)]
(11) = (14) / (7) / (8) * (3)
(12) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(13) Selected for by Deloitte Consulting LLP Based on (14)
(14) Selected by Deloitte Consulting LLP

Commonwealth of Massachusetts
Other Colleges and Universities
Other C&U - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Frequency Severity Method

Accident Year	Payroll (00)'s	Ultimate Reported Severity	Include For Fit	Exponential Fitted Reported Severity	Initial Selected Ultimate Severity	Selected Ultimate Claim Counts	Benefit Level Adjustment Factor	Selected Severity Trend	Trended Severity	On-Level Selected Ultimate Severity	Indicated Ultimate Loss	Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Prior to 7/1/1993			Exclude	18,972		0					0	
7/1/93 - 6/30/94	5,848,530		Exclude	19,556		0	1.347	2.357	0,000		0	0.00
7/1/94 - 6/30/95	5,877,010		Exclude	20,158		0	1.335	2.288	0,000		0	0.00
7/1/95 - 6/30/96	6,148,680		Exclude	20,779		0	1.324	2.221	0,000		0	0.00
7/1/96 - 6/30/97	7,006,860		Exclude	21,419		0	1.311	2.157	0,000		0	0.00
7/1/97 - 6/30/98	6,844,150		Exclude	22,078		0	1.294	2.094	0,000		0	0.00
7/1/98 - 6/30/99	7,077,960		Exclude	22,758		0	1.276	2.033	0,000		0	0.00
7/1/99 - 6/30/00	7,604,770		Exclude	23,459		0	1.254	1.974	0,000		0	0.00
7/1/00 - 6/30/01	8,116,000		Exclude	24,181		0	1.225	1.916	0,000		0	0.00
7/1/01 - 6/30/02	8,350,380		Exclude	24,926		0	1.203	1.860	0,000		0	0.00
7/1/02 - 6/30/03	8,253,400		Exclude	25,693		0	1.198	1.806	0,000		0	0.00
7/1/03 - 6/30/04	8,492,160		Exclude	26,484		0	1.197	1.754	0,000		0	0.00
7/1/04 - 6/30/05	9,925,080		Exclude	27,300		0	1.190	1.702	0,000		0	0.00
7/1/05 - 6/30/06	9,628,780		Exclude	28,141		0	1.178	1.653	0,000		0	0.00
7/1/06 - 6/30/07	10,329,300		Exclude	29,007		0	1.165	1.605	0,000		0	0.00
7/1/07 - 6/30/08	10,635,970		Exclude	29,900		0	1.152	1.558	0,000		0	0.00
7/1/08 - 6/30/09	10,738,050		Exclude	30,821		0	1.141	1.513	0,000		0	0.00
7/1/09 - 6/30/10	10,847,490		Exclude	31,770		0	1.136	1.469	0,000		0	0.00
7/1/10 - 6/30/11	11,341,640		Exclude	32,748		0	1.136	1.426	0,000		0	0.00
7/1/11 - 6/30/12	12,026,740		Exclude	33,757		0	1.129	1.384	0,000		0	0.00
7/1/12 - 6/30/13	12,847,410	28,486	Include	34,796	27,545	111	1.120	1.344	41,456	49,958	3,684,569	0.29
7/1/13 - 6/30/14	13,469,020	32,552	Include	35,868	29,830	106	1.114	1.305	43,376	49,958	3,641,819	0.27
7/1/14 - 6/30/15	14,040,930	30,452	Include	36,972	32,247	107	1.109	1.267	45,287	49,958	3,806,319	0.27
7/1/15 - 6/30/16	14,546,120	47,847	Include	38,111	29,893	109	1.100	1.230	40,450	49,958	4,024,238	0.28
7/1/16 - 6/30/17	14,615,880	44,318	Include	39,284	56,078	93	1.091	1.194	73,070	49,958	3,565,708	0.24
7/1/17 - 6/30/18	14,577,400	28,558	Include	40,494	30,085	137	1.081	1.159	37,710	49,958	5,460,324	0.37
7/1/18 - 6/30/19	15,002,050	34,460	Include	41,741	44,324	88	1.071	1.126	53,406	49,958	3,659,748	0.24
7/1/19 - 6/30/20	15,086,780	32,409	Include	43,026	46,592	65	1.060	1.093	53,950	49,958	2,816,621	0.19
7/1/20 - 6/30/21	14,138,618	54,817	Include	44,351	54,817	61	1.045	1.061	***60,752***	49,958	2,771,940	0.20
7/1/21 - 6/30/22	15,119,517	49,197	Exclude	45,716	49,197	57	1.020	1.030	***51,678***	49,958	2,719,238	0.18
7/1/22 - 6/30/23	15,459,627	57,665	Exclude	47,124	57,665	61	1.000	1.000	***57,665***	49,958	3,059,576	0.20
			Implied Trend	3.1%	17.2%			Last 5 Wtd Avg	49,958			
								Last 4 Wtd Avg	52,660			
								Last 3 Wtd Avg	46,127			
Total	323,996,302					996		Last 3 Avg	48,355		39,210,101	
								Selected	49,958			

Reported Exponential Regression	
Constant	10.791
X Coefficient	(0.030)
R Squared	0.130

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Section VI, Exhibit I, Sheet 0, Column (7) / Section VI, Exhibit I, Sheet 13, Column (7) x 1
(4) Years included for purposes of fit
(5) Result of Exponential fit of Column (3) * Column (8)
(6) Selected by Deloitte Consulting LLP
(7) From Section VI, Exhibit I, Sheet 13, Column (7)
(8) Based on industry sources
(9) Selected by Deloitte Consulting LLP
(10) = (6) x (8) x (9)
(11) Selected by Deloitte Consulting, LLP
(12) Selected in column (11) x (7) / (8) / (9)
(13) = (12) / (3)

Commonwealth of Massachusetts
Other Colleges and Universities
Other C&U - Indemnity (Including Lump Sum)

Section VI
Exhibit I
Sheet 10

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss Development Method

Accident Year	Age of Losses @ 06/30/2023	Retention	Payroll (00)'s	Unlimited Paid Loss @ 06/30/2023	Paid LDF	Indicated Ultimate Loss	Unlimited Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Prior to 7/1/1993	372.0	Unlimited		22,061,830	1.027	22,649,698	
7/1/93 - 6/30/94	360.0	Unlimited	5,848,530	1,317,192	1.030	1,356,332	0.23
7/1/94 - 6/30/95	348.0	Unlimited	5,877,010	1,817,354	1.033	1,877,535	0.32
7/1/95 - 6/30/96	336.0	Unlimited	6,148,680	1,269,047	1.037	1,315,861	0.21
7/1/96 - 6/30/97	324.0	Unlimited	7,006,860	1,179,732	1.042	1,229,490	0.18
7/1/97 - 6/30/98	312.0	Unlimited	6,844,150	2,625,461	1.050	2,756,439	0.40
7/1/98 - 6/30/99	300.0	Unlimited	7,077,960	1,626,118	1.058	1,721,174	0.24
7/1/99 - 6/30/00	288.0	Unlimited	7,604,770	1,182,336	1.070	1,264,832	0.17
7/1/00 - 6/30/01	276.0	Unlimited	8,116,000	1,889,024	1.084	2,047,111	0.25
7/1/01 - 6/30/02	264.0	Unlimited	8,350,380	2,698,870	1.098	2,963,856	0.35
7/1/02 - 6/30/03	252.0	Unlimited	8,253,400	1,438,134	1.114	1,602,565	0.19
7/1/03 - 6/30/04	240.0	Unlimited	8,492,160	1,501,155	1.131	1,697,632	0.20
7/1/04 - 6/30/05	228.0	Unlimited	9,925,080	1,023,565	1.150	1,177,413	0.12
7/1/05 - 6/30/06	216.0	Unlimited	9,628,780	1,716,467	1.171	2,009,884	0.21
7/1/06 - 6/30/07	204.0	Unlimited	10,329,300	968,709	1.193	1,155,402	0.11
7/1/07 - 6/30/08	192.0	Unlimited	10,635,970	2,917,340	1.215	3,544,383	0.33
7/1/08 - 6/30/09	180.0	Unlimited	10,738,050	2,242,694	1.238	2,776,141	0.26
7/1/09 - 6/30/10	168.0	Unlimited	10,847,490	3,819,424	1.262	4,820,137	0.44
7/1/10 - 6/30/11	156.0	Unlimited	11,341,640	2,458,081	1.287	3,164,009	0.28
7/1/11 - 6/30/12	144.0	Unlimited	12,026,740	2,327,743	1.313	3,057,476	0.25
7/1/12 - 6/30/13	132.0	Unlimited	12,847,410	2,357,828	1.341	3,161,985	0.25
7/1/13 - 6/30/14	120.0	Unlimited	13,469,020	2,519,760	1.369	3,450,471	0.26
7/1/14 - 6/30/15	108.0	Unlimited	14,040,930	2,317,082	1.406	3,258,351	0.23
7/1/15 - 6/30/16	96.0	Unlimited	14,546,120	3,594,025	1.451	5,215,329	0.36
7/1/16 - 6/30/17	84.0	Unlimited	14,615,880	2,689,860	1.532	4,121,592	0.28
7/1/17 - 6/30/18	72.0	Unlimited	14,577,400	2,388,992	1.638	3,912,382	0.27
7/1/18 - 6/30/19	60.0	Unlimited	15,002,050	1,700,330	1.789	3,041,680	0.20
7/1/19 - 6/30/20	48.0	Unlimited	15,086,780	1,042,113	2.030	2,115,764	0.14
7/1/20 - 6/30/21	36.0	Unlimited	14,138,618	1,349,932	2.497	3,370,861	0.24
7/1/21 - 6/30/22	24.0	Unlimited	15,119,517	776,521	3.622	2,812,853	0.19
7/1/22 - 6/30/23	12.0	Unlimited	15,459,627	438,372	8.056	3,531,610	0.23
Total			323,996,302	79,255,091		102,180,247	

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1)
(3) Provided by Entity
(4) Provided by Entity
(5) Provided by Entity
(6) From Section VI, Exhibit I, Sheet 11
(7) = (5) x (6)
(8) = (7) / (4)

Commonwealth of Massachusetts
Other Colleges and Universities
Other C&U - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development 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	348	360	372	As of 6/30/2023
Prior to 7/1/1993	44,245,444	12,346,269	13,366,392	14,082,704	14,785,625	15,575,150	16,226,216	16,695,877	17,165,474	17,600,485	17,971,189	18,310,816	18,634,059	18,941,120	19,229,367	19,579,892	19,873,401	20,136,391	20,357,315	20,584,592	20,851,595	21,258,135	21,429,817	21,537,470	21,602,146	21,670,788	21,741,791	21,815,456	21,891,721	21,974,476	22,061,830	22,061,830
7/1/93 - 6/30/94	145,078	338,638	462,332	583,452	661,360	789,759	824,338	842,894	861,764	881,297	901,006	919,225	938,419	958,569	978,773	1,000,452	1,022,666	1,044,787	1,066,933	1,089,019	1,111,105	1,133,191	1,155,338	1,177,424	1,199,510	1,221,597	1,243,743	1,265,829	1,290,992	1,317,192		1,317,192
7/1/94 - 6/30/95	115,982	433,462	658,743	773,370	960,124	1,030,439	1,077,462	1,137,115	1,209,561	1,268,397	1,268,457	1,271,820	1,285,222	1,327,549	1,370,728	1,415,996	1,459,561	1,502,678	1,548,491	1,592,468	1,636,969	1,682,205	1,727,375	1,773,363	1,817,354	1,817,354	1,817,354	1,817,354				1,817,354
7/1/95 - 6/30/96	228,756	545,949	672,767	777,734	926,663	999,211	1,060,882	1,103,356	1,182,205	1,269,047	1,269,047	1,269,047	1,269,047	1,269,047	1,269,047	1,269,047	1,269,047	1,269,047	1,269,047	1,269,047	1,269,047	1,269,047	1,269,047	1,269,047	1,269,047	1,269,047	1,269,047	1,269,047				1,269,047
7/1/96 - 6/30/97	184,229	377,946	607,286	729,906	807,448	878,869	905,432	924,433	945,404	964,574	984,407	1,008,897	1,030,087	1,051,474	1,076,468	1,098,628	1,120,892	1,143,309	1,178,539	1,178,539	1,178,539	1,178,539	1,178,539	1,179,732	1,179,732	1,179,732	1,179,732					1,179,732
7/1/97 - 6/30/98	204,733	406,969	608,428	751,503	876,266	970,818	1,166,526	1,295,878	1,376,871	1,460,899	1,548,861	1,638,390	1,736,075	1,825,882	1,905,371	1,978,867	2,051,522	2,125,045	2,199,781	2,274,408	2,350,383	2,427,744	2,506,497	2,551,635	2,587,965	2,625,461						2,625,461
7/1/98 - 6/30/99	178,965	400,074	658,577	835,540	948,260	974,393	1,001,860	1,031,054	1,061,343	1,116,901	1,184,506	1,217,014	1,249,386	1,282,862	1,316,769	1,350,909	1,385,456	1,420,573	1,455,640	1,491,339	1,527,690	1,564,695	1,602,383	1,626,118	1,626,118							1,626,118
7/1/99 - 6/30/00	277,497	665,937	951,061	1,022,951	1,104,341	1,147,109	1,182,336	1,182,336	1,182,336	1,182,336	1,182,336	1,182,336	1,182,336	1,182,336	1,182,336	1,182,336	1,182,336	1,182,336	1,182,336	1,182,336	1,182,336	1,182,336	1,182,336	1,182,336								1,182,336
7/1/00 - 6/30/01	238,769	570,991	878,554	1,074,443	1,196,047	1,247,856	1,309,607	1,397,290	1,427,324	1,457,578	1,487,705	1,518,858	1,550,412	1,582,184	1,614,351	1,647,033	1,680,166	1,713,389	1,747,218	1,781,656	1,816,728	1,852,304	1,889,024									1,889,024
7/1/01 - 6/30/02	237,348	711,745	1,080,296	1,433,994	1,633,853	1,862,089	1,952,846	2,022,242	2,076,332	2,130,193	2,185,889	2,242,305	2,299,109	2,356,593	2,415,024	2,473,369	2,532,769	2,593,252	2,654,825	2,698,870	2,698,870	2,698,870										2,698,870
7/1/02 - 6/30/03	291,166	606,649	771,780	885,677	966,825	1,058,435	1,085,956	1,123,415	1,149,516	1,176,505	1,203,913	1,232,207	1,260,064	1,288,379	1,316,652	1,345,437	1,403,134	1,438,134	1,438,134	1,438,134	1,438,134											1,438,134
7/1/03 - 6/30/04	217,692	494,010	665,712	846,060	1,124,866	1,249,639	1,399,175	1,486,953	1,486,953	1,486,953	1,486,953	1,490,601	1,490,601	1,490,601	1,490,601	1,490,601	1,500,008	1,500,008	1,500,008	1,501,155												1,501,155
7/1/04 - 6/30/05	230,521	433,799	678,139	824,739	928,914	973,781	1,022,754	1,023,493	1,023,564	1,023,564	1,023,564	1,023,564	1,023,564	1,023,564	1,023,564	1,023,565	1,023,565	1,023,565	1,023,565													1,023,565
7/1/05 - 6/30/06	295,643	668,840	905,565	1,085,239	1,205,927	1,232,606	1,259,807	1,298,406	1,318,990	1,364,758	1,407,148	1,518,763	1,552,655	1,584,208	1,616,327	1,649,039	1,682,220	1,716,467														1,716,467
7/1/06 - 6/30/07	271,385	557,910	746,652	860,911	869,279	891,612	939,415	968,708	968,708	968,708	968,708	968,708	968,708	968,708	968,708	968,708	968,709															968,709
7/1/07 - 6/30/08	266,597	716,370	1,167,726	1,407,168	1,646,106	1,880,290	2,137,102	2,326,869	2,468,417	2,524,830	2,584,717	2,647,186	2,710,777	2,775,540	2,849,536	2,917,340																2,917,340
7/1/08 - 6/30/09	286,738	604,698	874,591	1,131,874	1,345,080	1,466,140	1,621,010	1,787,110	1,849,437	1,962,077	2,015,460	2,069,313	2,124,720	2,187,498	2,242,694																	2,242,694
7/1/09 - 6/30/10	418,176	1,068,528	1,560,776	2,047,952	2,314,684	2,654,614	2,859,447	3,055,128	3,233,213	3,376,856	3,490,490	3,625,052	3,724,967	3,819,424																		3,819,424
7/1/10 - 6/30/11	441,106	979,293	1,689,949	1,951,905	2,104,252	2,179,619	2,289,763	2,370,561	2,457,150	2,457,151	2,458,081	2,458,081	2,458,081																			2,458,081
7/1/11 - 6/30/12	412,473	870,426	1,313,326	1,844,926	2,128,719	2,180,406	2,232,506	2,319,904	2,327,743	2,327,743	2,327,743	2,327,743																				2,327,743
7/1/12 - 6/30/13	432,464	783,505	1,196,035	1,512,582	1,706,654	1,847,776	1,969,060	2,101,773	2,184,892	2,268,780	2,357,828																					2,357,828
7/1/13 - 6/30/14	553,274	1,070,985	1,451,064	1,694,323	1,963,357	2,160,128	2,281,359	2,425,298	2,474,682	2,519,760																						2,519,760
7/1/14 - 6/30/15	513,416	936,417	1,321,257	1,618,707	1,815,471	2,093,293	2,154,787	2,227,797	2,317,082																							2,317,082
7/1/15 - 6/30/16	552,170	1,148,899	1,568,649	2,031,121	2,498,208	2,820,687	3,244,465	3,594,025																								3,594,025
7/1/16 - 6/30/17	423,610	1,062,257	1,661,705	2,039,493	2,227,675	2,525,181	2,689,860																									2,689,860
7/1/17 - 6/30/18	633,507	1,286,074	1,810,797	2,023,283	2,204,288	2,388,992																										2,388,992
7/1/18 - 6/30/19	419,549	866,612	1,230,896	1,574,209	1,700,330																											1,700,330
7/1/19 - 6/30/20	302,226	633,786	780,868	1,042,113																												1,042,113
7/1/20 - 6/30/21	368,923	973,126	1,349,932																													1,349,932
7/1/21 - 6/30/22	296,116	776,521																														776,521
7/1/22 - 6/30/23	438,372																															438,372
																																79,255,091

Accident Year	Age-to-Age Development Factors 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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993	***0.279***	***1.083***	***1.054***	***1.050***	***1.053***	***1.042***	***1.029***	***1.028***	***1.025***	***1.021***	***1.019***	***1.018***	***1.016***	***1.015***	***1.018***	***1.015***	***1.013***	***1.011***	***1.011***	***1.013***	***1.019***	***1.008***	***1.005***	***1.003***	***1.003***	***1.003***	***1.003***	***1.003***	***1.004***	***1.004***	
7/1/93 - 6/30/94	2.334	1.365	1.262	1.134	1.194	1.044	1.023	1.022	1.023	1.022	1.020	1.021	1.021	1.021	1.022	1.022	1.022	1.021	1.021	1.020	1.020	1.020	1.019	1.019	1.018	1.018	1.018	1.020	1.020		
7/1/94 - 6/30/95	3.737	1.520	1.174	1.241	1.073	1.046	1.055	1.064	1.049	1.000	1.003	1.011	1.033	1.033	1.033	1.031	1.030	1.030	1.028	1.028	1.028	1.027	1.027	1.025	1.000	1.000	1.000	1.000			
7/1/95 - 6/30/96	2.387	1.232	1.156	1.191	1.078	1.062	1.040	1.071	1.073	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	1.000				
7/1/96 - 6/30/97	2.052	1.607	1.202	1.106	1.088	1.030	1.021	1.023	1.020	1.021	1.025	1.021	1.021	1.024	1.021	1.020	1.020	1.031	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000					
7/1/97 - 6/30/98	1.988	1.495	1.235	1.166	1.108	1.202	1.111	1.063	1.061	1.060	1.058	1.060	1.052	1.044	1.039	1.037	1.036	1.035	1.034	1.033	1.033	1.032	1.018	1.014	1.014						
7/1/98 - 6/30/99	2.235	1.646	1.269	1.135	1.028	1.028	1.029	1.029	1.052	1.061	1.027	1.027	1.027	1.026	1.026	1.026	1.025	1.025	1.025	1.024	1.024	1.024	1.015	1.000							
7/1/99 - 6/30/00	2.400	1.428	1.076	1.080	1.039	1.031	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								
7/1/00 - 6/30/01	2.391	1.539	1.223	1.113	1.043	1.049	1.067	1.021	1.021	1.021	1.021	1.021	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020									
7/1/01 - 6/30/02	2.999	1.518	1.327	1.139	1.140	1.049	1.036	1.027	1.026	1.026	1.026	1.025	1.025	1.025	1.024	1.024	1.024	1.024	1.017	1.000	1.000										
7/1/02 - 6/30/03	2.084	1.272	1.148	1.092	1.095	1.026	1.034	1.023	1.023	1.023	1.024	1.023	1.022	1.022	1.022	1.043	1.025	1.000	1.000	1.000											
7/1/03 - 6/30/04	2.269	1.348	1.271	1.330	1.111	1.120	1.063	1.000	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.006	1.000	1.000	1.001												
7/1/04 - 6/30/05	1.882	1.563	1.216	1.126	1.048	1.050	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000													
7/1/05 - 6/30/06	2.262	1.354	1.198	1.111	1.022	1.022	1.031	1.016	1.035	1.031	1.079	1.022	1.020	1.020	1.020	1.020	1.020														
7/1/06 - 6/30/07	2.056	1.338	1.153	1.010	1.026	1.054	1.031	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000															
7/1/07 - 6/30/08	2.687	1.630	1.205	1.170	1.142	1.137	1.089	1.061	1.023	1.024	1.024	1.024	1.024	1.027	1.024																
7/1/08 - 6/30/09	2.109	1.446	1.294	1.188	1.090	1.106	1.102	1.035	1.061	1.027	1.027	1.027	1.030	1.025																	
7/1/09 - 6/30/10	2.555	1.461	1.312	1.130	1.147	1.077	1.068	1.058	1.044	1.034	1.039	1.028	1.025																		
7/1/10 - 6/30/11	2.220	1.726	1.155	1.078	1.036	1.051	1.035	1.037	1.000	1.000	1.000	1.000																			
7/1/11 - 6/30/12	2.110	1.509	1.405	1.154	1.024	1.024	1.039	1.003	1.000	1.000	1.000																				
7/1/12 - 6/30/13	1.812	1.527	1.265	1.128	1.083	1.066	1.067	1.040	1.038	1.039																					
7/1/13 - 6/30/14	1.936	1.355	1.168	1.159	1.100	1.056	1.063	1.020	1.018																						
7/1/14 - 6/30/15	1.824	1.411	1.225	1.122	1.153	1.029	1.034	1.040																							
7/1/15 - 6/30/16	2.081	1.365	1.295	1.230	1.129	1.150	1.108																								
7/1/16 - 6/30/17	2.508	1.564	1.227	1.092	1.134	1.065																									
7/1/17 - 6/30/18	2.030	1.408	1.117	1.089	1.084																										
7/1/18 - 6/30/19	2.066	1.420	1.279	1.080																											
7/1/19 - 6/30/20	2.097	1.232	1.335																												
7/1/20 - 6/30/21	2.638	1.387																													
7/1/21 - 6/30/22	2.622																														
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																															
Last 3 Wtd Avg	2.464	1.359	1.214	1.088	1.116	1.087	1.074	1.033	1.018	1.013	1.016	1.019	1.026	1.022	1.018	1.009	1.008	1.000	1.008	1.006	1.006	1.016	1.013	1.007	1.007	1.000	1.005				
Last 5 Wtd Avg	2.245	1.417	1.235	1.125	1.119	1.078	1.066	1.028	1.022	1.021	1.019	1.019	1.023	1.019	1.013	1.015	1.016	1.012	1.009	1.008	1.016	1.019	1.009	1.010	1.007						
Last 9 Wtd Avg	2.155	1.412	1.247	1.126	1.100	1.071	1.068	1.036	1.025	1.020	1.021	1.016	1.020	1.018	1.015	1.017	1.019	1.017	1.013	1.013	1.015										
Last 12 Wtd Avg	2.129	1.450	1.246	1.133	1.099	1.073	1.062	1.031	1.022	1.019	1.021	1.017	1.019	1.020	1.019	1.018	1.018	1.017													
All Per Wtd Avg	2.224	1.451	1.230	1.135	1.092	1.069	1.056	1.032	1.027	1.020	1.021	1.019	1.021	1.020	1.019	1.020	1.019	1.017	1.015	1.013	1.015	1.018	1.013	1.011	1.007	1.004	1.005	1.008	1.020		
Industry																															
Age-to-Age	2.944	1.572	1.221	1.082	1.038	1.014	1.011	1.008	1.006	1.005	1.005	1.002	1.003	1.002	1.003	1.002	1.002	1.001	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	
Age-to-Ult	7.016	2.383	1.516	1.242	1.148	1.106	1.091	1.079	1.070	1.064	1.059	1.054	1.052	1.049	1.047	1.044	1.042	1.040	1.039	1.037	1.036	1.034	1.032	1.031	1.029	1.027	1.025	1.023	1.022	1.020	1.018
Prior Selected																															
Age-to-Age	2.216	1.444	1.226	1.137	1.094	1.069	1.050	1.030	1.027	1.022	1.020	1.019	1.019	1.018	1.018	1.017	1.017	1.017	1.016	1.016	1.015	1.014	1.013	1.011	1.010	1.005	1.004	1.004	1.003	1.003	
Age-to-Ult	7.904	3.566	2.469	2.015	1.771	1.619	1.514	1.442	1.399	1.363	1.334	1.308	1.283	1.259	1.236	1.214	1.193	1.173	1.154	1.135	1.117	1.101	1.086	1.072	1.060	1.049	1.043	1.039	1.035	1.032	1.028
Selected																															
Age-to-Age	2.224	1.451	1.230	1.135	1.092	1.069	1.056	1.032	1.027	1.021	1.021	1.020	1.020	1.020	1.019	1.019	1.019	1.018	1.017	1.015	1.015	1.013	1.013	1.011	1.008	1.007	1.005	1.004	1.003	1.003	
Age-to-Ult	8.056	3.622	2.497	2.030	1.789	1.638	1.532	1.451	1.406	1.369	1.341	1.313	1.287	1.262	1.238	1.215	1.193	1.171	1.150	1.131	1.114	1.098	1.084	1.070	1.058	1.050	1.042	1.037	1.033	1.030	1.027

Commonwealth of Massachusetts
Other Colleges and Universities
Other C&U - Indemnity (Including Lump Sum)

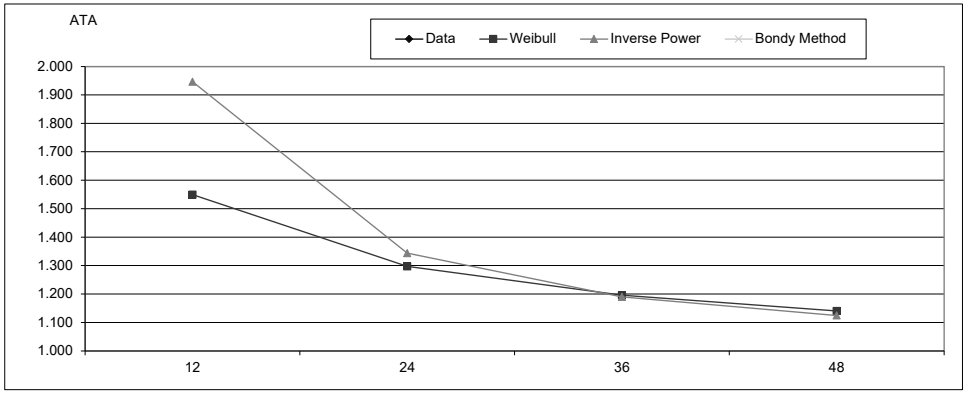
Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

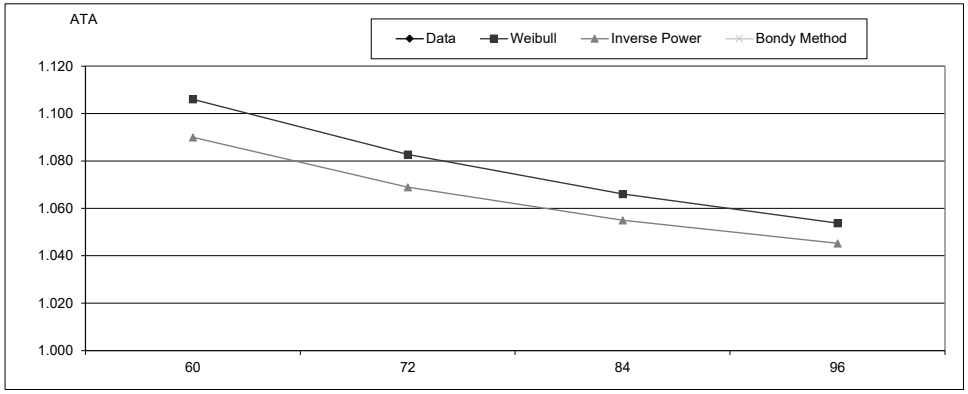
Curve Fitting Methods
Paid Loss

Tail at Period:	**31**	(To display in table)
Cut-off point:(<=Tail & <51)	**50**	(to run-out pattern)

Summary of Curve Fitting Methods

Method	Tail	R^2
Weibull	**1.027**	**0.907**
Inverse Power	**1.091**	**0.946**
Bondy Method		**N/A**





				Weibull		Inverse Power		Bondy Method			
									Sel. Decay Ratio=		
PERIOD	AGE	ATA	Use	**ATA***	**ATU***	**ATA***	**ATU***	Ln(ATA)	Decay	**ATA***	**ATU***
1	12	0.000	Exclude	**1.550**	5.129	**1.947**	6.871				
2	24	1.451	Include	**1.297**	3.310	**1.344**	3.529				
3	36	1.230	Include	**1.196**	2.551	**1.190**	2.627				
4	48	1.135	Include	**1.141**	2.133	**1.125**	2.207				
5	60	1.092	Include	**1.106**	1.871	**1.090**	1.963				
6	72	1.069	Include	**1.083**	1.691	**1.069**	1.801				
7	84	1.056	Include	**1.066**	1.562	**1.055**	1.684				
8	96	1.032	Include	**1.054**	1.465	**1.045**	1.597				
9	108	1.027	Include	**1.044**	1.390	**1.038**	1.527				
10	120	1.021	Include	**1.037**	1.331	**1.033**	1.471				
11	132	1.021	Include	**1.031**	1.284	**1.028**	1.425				
12	144	1.020	Include	**1.027**	1.245	**1.025**	1.385				
13	156	1.020	Include	**1.023**	1.213	**1.022**	1.352				
14	168	1.020	Include	**1.020**	1.186	**1.020**	1.322				
15	180	1.019	Include	**1.017**	1.163	**1.018**	1.296				
16	192	1.019	Include	**1.015**	1.143	**1.016**	1.273				
17	204	1.019	Include	**1.013**	1.127	**1.015**	1.253				
18	216	0.000	Exclude	**1.011**	1.112	**1.014**	1.234				
19	228	1.017	Include	**1.010**	1.100	**1.013**	1.217				
20	240	1.015	Include	**1.009**	1.089	**1.012**	1.202				
21	252	1.015	Include	**1.008**	1.079	**1.011**	1.188				
22	264	0.000	Exclude	**1.007**	1.071	**1.010**	1.175				
23	276	0.000	Exclude	**1.006**	1.063	**1.010**	1.163				
24	288	0.000	Exclude	**1.006**	1.057	**1.009**	1.152				
25	300	0.000	Exclude	**1.005**	1.051	**1.009**	1.141				
26	312	0.000	Exclude	**1.004**	1.046	**1.008**	1.132				
27	324	0.000	Exclude	**1.004**	1.041	**1.008**	1.123				
28	336	0.000	Exclude	**1.004**	1.037	**1.007**	1.114				
29	348	0.000	Exclude	**1.003**	1.033	**1.007**	1.106				
30	360	0.000	Exclude	**1.003**	1.030	**1.007**	1.099				
31	372	0.000	Exclude	**1.003**	1.027	**1.006**	1.091				
32	384	0.000	Exclude	**1.002**	1.024	**1.006**	1.085				
33	396	0.000	Exclude	**1.002**	1.021	**1.006**	1.078				
34	408	0.000	Exclude	**1.002**	1.019	**1.005**	1.072				
35	420	0.000	Exclude	**1.002**	1.017	**1.005**	1.066				
36	432	0.000	Exclude	**1.002**	1.015	**1.005**	1.061				
37	444	0.000	Exclude	**1.002**	1.013	**1.005**	1.055				
38	456	0.000	Exclude	**1.001**	1.012	**1.005**	1.050				
39	468	0.000	Exclude	**1.001**	1.010	**1.004**	1.046				
40	480	0.000	Exclude	**1.001**	1.009	**1.004**	1.041				
41	492	0.000	Exclude	**1.001**	1.008	**1.004**	1.036				
42	504	0.000	Exclude	**1.001**	1.007	**1.004**	1.032				
43	516	0.000	Exclude	**1.001**	1.006	**1.004**	1.028				
44	528	0.000	Exclude	**1.001**	1.005	**1.004**	1.024				
45	540	0.000	Exclude	**1.001**	1.004	**1.004**	1.020				
46	552	0.000	Exclude	**1.001**	1.003	**1.004**	1.017				
47	564	0.000	Exclude	**1.001**	1.002	**1.003**	1.013				
48	576	0.000	Exclude	**1.001**	1.002	**1.003**	1.010				
49	588	0.000	Exclude	**1.001**	1.001	**1.003**	1.006				
50	600	0.000	Exclude	**1.001**	1.001	**1.003**	1.003				

Unpaid Claim Analysis as of 06/30/2023

Ultimate Claim Count Development

Accident Year	Age of Counts @ 06/30/2023	Payroll (00)'s	Reported Claim Counts @ 06/30/2023	Reported Count Dev Factor	Indicated Ultimate Claim Counts	Selected Ultimate Claim Counts	Selected Ultimate Frequency	Selected Ultimate Frequency (Inflation-Adjusted)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	372.0		18	1.000	18			
7/1/93 - 6/30/94	360.0	5,848,530	3	1.000	3		0.00%	0.00%
7/1/94 - 6/30/95	348.0	5,877,010	2	1.000	2		0.00%	0.00%
7/1/95 - 6/30/96	336.0	6,148,680	1	1.000	1		0.00%	0.00%
7/1/96 - 6/30/97	324.0	7,006,860	4	1.000	4		0.00%	0.00%
7/1/97 - 6/30/98	312.0	6,844,150	3	1.000	3		0.00%	0.00%
7/1/98 - 6/30/99	300.0	7,077,960	4	1.000	4		0.00%	0.00%
7/1/99 - 6/30/00	288.0	7,604,770	3	1.000	3		0.00%	0.00%
7/1/00 - 6/30/01	276.0	8,116,000	5	1.000	5		0.00%	0.00%
7/1/01 - 6/30/02	264.0	8,350,380	4	1.000	4		0.00%	0.00%
7/1/02 - 6/30/03	252.0	8,253,400	5	1.000	5		0.00%	0.00%
7/1/03 - 6/30/04	240.0	8,492,160	7	1.000	7		0.00%	0.00%
7/1/04 - 6/30/05	228.0	9,925,080	6	1.000	6		0.00%	0.00%
7/1/05 - 6/30/06	216.0	9,628,780	9	1.000	9		0.00%	0.00%
7/1/06 - 6/30/07	204.0	10,329,300	6	1.000	6		0.00%	0.00%
7/1/07 - 6/30/08	192.0	10,635,970	17	1.000	17		0.00%	0.00%
7/1/08 - 6/30/09	180.0	10,738,050	21	1.000	21		0.00%	0.00%
7/1/09 - 6/30/10	168.0	10,847,490	30	1.000	30		0.00%	0.00%
7/1/10 - 6/30/11	156.0	11,341,640	49	1.000	49		0.00%	0.00%
7/1/11 - 6/30/12	144.0	12,026,740	67	1.000	67		0.00%	0.00%
7/1/12 - 6/30/13	132.0	12,847,410	111	1.000	111	111	8.64%	6.43%
7/1/13 - 6/30/14	120.0	13,469,020	106	1.000	106	106	7.87%	6.03%
7/1/14 - 6/30/15	108.0	14,040,930	107	1.000	107	107	7.62%	6.02%
7/1/15 - 6/30/16	96.0	14,546,120	109	1.000	109	109	7.49%	6.09%
7/1/16 - 6/30/17	84.0	14,615,880	93	1.000	93	93	6.36%	5.33%
7/1/17 - 6/30/18	72.0	14,577,400	137	1.000	137	137	9.40%	8.11%
7/1/18 - 6/30/19	60.0	15,002,050	88	1.003	88	88	5.88%	5.23%
7/1/19 - 6/30/20	48.0	15,086,780	65	1.004	65	65	4.33%	3.96%
7/1/20 - 6/30/21	36.0	14,138,618	61	1.008	61	61	4.35%	4.10%
7/1/21 - 6/30/22	24.0	15,119,517	56	1.021	57	57	3.78%	3.67%
7/1/22 - 6/30/23	12.0	15,459,627	47	1.175	55	61	3.96%	3.96%
Total		323,996,302	1,244		1,254	996		

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1)
(3) Provided by Entity
(4) Provided by Entity
(5) From Section VI, Exhibit I, Sheet 14
(6) = (4) x (5)
(7) Selected by Deloitte Consulting LLP
(8) = (7) / (3)
(9) = (7) / [(3) x Section VI, Exhibit I, Sheet 8, Column (3)]

Commonwealth of Massachusetts
Other Colleges and Universities
Other C&U - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Reported Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																															18	18
7/1/93 - 6/30/94																														3		3
7/1/94 - 6/30/95																													2			2
7/1/95 - 6/30/96																												1				1
7/1/96 - 6/30/97																											4					4
7/1/97 - 6/30/98																										3						3
7/1/98 - 6/30/99																									4							4
7/1/99 - 6/30/00																								3								3
7/1/00 - 6/30/01																							5									5
7/1/01 - 6/30/02																						4										4
7/1/02 - 6/30/03																					5											5
7/1/03 - 6/30/04																				7												7
7/1/04 - 6/30/05																			6													6
7/1/05 - 6/30/06																		9														9
7/1/06 - 6/30/07																	6															6
7/1/07 - 6/30/08																17																17
7/1/08 - 6/30/09															21																	21
7/1/09 - 6/30/10														30																		30
7/1/10 - 6/30/11													49																			49
7/1/11 - 6/30/12												67																				67
7/1/12 - 6/30/13	92	109	111	111	111	111	111	111	111	111	111																					111
7/1/13 - 6/30/14	92	106	106	106	106	106	106	106	106	106																						106
7/1/14 - 6/30/15	90	104	106	106	106	107	107	107	107																							107
7/1/15 - 6/30/16	93	106	108	109	109	109	109	109																								109
7/1/16 - 6/30/17	77	90	92	93	93	93	93																									93
7/1/17 - 6/30/18	119	134	135	135	136	137																										137
7/1/18 - 6/30/19	74	86	87	88	88																											88
7/1/19 - 6/30/20	57	65	65	65																												65
7/1/20 - 6/30/21	53	60	61																													61
7/1/21 - 6/30/22	49	56																														56
7/1/22 - 6/30/23	47																															47
																																1,244

Accident Year	Age-to-Age Development Factors																															
	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
7/1/98 - 6/30/99																																
7/1/99 - 6/30/00																																
7/1/00 - 6/30/01																																
7/1/01 - 6/30/02																																
7/1/02 - 6/30/03																																
7/1/03 - 6/30/04																																
7/1/04 - 6/30/05																																
7/1/05 - 6/30/06																																
7/1/06 - 6/30/07																																
7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	1.185	1.018	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000																						
7/1/13 - 6/30/14	1.152	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000																							
7/1/14 - 6/30/15	1.156	1.019	1.000	1.000	1.009	1.000	1.000	1.000																								
7/1/15 - 6/30/16	1.140	1.019	1.009	1.000	1.000	1.000	1.000																									
7/1/16 - 6/30/17	1.169	1.022	1.011	1.000	1.000	1.000																										
7/1/17 - 6/30/18	1.126	1.007	1.000	1.007	1.007																											
7/1/18 - 6/30/19	1.162	1.012	1.011	1.000																												
7/1/19 - 6/30/20	1.140	1.000	1.000																													
7/1/20 - 6/30/21	1.132	1.017																														
7/1/21 - 6/30/22	1.143																															
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																																
Last 3 Wtd Avg	1.138	1.009	1.003	1.003	1.003	1.000	1.000	1.000																								
Last 4 Wtd Avg	1.146	1.009	1.005	1.002	1.005	1.000	1.000																									
Last 5 Wtd Avg	1.139	1.011	1.006	1.002	1.004	1.000																										
All Per Wtd Avg	1.151	1.013	1.004	1.001	1.003	1.000	1.000	1.000	1.000	1.000																						
Average ex Hi/Lo	1.149	1.013	1.003	1.000	1.002	1.000	1.000	1.000																								
Prior Selected																																
Age-to-Age	1.151	1.013	1.004	1.002	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	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		
Age-to-Ult	1.174	1.020	1.007	1.003	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	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																																
Age-to-Age	1.151	1.013	1.004	1.001	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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
Age-to-Ult	1.175	1.021	1.008	1.004	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	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	

Commonwealth of Massachusetts
Other Colleges and Universities
Other C&U - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Reported Counts to Payroll (00)'s

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01		5,848,530
7/1/94 - 6/30/95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			5,877,010
7/1/95 - 6/30/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				6,148,680
7/1/96 - 6/30/97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01					7,006,860
7/1/97 - 6/30/98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						6,844,150
7/1/98 - 6/30/99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01							7,077,960
7/1/99 - 6/30/00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00								7,604,770
7/1/00 - 6/30/01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01									8,116,000
7/1/01 - 6/30/02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										8,350,380
7/1/02 - 6/30/03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01											8,253,400
7/1/03 - 6/30/04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01												8,492,160
7/1/04 - 6/30/05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01													9,925,080
7/1/05 - 6/30/06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01														9,628,780
7/1/06 - 6/30/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01															10,329,300
7/1/07 - 6/30/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02																10,635,970
7/1/08 - 6/30/09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02																	10,738,050
7/1/09 - 6/30/10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03																		10,847,490
7/1/10 - 6/30/11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04																			11,341,640
7/1/11 - 6/30/12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06																				12,026,740
7/1/12 - 6/30/13	0.07	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09																					12,847,410
7/1/13 - 6/30/14	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08																						13,469,020
7/1/14 - 6/30/15	0.06	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08																							14,040,930
7/1/15 - 6/30/16	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07																								14,546,120
7/1/16 - 6/30/17	0.05	0.06	0.06	0.06	0.06	0.06	0.06																									14,615,880
7/1/17 - 6/30/18	0.08	0.09	0.09	0.09	0.09	0.09																										14,577,400
7/1/18 - 6/30/19	0.05	0.06	0.06	0.06	0.06																											15,002,050
7/1/19 - 6/30/20	0.04	0.04	0.04	0.04																												15,086,780
7/1/20 - 6/30/21	0.04	0.04	0.04																													14,138,618
7/1/21 - 6/30/22	0.03	0.04																														15,119,517
7/1/22 - 6/30/23	0.03																															15,459,627

Commonwealth of Massachusetts
Other Colleges and Universities
Other C&U - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss Rates

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														Payroll
	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	348	360	372	(00)'s
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.02	0.06	0.08	0.10	0.11	0.14	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.17	0.18	0.18	0.19	0.19	0.19	0.20	0.20	0.21	0.21	0.21	0.22	0.22	0.23		5,848,530
7/1/94 - 6/30/95	0.02	0.07	0.11	0.13	0.16	0.18	0.18	0.19	0.21	0.22	0.22	0.22	0.22	0.23	0.23	0.24	0.25	0.26	0.26	0.27	0.28	0.29	0.29	0.30	0.31	0.31	0.31	0.31	0.31			5,877,010
7/1/95 - 6/30/96	0.04	0.09	0.11	0.13	0.15	0.16	0.17	0.18	0.19	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21				6,148,680
7/1/96 - 6/30/97	0.03	0.05	0.09	0.10	0.12	0.13	0.13	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17					7,006,860
7/1/97 - 6/30/98	0.03	0.06	0.09	0.11	0.13	0.14	0.17	0.19	0.20	0.21	0.23	0.24	0.25	0.27	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.37	0.37	0.38	0.38						6,844,150
7/1/98 - 6/30/99	0.03	0.06	0.09	0.12	0.13	0.14	0.14	0.15	0.15	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.21	0.21	0.22	0.22	0.23	0.23	0.23							7,077,960
7/1/99 - 6/30/00	0.04	0.09	0.13	0.13	0.15	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16								7,604,770
7/1/00 - 6/30/01	0.03	0.07	0.11	0.13	0.15	0.15	0.16	0.17	0.18	0.18	0.18	0.19	0.19	0.19	0.20	0.20	0.21	0.21	0.22	0.22	0.22	0.23	0.23									8,116,000
7/1/01 - 6/30/02	0.03	0.09	0.13	0.17	0.20	0.22	0.23	0.24	0.25	0.26	0.26	0.27	0.28	0.28	0.29	0.30	0.30	0.31	0.32	0.32	0.32	0.32										8,350,380
7/1/02 - 6/30/03	0.04	0.07	0.09	0.11	0.12	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17											8,253,400
7/1/03 - 6/30/04	0.03	0.06	0.08	0.10	0.13	0.15	0.16	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18												8,492,160
7/1/04 - 6/30/05	0.02	0.04	0.07	0.08	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10													9,925,080
7/1/05 - 6/30/06	0.03	0.07	0.09	0.11	0.13	0.13	0.13	0.13	0.14	0.14	0.15	0.16	0.16	0.16	0.17	0.17	0.17	0.18														9,628,780
7/1/06 - 6/30/07	0.03	0.05	0.07	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09															10,329,300
7/1/07 - 6/30/08	0.03	0.07	0.11	0.13	0.15	0.18	0.20	0.22	0.23	0.24	0.24	0.25	0.25	0.26	0.27	0.27																10,635,970
7/1/08 - 6/30/09	0.03	0.06	0.08	0.11	0.13	0.14	0.15	0.17	0.17	0.18	0.19	0.19	0.20	0.20	0.21																	10,738,050
7/1/09 - 6/30/10	0.04	0.10	0.14	0.19	0.21	0.24	0.26	0.28	0.30	0.31	0.32	0.33	0.34	0.35																		10,847,490
7/1/10 - 6/30/11	0.04	0.09	0.15	0.17	0.19	0.19	0.20	0.21	0.22	0.22	0.22	0.22	0.22																			11,341,640
7/1/11 - 6/30/12	0.03	0.07	0.11	0.15	0.18	0.18	0.19	0.19	0.19	0.19	0.19	0.19																				12,026,740
7/1/12 - 6/30/13	0.03	0.06	0.09	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.18																					12,847,410
7/1/13 - 6/30/14	0.04	0.08	0.11	0.13	0.15	0.16	0.17	0.18	0.18	0.19																						13,469,020
7/1/14 - 6/30/15	0.04	0.07	0.09	0.12	0.13	0.15	0.15	0.16	0.17																							14,040,930
7/1/15 - 6/30/16	0.04	0.08	0.11	0.14	0.17	0.19	0.22	0.25																								14,546,120
7/1/16 - 6/30/17	0.03	0.07	0.11	0.14	0.15	0.17	0.18																									14,615,880
7/1/17 - 6/30/18	0.04	0.09	0.12	0.14	0.15	0.16																										14,577,400
7/1/18 - 6/30/19	0.03	0.06	0.08	0.10	0.11																											15,002,050
7/1/19 - 6/30/20	0.02	0.04	0.05	0.07																												15,086,780
7/1/20 - 6/30/21	0.03	0.07	0.10																													14,138,618
7/1/21 - 6/30/22	0.02	0.05																														15,119,517
7/1/22 - 6/30/23	0.03																															15,459,627

Commonwealth of Massachusetts
Other Colleges and Universities
Other C&U - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Settlement Rates (Closed Claim Count / Ultimate Claim Count)

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
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7/1/00 - 6/30/01																																
7/1/01 - 6/30/02																																
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7/1/06 - 6/30/07																																
7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	0.00	0.34	0.74	0.86	0.91	0.94	0.95	0.95	0.96	0.96	0.98																					0.98
7/1/13 - 6/30/14	0.00	0.29	0.68	0.83	0.90	0.92	0.95	0.94	0.96	0.93																						0.93
7/1/14 - 6/30/15	0.00	0.40	0.74	0.85	0.91	0.92	0.98	0.98	0.99																							0.99
7/1/15 - 6/30/16	0.00	0.30	0.65	0.81	0.83	0.88	0.89	0.94																								0.94
7/1/16 - 6/30/17	0.00	0.40	0.69	0.81	0.86	0.89	0.90																									0.90
7/1/17 - 6/30/18	0.00	0.39	0.71	0.88	0.94	0.96																										0.96
7/1/18 - 6/30/19	0.00	0.33	0.77	0.85	0.88																											0.88
7/1/19 - 6/30/20	0.00	0.51	0.80	0.86																												0.86
7/1/20 - 6/30/21	0.00	0.31	0.70																													0.70
7/1/21 - 6/30/22	0.00	0.35																														0.35
7/1/22 - 6/30/23	0.00																															0.00

Commonwealth of Massachusetts
Other Colleges and Universities
Other C&U - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Open Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993	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	0	0	0	2	2
7/1/93 - 6/30/94	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	0	0	2		2
7/1/94 - 6/30/95	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	0	0			0
7/1/95 - 6/30/96	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	0				0
7/1/96 - 6/30/97	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	1					1
7/1/97 - 6/30/98	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	1						1
7/1/98 - 6/30/99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1							1
7/1/99 - 6/30/00	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
7/1/00 - 6/30/01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1									1
7/1/01 - 6/30/02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										0
7/1/02 - 6/30/03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											0
7/1/03 - 6/30/04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1												1
7/1/04 - 6/30/05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0													0
7/1/05 - 6/30/06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2														2
7/1/06 - 6/30/07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1															1
7/1/07 - 6/30/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3																3
7/1/08 - 6/30/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3																	3
7/1/09 - 6/30/10	0	0	0	0	0	0	0	0	0	0	0	0	0	4																		4
7/1/10 - 6/30/11	0	0	0	0	0	0	0	0	0	0	0	0	2																			2
7/1/11 - 6/30/12	0	0	0	0	0	0	0	0	0	0	0	1																				1
7/1/12 - 6/30/13	92	71	29	16	10	7	5	6	4	4	2																					2
7/1/13 - 6/30/14	92	75	34	18	11	9	5	6	4	7																						7
7/1/14 - 6/30/15	90	61	27	15	9	9	2	2	1																							1
7/1/15 - 6/30/16	93	73	37	21	18	13	12	6																								6
7/1/16 - 6/30/17	77	53	28	18	13	10	9																									9
7/1/17 - 6/30/18	119	80	38	14	7	5																										5
7/1/18 - 6/30/19	74	57	19	13	10																											10
7/1/19 - 6/30/20	57	32	13	9																												9
7/1/20 - 6/30/21	53	41	18																													18
7/1/21 - 6/30/22	49	36																														36
7/1/22 - 6/30/23	47																															47
																																175

Commonwealth of Massachusetts
Other Colleges and Universities
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Section VI
Exhibit II
Sheet 1

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Unpaid Loss & ALAE Estimates

Accident Year	Payroll (00)'s	Retention	Unlimited Paid Loss & ALAE @ 06/30/2023	Unlimited Reported Loss & ALAE @ 06/30/2023	Ultimate Loss & ALAE Low	Ultimate Loss & ALAE High	Indicated Total Unpaid Loss & ALAE Estimates Low	Indicated Total Unpaid Loss & ALAE Estimates High	Case Reserves	Indicated IBNR Estimate Low	Indicated IBNR Estimate High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993		Unlimited	4,260,984	4,260,984	4,276,707	4,280,201	15,723	19,217	0	15,723	19,217
7/1/93 - 6/30/94	5,848,530	Unlimited	812,437	812,437	859,100	864,100	46,663	51,663	0	46,663	51,663
7/1/94 - 6/30/95	5,877,010	Unlimited	572,784	572,784	572,784	572,784	0	0	0	0	0
7/1/95 - 6/30/96	6,148,680	Unlimited	581,842	581,842	581,842	581,842	0	0	0	0	0
7/1/96 - 6/30/97	7,006,860	Unlimited	928,271	928,271	995,300	1,002,400	67,029	74,129	0	67,029	74,129
7/1/97 - 6/30/98	6,844,150	Unlimited	432,549	432,549	467,300	470,900	34,751	38,351	0	34,751	38,351
7/1/98 - 6/30/99	7,077,960	Unlimited	376,763	376,763	410,100	413,600	33,337	36,837	0	33,337	36,837
7/1/99 - 6/30/00	7,604,770	Unlimited	486,803	486,803	533,900	538,800	47,097	51,997	0	47,097	51,997
7/1/00 - 6/30/01	8,116,000	Unlimited	564,812	564,812	624,300	630,600	59,488	65,788	0	59,488	65,788
7/1/01 - 6/30/02	8,350,380	Unlimited	534,221	534,221	534,221	534,221	0	0	0	0	0
7/1/02 - 6/30/03	8,253,400	Unlimited	637,562	637,562	717,000	725,300	79,438	87,738	0	79,438	87,738
7/1/03 - 6/30/04	8,492,160	Unlimited	691,458	691,458	691,458	691,458	0	0	0	0	0
7/1/04 - 6/30/05	9,925,080	Unlimited	659,963	659,963	659,963	659,963	0	0	0	0	0
7/1/05 - 6/30/06	9,628,780	Unlimited	843,946	843,946	975,600	989,400	131,654	145,454	0	131,654	145,454
7/1/06 - 6/30/07	10,329,300	Unlimited	683,354	683,354	798,300	810,400	114,946	127,046	0	114,946	127,046
7/1/07 - 6/30/08	10,635,970	Unlimited	1,010,855	1,010,855	1,193,500	1,212,700	182,645	201,845	0	182,645	201,845
7/1/08 - 6/30/09	10,738,050	Unlimited	1,092,604	1,092,604	1,304,000	1,326,200	211,396	233,596	0	211,396	233,596
7/1/09 - 6/30/10	10,847,490	Unlimited	1,060,498	1,060,498	1,280,000	1,303,200	219,502	242,702	0	219,502	242,702
7/1/10 - 6/30/11	11,341,640	Unlimited	1,184,268	1,184,268	1,446,900	1,474,500	262,632	290,232	0	262,632	290,232
7/1/11 - 6/30/12	12,026,740	Unlimited	895,280	895,280	1,109,100	1,131,600	213,820	236,320	0	213,820	236,320
7/1/12 - 6/30/13	12,847,410	Unlimited	794,386	794,386	1,000,600	1,022,300	206,214	227,914	0	206,214	227,914
7/1/13 - 6/30/14	13,469,020	Unlimited	999,340	999,340	1,282,200	1,312,000	282,860	312,660	0	282,860	312,660
7/1/14 - 6/30/15	14,040,930	Unlimited	983,330	983,330	1,279,500	1,324,100	296,170	340,770	0	296,170	340,770
7/1/15 - 6/30/16	14,546,120	Unlimited	1,088,926	1,088,926	1,445,100	1,498,700	356,174	409,774	0	356,174	409,774
7/1/16 - 6/30/17	14,615,880	Unlimited	963,668	963,668	1,305,300	1,356,700	341,632	393,032	0	341,632	393,032
7/1/17 - 6/30/18	14,577,400	Unlimited	1,090,338	1,090,338	1,511,700	1,575,100	421,362	484,762	0	421,362	484,762
7/1/18 - 6/30/19	15,002,050	Unlimited	787,904	787,904	1,120,800	1,170,900	332,896	382,996	0	332,896	382,996
7/1/19 - 6/30/20	15,086,780	Unlimited	601,049	601,049	932,200	982,000	331,151	380,951	0	331,151	380,951
7/1/20 - 6/30/21	14,138,618	Unlimited	460,390	460,390	936,000	1,042,000	475,610	581,610	0	475,610	581,610
7/1/21 - 6/30/22	15,119,517	Unlimited	383,220	383,220	959,000	1,087,000	575,780	703,780	0	575,780	703,780
7/1/22 - 6/30/23	15,459,627	Unlimited	342,881	342,881	1,183,000	1,370,000	840,119	1,027,119	0	840,119	1,027,119
Total	323,996,302		26,806,686	26,806,686	32,986,775	33,954,969	6,180,089	7,148,283	0	6,180,089	7,148,283

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	Provided by Entity
(6)	From Section VI, Exhibit II, Sheet 6, Column (11)
(7)	From Section VI, Exhibit II, Sheet 6, Column (12)
(8)	= (6) - (4)
(9)	= (7) - (4)
(10)	= (5) - (4)
(11)	= (8) - (10)
(12)	= (9) - (10)

Commonwealth of Massachusetts
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Unpaid Claim Analysis as of 06/30/2023
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Short-Term Portion

Accident Year	Age of Losses @ 06/30/2023	Selected Paid Test LDF @ 06/30/2023	Implied Paid LDF	Paid LDF	Cumulative Percent Paid	Incremental Percent Paid	Average Total Unpaid ss & ALAE Estimate	Undiscounted Cash Flow of Payments 2024
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
						0.52%		
Prior to 7/1/1993	372.0	1.056	1.004	1.056	94.70%	0.41%	17,470	1,705
7/1/93 - 6/30/94	360.0	1.061	1.061	1.061	94.29%	0.43%	49,163	3,519
7/1/94 - 6/30/95	348.0	1.065	1.000	1.065	93.86%	0.45%	0	0
7/1/95 - 6/30/96	336.0	1.071	1.000	1.071	93.41%	0.48%	0	0
7/1/96 - 6/30/97	324.0	1.076	1.076	1.076	92.94%	0.73%	70,579	4,760
7/1/97 - 6/30/98	312.0	1.085	1.085	1.085	92.21%	0.72%	36,551	3,418
7/1/98 - 6/30/99	300.0	1.093	1.093	1.093	91.48%	0.72%	35,087	2,980
7/1/99 - 6/30/00	288.0	1.102	1.102	1.102	90.76%	0.74%	49,547	3,883
7/1/00 - 6/30/01	276.0	1.111	1.111	1.111	90.02%	0.80%	62,638	4,667
7/1/01 - 6/30/02	264.0	1.121	1.000	1.121	89.22%	0.81%	0	0
7/1/02 - 6/30/03	252.0	1.131	1.131	1.131	88.41%	0.83%	83,588	5,842
7/1/03 - 6/30/04	240.0	1.142	1.000	1.142	87.58%	0.82%	0	0
7/1/04 - 6/30/05	228.0	1.153	1.000	1.153	86.76%	0.87%	0	0
7/1/05 - 6/30/06	216.0	1.164	1.164	1.164	85.90%	0.94%	138,554	8,527
7/1/06 - 6/30/07	204.0	1.177	1.177	1.177	84.95%	0.93%	120,996	7,579
7/1/07 - 6/30/08	192.0	1.190	1.190	1.190	84.02%	0.94%	192,245	11,227
7/1/08 - 6/30/09	180.0	1.204	1.204	1.204	83.08%	0.97%	222,496	12,343
7/1/09 - 6/30/10	168.0	1.218	1.218	1.218	82.11%	1.03%	231,102	12,589
7/1/10 - 6/30/11	156.0	1.233	1.233	1.233	81.08%	1.17%	276,432	15,063
7/1/11 - 6/30/12	144.0	1.251	1.251	1.251	79.91%	1.37%	225,070	13,071
7/1/12 - 6/30/13	132.0	1.273	1.273	1.273	78.54%	1.50%	217,064	13,843
7/1/13 - 6/30/14	120.0	1.298	1.298	1.298	77.04%	1.50%	297,760	19,433
7/1/14 - 6/30/15	108.0	1.324	1.324	1.324	75.54%	1.56%	318,470	19,591
7/1/15 - 6/30/16	96.0	1.352	1.352	1.352	73.98%	1.58%	382,974	22,891
7/1/16 - 6/30/17	84.0	1.381	1.381	1.381	72.40%	1.76%	367,332	21,022
7/1/17 - 6/30/18	72.0	1.416	1.416	1.416	70.65%	1.88%	453,062	27,131
7/1/18 - 6/30/19	60.0	1.454	1.454	1.454	68.76%	2.81%	357,946	21,580
7/1/19 - 6/30/20	48.0	1.516	1.592	1.516	65.95%	4.88%	356,051	29,416
7/1/20 - 6/30/21	36.0	1.637	2.148	1.637	61.07%	8.65%	528,610	66,234
7/1/21 - 6/30/22	24.0	1.908	2.669	1.908	52.42%	26.49%	639,780	116,318
7/1/22 - 6/30/23	12.0	3.856	3.723	3.856	25.93%	25.93%	933,619	333,871
Total							6,664,186	802,501

	Undiscounted	Discounted			
Short-Term Portion	12%	16%	(10)	Interest Rate	4%

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1) @ 06/30/2023
(3) From Section VI, Exhibit II, Sheet 10, Column (6)
(4) Average Ultimate Loss Divided by Paid Loss From Section VI, Exhibit II, Sheet 6
(5) Selected
(6) = 1 / (5)
(7) = (6) from Current Age - (6) from Subsequent Age
(8) From Section VI, Exhibit II, Sheet 3
(9) - (9) Based on (5)

Commonwealth of Massachusetts
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Section VI
Exhibit II
Sheet 3

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Discounted at (4%) Unpaid Loss & ALAE Estimate

Accident Year	Indicated Total Unpaid Loss & ALAE Estimate Low	Indicated Total Unpaid Loss & ALAE Estimate High	Discount Factor	Discounted Total Unpaid Loss & ALAE Estimate Low	Discounted Total Unpaid Loss & ALAE Estimate High
(1)	(2)	(3)	(4)	(5)	(6)
Prior to 7/1/1993	15,723	19,217	1.000	15,723	19,217
7/1/93 - 6/30/94	46,663	51,663	0.981	45,757	50,660
7/1/94 - 6/30/95	0	0	0.946	0	0
7/1/95 - 6/30/96	0	0	0.914	0	0
7/1/96 - 6/30/97	67,029	74,129	0.886	59,371	65,660
7/1/97 - 6/30/98	34,751	38,351	0.864	30,016	33,125
7/1/98 - 6/30/99	33,337	36,837	0.843	28,112	31,063
7/1/99 - 6/30/00	47,097	51,997	0.824	38,814	42,852
7/1/00 - 6/30/01	59,488	65,788	0.806	47,974	53,055
7/1/01 - 6/30/02	0	0	0.791	0	0
7/1/02 - 6/30/03	79,438	87,738	0.776	61,611	68,049
7/1/03 - 6/30/04	0	0	0.761	0	0
7/1/04 - 6/30/05	0	0	0.747	0	0
7/1/05 - 6/30/06	131,654	145,454	0.735	96,743	106,884
7/1/06 - 6/30/07	114,946	127,046	0.724	83,190	91,947
7/1/07 - 6/30/08	182,645	201,845	0.713	130,138	143,818
7/1/08 - 6/30/09	211,396	233,596	0.702	148,296	163,869
7/1/09 - 6/30/10	219,502	242,702	0.691	151,719	167,755
7/1/10 - 6/30/11	262,632	290,232	0.682	179,070	197,888
7/1/11 - 6/30/12	213,820	236,320	0.674	144,216	159,392
7/1/12 - 6/30/13	206,214	227,914	0.670	138,104	152,637
7/1/13 - 6/30/14	282,860	312,660	0.666	188,363	208,207
7/1/14 - 6/30/15	296,170	340,770	0.661	195,840	225,332
7/1/15 - 6/30/16	356,174	409,774	0.656	233,799	268,983
7/1/16 - 6/30/17	341,632	393,032	0.651	222,460	255,930
7/1/17 - 6/30/18	421,362	484,762	0.647	272,768	313,810
7/1/18 - 6/30/19	332,896	382,996	0.644	214,399	246,666
7/1/19 - 6/30/20	331,151	380,951	0.649	214,957	247,284
7/1/20 - 6/30/21	475,610	581,610	0.669	318,095	388,989
7/1/21 - 6/30/22	575,780	703,780	0.704	405,608	495,778
7/1/22 - 6/30/23	840,119	1,027,119	0.786	660,158	807,102
Total	6,180,089	7,148,283		4,325,302	5,005,950

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From Section VI, Exhibit II, Sheet 1, Column (8)
(3) From Section VI, Exhibit II, Sheet 1, Column (9)
(4) From Section VI, Exhibit II, Sheet 0, Column (8)
(5) = (2) x (4)
(6) = (3) x (4)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Actual vs Expected - Paid Loss & ALAE Emergence

Accident Year	Selected Low Ultimate Loss & ALAE @ 06/30/2022	Selected High Ultimate Loss & ALAE @ 06/30/2022	Unlimited Paid Loss & ALAE @ 06/30/2022	Unlimited Paid Loss & ALAE @ 06/30/2023	Paid LDF @ 06/30/2022	Projected Paid LDF @ 06/30/2023	Method 1 Low Expected Paid Emergence Loss & ALAE @ 06/30/2023	Method 1 High Expected Paid Emergence Loss & ALAE @ 06/30/2023	Actual Paid Emergence Loss & ALAE @ 06/30/2023	Actual - Expected Method 1 Low Paid	Actual - Expected Method 1 High Paid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993	4,284,054	4,289,301	4,260,444	4,260,984	1.061	1.055	2,299	2,810	540	(1,759)	(2,270)
7/1/93 - 6/30/94	840,200	845,300	790,779	812,437	1.066	1.061	3,419	3,772	21,658	18,239	17,886
7/1/94 - 6/30/95	572,784	572,784	572,784	572,784	1.071	1.066	0	0	0	0	0
7/1/95 - 6/30/96	581,842	581,842	581,842	581,842	1.076	1.071	0	0	0	0	0
7/1/96 - 6/30/97	996,000	1,003,800	921,783	928,271	1.085	1.076	6,857	7,578	6,488	(369)	(1,089)
7/1/97 - 6/30/98	470,900	475,000	432,549	432,549	1.093	1.085	3,293	3,646	0	(3,293)	(3,646)
7/1/98 - 6/30/99	412,800	416,600	376,236	376,763	1.102	1.093	2,879	3,178	527	(2,352)	(2,651)
7/1/99 - 6/30/00	538,200	543,600	486,803	486,803	1.111	1.102	3,741	4,134	0	(3,741)	(4,134)
7/1/00 - 6/30/01	629,300	636,100	564,812	564,812	1.120	1.111	4,369	4,829	0	(4,369)	(4,829)
7/1/01 - 6/30/02	534,221	534,221	534,221	534,221	1.130	1.120	0	0	0	0	0
7/1/02 - 6/30/03	721,800	730,700	637,562	637,562	1.139	1.130	5,130	5,672	0	(5,130)	(5,672)
7/1/03 - 6/30/04	691,458	691,458	691,458	691,458	1.149	1.139	0	0	0	0	0
7/1/04 - 6/30/05	659,963	659,963	659,963	659,963	1.160	1.149	0	0	0	0	0
7/1/05 - 6/30/06	966,400	980,600	831,397	843,946	1.171	1.160	7,623	8,425	12,549	4,926	4,124
7/1/06 - 6/30/07	801,500	814,000	683,109	683,354	1.182	1.171	6,406	7,082	245	(6,161)	(6,837)
7/1/07 - 6/30/08	1,179,100	1,198,500	994,580	1,010,855	1.195	1.182	10,289	11,371	16,275	5,986	4,904
7/1/08 - 6/30/09	1,299,000	1,321,600	1,084,154	1,092,604	1.209	1.195	11,428	12,630	8,450	(2,978)	(4,180)
7/1/09 - 6/30/10	1,285,300	1,308,900	1,060,498	1,060,498	1.223	1.209	12,120	13,392	0	(12,120)	(13,392)
7/1/10 - 6/30/11	1,447,600	1,475,800	1,180,009	1,184,268	1.239	1.223	14,324	15,833	4,259	(10,064)	(11,574)
7/1/11 - 6/30/12	1,111,300	1,134,300	892,817	895,280	1.258	1.239	12,900	14,258	2,463	(10,436)	(11,794)
7/1/12 - 6/30/13	997,700	1,019,800	787,857	794,386	1.280	1.258	13,590	15,021	6,528	(7,061)	(8,493)
7/1/13 - 6/30/14	1,280,800	1,311,200	992,455	999,340	1.306	1.280	18,744	20,721	6,885	(11,860)	(13,836)
7/1/14 - 6/30/15	1,273,100	1,318,400	972,290	983,330	1.333	1.306	18,543	21,336	11,040	(7,503)	(10,295)
7/1/15 - 6/30/16	1,446,700	1,501,300	1,083,358	1,088,926	1.361	1.333	21,123	24,298	5,568	(15,555)	(18,729)
7/1/16 - 6/30/17	1,288,200	1,339,900	944,514	963,668	1.391	1.361	19,801	22,780	19,154	(647)	(3,626)
7/1/17 - 6/30/18	1,511,400	1,576,000	1,082,769	1,090,338	1.426	1.391	24,930	28,687	7,570	(17,360)	(21,117)
7/1/18 - 6/30/19	1,104,400	1,156,200	760,519	787,904	1.486	1.426	30,012	34,533	27,385	(2,627)	(7,147)
7/1/19 - 6/30/20	1,013,000	1,113,000	560,844	601,049	1.605	1.486	59,593	72,773	40,205	(19,389)	(32,568)
7/1/20 - 6/30/21	947,000	1,073,000	382,196	460,390	1.865	1.605	105,970	129,611	78,194	(27,776)	(51,417)
7/1/21 - 6/30/22	1,101,000	1,299,000	206,607	383,220	3.805	1.865	331,646	405,066	176,613	(155,033)	(228,453)
Total	31,987,022	32,922,169	26,011,209	26,463,805			751,029	893,433	452,596	(298,433)	(440,837)

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Selected by Deloitte Consulting LLP @ 06/30/2022
(3)	Selected by Deloitte Consulting LLP @ 06/30/2022
(4)	Provided by Entity
(5)	Provided by Entity
(6)	Selected by Deloitte Consulting LLP @ 06/30/2022
(7)	Interpolated From (6)
(8)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((2) - (4))
(9)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((3) - (4))
(10)	= (5) - (4)
(11)	= (10) - (8)
(12)	= (10) - (9)

Commonwealth of Massachusetts
Other Colleges and Universities
Other C&U - Medical

Section VI
Exhibit II
Sheet 5

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Ultimate Loss & ALAE Runoff

Accident Year	Ultimate Loss & ALAE @ 06/30/2022 Low	Ultimate Loss & ALAE @ 06/30/2022 High	Ultimate Loss & ALAE @ 06/30/2023 Low	Ultimate Loss & ALAE @ 06/30/2023 High	Deloitte Change Low	Deloitte Change High	Paid Loss & ALAE @ 06/30/2023	Reported Loss & ALAE @ 06/30/2023
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	4,284,054	4,289,301	4,276,707	4,280,201	(7,347)	(9,100)	4,260,984	4,260,984
7/1/93 - 6/30/94	840,200	845,300	859,100	864,100	18,900	18,800	812,437	812,437
7/1/94 - 6/30/95	572,784	572,784	572,784	572,784	0	0	572,784	572,784
7/1/95 - 6/30/96	581,842	581,842	581,842	581,842	0	0	581,842	581,842
7/1/96 - 6/30/97	996,000	1,003,800	995,300	1,002,400	(700)	(1,400)	928,271	928,271
7/1/97 - 6/30/98	470,900	475,000	467,300	470,900	(3,600)	(4,100)	432,549	432,549
7/1/98 - 6/30/99	412,800	416,600	410,100	413,600	(2,700)	(3,000)	376,763	376,763
7/1/99 - 6/30/00	538,200	543,600	533,900	538,800	(4,300)	(4,800)	486,803	486,803
7/1/00 - 6/30/01	629,300	636,100	624,300	630,600	(5,000)	(5,500)	564,812	564,812
7/1/01 - 6/30/02	534,221	534,221	534,221	534,221	0	0	534,221	534,221
7/1/02 - 6/30/03	721,800	730,700	717,000	725,300	(4,800)	(5,400)	637,562	637,562
7/1/03 - 6/30/04	691,458	691,458	691,458	691,458	0	0	691,458	691,458
7/1/04 - 6/30/05	659,963	659,963	659,963	659,963	0	0	659,963	659,963
7/1/05 - 6/30/06	966,400	980,600	975,600	989,400	9,200	8,800	843,946	843,946
7/1/06 - 6/30/07	801,500	814,000	798,300	810,400	(3,200)	(3,600)	683,354	683,354
7/1/07 - 6/30/08	1,179,100	1,198,500	1,193,500	1,212,700	14,400	14,200	1,010,855	1,010,855
7/1/08 - 6/30/09	1,299,000	1,321,600	1,304,000	1,326,200	5,000	4,600	1,092,604	1,092,604
7/1/09 - 6/30/10	1,285,300	1,308,900	1,280,000	1,303,200	(5,300)	(5,700)	1,060,498	1,060,498
7/1/10 - 6/30/11	1,447,600	1,475,800	1,446,900	1,474,500	(700)	(1,300)	1,184,268	1,184,268
7/1/11 - 6/30/12	1,111,300	1,134,300	1,109,100	1,131,600	(2,200)	(2,700)	895,280	895,280
7/1/12 - 6/30/13	997,700	1,019,800	1,000,600	1,022,300	2,900	2,500	794,386	794,386
7/1/13 - 6/30/14	1,280,800	1,311,200	1,282,200	1,312,000	1,400	800	999,340	999,340
7/1/14 - 6/30/15	1,273,100	1,318,400	1,279,500	1,324,100	6,400	5,700	983,330	983,330
7/1/15 - 6/30/16	1,446,700	1,501,300	1,445,100	1,498,700	(1,600)	(2,600)	1,088,926	1,088,926
7/1/16 - 6/30/17	1,288,200	1,339,900	1,305,300	1,356,700	17,100	16,800	963,668	963,668
7/1/17 - 6/30/18	1,511,400	1,576,000	1,511,700	1,575,100	300	(900)	1,090,338	1,090,338
7/1/18 - 6/30/19	1,104,400	1,156,200	1,120,800	1,170,900	16,400	14,700	787,904	787,904
7/1/19 - 6/30/20	1,013,000	1,113,000	932,200	982,000	(80,800)	(131,000)	601,049	601,049
7/1/20 - 6/30/21	947,000	1,073,000	936,000	1,042,000	(11,000)	(31,000)	460,390	460,390
7/1/21 - 6/30/22	1,101,000	1,299,000	959,000	1,087,000	(142,000)	(212,000)	383,220	383,220
Total	31,987,022	32,922,169	31,803,775	32,584,969	(183,247)	(337,200)	26,463,805	26,463,805

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(3) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(4) From Section VI, Exhibit II, Sheet 6, Column (11)
(5) From Section VI, Exhibit II, Sheet 6, Column (12)
(6) = (4) - (2)
(7) = (5) - (3)
(8) Provided by Entity
(9) Provided by Entity

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Selection of Ultimate Loss & ALAE

Accident Year	Payroll (00)'s	Unlimited Paid Loss & ALAE @ 06/30/2023	Unlimited Reported Loss & ALAE @ 06/30/2023	Ultimate Loss & ALAE Indications: Paid LDM	Ultimate Loss & ALAE Indications: Expected Loss & ALAE	Ultimate Loss & ALAE Indications: Paid B-F	Ultimate Loss & ALAE Indications: Frequency Severity	Prior Selected Ultimate Loss & ALAE: Low	Prior Selected Ultimate Loss & ALAE: High	Selected Ultimate Loss & ALAE: Low	Selected Ultimate Loss & ALAE: High	Ultimate Loss & ALAE Rates: Low	Ultimate Loss & ALAE Rates: High	Ultimate Loss & ALAE Severity: Low	Ultimate Loss & ALAE Severity: High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Prior to 7/1/1993		4,260,984	4,260,984	4,499,362	0		0	4,284,054	4,289,301	4,276,707	4,280,201				
7/1/93 - 6/30/94	5,848,530	812,437	812,437	861,605	323,295	830,886	0	840,200	845,300	859,100	864,100	0.15	0.15		
7/1/94 - 6/30/95	5,877,010	572,784	572,784	610,227	333,273	593,233	0	572,784	572,784	572,784	572,784	0.10	0.10		
7/1/95 - 6/30/96	6,148,680	581,842	581,842	622,878	358,713	605,474	0	581,842	581,842	581,842	581,842	0.09	0.09		
7/1/96 - 6/30/97	7,006,860	928,271	928,271	998,833	418,775	957,855	0	996,000	1,003,800	995,300	1,002,400	0.14	0.14		
7/1/97 - 6/30/98	6,844,150	432,549	432,549	469,107	416,859	465,036	0	470,900	475,000	467,300	470,900	0.07	0.07		
7/1/98 - 6/30/99	7,077,960	376,763	376,763	411,837	437,378	414,012	0	412,800	416,600	410,100	413,600	0.06	0.06		
7/1/99 - 6/30/00	7,604,770	486,803	486,803	536,367	479,226	531,086	0	538,200	543,600	533,900	538,800	0.07	0.07		
7/1/00 - 6/30/01	8,116,000	564,812	564,812	627,461	526,851	617,416	0	629,300	636,100	624,300	630,600	0.08	0.08		
7/1/01 - 6/30/02	8,350,380	534,221	534,221	598,777	556,786	594,250	0	534,221	534,221	534,221	534,221	0.06	0.06		
7/1/02 - 6/30/03	8,253,400	637,562	637,562	721,154	572,514	703,924	0	721,800	730,700	717,000	725,300	0.09	0.09		
7/1/03 - 6/30/04	8,492,160	691,458	691,458	789,486	613,262	767,605	0	691,458	691,458	691,458	691,458	0.08	0.08		
7/1/04 - 6/30/05	9,925,080	659,963	659,963	760,641	732,245	756,882	0	659,963	659,963	659,963	659,963	0.07	0.07		
7/1/05 - 6/30/06	9,628,780	843,946	843,946	982,519	724,078	946,069	0	966,400	980,600	975,600	989,400	0.10	0.10		
7/1/06 - 6/30/07	10,329,300	683,354	683,354	804,384	788,069	801,929	0	801,500	814,000	798,300	810,400	0.08	0.08		
7/1/07 - 6/30/08	10,635,970	1,010,855	1,010,855	1,203,106	823,284	1,142,412	0	1,179,100	1,198,500	1,193,500	1,212,700	0.11	0.11		
7/1/08 - 6/30/09	10,738,050	1,092,604	1,092,604	1,315,092	853,289	1,236,964	0	1,299,000	1,321,600	1,304,000	1,326,200	0.12	0.12		
7/1/09 - 6/30/10	10,847,490	1,060,498	1,060,498	1,291,600	888,477	1,219,470	0	1,285,300	1,308,900	1,280,000	1,303,200	0.12	0.12		
7/1/10 - 6/30/11	11,341,640	1,184,268	1,184,268	1,460,686	946,161	1,363,319	0	1,447,600	1,475,800	1,446,900	1,474,500	0.13	0.13		
7/1/11 - 6/30/12	12,026,740	895,280	895,280	1,120,369	1,017,926	1,099,788	0	1,111,300	1,134,300	1,109,100	1,131,600	0.09	0.09		
7/1/12 - 6/30/13	12,847,410	794,386	794,386	1,011,429	1,103,222	1,031,127	1,252,968	997,700	1,019,800	1,000,600	1,022,300	0.08	0.08	9,014	9,210
7/1/13 - 6/30/14	13,469,020	999,340	999,340	1,297,128	1,173,444	1,268,733	1,250,372	1,280,800	1,311,200	1,282,200	1,312,000	0.10	0.10	12,096	12,377
7/1/14 - 6/30/15	14,040,930	983,330	983,330	1,301,774	1,241,085	1,286,928	1,318,966	1,273,100	1,318,400	1,279,500	1,324,100	0.09	0.09	11,958	12,375
7/1/15 - 6/30/16	14,546,120	1,088,926	1,088,926	1,471,868	1,304,463	1,428,313	1,404,082	1,446,700	1,501,300	1,445,100	1,498,700	0.10	0.10	13,258	13,750
7/1/16 - 6/30/17	14,615,880	963,668	963,668	1,330,974	1,329,807	1,330,652	1,251,887	1,288,200	1,339,900	1,305,300	1,356,700	0.09	0.09	14,035	14,588
7/1/17 - 6/30/18	14,577,400	1,090,338	1,090,338	1,543,395	1,345,621	1,485,340	1,927,166	1,511,400	1,576,000	1,511,700	1,575,100	0.10	0.11	11,034	11,497
7/1/18 - 6/30/19	15,002,050	787,904	787,904	1,145,840	1,404,988	1,226,792	1,297,507	1,104,400	1,156,200	1,120,800	1,170,900	0.07	0.08	12,698	13,266
7/1/19 - 6/30/20	15,086,780	601,049	601,049	911,385	1,433,499	1,089,170	1,002,852	1,013,000	1,113,000	932,200	982,000	0.06	0.07	14,279	15,042
7/1/20 - 6/30/21	14,138,618	460,390	460,390	753,858	1,362,972	990,979	987,132	947,000	1,073,000	936,000	1,042,000	0.07	0.07	15,221	16,945
7/1/21 - 6/30/22	15,119,517	383,220	383,220	731,046	1,478,758	1,086,801	959,112	1,101,000	1,299,000	959,000	1,087,000	0.06	0.07	16,773	19,012
7/1/22 - 6/30/23	15,459,627	342,881	342,881	1,322,117	1,534,042	1,479,080	1,073,587			1,183,000	1,370,000	0.08	0.09	19,316	22,370
Total	323,996,302	26,806,686	26,806,686	33,506,303	26,522,367	29,351,526	13,725,629	31,987,022	32,922,169	32,986,775	33,954,969				

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Provided by Entity
(4) Provided by Entity
(5) From Section VI, Exhibit II, Sheet 10, Column (7)
(6) From Section VI, Exhibit II, Sheet 7, Column (4)
(7) From Section VI, Exhibit II, Sheet 7, Column (10)
(8) From Section VI, Exhibit II, Sheet 9, Column (12)
(9) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(10) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(11) Selected by Deloitte Consulting LLP
(12) Selected by Deloitte Consulting LLP
(13) = (11) / (2)
(14) = (12) / (2)
(15) (11) Divided by Ultimate Claims From Section VI, Exhibit II, Sheet 13, Column (7)
(16) (12) Divided by Ultimate Claims From Section VI, Exhibit II, Sheet 13, Column (7)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Bornhuetter-Ferguson Method

Accident Year	Payroll (00)'s	Initial Expected Loss & ALAE Rates	Initial Expected Loss & ALAE	Expected % of Paid Loss & ALAE	Expected Paid Loss & ALAE	Unlimited Actual Paid Loss & ALAE	Expected % of Unpaid Loss & ALAE	Expected Unpaid Loss & ALAE	Unlimited Indicated Ultimate Loss & ALAE	Unlimited Indicated Ultimate Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
7/1/93 - 6/30/94	5,848,530	0.06	323,295	94.3%	304,846	812,437	5.7%	18,449	830,886	0.14
7/1/94 - 6/30/95	5,877,010	0.06	333,273	93.9%	312,823	572,784	6.1%	20,450	593,233	0.10
7/1/95 - 6/30/96	6,148,680	0.06	358,713	93.4%	335,081	581,842	6.6%	23,632	605,474	0.10
7/1/96 - 6/30/97	7,006,860	0.06	418,775	92.9%	389,191	928,271	7.1%	29,584	957,855	0.14
7/1/97 - 6/30/98	6,844,150	0.06	416,859	92.2%	384,372	432,549	7.8%	32,487	465,036	0.07
7/1/98 - 6/30/99	7,077,960	0.06	437,378	91.5%	400,129	376,763	8.5%	37,249	414,012	0.06
7/1/99 - 6/30/00	7,604,770	0.06	479,226	90.8%	434,942	486,803	9.2%	44,284	531,086	0.07
7/1/00 - 6/30/01	8,116,000	0.06	526,851	90.0%	474,248	564,812	10.0%	52,604	617,416	0.08
7/1/01 - 6/30/02	8,350,380	0.07	556,786	89.2%	496,758	534,221	10.8%	60,029	594,250	0.07
7/1/02 - 6/30/03	8,253,400	0.07	572,514	88.4%	506,152	637,562	11.6%	66,362	703,924	0.09
7/1/03 - 6/30/04	8,492,160	0.07	613,262	87.6%	537,115	691,458	12.4%	76,147	767,605	0.09
7/1/04 - 6/30/05	9,925,080	0.07	732,245	86.8%	635,326	659,963	13.2%	96,919	756,882	0.08
7/1/05 - 6/30/06	9,628,780	0.08	724,078	85.9%	621,956	843,946	14.1%	102,123	946,069	0.10
7/1/06 - 6/30/07	10,329,300	0.08	788,069	85.0%	669,494	683,354	15.0%	118,575	801,929	0.08
7/1/07 - 6/30/08	10,635,970	0.08	823,284	84.0%	691,727	1,010,855	16.0%	131,557	1,142,412	0.11
7/1/08 - 6/30/09	10,738,050	0.08	853,289	83.1%	708,929	1,092,604	16.9%	144,360	1,236,964	0.12
7/1/09 - 6/30/10	10,847,490	0.08	888,477	82.1%	729,505	1,060,498	17.9%	158,973	1,219,470	0.11
7/1/10 - 6/30/11	11,341,640	0.08	946,161	81.1%	767,111	1,184,268	18.9%	179,050	1,363,319	0.12
7/1/11 - 6/30/12	12,026,740	0.08	1,017,926	79.9%	813,419	895,280	20.1%	204,507	1,099,788	0.09
7/1/12 - 6/30/13	12,847,410	0.09	1,103,222	78.5%	866,481	794,386	21.5%	236,742	1,031,127	0.08
7/1/13 - 6/30/14	13,469,020	0.09	1,173,444	77.0%	904,052	999,340	23.0%	269,393	1,268,733	0.09
7/1/14 - 6/30/15	14,040,930	0.09	1,241,085	75.5%	937,487	983,330	24.5%	303,598	1,286,928	0.09
7/1/15 - 6/30/16	14,546,120	0.09	1,304,463	74.0%	965,076	1,088,926	26.0%	339,387	1,428,313	0.10
7/1/16 - 6/30/17	14,615,880	0.09	1,329,807	72.4%	962,824	963,668	27.6%	366,984	1,330,652	0.09
7/1/17 - 6/30/18	14,577,400	0.09	1,345,621	70.6%	950,620	1,090,338	29.4%	395,001	1,485,340	0.10
7/1/18 - 6/30/19	15,002,050	0.09	1,404,988	68.8%	966,100	787,904	31.2%	438,888	1,226,792	0.08
7/1/19 - 6/30/20	15,086,780	0.10	1,433,499	65.9%	945,378	601,049	34.1%	488,121	1,089,170	0.07
7/1/20 - 6/30/21	14,138,618	0.10	1,362,972	61.1%	832,384	460,390	38.9%	530,588	990,979	0.07
7/1/21 - 6/30/22	15,119,517	0.10	1,478,758	52.4%	775,177	383,220	47.6%	703,580	1,086,801	0.07
7/1/22 - 6/30/23	15,459,627	0.10	1,534,042	25.9%	397,843	342,881	74.1%	1,136,199	1,479,080	0.10
Total	323,996,302		26,522,367		19,716,544	22,545,703		6,805,823	29,351,526	

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	From Section VI, Exhibit II, Sheet 8, Column (13)
(4)	= (2) x (3)
(5)	= 1 / Section VI, Exhibit II, Sheet 10, Column (6)
(6)	= (4) x (5)
(7)	Provided by Entity
(8)	= 1 - (5)
(9)	= (4) x (8)
(10)	= (7) + (9)
(11)	= (10) / (2)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Calculation of Initial Expected Loss & ALAE Rates

Accident Year	Payroll (00)'s	Payroll Trend	Loss Development Unlimited Indicated Ultimate Loss & ALAE Paid	Reported	Selected Initial Ultimate Loss & ALAE	Loss & ALAE Trend Factor	Benefit Level Adjustment Factors	Trended Ultimate	On-level Loss & ALAE Rates	Detrended Loss & ALAE Rates	Prior Expected Loss & ALAE Rates	Initial Expected Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
7/1/93 - 6/30/94	5,848,530	2.357	861,605	861,605	4,278,454	3.584	1.180	18,098,905	***1.31***	0.06	0.06	0.06
7/1/94 - 6/30/95	5,877,010	2.288	610,227	610,227	861,600	3.430	1.167	3,449,392	0.26	0.06	0.06	0.06
7/1/95 - 6/30/96	6,148,680	2.221	622,878	622,878	572,784	3.282	1.151	2,164,056	0.16	0.06	0.06	0.06
7/1/96 - 6/30/97	7,006,860	2.157	998,833	998,833	581,842	3.141	1.140	2,083,307	0.14	0.06	0.06	0.06
7/1/97 - 6/30/98	6,844,150	2.094	469,107	469,107	998,850	3.005	1.135	3,407,215	0.24	0.06	0.06	0.06
7/1/98 - 6/30/99	7,077,960	2.033	411,837	411,837	469,100	2.876	1.135	1,531,258	0.11	0.06	0.06	0.06
7/1/99 - 6/30/00	7,604,770	1.974	536,367	536,367	411,850	2.752	1.129	1,279,909	0.09	0.06	0.07	0.06
7/1/00 - 6/30/01	8,116,000	1.916	627,461	627,461	536,350	2.634	1.112	1,570,939	0.10	0.06	0.07	0.06
7/1/01 - 6/30/02	8,350,380	1.860	598,777	598,777	627,450	2.520	1.098	1,737,067	0.11	0.07	0.07	0.07
7/1/02 - 6/30/03	8,253,400	1.806	721,154	721,154	534,221	2.412	1.071	1,380,227	0.09	0.07	0.07	0.07
7/1/03 - 6/30/04	8,492,160	1.754	789,486	789,486	721,150	2.308	1.044	1,737,573	0.12	0.07	0.08	0.07
7/1/04 - 6/30/05	9,925,080	1.702	760,641	760,641	691,458	2.208	1.037	1,583,256	0.09	0.07	0.08	0.07
7/1/05 - 6/30/06	9,628,780	1.653	982,519	982,519	659,963	2.113	1.032	1,439,383	0.09	0.08	0.08	0.08
7/1/06 - 6/30/07	10,329,300	1.605	804,384	804,384	982,500	2.022	1.032	2,050,562	0.12	0.08	0.08	0.08
7/1/07 - 6/30/08	10,635,970	1.558	1,203,106	1,203,106	804,350	1.935	1.032	1,606,457	0.10	0.08	0.08	0.08
7/1/08 - 6/30/09	10,738,050	1.513	1,315,092	1,315,092	1,203,100	1.852	1.020	2,272,428	0.14	0.08	0.08	0.08
7/1/09 - 6/30/10	10,847,490	1.469	1,291,600	1,291,600	1,315,100	1.772	1.004	2,339,719	0.15	0.08	0.09	0.08
7/1/10 - 6/30/11	11,341,640	1.426	1,460,686	1,460,686	1,291,600	1.696	1.000	2,190,400	0.14	0.08	0.09	0.08
7/1/11 - 6/30/12	12,026,740	1.384	1,120,369	1,120,369	1,460,700	1.623	1.000	2,370,501	0.14	0.08	0.09	0.08
7/1/12 - 6/30/13	12,847,410	1.344	1,011,429	1,011,429	1,120,350	1.553	1.000	1,739,869	0.10	0.09	0.09	0.09
7/1/13 - 6/30/14	13,469,020	1.305	1,297,128	1,297,128	1,011,450	1.486	1.000	1,503,111	0.09	0.09	0.09	0.09
7/1/14 - 6/30/15	14,040,930	1.267	1,301,774	1,301,774	1,297,100	1.422	1.000	1,844,607	0.10	0.09	0.09	0.09
7/1/15 - 6/30/16	14,546,120	1.230	1,471,868	1,471,868	1,301,800	1.361	1.000	1,771,570	0.10	0.09	0.09	0.09
7/1/16 - 6/30/17	14,615,880	1.194	1,330,974	1,330,974	1,471,900	1.302	1.000	1,916,797	0.11	0.09	0.09	0.09
7/1/17 - 6/30/18	14,577,400	1.159	1,543,395	1,543,395	1,331,000	1.246	1.000	1,658,668	0.10	0.09	0.10	0.09
7/1/18 - 6/30/19	15,002,050	1.126	1,145,840	1,145,840	1,543,400	1.193	1.000	1,840,533	0.11	0.09	0.10	0.09
7/1/19 - 6/30/20	15,086,780	1.093	911,385	911,385	1,145,850	1.141	1.000	1,307,605	0.08	0.10	0.10	0.10
7/1/20 - 6/30/21	14,138,618	1.061	753,858	753,858	753,858	1.092	1.000	823,231	***0.05***	0.10	0.10	0.10
7/1/21 - 6/30/22	15,119,517	1.030	731,046	731,046	731,046	1.045	1.000	763,943	***0.05***	0.10	0.10	0.10
7/1/22 - 6/30/23	15,459,627	1.000	1,322,117	1,322,117	1,322,117	1.000	1.000	1,322,117	***0.09***	0.10		0.10
			29,006,941	29,006,941				Last 3 Wtd Avg	0.10			
								Last 4 Wtd Avg	0.10			
								Last 5 Wtd Avg	0.10			
								All Per Wtd Avg	0.12			

(Note: numbers in bold and italics and with borders are excluded from the calculated averages)

Selected (14) 0.10

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Selected by Deloitte Consulting LLP
(4) From Section VI, Exhibit II, Sheet 10, Column (7)
(5) From Section VI, Exhibit II, Sheet 0, Column (7)
(6) Selected by Deloitte Consulting LLP
(7) Selected by Deloitte Consulting LLP
(8) Based on industry sources
(9) = (6) x (7) x (8)
(10) = (9) / [(2) x (3)]
(11) = (14) / (7) / (8) * (3)
(12) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(13) Selected for by Deloitte Consulting LLP Based on (14)
(14) Selected by Deloitte Consulting LLP

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Frequency Severity Method

Accident Year	Payroll (00)'s	Ultimate Reported Severity	Include For Fit	Exponential Fitted Reported Severity	Initial Selected Ultimate Severity	Selected Ultimate Claim Counts	Benefit Level Adjustment Factor	Selected Severity Trend	Trended Severity	On-Level Selected Ultimate Severity	Indicated Ultimate Loss & ALAE	Indicated Ultimate Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Prior to 7/1/1993			Exclude	6,682		0					0	
7/1/93 - 6/30/94	5,848,530		Exclude	6,854		0	1.180	3.584	0,000		0	0.00
7/1/94 - 6/30/95	5,877,010		Exclude	7,031		0	1.167	3.430	0,000		0	0.00
7/1/95 - 6/30/96	6,148,680		Exclude	7,213		0	1.151	3.282	0,000		0	0.00
7/1/96 - 6/30/97	7,006,860		Exclude	7,400		0	1.140	3.141	0,000		0	0.00
7/1/97 - 6/30/98	6,844,150		Exclude	7,591		0	1.135	3.005	0,000		0	0.00
7/1/98 - 6/30/99	7,077,960		Exclude	7,787		0	1.135	2.876	0,000		0	0.00
7/1/99 - 6/30/00	7,604,770		Exclude	7,988		0	1.129	2.752	0,000		0	0.00
7/1/00 - 6/30/01	8,116,000		Exclude	8,194		0	1.112	2.634	0,000		0	0.00
7/1/01 - 6/30/02	8,350,380		Exclude	8,406		0	1.098	2.520	0,000		0	0.00
7/1/02 - 6/30/03	8,253,400		Exclude	8,623		0	1.071	2.412	0,000		0	0.00
7/1/03 - 6/30/04	8,492,160		Exclude	8,846		0	1.044	2.308	0,000		0	0.00
7/1/04 - 6/30/05	9,925,080		Exclude	9,075		0	1.037	2.208	0,000		0	0.00
7/1/05 - 6/30/06	9,628,780		Exclude	9,309		0	1.032	2.113	0,000		0	0.00
7/1/06 - 6/30/07	10,329,300		Exclude	9,550		0	1.032	2.022	0,000		0	0.00
7/1/07 - 6/30/08	10,635,970		Exclude	9,796		0	1.032	1.935	0,000		0	0.00
7/1/08 - 6/30/09	10,738,050		Exclude	10,050		0	1.020	1.852	0,000		0	0.00
7/1/09 - 6/30/10	10,847,490		Exclude	10,309		0	1.004	1.772	0,000		0	0.00
7/1/10 - 6/30/11	11,341,640		Exclude	10,576		0	1.000	1.696	0,000		0	0.00
7/1/11 - 6/30/12	12,026,740		Exclude	10,849		0	1.000	1.623	0,000		0	0.00
7/1/12 - 6/30/13	12,847,410	9,112	Include	11,129	10,093	111	1.000	1.553	15,674	17,530	1,252,968	0.10
7/1/13 - 6/30/14	13,469,020	12,237	Include	11,417	9,542	106	1.000	1.486	14,180	17,530	1,250,372	0.09
7/1/14 - 6/30/15	14,040,930	12,166	Include	11,712	12,122	107	1.000	1.422	17,239	17,530	1,318,966	0.09
7/1/15 - 6/30/16	14,546,120	13,503	Include	12,014	11,943	109	1.000	1.361	16,253	17,530	1,404,082	0.10
7/1/16 - 6/30/17	14,615,880	14,312	Include	12,325	15,827	93	1.000	1.302	20,611	17,530	1,251,887	0.09
7/1/17 - 6/30/18	14,577,400	11,266	Include	12,643	9,715	137	1.000	1.246	12,107	17,530	1,927,166	0.13
7/1/18 - 6/30/19	15,002,050	12,982	Include	12,970	17,486	88	1.000	1.193	20,852	17,530	1,297,507	0.09
7/1/19 - 6/30/20	15,086,780	13,960	Include	13,305	17,552	65	1.000	1.141	20,030	17,530	1,002,852	0.07
7/1/20 - 6/30/21	14,138,618	12,259	Include	13,649	12,259	61	1.000	1.092	***13,387***	17,530	987,132	0.07
7/1/21 - 6/30/22	15,119,517	12,786	Exclude	14,001	12,786	57	1.000	1.045	***13,361***	17,530	959,112	0.06
7/1/22 - 6/30/23	15,459,627	21,588	Exclude	14,363	21,588	61	1.000	1.000	***21,588***	17,530	1,073,587	0.07
			Implied Trend	2.6%	68.8%			Last 5 Wtd Avg	17,247			
								Last 4 Wtd Avg	17,530			
								Last 3 Wtd Avg	16,544			
Total	323,996,302					996		Last 3 Avg	17,663		13,725,629	
								Selected	17,530			

Reported Exponential Regressio	
Constant	9.598
X Coefficient	(0.026)
R Squared	0.263

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Section VI, Exhibit II, Sheet 0, Column (7) / Section VI, Exhibit II, Sheet 13, Column (7) x 1
(4) Years included for purposes of fit
(5) Result of Exponential fit of Column (3) * Column (8)
(6) Selected by Deloitte Consulting LLP
(7) From Section VI, Exhibit II, Sheet 13, Column (7)
(8) Based on industry sources
(9) Selected by Deloitte Consulting LLP
(10) = (6) x (8) x (9)
(11) Selected by Deloitte Consulting, LLP
(12) Selected in column (11) x (7) / (8) / (9)
(13) = (12) / (3)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss & ALAE Development Method

Accident Year	Age of Losses @ 06/30/2023	Retention	Payroll (00)'s	Unlimited Paid Loss & ALAE @ 06/30/2023	Paid LDF	Indicated Ultimate Loss & ALAE	Unlimited Indicated Ultimate Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Prior to 7/1/1993	372.0	Unlimited		4,260,984	1.056	4,499,362	
7/1/93 - 6/30/94	360.0	Unlimited	5,848,530	812,437	1.061	861,605	0.15
7/1/94 - 6/30/95	348.0	Unlimited	5,877,010	572,784	1.065	610,227	0.10
7/1/95 - 6/30/96	336.0	Unlimited	6,148,680	581,842	1.071	622,878	0.10
7/1/96 - 6/30/97	324.0	Unlimited	7,006,860	928,271	1.076	998,833	0.14
7/1/97 - 6/30/98	312.0	Unlimited	6,844,150	432,549	1.085	469,107	0.07
7/1/98 - 6/30/99	300.0	Unlimited	7,077,960	376,763	1.093	411,837	0.06
7/1/99 - 6/30/00	288.0	Unlimited	7,604,770	486,803	1.102	536,367	0.07
7/1/00 - 6/30/01	276.0	Unlimited	8,116,000	564,812	1.111	627,461	0.08
7/1/01 - 6/30/02	264.0	Unlimited	8,350,380	534,221	1.121	598,777	0.07
7/1/02 - 6/30/03	252.0	Unlimited	8,253,400	637,562	1.131	721,154	0.09
7/1/03 - 6/30/04	240.0	Unlimited	8,492,160	691,458	1.142	789,486	0.09
7/1/04 - 6/30/05	228.0	Unlimited	9,925,080	659,963	1.153	760,641	0.08
7/1/05 - 6/30/06	216.0	Unlimited	9,628,780	843,946	1.164	982,519	0.10
7/1/06 - 6/30/07	204.0	Unlimited	10,329,300	683,354	1.177	804,384	0.08
7/1/07 - 6/30/08	192.0	Unlimited	10,635,970	1,010,855	1.190	1,203,106	0.11
7/1/08 - 6/30/09	180.0	Unlimited	10,738,050	1,092,604	1.204	1,315,092	0.12
7/1/09 - 6/30/10	168.0	Unlimited	10,847,490	1,060,498	1.218	1,291,600	0.12
7/1/10 - 6/30/11	156.0	Unlimited	11,341,640	1,184,268	1.233	1,460,686	0.13
7/1/11 - 6/30/12	144.0	Unlimited	12,026,740	895,280	1.251	1,120,369	0.09
7/1/12 - 6/30/13	132.0	Unlimited	12,847,410	794,386	1.273	1,011,429	0.08
7/1/13 - 6/30/14	120.0	Unlimited	13,469,020	999,340	1.298	1,297,128	0.10
7/1/14 - 6/30/15	108.0	Unlimited	14,040,930	983,330	1.324	1,301,774	0.09
7/1/15 - 6/30/16	96.0	Unlimited	14,546,120	1,088,926	1.352	1,471,868	0.10
7/1/16 - 6/30/17	84.0	Unlimited	14,615,880	963,668	1.381	1,330,974	0.09
7/1/17 - 6/30/18	72.0	Unlimited	14,577,400	1,090,338	1.416	1,543,395	0.11
7/1/18 - 6/30/19	60.0	Unlimited	15,002,050	787,904	1.454	1,145,840	0.08
7/1/19 - 6/30/20	48.0	Unlimited	15,086,780	601,049	1.516	911,385	0.06
7/1/20 - 6/30/21	36.0	Unlimited	14,138,618	460,390	1.637	753,858	0.05
7/1/21 - 6/30/22	24.0	Unlimited	15,119,517	383,220	1.908	731,046	0.05
7/1/22 - 6/30/23	12.0	Unlimited	15,459,627	342,881	3.856	1,322,117	0.09
Total			323,996,302	26,806,686		33,506,303	

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1)
(3) Provided by Entity
(4) Provided by Entity
(5) Provided by Entity
(6) From Section VI, Exhibit II, Sheet 11
(7) = (5) x (6)
(8) = (7) / (4)

Commonwealth of Massachusetts
Other Colleges and Universities
Other C&U - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss & ALAE

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																															As of
	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	348	360	372	6/30/2023
Prior to 7/1/1993	9,513,173	3,449,573	3,623,929	3,734,409	3,807,621	3,837,239	3,878,505	3,910,584	3,927,763	3,958,977	3,984,273	4,036,823	4,061,836	4,074,722	4,087,622	4,098,287	4,113,493	4,126,037	4,140,671	4,157,709	4,172,915	4,190,872	4,225,889	4,243,817	4,249,693	4,251,037	4,253,705	4,256,276	4,259,647	4,260,444	4,260,984	4,260,984
7/1/93 - 6/30/94	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	539,677	552,169	567,707	583,321	603,468	622,024	645,934	667,089	694,391	716,701	736,533	764,145	790,779	812,437		812,437
7/1/94 - 6/30/95	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	533,675	537,590	548,842	549,714	552,789	553,267	561,548	569,946	571,817	572,784	572,784	572,784	572,784	572,784			572,784
7/1/95 - 6/30/96	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	581,842	581,842	581,842	581,842	581,842	581,842	581,842	581,842	581,842	581,842	581,842	581,842	581,842	581,842				581,842
7/1/96 - 6/30/97	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	602,453	632,460	672,797	707,291	751,693	784,697	804,425	816,942	826,844	844,889	911,103	913,923	921,783	928,271					928,271
7/1/97 - 6/30/98	130,372	302,957	339,295	363,480	383,927	388,726	391,919	417,459	417,733	418,585	421,666	427,310	427,449	428,766	428,839	429,419	429,419	431,949	431,949	432,549	432,549	432,549	432,549	432,549	432,549	432,549						432,549
7/1/98 - 6/30/99	97,937	205,527	246,679	296,667	310,533	318,692	324,215	326,063	327,858	331,461	334,241	334,867	336,644	336,644	338,913	356,188	359,425	359,425	359,555	362,292	363,846	365,529	367,696	376,236	376,763							376,763
7/1/99 - 6/30/00	149,711	324,594	408,387	446,980	464,695	474,595	478,979	480,612	480,853	482,147	483,486	483,486	483,486	485,189	486,598	486,598	486,598	486,598	486,598	486,598	486,598	486,598	486,803	486,803								486,803
7/1/00 - 6/30/01	146,796	329,001	398,588	483,338	524,021	540,381	553,789	559,032	562,148	562,831	562,932	563,168	564,300	564,300	564,300	564,531	564,812	564,812	564,812	564,812	564,812	564,812	564,812									564,812
7/1/01 - 6/30/02	113,531	244,127	383,389	485,433	511,686	522,029	525,064	528,876	530,895	532,387	533,222	533,611	533,769	533,801	533,801	533,801	533,801	534,221	534,221	534,221	534,221	534,221										534,221
7/1/02 - 6/30/03	68,006	374,633	451,946	472,102	486,597	492,733	520,395	535,451	548,996	558,702	571,378	580,801	592,448	598,592	629,662	630,549	632,860	633,141	637,326	637,562	637,562											637,562
7/1/03 - 6/30/04	226,665	540,314	613,339	657,569	676,213	687,448	689,931	690,265	690,426	690,599	690,599	690,599	690,884	691,090	691,090	691,090	691,458	691,458	691,458	691,458												691,458
7/1/04 - 6/30/05	267,264	502,730	569,792	616,429	634,553	643,543	651,061	654,330	656,278	658,062	658,407	659,359	659,643	659,795	659,963	659,963	659,963	659,963	659,963													659,963
7/1/05 - 6/30/06	266,086	533,067	604,845	688,237	700,485	712,078	725,521	746,165	766,110	772,655	782,897	794,172	800,330	808,926	819,272	822,621	831,397	843,946														843,946
7/1/06 - 6/30/07	237,774	472,669	580,019	596,123	625,421	633,211	640,381	648,441	650,947	666,396	670,899	682,244	682,415	682,415	682,948	683,109	683,354															683,354
7/1/07 - 6/30/08	254,702	609,536	722,745	829,701	850,544	872,814	886,112	897,870	903,764	908,328	914,114	923,764	974,013	983,647	994,580	1,010,855																1,010,855
7/1/08 - 6/30/09	295,106	650,179	756,525	816,761	864,783	890,799	963,303	1,000,692	1,014,361	1,032,333	1,040,037	1,047,531	1,053,052	1,084,154	1,092,604																	1,092,604
7/1/09 - 6/30/10	419,730	775,749	865,851	909,378	969,832	1,003,634	1,022,482	1,035,227	1,047,120	1,053,598	1,057,134	1,059,078	1,060,498	1,060,498																		1,060,498
7/1/10 - 6/30/11	454,614	843,137	950,684	993,647	1,027,735	1,049,121	1,062,776	1,136,431	1,155,890	1,167,779	1,174,705	1,180,009	1,184,268																			1,184,268
7/1/11 - 6/30/12	330,317	680,422	807,857	845,053	855,001	862,692	874,678	881,227	887,174	889,539	892,817	895,280																				895,280
7/1/12 - 6/30/13	291,036	557,974	663,264	737,725	766,678	781,059	782,701	783,986	784,495	787,857	794,386																					794,386
7/1/13 - 6/30/14	380,527	800,513	898,591	934,609	956,501	970,221	977,381	985,479	992,455	999,340																						999,340
7/1/14 - 6/30/15	425,720	650,583	818,551	863,423	909,146	942,462	958,203	972,290	983,330																							983,330
7/1/15 - 6/30/16	452,409	810,095	957,451	1,017,009	1,042,593	1,068,349	1,083,358	1,088,926																								1,088,926
7/1/16 - 6/30/17	306,218	654,776	776,866	836,564	914,311	944,514	963,668																									963,668
7/1/17 - 6/30/18	505,195	942,187	1,018,565	1,056,300	1,082,769	1,090,338																										1,090,338
7/1/18 - 6/30/19	306,185	616,988	705,275	760,519	787,904																											787,904
7/1/19 - 6/30/20	244,786	525,368	560,844	601,049																												601,049
7/1/20 - 6/30/21	216,264	382,196	460,390																													460,390
7/1/21 - 6/30/22	206,607	383,220																														383,220
7/1/22 - 6/30/23	342,881																															342,881
																																26,806,686

Accident Year	Age-to-Age Development Factors																														
	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993	***0.363***	***1.051***	***1.030***	***1.020***	***1.008***	***1.011***	***1.008***	***1.004***	***1.008***	***1.006***	***1.013***	***1.006***	***1.003***	***1.003***	***1.003***	***1.004***	***1.003***	***1.004***	***1.004***	***1.004***	***1.004***	***1.008***	***1.004***	***1.001***	***1.000***	***1.001***	***1.001***	***1.001***	***1.000***	***1.000***	
7/1/93 - 6/30/94	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	1.021	1.023	1.028	1.028	1.035	1.031	1.038	1.033	1.041	1.032	1.028	1.037	1.035	1.027		
7/1/94 - 6/30/95	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	1.013	1.007	1.021	1.002	1.006	1.001	1.015	1.015	1.003	1.002	1.000	1.000	1.000	1.000			
7/1/95 - 6/30/96	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	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				
7/1/96 - 6/30/97	1.813	1.173	1.121	1.091	1.025	1.017	1.054	1.042	1.033	1.031	1.038	1.041	1.041	1.050	1.064	1.051	1.063	1.044	1.025	1.016	1.012	1.022	1.078	1.003	1.009	1.007					
7/1/97 - 6/30/98	2.324	1.120	1.071	1.056	1.012	1.008	1.065	1.001	1.002	1.007	1.013	1.000	1.003	1.000	1.001	1.000	1.006	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000						
7/1/98 - 6/30/99	2.099	1.200	1.203	1.047	1.026	1.017	1.006	1.006	1.011	1.008	1.002	1.005	1.000	1.007	1.051	1.009	1.000	1.000	1.008	1.004	1.005	1.006	1.023	1.001							
7/1/99 - 6/30/00	2.168	1.258	1.095	1.040	1.021	1.009	1.003	1.001	1.003	1.003	1.000	1.000	1.004	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000								
7/1/00 - 6/30/01	2.241	1.212	1.213	1.084	1.031	1.025	1.009	1.006	1.001	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000									
7/1/01 - 6/30/02	2.150	1.570	1.266	1.054	1.020	1.006	1.007	1.004	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000										
7/1/02 - 6/30/03	5.509	1.206	1.045	1.031	1.013	1.056	1.029	1.025	1.018	1.023	1.016	1.020	1.010	1.052	1.001	1.004	1.000	1.007	1.000	1.000											
7/1/03 - 6/30/04	2.384	1.135	1.072	1.028	1.017	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000												
7/1/04 - 6/30/05	1.881	1.133	1.082	1.029	1.014	1.012	1.005	1.003	1.003	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000													
7/1/05 - 6/30/06	2.003	1.135	1.138	1.018	1.017	1.019	1.028	1.027	1.009	1.013	1.014	1.008	1.011	1.013	1.004	1.011	1.015														
7/1/06 - 6/30/07	1.988	1.227	1.028	1.049	1.012	1.011	1.013	1.004	1.024	1.007	1.017	1.000	1.000	1.001	1.000	1.000															
7/1/07 - 6/30/08	2.393	1.186	1.148	1.025	1.026	1.015	1.013	1.007	1.005	1.006	1.011	1.054	1.010	1.011	1.016																
7/1/08 - 6/30/09	2.203	1.164	1.080	1.059	1.030	1.081	1.039	1.014	1.018	1.007	1.007	1.005	1.030	1.008																	
7/1/09 - 6/30/10	1.848	1.116	1.050	1.066	1.035	1.019	1.012	1.011	1.006	1.003	1.002	1.001	1.000																		
7/1/10 - 6/30/11	1.855	1.128	1.045	1.034	1.021	1.013	1.069	1.017	1.010	1.006	1.005	1.004																			
7/1/11 - 6/30/12	2.060	1.187	1.046	1.012	1.009	1.014	1.007	1.007	1.003	1.004	1.003																				
7/1/12 - 6/30/13	1.917	1.189	1.112	1.039	1.019	1.002	1.002	1.001	1.004	1.008																					
7/1/13 - 6/30/14	2.104	1.123	1.040	1.023	1.014	1.007	1.008	1.007	1.007																						
7/1/14 - 6/30/15	1.528	1.258	1.055	1.053	1.037	1.017	1.015	1.011																							
7/1/15 - 6/30/16	1.791	1.182	1.062	1.025	1.025	1.014	1.005																								
7/1/16 - 6/30/17	2.138	1.186	1.077	1.093	1.033	1.020																									
7/1/17 - 6/30/18	1.865	1.081	1.037	1.025	1.007																										
7/1/18 - 6/30/19	2.015	1.143	1.078	1.036																											
7/1/19 - 6/30/20	2.146	1.068	1.072																												
7/1/20 - 6/30/21	1.767	1.205																													
7/1/21 - 6/30/22	1.855																														

(Note: numbers in bold and italics and with borders are excluded from the calculated averages)

Last 3 Wtd Avg	1.933	1.132	1.058	1.050	1.021	1.017	1.009	1.007	1.005	1.006	1.003	1.003	1.013	1.007	1.008	1.004	1.006	1.002	1.000	1.000	1.000	1.002	1.007	1.002	1.004	1.003	1.015				
Last 5 Wtd Avg	1.927	1.128	1.063	1.045	1.023	1.012	1.008	1.009	1.006	1.006	1.005	1.013	1.011	1.007	1.005	1.003	1.004	1.001	1.000	1.001	1.001	1.008	1.028	1.002	1.009						
Last 9 Wtd Avg	1.894	1.155	1.062	1.037	1.022	1.021	1.020	1.009	1.009	1.006	1.006	1.011	1.008	1.009	1.003	1.003	1.003	1.007	1.005	1.003	1.008										
Last 12 Wtd Avg	1.905	1.151	1.061	1.040	1.022	1.020	1.019	1.010	1.009	1.006	1.006	1.009	1.007	1.008	1.011	1.007	1.010	1.008													
All Per Wtd Avg	2.021	1.165	1.080	1.043	1.022	1.021	1.019	1.011	1.013	1.008	1.008	1.017	1.009	1.011	1.010	1.008	1.011	1.008	1.007	1.006	1.008	1.012	1.025	1.009	1.009	1.009	1.015	1.020	1.027		
Industry																															
Age-to-Age	1.952	1.143	1.054	1.022	1.017	1.007	1.012	1.008	1.009	1.008	1.007	1.008	1.007	1.008	1.007	1.007	1.008	1.007	1.004	1.004	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.004	1.004	
Age-to-Ult	2.959	1.516	1.326	1.258	1.231	1.210	1.202	1.188	1.179	1.168	1.159	1.151	1.142	1.134	1.125	1.117	1.109	1.100	1.092	1.088	1.083	1.078	1.073	1.068	1.063	1.058	1.052	1.047	1.043	1.038	1.034
Prior Selected																															
Age-to-Age	2.040	1.162	1.080	1.042	1.025	1.023	1.021	1.021	1.020	1.018	1.015	1.013	1.012	1.011	1.011	1.010	1.010	1.009	1.009	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.005	1.005	1.005	1.004	
Age-to-Ult	3.805	1.865	1.605	1.486	1.426	1.391	1.361	1.333	1.306	1.280	1.258	1.239	1.223	1.209	1.195	1.182	1.171	1.160	1.149	1.139	1.130	1.120	1.111	1.102	1.093	1.085	1.076	1.071	1.066	1.061	1.056
Selected																															
Age-to-Age	2.021	1.165	1.080	1.043	1.027	1.025	1.022	1.021	1.020	1.019	1.017	1.015	1.013	1.012	1.011	1.011	1.011	1.010	1.009	1.009	1.009	1.009	1.008	1.008	1.008	1.008	1.005	1.005	1.005	1.004	
Age-to-Ult	3.856	1.908	1.637	1.516	1.454	1.416	1.381	1.352	1.324	1.298	1.273	1.251	1.233	1.218	1.204	1.190	1.177	1.164	1.153	1.142	1.131	1.121	1.111	1.102	1.093	1.085	1.076	1.071	1.065	1.061	1.056

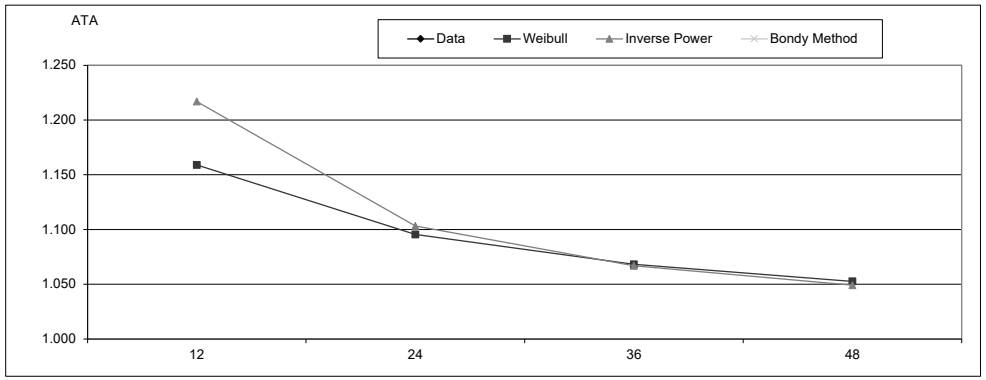
Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

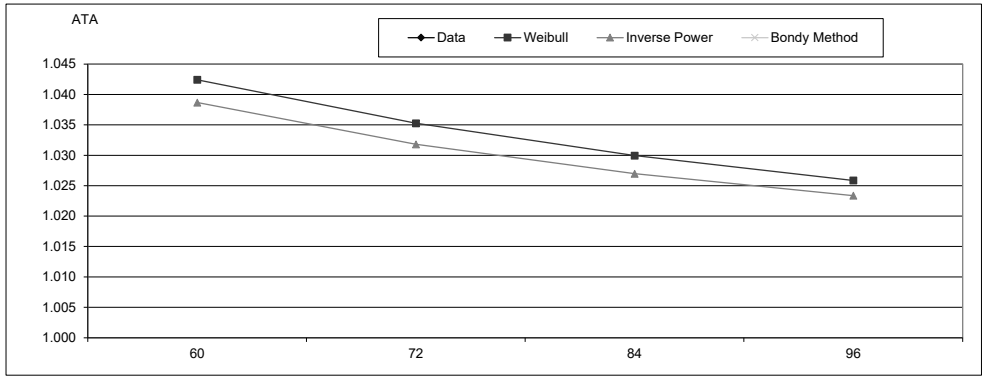
Curve Fitting Methods
Paid Loss & ALAE

Tail at Period: 31 (To display in table)
Cut-off point:(<=Tail & <51) 50 (to run-out pattern)

Summary of Curve Fitting Methods

Method	Tail	R^2
Weibull	**1.056**	**0.897**
Inverse Power	**1.088**	**0.953**
Bondy Method		**N/A**





				Weibull		Inverse Power		Bondy Method			
									Sel. Decay Ratio=		
PERIOD	AGE	ATA	Use	**ATA***	**ATU***	**ATA***	**ATU***	Ln(ATA)	Decay	**ATA***	**ATU***
1	12	0.000	Exclude	**1.159**	2.140	**1.217**	2.308				
2	24	1.165	Include	**1.096**	1.847	**1.103**	1.896				
3	36	1.080	Include	**1.068**	1.686	**1.067**	1.719				
4	48	1.043	Include	**1.053**	1.578	**1.049**	1.611				
5	60	1.027	Include	**1.042**	1.499	**1.039**	1.536				
6	72	1.025	Include	**1.035**	1.438	**1.032**	1.479				
7	84	1.022	Include	**1.030**	1.389	**1.027**	1.433				
8	96	1.021	Include	**1.026**	1.349	**1.023**	1.395				
9	108	1.020	Include	**1.023**	1.315	**1.021**	1.363				
10	120	1.019	Include	**1.020**	1.286	**1.018**	1.336				
11	132	1.017	Include	**1.018**	1.261	**1.017**	1.312				
12	144	1.015	Include	**1.016**	1.238	**1.015**	1.290				
13	156	1.013	Include	**1.014**	1.219	**1.014**	1.271				
14	168	1.012	Include	**1.013**	1.202	**1.013**	1.254				
15	180	1.011	Include	**1.012**	1.186	**1.012**	1.238				
16	192	1.011	Include	**1.011**	1.172	**1.011**	1.223				
17	204	1.011	Include	**1.010**	1.159	**1.010**	1.210				
18	216	1.010	Include	**1.009**	1.147	**1.010**	1.197				
19	228	1.009	Include	**1.009**	1.137	**1.009**	1.186				
20	240	1.009	Include	**1.008**	1.127	**1.009**	1.175				
21	252	1.009	Include	**1.008**	1.118	**1.008**	1.165				
22	264	1.009	Include	**1.007**	1.110	**1.008**	1.155				
23	276	1.008	Include	**1.007**	1.102	**1.008**	1.146				
24	288	1.008	Include	**1.006**	1.095	**1.007**	1.137				
25	300	0.000	Exclude	**1.006**	1.088	**1.007**	1.129				
26	312	0.000	Exclude	**1.005**	1.082	**1.007**	1.121				
27	324	0.000	Exclude	**1.005**	1.076	**1.006**	1.114				
28	336	0.000	Exclude	**1.005**	1.071	**1.006**	1.107				
29	348	0.000	Exclude	**1.005**	1.065	**1.006**	1.100				
30	360	0.000	Exclude	**1.004**	1.061	**1.006**	1.094				
31	372	0.000	Exclude	**1.004**	1.056	**1.005**	1.088				
32	384	0.000	Exclude	**1.004**	1.052	**1.005**	1.082				
33	396	0.000	Exclude	**1.004**	1.048	**1.005**	1.076				
34	408	0.000	Exclude	**1.004**	1.044	**1.005**	1.071				
35	420	0.000	Exclude	**1.003**	1.040	**1.005**	1.065				
36	432	0.000	Exclude	**1.003**	1.037	**1.005**	1.060				
37	444	0.000	Exclude	**1.003**	1.033	**1.005**	1.055				
38	456	0.000	Exclude	**1.003**	1.030	**1.004**	1.050				
39	468	0.000	Exclude	**1.003**	1.027	**1.004**	1.046				
40	480	0.000	Exclude	**1.003**	1.024	**1.004**	1.041				
41	492	0.000	Exclude	**1.003**	1.022	**1.004**	1.037				
42	504	0.000	Exclude	**1.002**	1.019	**1.004**	1.033				
43	516	0.000	Exclude	**1.002**	1.016	**1.004**	1.029				
44	528	0.000	Exclude	**1.002**	1.014	**1.004**	1.025				
45	540	0.000	Exclude	**1.002**	1.012	**1.004**	1.021				
46	552	0.000	Exclude	**1.002**	1.010	**1.004**	1.017				
47	564	0.000	Exclude	**1.002**	1.008	**1.004**	1.014				
48	576	0.000	Exclude	**1.002**	1.006	**1.003**	1.010				
49	588	0.000	Exclude	**1.002**	1.004	**1.003**	1.007				
50	600	0.000	Exclude	**1.002**	1.002	**1.003**	1.003				

Unpaid Claim Analysis as of 06/30/2023

Ultimate Claim Count Development

Accident Year	Age of Counts @ 06/30/2023	Payroll (00)'s	Reported Claim Counts @ 06/30/2023	Reported Count Dev Factor	Indicated Ultimate Claim Counts	Selected Ultimate Claim Counts	Selected Ultimate Frequency	Selected Ultimate Frequency (Inflation-Adjusted)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	372.0		18	1.000	18			
7/1/93 - 6/30/94	360.0	5,848,530	3	1.000	3		0.00%	0.00%
7/1/94 - 6/30/95	348.0	5,877,010	2	1.000	2		0.00%	0.00%
7/1/95 - 6/30/96	336.0	6,148,680	1	1.000	1		0.00%	0.00%
7/1/96 - 6/30/97	324.0	7,006,860	4	1.000	4		0.00%	0.00%
7/1/97 - 6/30/98	312.0	6,844,150	3	1.000	3		0.00%	0.00%
7/1/98 - 6/30/99	300.0	7,077,960	4	1.000	4		0.00%	0.00%
7/1/99 - 6/30/00	288.0	7,604,770	3	1.000	3		0.00%	0.00%
7/1/00 - 6/30/01	276.0	8,116,000	5	1.000	5		0.00%	0.00%
7/1/01 - 6/30/02	264.0	8,350,380	4	1.000	4		0.00%	0.00%
7/1/02 - 6/30/03	252.0	8,253,400	5	1.000	5		0.00%	0.00%
7/1/03 - 6/30/04	240.0	8,492,160	6	1.000	6		0.00%	0.00%
7/1/04 - 6/30/05	228.0	9,925,080	6	1.000	6		0.00%	0.00%
7/1/05 - 6/30/06	216.0	9,628,780	9	1.000	9		0.00%	0.00%
7/1/06 - 6/30/07	204.0	10,329,300	6	1.000	6		0.00%	0.00%
7/1/07 - 6/30/08	192.0	10,635,970	17	1.000	17		0.00%	0.00%
7/1/08 - 6/30/09	180.0	10,738,050	21	1.000	21		0.00%	0.00%
7/1/09 - 6/30/10	168.0	10,847,490	29	1.000	29		0.00%	0.00%
7/1/10 - 6/30/11	156.0	11,341,640	49	1.000	49		0.00%	0.00%
7/1/11 - 6/30/12	144.0	12,026,740	67	1.000	67		0.00%	0.00%
7/1/12 - 6/30/13	132.0	12,847,410	111	1.000	111	111	8.64%	6.43%
7/1/13 - 6/30/14	120.0	13,469,020	106	1.000	106	106	7.87%	6.03%
7/1/14 - 6/30/15	108.0	14,040,930	107	1.000	107	107	7.62%	6.02%
7/1/15 - 6/30/16	96.0	14,546,120	109	1.000	109	109	7.49%	6.09%
7/1/16 - 6/30/17	84.0	14,615,880	93	1.000	93	93	6.36%	5.33%
7/1/17 - 6/30/18	72.0	14,577,400	137	1.000	137	137	9.40%	8.11%
7/1/18 - 6/30/19	60.0	15,002,050	88	1.003	88	88	5.88%	5.23%
7/1/19 - 6/30/20	48.0	15,086,780	65	1.004	65	65	4.33%	3.96%
7/1/20 - 6/30/21	36.0	14,138,618	61	1.008	61	61	4.35%	4.10%
7/1/21 - 6/30/22	24.0	15,119,517	56	1.021	57	57	3.78%	3.67%
7/1/22 - 6/30/23	12.0	15,459,627	47	1.175	55	61	3.96%	3.96%
Total		323,996,302	1,242		1,252	996		

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1)
(3) Provided by Entity
(4) Provided by Entity
(5) From Section VI, Exhibit II, Sheet 14
(6) = (4) x (5)
(7) Selected by Deloitte Consulting LLP
(8) = (7) / (3)
(9) = (7) / [(3) x Section VI, Exhibit II, Sheet 8, Column (3)]

Unpaid Claim Analysis as of 06/30/2023

Reported Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																															18	18
7/1/93 - 6/30/94																														3		3
7/1/94 - 6/30/95																													2			2
7/1/95 - 6/30/96																												1				1
7/1/96 - 6/30/97																											4					4
7/1/97 - 6/30/98																										3						3
7/1/98 - 6/30/99																									4							4
7/1/99 - 6/30/00																								3								3
7/1/00 - 6/30/01																							5									5
7/1/01 - 6/30/02																						4										4
7/1/02 - 6/30/03																					5											5
7/1/03 - 6/30/04																				6												6
7/1/04 - 6/30/05																			6													6
7/1/05 - 6/30/06																		9														9
7/1/06 - 6/30/07																	6															6
7/1/07 - 6/30/08																17																17
7/1/08 - 6/30/09															21																	21
7/1/09 - 6/30/10														29																		29
7/1/10 - 6/30/11													49																			49
7/1/11 - 6/30/12												67																				67
7/1/12 - 6/30/13	92	109	111	111	111	111	111	111	111	111	111																					111
7/1/13 - 6/30/14	92	106	106	106	106	106	106	106	106	106																						106
7/1/14 - 6/30/15	90	104	106	106	106	107	107	107	107																							107
7/1/15 - 6/30/16	93	106	108	109	109	109	109	109																								109
7/1/16 - 6/30/17	77	90	92	93	93	93	93																									93
7/1/17 - 6/30/18	119	134	135	135	136	137																										137
7/1/18 - 6/30/19	74	86	87	88	88																											88
7/1/19 - 6/30/20	57	65	65	65																												65
7/1/20 - 6/30/21	53	60	61																													61
7/1/21 - 6/30/22	49	56																														56
7/1/22 - 6/30/23	47																															47
																																1,242

Accident Year	Age-to-Age Development Factors																														
	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993																															
7/1/93 - 6/30/94																															
7/1/94 - 6/30/95																															
7/1/95 - 6/30/96																															
7/1/96 - 6/30/97																															
7/1/97 - 6/30/98																															
7/1/98 - 6/30/99																															
7/1/99 - 6/30/00																															
7/1/00 - 6/30/01																															
7/1/01 - 6/30/02																															
7/1/02 - 6/30/03																															
7/1/03 - 6/30/04																															
7/1/04 - 6/30/05																															
7/1/05 - 6/30/06																															
7/1/06 - 6/30/07																															
7/1/07 - 6/30/08																															
7/1/08 - 6/30/09																															
7/1/09 - 6/30/10																															
7/1/10 - 6/30/11																															
7/1/11 - 6/30/12																															
7/1/12 - 6/30/13	1.185	1.018	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000																					
7/1/13 - 6/30/14	1.152	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000																						
7/1/14 - 6/30/15	1.156	1.019	1.000	1.000	1.009	1.000	1.000	1.000																							
7/1/15 - 6/30/16	1.140	1.019	1.009	1.000	1.000	1.000	1.000																								
7/1/16 - 6/30/17	1.169	1.022	1.011	1.000	1.000	1.000																									
7/1/17 - 6/30/18	1.126	1.007	1.000	1.007	1.007																										
7/1/18 - 6/30/19	1.162	1.012	1.011	1.000																											
7/1/19 - 6/30/20	1.140	1.000	1.000																												
7/1/20 - 6/30/21	1.132	1.017																													
7/1/21 - 6/30/22	1.143																														
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																															
Last 3 Wtd Avg	1.138	1.009	1.003	1.003	1.003	1.000	1.000	1.000																							
Last 4 Wtd Avg	1.146	1.009	1.005	1.002	1.005	1.000	1.000																								
Last 5 Wtd Avg	1.139	1.011	1.006	1.002	1.004	1.000																									
All Per Wtd Avg	1.151	1.013	1.004	1.001	1.003	1.000	1.000	1.000	1.000	1.000																					
Average ex Hi/Lo	1.149	1.013	1.003	1.000	1.002	1.000	1.000	1.000																							
Prior Selected																															
Age-to-Age	1.151	1.013	1.004	1.002	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	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	
Age-to-Ult	1.174	1.020	1.007	1.003	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	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																															
Age-to-Age	1.151	1.013	1.004	1.001	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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Age-to-Ult	1.175	1.021	1.008	1.004	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	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

Commonwealth of Massachusetts
Other Colleges and Universities
Other C&U - Medical

Unpaid Claim Analysis as of 06/30/2023

Reported Counts to Payroll (00)'s

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01		5,848,530
7/1/94 - 6/30/95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			5,877,010
7/1/95 - 6/30/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				6,148,680
7/1/96 - 6/30/97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01					7,006,860
7/1/97 - 6/30/98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						6,844,150
7/1/98 - 6/30/99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01							7,077,960
7/1/99 - 6/30/00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00								7,604,770
7/1/00 - 6/30/01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01									8,116,000
7/1/01 - 6/30/02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										8,350,380
7/1/02 - 6/30/03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01											8,253,400
7/1/03 - 6/30/04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01												8,492,160
7/1/04 - 6/30/05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01													9,925,080
7/1/05 - 6/30/06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01														9,628,780
7/1/06 - 6/30/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01															10,329,300
7/1/07 - 6/30/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02																10,635,970
7/1/08 - 6/30/09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02																	10,738,050
7/1/09 - 6/30/10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03																		10,847,490
7/1/10 - 6/30/11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04																			11,341,640
7/1/11 - 6/30/12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06																				12,026,740
7/1/12 - 6/30/13	0.07	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09																					12,847,410
7/1/13 - 6/30/14	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08																						13,469,020
7/1/14 - 6/30/15	0.06	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08																							14,040,930
7/1/15 - 6/30/16	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07																								14,546,120
7/1/16 - 6/30/17	0.05	0.06	0.06	0.06	0.06	0.06	0.06																									14,615,880
7/1/17 - 6/30/18	0.08	0.09	0.09	0.09	0.09	0.09																										14,577,400
7/1/18 - 6/30/19	0.05	0.06	0.06	0.06	0.06																											15,002,050
7/1/19 - 6/30/20	0.04	0.04	0.04	0.04																												15,086,780
7/1/20 - 6/30/21	0.04	0.04	0.04																													14,138,618
7/1/21 - 6/30/22	0.03	0.04																														15,119,517
7/1/22 - 6/30/23	0.03																															15,459,627

Commonwealth of Massachusetts
Other Colleges and Universities
Other C&U - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss & ALAE Rates

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94	0.03	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.11	0.11	0.11	0.12	0.12	0.13	0.13	0.14	0.14		5,848,530
7/1/94 - 6/30/95	0.02	0.04	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10			5,877,010
7/1/95 - 6/30/96	0.03	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09				6,148,680
7/1/96 - 6/30/97	0.02	0.04	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.11	0.12	0.12	0.12	0.13	0.13	0.13	0.13					7,006,860
7/1/97 - 6/30/98	0.02	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06						6,844,150
7/1/98 - 6/30/99	0.01	0.03	0.03	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05							7,077,960
7/1/99 - 6/30/00	0.02	0.04	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06								7,604,770
7/1/00 - 6/30/01	0.02	0.04	0.05	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07									8,116,000
7/1/01 - 6/30/02	0.01	0.03	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06										8,350,380
7/1/02 - 6/30/03	0.01	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08											8,253,400
7/1/03 - 6/30/04	0.03	0.06	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08												8,492,160
7/1/04 - 6/30/05	0.03	0.05	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07													9,925,080
7/1/05 - 6/30/06	0.03	0.06	0.06	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09														9,628,780
7/1/06 - 6/30/07	0.02	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07															10,329,300
7/1/07 - 6/30/08	0.02	0.06	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.10																10,635,970
7/1/08 - 6/30/09	0.03	0.06	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10																	10,738,050
7/1/09 - 6/30/10	0.04	0.07	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10																		10,847,490
7/1/10 - 6/30/11	0.04	0.07	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10																			11,341,640
7/1/11 - 6/30/12	0.03	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07																				12,026,740
7/1/12 - 6/30/13	0.02	0.04	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06																					12,847,410
7/1/13 - 6/30/14	0.03	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07																						13,469,020
7/1/14 - 6/30/15	0.03	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.07																							14,040,930
7/1/15 - 6/30/16	0.03	0.06	0.07	0.07	0.07	0.07	0.07	0.07																								14,546,120
7/1/16 - 6/30/17	0.02	0.04	0.05	0.06	0.06	0.06	0.07																									14,615,880
7/1/17 - 6/30/18	0.03	0.06	0.07	0.07	0.07	0.07																										14,577,400
7/1/18 - 6/30/19	0.02	0.04	0.05	0.05	0.05																											15,002,050
7/1/19 - 6/30/20	0.02	0.03	0.04	0.04																												15,086,780
7/1/20 - 6/30/21	0.02	0.03	0.03																													14,138,618
7/1/21 - 6/30/22	0.01	0.03																														15,119,517
7/1/22 - 6/30/23	0.02																															15,459,627

Commonwealth of Massachusetts
Other Colleges and Universities
Other C&U - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Settlement Rates (Closed Claim Count / Ultimate Claim Count)

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
7/1/98 - 6/30/99																																
7/1/99 - 6/30/00																																
7/1/00 - 6/30/01																																
7/1/01 - 6/30/02																																
7/1/02 - 6/30/03																																
7/1/03 - 6/30/04																																
7/1/04 - 6/30/05																																
7/1/05 - 6/30/06																																
7/1/06 - 6/30/07																																
7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	0.00	0.34	0.74	0.86	0.91	0.94	0.95	0.95	0.96	0.96	0.98																					0.98
7/1/13 - 6/30/14	0.00	0.29	0.68	0.83	0.90	0.92	0.95	0.94	0.96	0.93																						0.93
7/1/14 - 6/30/15	0.00	0.40	0.74	0.85	0.91	0.92	0.98	0.98	0.99																							0.99
7/1/15 - 6/30/16	0.00	0.30	0.65	0.81	0.83	0.88	0.89	0.94																								0.94
7/1/16 - 6/30/17	0.00	0.40	0.69	0.81	0.86	0.89	0.90																									0.90
7/1/17 - 6/30/18	0.00	0.39	0.71	0.88	0.94	0.96																										0.96
7/1/18 - 6/30/19	0.00	0.33	0.77	0.85	0.88																											0.88
7/1/19 - 6/30/20	0.00	0.51	0.80	0.86																												0.86
7/1/20 - 6/30/21	0.00	0.31	0.70																													0.70
7/1/21 - 6/30/22	0.00	0.35																														0.35
7/1/22 - 6/30/23	0.00																															0.00

Unpaid Claim Analysis as of 06/30/2023

Open Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993	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	0	0	0	2	2
7/1/93 - 6/30/94	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	0	0	2		2
7/1/94 - 6/30/95	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	0	0			0
7/1/95 - 6/30/96	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	0				0
7/1/96 - 6/30/97	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	1					1
7/1/97 - 6/30/98	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	1						1
7/1/98 - 6/30/99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1							1
7/1/99 - 6/30/00	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
7/1/00 - 6/30/01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1									1
7/1/01 - 6/30/02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										0
7/1/02 - 6/30/03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											0
7/1/03 - 6/30/04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												0
7/1/04 - 6/30/05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0													0
7/1/05 - 6/30/06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2														2
7/1/06 - 6/30/07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1															1
7/1/07 - 6/30/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3																3
7/1/08 - 6/30/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3																	3
7/1/09 - 6/30/10	0	0	0	0	0	0	0	0	0	0	0	0	0	3																		3
7/1/10 - 6/30/11	0	0	0	0	0	0	0	0	0	0	0	0	2																			2
7/1/11 - 6/30/12	0	0	0	0	0	0	0	0	0	0	0	1																				1
7/1/12 - 6/30/13	92	71	29	16	10	7	5	6	4	4	2																					2
7/1/13 - 6/30/14	92	75	34	18	11	9	5	6	4	7																						7
7/1/14 - 6/30/15	90	61	27	15	9	9	2	2	1																							1
7/1/15 - 6/30/16	93	73	37	21	18	13	12	6																								6
7/1/16 - 6/30/17	77	53	28	18	13	10	9																									9
7/1/17 - 6/30/18	119	80	38	14	7	5																										5
7/1/18 - 6/30/19	74	57	19	13	10																											10
7/1/19 - 6/30/20	57	32	13	9																												9
7/1/20 - 6/30/21	53	41	18																													18
7/1/21 - 6/30/22	49	36																														36
7/1/22 - 6/30/23	47																															47
																																173

Commonwealth of Massachusetts
All Other
All Other - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Unpaid Loss Estimates

Accident Year	Payroll (00)'s	Retention	Unlimited Paid Loss @ 06/30/2023	Unlimited Reported Loss @ 06/30/2023	Ultimate Loss Low	Ultimate Loss High	Indicated Total Unpaid Loss Estimates Low	Indicated Total Unpaid Loss Estimates High	Case Reserves	Indicated IBNR Estimate Low	Indicated IBNR Estimate High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993		Unlimited	206,642,368	206,642,368	221,704,461	225,051,593	15,062,093	18,409,225	0	15,062,093	18,409,225
7/1/93 - 6/30/94		Unlimited	11,547,856	11,547,856	12,356,100	12,441,200	808,244	893,344	0	808,244	893,344
7/1/94 - 6/30/95		Unlimited	10,153,089	10,153,089	10,917,100	10,997,500	764,011	844,411	0	764,011	844,411
7/1/95 - 6/30/96		Unlimited	10,661,071	10,661,071	11,586,300	11,683,700	925,229	1,022,629	0	925,229	1,022,629
7/1/96 - 6/30/97		Unlimited	10,842,645	10,842,645	11,880,500	11,989,800	1,037,855	1,147,155	0	1,037,855	1,147,155
7/1/97 - 6/30/98		Unlimited	9,111,868	9,111,868	10,076,900	10,178,500	965,032	1,066,632	0	965,032	1,066,632
7/1/98 - 6/30/99	19,448,360	Unlimited	9,713,565	9,713,565	10,821,300	10,937,900	1,107,735	1,224,335	0	1,107,735	1,224,335
7/1/99 - 6/30/00	20,693,510	Unlimited	11,472,474	11,472,474	12,880,900	13,029,200	1,408,426	1,556,726	0	1,408,426	1,556,726
7/1/00 - 6/30/01	20,558,590	Unlimited	10,416,510	10,416,510	11,800,700	11,946,400	1,384,190	1,529,890	0	1,384,190	1,529,890
7/1/01 - 6/30/02	21,523,690	Unlimited	10,561,383	10,561,383	12,061,600	12,219,500	1,500,217	1,658,117	0	1,500,217	1,658,117
7/1/02 - 6/30/03	21,202,840	Unlimited	10,373,156	10,373,156	11,940,700	12,105,700	1,567,544	1,732,544	0	1,567,544	1,732,544
7/1/03 - 6/30/04	21,185,340	Unlimited	9,727,856	9,727,856	11,297,800	11,463,100	1,569,944	1,735,244	0	1,569,944	1,735,244
7/1/04 - 6/30/05	21,640,500	Unlimited	11,671,149	11,671,149	13,676,600	13,887,700	2,005,451	2,216,551	0	2,005,451	2,216,551
7/1/05 - 6/30/06	23,243,030	Unlimited	10,451,514	10,451,514	12,363,200	12,564,500	1,911,686	2,112,986	0	1,911,686	2,112,986
7/1/06 - 6/30/07	24,554,310	Unlimited	9,318,885	9,318,885	11,123,700	11,313,700	1,804,815	1,994,815	0	1,804,815	1,994,815
7/1/07 - 6/30/08	26,150,540	Unlimited	13,761,809	13,761,809	16,607,200	16,906,700	2,845,391	3,144,891	0	2,845,391	3,144,891
7/1/08 - 6/30/09	25,704,510	Unlimited	13,216,694	13,216,694	16,110,100	16,414,700	2,893,406	3,198,006	0	2,893,406	3,198,006
7/1/09 - 6/30/10	26,029,100	Unlimited	13,642,977	13,642,977	16,806,300	17,139,300	3,163,323	3,496,323	0	3,163,323	3,496,323
7/1/10 - 6/30/11	27,458,630	Unlimited	15,243,243	15,243,243	18,973,000	19,365,700	3,729,757	4,122,457	0	3,729,757	4,122,457
7/1/11 - 6/30/12	27,995,990	Unlimited	16,245,336	16,245,336	20,438,500	20,879,900	4,193,164	4,634,564	0	4,193,164	4,634,564
7/1/12 - 6/30/13	29,200,210	Unlimited	13,050,411	13,050,411	16,610,900	16,985,700	3,560,489	3,935,289	0	3,560,489	3,935,289
7/1/13 - 6/30/14	30,801,820	Unlimited	16,009,156	16,009,156	20,694,100	21,187,200	4,684,944	5,178,044	0	4,684,944	5,178,044
7/1/14 - 6/30/15	32,591,780	Unlimited	16,627,544	16,627,544	21,811,900	22,357,600	5,184,356	5,730,056	0	5,184,356	5,730,056
7/1/15 - 6/30/16	32,518,420	Unlimited	18,660,468	18,660,468	24,736,700	25,651,400	6,076,232	6,990,932	0	6,076,232	6,990,932
7/1/16 - 6/30/17	31,362,360	Unlimited	17,124,211	17,124,211	23,255,500	24,178,500	6,131,289	7,054,289	0	6,131,289	7,054,289
7/1/17 - 6/30/18	31,972,210	Unlimited	19,003,726	19,003,726	26,855,500	28,037,500	7,851,774	9,033,774	0	7,851,774	9,033,774
7/1/18 - 6/30/19	33,600,390	Unlimited	11,696,090	11,696,090	19,604,100	20,794,500	7,908,010	9,098,410	0	7,908,010	9,098,410
7/1/19 - 6/30/20	35,047,860	Unlimited	13,082,044	13,082,044	23,066,800	24,569,900	9,984,756	11,487,856	0	9,984,756	11,487,856
7/1/20 - 6/30/21	35,216,283	Unlimited	11,096,484	11,096,484	24,119,000	27,013,000	13,022,516	15,916,516	0	13,022,516	15,916,516
7/1/21 - 6/30/22	37,107,388	Unlimited	9,282,726	9,282,726	26,814,000	30,709,000	17,531,274	21,426,274	0	17,531,274	21,426,274
7/1/22 - 6/30/23	38,502,230	Unlimited	4,093,933	4,093,933	25,741,000	30,552,000	21,647,067	26,458,067	0	21,647,067	26,458,067
Total	695,309,891		574,502,242	574,502,242	728,732,461	754,552,593	154,230,219	180,050,351	0	154,230,219	180,050,351

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	Provided by Entity
(6)	From Section VII, Exhibit I, Sheet 6, Column (11)
(7)	From Section VII, Exhibit I, Sheet 6, Column (12)
(8)	= (6) - (4)
(9)	= (7) - (4)
(10)	= (5) - (4)
(11)	= (8) - (10)
(12)	= (9) - (10)

Commonwealth of Massachusetts
All Other
All Other - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Short-Term Portion

Accident Year	Age of Losses @ 06/30/2023	Selected Paid Test LDF @ 06/30/2023	Implied Paid LDF	Paid LDF	Cumulative Percent Paid	Incremental Percent Paid	Average Total Unpaid Loss Estimate	Undiscounted Cash Flow of Payments 2024
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
						0.62%		
Prior to 7/1/1993	372.0	1.068	1.081	1.068	93.59%	0.46%	16,735,659	1,624,156
7/1/93 - 6/30/94	360.0	1.074	1.074	1.074	93.14%	0.48%	850,794	56,663
7/1/94 - 6/30/95	348.0	1.079	1.079	1.079	92.66%	1.03%	804,211	52,291
7/1/95 - 6/30/96	336.0	1.091	1.091	1.091	91.63%	0.78%	973,929	119,999
7/1/96 - 6/30/97	324.0	1.101	1.101	1.101	90.85%	0.88%	1,092,505	93,431
7/1/97 - 6/30/98	312.0	1.111	1.111	1.111	89.97%	0.69%	1,015,832	88,786
7/1/98 - 6/30/99	300.0	1.120	1.120	1.120	89.28%	0.73%	1,166,035	74,778
7/1/99 - 6/30/00	288.0	1.129	1.129	1.129	88.56%	0.83%	1,482,576	94,094
7/1/00 - 6/30/01	276.0	1.140	1.140	1.140	87.73%	0.74%	1,457,040	98,234
7/1/01 - 6/30/02	264.0	1.150	1.150	1.150	86.99%	0.72%	1,579,167	89,388
7/1/02 - 6/30/03	252.0	1.159	1.159	1.159	86.28%	0.80%	1,650,044	86,083
7/1/03 - 6/30/04	240.0	1.170	1.170	1.170	85.48%	0.80%	1,652,594	90,782
7/1/04 - 6/30/05	228.0	1.181	1.181	1.181	84.68%	0.83%	2,111,001	109,682
7/1/05 - 6/30/06	216.0	1.193	1.193	1.193	83.85%	0.79%	2,012,336	103,256
7/1/06 - 6/30/07	204.0	1.204	1.204	1.204	83.07%	0.94%	1,899,815	88,516
7/1/07 - 6/30/08	192.0	1.218	1.218	1.218	82.13%	0.85%	2,995,141	157,428
7/1/08 - 6/30/09	180.0	1.230	1.230	1.230	81.27%	0.89%	3,045,706	138,973
7/1/09 - 6/30/10	168.0	1.244	1.244	1.244	80.38%	0.86%	3,329,823	151,095
7/1/10 - 6/30/11	156.0	1.258	1.258	1.258	79.52%	0.88%	3,926,107	165,327
7/1/11 - 6/30/12	144.0	1.272	1.272	1.272	78.63%	0.95%	4,413,864	182,637
7/1/12 - 6/30/13	132.0	1.287	1.287	1.287	77.69%	1.24%	3,747,889	158,906
7/1/13 - 6/30/14	120.0	1.308	1.308	1.308	76.45%	1.16%	4,931,494	259,390
7/1/14 - 6/30/15	108.0	1.328	1.328	1.328	75.29%	1.22%	5,457,206	256,271
7/1/15 - 6/30/16	96.0	1.350	1.350	1.350	74.07%	1.86%	6,533,582	308,070
7/1/16 - 6/30/17	84.0	1.385	1.385	1.385	72.20%	2.96%	6,592,789	442,246
7/1/17 - 6/30/18	72.0	1.444	1.444	1.444	69.24%	4.89%	8,442,774	813,286
7/1/18 - 6/30/19	60.0	1.554	1.727	1.554	64.35%	7.84%	8,503,210	1,165,813
7/1/19 - 6/30/20	48.0	1.769	1.821	1.769	56.51%	10.79%	10,736,306	1,934,829
7/1/20 - 6/30/21	36.0	2.187	2.304	2.187	45.72%	13.57%	14,469,516	2,877,627
7/1/21 - 6/30/22	24.0	3.110	3.098	3.110	32.15%	17.25%	19,478,774	3,895,552
7/1/22 - 6/30/23	12.0	6.709	6.875	6.709	14.90%	14.90%	24,052,567	4,874,775
Total							167,140,285	20,652,364

	Undiscounted	Discounted			
Short-Term Portion	12%	18%	(10)	Interest Rate	4%

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1) @ 06/30/2023
(3) From Section VII, Exhibit I, Sheet 10, Column (6)
(4) Average Ultimate Loss Divided by Paid Loss From Section VII, Exhibit I, Sheet 6
(5) Selected
(6) = 1 / (5)
(7) = (6) from Current Age - (6) from Subsequent Age
(8) From Section VII, Exhibit I, Sheet 3
(9) - (9) Based on (5)

Commonwealth of Massachusetts
All Other
All Other - Indemnity (Including Lump Sum)

Section VII
Exhibit I
Sheet 3

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Discounted at (4%) Unpaid Loss Estimate

Accident Year	Indicated Total Unpaid Loss Estimate Low	Indicated Total Unpaid Loss Estimate High	Discount Factor	Discounted Total Unpaid Loss Estimate Low	Discounted Total Unpaid Loss Estimate High
(1)	(2)	(3)	(4)	(5)	(6)
Prior to 7/1/1993	15,062,093	18,409,225	1.000	15,062,093	18,409,225
7/1/93 - 6/30/94	808,244	893,344	0.981	792,548	875,996
7/1/94 - 6/30/95	764,011	844,411	0.945	722,234	798,237
7/1/95 - 6/30/96	925,229	1,022,629	0.918	849,161	938,553
7/1/96 - 6/30/97	1,037,855	1,147,155	0.891	924,598	1,021,971
7/1/97 - 6/30/98	965,032	1,066,632	0.867	837,112	925,244
7/1/98 - 6/30/99	1,107,735	1,224,335	0.843	934,349	1,032,698
7/1/99 - 6/30/00	1,408,426	1,556,726	0.822	1,157,439	1,279,311
7/1/00 - 6/30/01	1,384,190	1,529,890	0.803	1,111,539	1,228,539
7/1/01 - 6/30/02	1,500,217	1,658,117	0.784	1,176,077	1,299,861
7/1/02 - 6/30/03	1,567,544	1,732,544	0.766	1,200,140	1,326,467
7/1/03 - 6/30/04	1,569,944	1,735,244	0.750	1,176,826	1,300,734
7/1/04 - 6/30/05	2,005,451	2,216,551	0.734	1,472,535	1,627,538
7/1/05 - 6/30/06	1,911,686	2,112,986	0.720	1,376,629	1,521,588
7/1/06 - 6/30/07	1,804,815	1,994,815	0.706	1,273,915	1,408,025
7/1/07 - 6/30/08	2,845,391	3,144,891	0.695	1,976,300	2,184,322
7/1/08 - 6/30/09	2,893,406	3,198,006	0.682	1,973,644	2,181,417
7/1/09 - 6/30/10	3,163,323	3,496,323	0.671	2,121,375	2,344,690
7/1/10 - 6/30/11	3,729,757	4,122,457	0.659	2,457,768	2,716,542
7/1/11 - 6/30/12	4,193,164	4,634,564	0.648	2,717,060	3,003,076
7/1/12 - 6/30/13	3,560,489	3,935,289	0.638	2,272,342	2,511,543
7/1/13 - 6/30/14	4,684,944	5,178,044	0.633	2,965,398	3,277,512
7/1/14 - 6/30/15	5,184,356	5,730,056	0.626	3,245,853	3,587,508
7/1/15 - 6/30/16	6,076,232	6,990,932	0.620	3,766,390	4,333,373
7/1/16 - 6/30/17	6,131,289	7,054,289	0.622	3,812,511	4,386,444
7/1/17 - 6/30/18	7,851,774	9,033,774	0.635	4,983,994	5,734,280
7/1/18 - 6/30/19	7,908,010	9,098,410	0.661	5,228,037	6,015,018
7/1/19 - 6/30/20	9,984,756	11,487,856	0.698	6,967,715	8,016,631
7/1/20 - 6/30/21	13,022,516	15,916,516	0.733	9,539,830	11,659,870
7/1/21 - 6/30/22	17,531,274	21,426,274	0.760	13,317,180	16,275,916
7/1/22 - 6/30/23	21,647,067	26,458,067	0.781	16,908,758	20,666,683
Total	154,230,219	180,050,351		114,321,349	133,888,813

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From Section VII, Exhibit I, Sheet 1, Column (8)
(3) From Section VII, Exhibit I, Sheet 1, Column (9)
(4) From Section VII, Exhibit I, Sheet 0, Column (8)
(5) = (2) x (4)
(6) = (3) x (4)

Commonwealth of Massachusetts
All Other
All Other - Indemnity (Including Lump Sum)

Section VII
Exhibit I
Sheet 4

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Actual vs Expected - Paid Loss Emergence

Accident Year	Selected Low Ultimate Loss @ 06/30/2022	Selected High Ultimate Loss @ 06/30/2022	Unlimited Paid Loss @ 06/30/2022	Unlimited Paid Loss @ 06/30/2023	Paid LDF @ 06/30/2022	Projected Paid LDF @ 06/30/2023	Method 1 Low Expected Paid Emergence Loss @ 06/30/2023	Method 1 High Expected Paid Emergence Loss @ 06/30/2023	Actual Paid Emergence Loss @ 06/30/2023	Actual - Expected Method 1 Low Paid	Actual - Expected Method 1 High Paid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993	223,175,122	227,106,076	205,118,212	206,642,368	1.073	1.065	1,749,216	2,130,017	1,524,156	(225,060)	(605,861)
7/1/93 - 6/30/94	12,277,300	12,366,800	11,426,902	11,547,856	1.078	1.073	57,219	63,241	120,954	63,735	57,713
7/1/94 - 6/30/95	10,952,700	11,041,000	10,112,879	10,153,089	1.087	1.078	80,863	89,365	40,210	(40,653)	(49,155)
7/1/95 - 6/30/96	11,587,300	11,690,200	10,609,781	10,661,071	1.097	1.087	88,711	98,050	51,291	(37,421)	(46,759)
7/1/96 - 6/30/97	11,817,800	11,932,200	10,730,514	10,842,645	1.107	1.097	89,935	99,398	112,131	22,196	12,733
7/1/97 - 6/30/98	10,123,600	10,230,100	9,111,868	9,111,868	1.117	1.107	79,950	88,366	0	(79,950)	(88,366)
7/1/98 - 6/30/99	10,846,300	10,969,200	9,678,418	9,713,565	1.127	1.117	83,465	92,249	35,147	(48,318)	(57,102)
7/1/99 - 6/30/00	12,843,800	12,999,300	11,366,464	11,472,474	1.137	1.127	93,853	103,731	106,009	12,157	2,278
7/1/00 - 6/30/01	11,772,800	11,923,100	10,345,565	10,416,510	1.145	1.137	72,659	80,310	70,945	(1,714)	(9,366)
7/1/01 - 6/30/02	12,089,000	12,253,200	10,528,826	10,561,383	1.156	1.145	93,985	103,877	32,556	(61,429)	(71,320)
7/1/02 - 6/30/03	12,033,800	12,208,600	10,373,156	10,373,156	1.169	1.156	106,865	118,114	0	(106,865)	(118,114)
7/1/03 - 6/30/04	11,350,500	11,525,700	9,686,014	9,727,856	1.181	1.169	97,439	107,695	41,842	(55,597)	(65,853)
7/1/04 - 6/30/05	13,649,100	13,872,700	11,524,786	11,671,149	1.194	1.181	121,770	134,587	146,363	24,593	11,776
7/1/05 - 6/30/06	12,443,500	12,658,500	10,400,912	10,451,514	1.207	1.194	105,066	116,125	50,602	(54,464)	(65,523)
7/1/06 - 6/30/07	11,202,400	11,407,400	9,254,623	9,318,885	1.222	1.207	108,013	119,381	64,262	(43,751)	(55,119)
7/1/07 - 6/30/08	16,599,200	16,918,300	13,567,330	13,761,809	1.235	1.222	144,377	159,572	194,480	50,103	34,907
7/1/08 - 6/30/09	16,344,100	16,675,100	13,199,076	13,216,694	1.251	1.235	158,247	174,902	17,619	(140,628)	(157,283)
7/1/09 - 6/30/10	16,925,100	17,284,100	13,515,429	13,642,977	1.266	1.251	151,350	167,285	127,549	(23,801)	(39,736)
7/1/10 - 6/30/11	19,140,300	19,564,200	15,113,938	15,243,243	1.280	1.266	168,617	186,370	129,304	(39,313)	(57,065)
7/1/11 - 6/30/12	20,602,700	21,079,300	16,074,547	16,245,336	1.297	1.280	192,002	212,211	170,789	(21,213)	(41,422)
7/1/12 - 6/30/13	16,613,400	17,017,800	12,771,303	13,050,411	1.317	1.297	188,557	208,404	279,108	90,551	70,704
7/1/13 - 6/30/14	20,739,700	21,269,200	15,709,792	16,009,156	1.337	1.317	230,767	255,060	299,363	68,596	44,304
7/1/14 - 6/30/15	21,915,700	22,741,500	16,429,966	16,627,544	1.359	1.337	251,268	289,092	197,577	(53,690)	(91,515)
7/1/15 - 6/30/16	24,691,800	25,686,200	18,085,870	18,660,468	1.393	1.359	417,434	480,271	574,598	157,164	94,327
7/1/16 - 6/30/17	23,389,100	24,438,800	16,415,744	17,124,211	1.457	1.393	701,814	807,458	708,467	6,653	(98,991)
7/1/17 - 6/30/18	26,311,200	27,678,200	17,230,352	19,003,726	1.567	1.457	1,209,138	1,391,157	1,773,373	564,235	382,216
7/1/18 - 6/30/19	20,034,900	21,454,700	10,603,013	11,696,090	1.789	1.567	1,698,336	1,953,990	1,093,077	(605,259)	(860,913)
7/1/19 - 6/30/20	22,675,000	25,428,000	10,286,446	13,082,044	2.194	1.789	2,345,930	2,867,246	2,795,597	449,667	(71,649)
7/1/20 - 6/30/21	23,984,000	27,518,000	8,079,173	11,096,484	3.126	2.194	3,177,945	3,884,073	3,017,310	(160,634)	(866,763)
7/1/21 - 6/30/22	26,492,000	31,429,000	4,273,310	9,282,726	6.697	3.126	4,455,898	5,446,000	5,009,416	553,518	(436,584)
Total	704,623,222	730,366,476	551,624,212	570,408,309			18,520,690	22,027,598	18,784,097	263,407	(3,243,501)

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Selected by Deloitte Consulting LLP @ 06/30/2022
(3)	Selected by Deloitte Consulting LLP @ 06/30/2022
(4)	Provided by Entity
(5)	Provided by Entity
(6)	Selected by Deloitte Consulting LLP @ 06/30/2022
(7)	Interpolated From (6)
(8)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((2) - (4))
(9)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((3) - (4))
(10)	= (5) - (4)
(11)	= (10) - (8)
(12)	= (10) - (9)

Commonwealth of Massachusetts
All Other
All Other - Indemnity (Including Lump Sum)

Section VII
Exhibit I
Sheet 5

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Ultimate Loss Runoff

Accident Year	Ultimate Loss @ 06/30/2022 Low	Ultimate Loss @ 06/30/2022 High	Ultimate Loss @ 06/30/2023 Low	Ultimate Loss @ 06/30/2023 High	Deloitte Change Low	Deloitte Change High	Paid Loss @ 06/30/2023	Reported Loss @ 06/30/2023
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	223,175,122	227,106,076	221,704,461	225,051,593	(1,470,661)	(2,054,483)	206,642,368	206,642,368
7/1/93 - 6/30/94	12,277,300	12,366,800	12,356,100	12,441,200	78,800	74,400	11,547,856	11,547,856
7/1/94 - 6/30/95	10,952,700	11,041,000	10,917,100	10,997,500	(35,600)	(43,500)	10,153,089	10,153,089
7/1/95 - 6/30/96	11,587,300	11,690,200	11,586,300	11,683,700	(1,000)	(6,500)	10,661,071	10,661,071
7/1/96 - 6/30/97	11,817,800	11,932,200	11,880,500	11,989,800	62,700	57,600	10,842,645	10,842,645
7/1/97 - 6/30/98	10,123,600	10,230,100	10,076,900	10,178,500	(46,700)	(51,600)	9,111,868	9,111,868
7/1/98 - 6/30/99	10,846,300	10,969,200	10,821,300	10,937,900	(25,000)	(31,300)	9,713,565	9,713,565
7/1/99 - 6/30/00	12,843,800	12,999,300	12,880,900	13,029,200	37,100	29,900	11,472,474	11,472,474
7/1/00 - 6/30/01	11,772,800	11,923,100	11,800,700	11,946,400	27,900	23,300	10,416,510	10,416,510
7/1/01 - 6/30/02	12,089,000	12,253,200	12,061,600	12,219,500	(27,400)	(33,700)	10,561,383	10,561,383
7/1/02 - 6/30/03	12,033,800	12,208,600	11,940,700	12,105,700	(93,100)	(102,900)	10,373,156	10,373,156
7/1/03 - 6/30/04	11,350,500	11,525,700	11,297,800	11,463,100	(52,700)	(62,600)	9,727,856	9,727,856
7/1/04 - 6/30/05	13,649,100	13,872,700	13,676,600	13,887,700	27,500	15,000	11,671,149	11,671,149
7/1/05 - 6/30/06	12,443,500	12,658,500	12,363,200	12,564,500	(80,300)	(94,000)	10,451,514	10,451,514
7/1/06 - 6/30/07	11,202,400	11,407,400	11,123,700	11,313,700	(78,700)	(93,700)	9,318,885	9,318,885
7/1/07 - 6/30/08	16,599,200	16,918,300	16,607,200	16,906,700	8,000	(11,600)	13,761,809	13,761,809
7/1/08 - 6/30/09	16,344,100	16,675,100	16,110,100	16,414,700	(234,000)	(260,400)	13,216,694	13,216,694
7/1/09 - 6/30/10	16,925,100	17,284,100	16,806,300	17,139,300	(118,800)	(144,800)	13,642,977	13,642,977
7/1/10 - 6/30/11	19,140,300	19,564,200	18,973,000	19,365,700	(167,300)	(198,500)	15,243,243	15,243,243
7/1/11 - 6/30/12	20,602,700	21,079,300	20,438,500	20,879,900	(164,200)	(199,400)	16,245,336	16,245,336
7/1/12 - 6/30/13	16,613,400	17,017,800	16,610,900	16,985,700	(2,500)	(32,100)	13,050,411	13,050,411
7/1/13 - 6/30/14	20,739,700	21,269,200	20,694,100	21,187,200	(45,600)	(82,000)	16,009,156	16,009,156
7/1/14 - 6/30/15	21,915,700	22,741,500	21,811,900	22,357,600	(103,800)	(383,900)	16,627,544	16,627,544
7/1/15 - 6/30/16	24,691,800	25,686,200	24,736,700	25,651,400	44,900	(34,800)	18,660,468	18,660,468
7/1/16 - 6/30/17	23,389,100	24,438,800	23,255,500	24,178,500	(133,600)	(260,300)	17,124,211	17,124,211
7/1/17 - 6/30/18	26,311,200	27,678,200	26,855,500	28,037,500	544,300	359,300	19,003,726	19,003,726
7/1/18 - 6/30/19	20,034,900	21,454,700	19,604,100	20,794,500	(430,800)	(660,200)	11,696,090	11,696,090
7/1/19 - 6/30/20	22,675,000	25,428,000	23,066,800	24,569,900	391,800	(858,100)	13,082,044	13,082,044
7/1/20 - 6/30/21	23,984,000	27,518,000	24,119,000	27,013,000	135,000	(505,000)	11,096,484	11,096,484
7/1/21 - 6/30/22	26,492,000	31,429,000	26,814,000	30,709,000	322,000	(720,000)	9,282,726	9,282,726
Total	704,623,222	730,366,476	702,991,461	724,000,593	(1,631,761)	(6,365,883)	570,408,309	570,408,309

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(3) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(4) From Section VII, Exhibit I, Sheet 6, Column (11)
(5) From Section VII, Exhibit I, Sheet 6, Column (12)
(6) = (4) - (2)
(7) = (5) - (3)
(8) Provided by Entity
(9) Provided by Entity

Commonwealth of Massachusetts
All Other
All Other - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Selection of Ultimate Loss

Accident Year	Payroll (00)'s	Unlimited Paid Loss @ 06/30/2023	Unlimited Reported Loss @ 06/30/2023	Ultimate Loss Indications: Paid LDM	Ultimate Loss Indications: Expected Loss	Ultimate Loss Indications: Paid B-F	Ultimate Loss Indications: Frequency Severity	Prior Selected Ultimate Loss: Low	Prior Selected Ultimate Loss: High	Selected Ultimate Loss: Low	Selected Ultimate Loss: High	Ultimate Loss Rates: Low	Ultimate Loss Rates: High	Ultimate Loss Severity: Low	Ultimate Loss Severity: High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Prior to 7/1/1993		206,642,368	206,642,368	220,783,970	0		0	223,175,122	227,106,076	221,704,461	225,051,593				
7/1/93 - 6/30/94		11,547,856	11,547,856	12,398,678	0	11,547,856	0	12,277,300	12,366,800	12,356,100	12,441,200				
7/1/94 - 6/30/95		10,153,089	10,153,089	10,957,290	0	10,153,089	0	10,952,700	11,041,000	10,917,100	10,997,500				
7/1/95 - 6/30/96		10,661,071	10,661,071	11,635,014	0	10,661,071	0	11,587,300	11,690,200	11,586,300	11,683,700				
7/1/96 - 6/30/97		10,842,645	10,842,645	11,935,141	0	10,842,645	0	11,817,800	11,932,200	11,880,500	11,989,800				
7/1/97 - 6/30/98		9,111,868	9,111,868	10,127,706	0	9,111,868	0	10,123,600	10,230,100	10,076,900	10,178,500				
7/1/98 - 6/30/99	19,448,360	9,713,565	9,713,565	10,879,597	9,394,442	10,720,424	0	10,846,300	10,969,200	10,821,300	10,937,900	0.56	0.56		
7/1/99 - 6/30/00	20,693,510	11,472,474	11,472,474	12,955,037	10,320,129	12,653,500	0	12,843,800	12,999,300	12,880,900	13,029,200	0.62	0.63		
7/1/00 - 6/30/01	20,558,590	10,416,510	10,416,510	11,873,541	10,647,337	11,723,070	0	11,772,800	11,923,100	11,800,700	11,946,400	0.57	0.58		
7/1/01 - 6/30/02	21,523,690	10,561,383	10,561,383	12,140,570	11,518,450	12,059,648	0	12,089,000	12,253,200	12,061,600	12,219,500	0.56	0.57		
7/1/02 - 6/30/03	21,202,840	10,373,156	10,373,156	12,023,151	11,564,902	11,960,263	0	12,033,800	12,208,600	11,940,700	12,105,700	0.56	0.57		
7/1/03 - 6/30/04	21,185,340	9,727,856	9,727,856	11,380,428	11,728,006	11,430,900	0	11,350,500	11,525,700	11,297,800	11,463,100	0.53	0.54		
7/1/04 - 6/30/05	21,640,500	11,671,149	11,671,149	13,782,163	12,225,663	13,543,754	0	13,649,100	13,872,700	13,676,600	13,887,700	0.63	0.64		
7/1/05 - 6/30/06	23,243,030	10,451,514	10,451,514	12,463,861	13,458,751	12,624,490	0	12,443,500	12,658,500	12,363,200	12,564,500	0.53	0.54		
7/1/06 - 6/30/07	24,554,310	9,318,885	9,318,885	11,218,713	14,583,776	11,788,568	0	11,202,400	11,407,400	11,123,700	11,313,700	0.45	0.46		
7/1/07 - 6/30/08	26,150,540	13,761,809	13,761,809	16,756,932	15,933,345	16,609,724	0	16,599,200	16,918,300	16,607,200	16,906,700	0.64	0.65		
7/1/08 - 6/30/09	25,704,510	13,216,694	13,216,694	16,262,396	16,050,429	16,222,698	0	16,344,100	16,675,100	16,110,100	16,414,700	0.63	0.64		
7/1/09 - 6/30/10	26,029,100	13,642,977	13,642,977	16,972,829	16,559,646	16,891,768	0	16,925,100	17,284,100	16,806,300	17,139,300	0.65	0.66		
7/1/10 - 6/30/11	27,458,630	15,243,243	15,243,243	19,169,351	17,730,107	18,874,577	0	19,140,300	19,564,200	18,973,000	19,365,700	0.69	0.71		
7/1/11 - 6/30/12	27,995,990	16,245,336	16,245,336	20,659,227	18,445,276	20,186,212	0	20,602,700	21,079,300	20,438,500	20,879,900	0.73	0.75		
7/1/12 - 6/30/13	29,200,210	13,050,411	13,050,411	16,798,317	19,682,297	17,441,767	19,723,366	16,613,400	17,017,800	16,610,900	16,985,700	0.57	0.58	31,223	31,928
7/1/13 - 6/30/14	30,801,820	16,009,156	16,009,156	20,940,658	21,166,882	20,993,933	20,867,101	20,739,700	21,269,200	20,694,100	21,187,200	0.67	0.69	38,608	39,528
7/1/14 - 6/30/15	32,591,780	16,627,544	16,627,544	22,084,748	22,842,273	22,271,935	24,578,747	21,915,700	22,741,500	21,811,900	22,357,600	0.67	0.69	36,293	37,201
7/1/15 - 6/30/16	32,518,420	18,660,468	18,660,468	25,194,064	23,299,055	24,702,630	25,622,240	24,691,800	25,686,200	24,736,700	25,651,400	0.76	0.79	41,574	43,112
7/1/16 - 6/30/17	31,362,360	17,124,211	17,124,211	23,717,008	22,986,089	23,513,829	24,772,936	23,389,100	24,438,800	23,255,500	24,178,500	0.74	0.77	42,592	44,283
7/1/17 - 6/30/18	31,972,210	19,003,726	19,003,726	27,446,538	23,994,178	26,384,560	25,792,159	26,311,200	27,678,200	26,855,500	28,037,500	0.84	0.88	49,825	52,018
7/1/18 - 6/30/19	33,600,390	11,696,090	11,696,090	18,175,300	25,839,135	20,907,337	21,515,240	20,034,900	21,454,700	19,604,100	20,794,500	0.58	0.62	46,019	48,813
7/1/19 - 6/30/20	35,047,860	13,082,044	13,082,044	23,147,927	27,625,066	25,094,812	23,212,226	22,675,000	25,428,000	23,066,800	24,569,900	0.66	0.70	52,985	56,438
7/1/20 - 6/30/21	35,216,283	11,096,484	11,096,484	24,270,506	28,566,734	26,602,497	24,528,997	23,984,000	27,518,000	24,119,000	27,013,000	0.68	0.77	55,574	62,243
7/1/21 - 6/30/22	37,107,388	9,282,726	9,282,726	28,872,346	31,282,740	30,507,776	26,904,438	26,492,000	31,429,000	26,814,000	30,709,000	0.72	0.83	60,297	69,056
7/1/22 - 6/30/23	38,502,230	4,093,933	4,093,933	27,467,826	33,584,163	32,672,555	28,146,268			25,741,000	30,552,000	0.67	0.79	58,966	69,987
Total	695,309,891	574,502,242	574,502,242	734,490,832	471,028,873	520,699,758	265,663,719	704,623,222	730,366,476	728,732,461	754,552,593				

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Provided by Entity
(4) Provided by Entity
(5) From Section VII, Exhibit I, Sheet 10, Column (7)
(6) From Section VII, Exhibit I, Sheet 7, Column (4)
(7) From Section VII, Exhibit I, Sheet 7, Column (10)
(8) From Section VII, Exhibit I, Sheet 9, Column (12)
(9) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(10) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(11) Selected by Deloitte Consulting LLP
(12) Selected by Deloitte Consulting LLP
(13) = (11) / (2)
(14) = (12) / (2)
(15) (11) Divided by Ultimate Claims From Section VII, Exhibit I, Sheet 13, Column (7)
(16) (12) Divided by Ultimate Claims From Section VII, Exhibit I, Sheet 13, Column (7)

Commonwealth of Massachusetts
All Other
All Other - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Bornhuetter-Ferguson Method

Accident Year	Payroll (00)'s	Initial Expected Loss Rates	Initial Expected Loss	Expected % of Paid Loss	Expected Paid Loss	Unlimited Actual Paid Loss	Expected % of Unpaid Loss	Expected Unpaid Loss	Unlimited Indicated Ultimate Loss	Unlimited Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
7/1/93 - 6/30/94		0.43	0	93.1%	0	11,547,856	6.9%	0	11,547,856	
7/1/94 - 6/30/95		0.44	0	92.7%	0	10,153,089	7.3%	0	10,153,089	
7/1/95 - 6/30/96		0.45	0	91.6%	0	10,661,071	8.4%	0	10,661,071	
7/1/96 - 6/30/97		0.46	0	90.8%	0	10,842,645	9.2%	0	10,842,645	
7/1/97 - 6/30/98		0.47	0	90.0%	0	9,111,868	10.0%	0	9,111,868	
7/1/98 - 6/30/99	19,448,360	0.48	9,394,442	89.3%	8,387,583	9,713,565	10.7%	1,006,859	10,720,424	0.55
7/1/99 - 6/30/00	20,693,510	0.50	10,320,129	88.6%	9,139,103	11,472,474	11.4%	1,181,027	12,653,500	0.61
7/1/00 - 6/30/01	20,558,590	0.52	10,647,337	87.7%	9,340,777	10,416,510	12.3%	1,306,560	11,723,070	0.57
7/1/01 - 6/30/02	21,523,690	0.54	11,518,450	87.0%	10,020,185	10,561,383	13.0%	1,498,265	12,059,648	0.56
7/1/02 - 6/30/03	21,202,840	0.55	11,564,902	86.3%	9,977,795	10,373,156	13.7%	1,587,107	11,960,263	0.56
7/1/03 - 6/30/04	21,185,340	0.55	11,728,006	85.5%	10,024,962	9,727,856	14.5%	1,703,044	11,430,900	0.54
7/1/04 - 6/30/05	21,640,500	0.56	12,225,663	84.7%	10,353,058	11,671,149	15.3%	1,872,605	13,543,754	0.63
7/1/05 - 6/30/06	23,243,030	0.58	13,458,751	83.9%	11,285,776	10,451,514	16.1%	2,172,976	12,624,490	0.54
7/1/06 - 6/30/07	24,554,310	0.59	14,583,776	83.1%	12,114,093	9,318,885	16.9%	2,469,683	11,788,568	0.48
7/1/07 - 6/30/08	26,150,540	0.61	15,933,345	82.1%	13,085,430	13,761,809	17.9%	2,847,915	16,609,724	0.64
7/1/08 - 6/30/09	25,704,510	0.62	16,050,429	81.3%	13,044,426	13,216,694	18.7%	3,006,004	16,222,698	0.63
7/1/09 - 6/30/10	26,029,100	0.64	16,559,646	80.4%	13,310,856	13,642,977	19.6%	3,248,790	16,891,768	0.65
7/1/10 - 6/30/11	27,458,630	0.65	17,730,107	79.5%	14,098,773	15,243,243	20.5%	3,631,334	18,874,577	0.69
7/1/11 - 6/30/12	27,995,990	0.66	18,445,276	78.6%	14,504,401	16,245,336	21.4%	3,940,875	20,186,212	0.72
7/1/12 - 6/30/13	29,200,210	0.67	19,682,297	77.7%	15,290,941	13,050,411	22.3%	4,391,356	17,441,767	0.60
7/1/13 - 6/30/14	30,801,820	0.69	21,166,882	76.5%	16,182,105	16,009,156	23.5%	4,984,777	20,993,933	0.68
7/1/14 - 6/30/15	32,591,780	0.70	22,842,273	75.3%	17,197,882	16,627,544	24.7%	5,644,391	22,271,935	0.68
7/1/15 - 6/30/16	32,518,420	0.72	23,299,055	74.1%	17,256,893	18,660,468	25.9%	6,042,162	24,702,630	0.76
7/1/16 - 6/30/17	31,362,360	0.73	22,986,089	72.2%	16,596,472	17,124,211	27.8%	6,389,618	23,513,829	0.75
7/1/17 - 6/30/18	31,972,210	0.75	23,994,178	69.2%	16,613,344	19,003,726	30.8%	7,380,834	26,384,560	0.83
7/1/18 - 6/30/19	33,600,390	0.77	25,839,135	64.4%	16,627,888	11,696,090	35.6%	9,211,247	20,907,337	0.62
7/1/19 - 6/30/20	35,047,860	0.79	27,625,066	56.5%	15,612,298	13,082,044	43.5%	12,012,769	25,094,812	0.72
7/1/20 - 6/30/21	35,216,283	0.81	28,566,734	45.7%	13,060,721	11,096,484	54.3%	15,506,014	26,602,497	0.76
7/1/21 - 6/30/22	37,107,388	0.84	31,282,740	32.2%	10,057,690	9,282,726	67.8%	21,225,050	30,507,776	0.82
7/1/22 - 6/30/23	38,502,230	0.87	33,584,163	14.9%	5,005,541	4,093,933	85.1%	28,578,622	32,672,555	0.85
Total	695,309,891		471,028,873		318,188,989	367,859,874		152,839,885	520,699,758	

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	From Section VII, Exhibit I, Sheet 8, Column (13)
(4)	= (2) x (3)
(5)	= 1 / Section VII, Exhibit I, Sheet 10, Column (6)
(6)	= (4) x (5)
(7)	Provided by Entity
(8)	= 1 - (5)
(9)	= (4) x (8)
(10)	= (7) + (9)
(11)	= (10) / (2)

Commonwealth of Massachusetts
All Other
All Other - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Calculation of Initial Expected Loss Rates

Accident Year	Payroll (00)'s	Payroll Trend	Loss Development Unlimited Indicated Ultimate Loss Paid	Loss Development Unlimited Indicated Ultimate Loss Reported	Selected Initial Ultimate Loss	Loss Trend Factor	Benefit Level Adjustment Factors	Trended Ultimate	On-level Loss Rates	Detrended Loss Rates	Prior Expected Loss Rates	Initial Expected Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
7/1/93 - 6/30/94	0	2.357	12,398,678	12,398,678	223,378,027	3.584	1.347	1,078,622,975		0.43	0.43	0.43
7/1/94 - 6/30/95	0	2.288	10,957,290	10,957,290	12,398,650	3.430	1.335	56,778,329		0.44	0.44	0.44
7/1/95 - 6/30/96	0	2.221	11,635,014	11,635,014	10,957,300	3.282	1.324	47,618,218		0.45	0.45	0.45
7/1/96 - 6/30/97	0	2.157	11,935,141	11,935,141	11,635,000	3.141	1.311	47,895,235		0.46	0.46	0.46
7/1/97 - 6/30/98	0	2.094	10,127,706	10,127,706	11,935,150	3.005	1.294	46,423,450		0.47	0.47	0.47
7/1/98 - 6/30/99	19,448,360	2.033	10,879,597	10,879,597	10,127,700	2.876	1.276	37,176,188	0.94	0.48	0.48	0.48
7/1/99 - 6/30/00	20,693,510	1.974	12,955,037	12,955,037	10,879,600	2.752	1.254	37,554,913	0.92	0.50	0.50	0.50
7/1/00 - 6/30/01	20,558,590	1.916	11,873,541	11,873,541	12,955,050	2.634	1.225	41,807,962	1.06	0.52	0.52	0.52
7/1/01 - 6/30/02	21,523,690	1.860	12,140,570	12,140,570	11,873,550	2.520	1.203	36,002,581	0.90	0.54	0.54	0.54
7/1/02 - 6/30/03	21,202,840	1.806	12,023,151	12,023,151	12,140,550	2.412	1.198	35,065,786	0.92	0.55	0.55	0.55
7/1/03 - 6/30/04	21,185,340	1.754	11,380,428	11,380,428	12,023,200	2.308	1.197	33,219,053	0.89	0.55	0.55	0.55
7/1/04 - 6/30/05	21,640,500	1.702	13,782,163	13,782,163	11,380,450	2.208	1.190	29,913,896	0.81	0.56	0.57	0.56
7/1/05 - 6/30/06	23,243,030	1.653	12,463,861	12,463,861	13,782,150	2.113	1.178	34,315,190	0.89	0.58	0.58	0.58
7/1/06 - 6/30/07	24,554,310	1.605	11,218,713	11,218,713	12,463,850	2.022	1.165	29,373,399	0.75	0.59	0.59	0.59
7/1/07 - 6/30/08	26,150,540	1.558	16,756,932	16,756,932	11,218,700	1.935	1.152	25,022,070	0.61	0.61	0.61	0.61
7/1/08 - 6/30/09	25,704,510	1.513	16,262,396	16,262,396	16,756,950	1.852	1.141	35,406,861	0.91	0.62	0.62	0.62
7/1/09 - 6/30/10	26,029,100	1.469	16,972,829	16,972,829	16,262,400	1.772	1.136	32,743,515	0.86	0.64	0.64	0.64
7/1/10 - 6/30/11	27,458,630	1.426	19,169,351	19,169,351	16,972,800	1.696	1.136	32,690,106	0.84	0.65	0.65	0.65
7/1/11 - 6/30/12	27,995,990	1.384	20,659,227	20,659,227	19,169,350	1.623	1.129	35,129,840	0.91	0.66	0.66	0.66
7/1/12 - 6/30/13	29,200,210	1.344	16,798,317	16,798,317	20,659,200	1.553	1.120	35,928,954	0.92	0.67	0.67	0.67
7/1/13 - 6/30/14	30,801,820	1.305	20,940,658	20,940,658	16,798,300	1.486	1.114	27,820,727	0.69	0.69	0.69	0.69
7/1/14 - 6/30/15	32,591,780	1.267	22,084,748	22,084,748	20,940,650	1.422	1.109	33,014,548	0.80	0.70	0.70	0.70
7/1/15 - 6/30/16	32,518,420	1.230	25,194,064	25,194,064	22,084,750	1.361	1.100	33,066,850	0.83	0.72	0.72	0.72
7/1/16 - 6/30/17	31,362,360	1.194	23,717,008	23,717,008	25,194,050	1.302	1.091	35,802,522	0.96	0.73	0.73	0.73
7/1/17 - 6/30/18	31,972,210	1.159	27,446,538	27,446,538	23,717,000	1.246	1.081	31,956,653	0.86	0.75	0.75	0.75
7/1/18 - 6/30/19	33,600,390	1.126	18,175,300	18,175,300	27,446,500	1.193	1.071	35,038,931	0.93	0.77	0.77	0.77
7/1/19 - 6/30/20	35,047,860	1.093	23,147,927	23,147,927	23,147,927	1.141	1.060	27,991,784	***0.73***	0.79	0.79	0.79
7/1/20 - 6/30/21	35,216,283	1.061	24,270,506	24,270,506	24,270,506	1.092	1.045	27,687,570	***0.74***	0.81	0.81	0.81
7/1/21 - 6/30/22	37,107,388	1.030	28,872,346	28,872,346	28,872,346	1.045	1.020	30,769,720	***0.81***	0.84	0.84	0.84
7/1/22 - 6/30/23	38,502,230	1.000	27,467,826	27,467,826	27,467,826	1.000	1.000	27,467,826	***0.71***	0.87		0.87
			513,706,862	513,706,862				Last 3 Wtd Avg	0.92			
								Last 4 Wtd Avg	0.89			
								Last 5 Wtd Avg	0.87			
								All Per Wtd Avg	0.86			

(Note: numbers in bold and italics and with borders are excluded from the calculated averages)

Selected (14) 0.87

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Selected by Deloitte Consulting LLP
(4) From Section VII, Exhibit I, Sheet 10, Column (7)
(5) From Section VII, Exhibit I, Sheet 0, Column (7)
(6) Selected by Deloitte Consulting LLP
(7) Selected by Deloitte Consulting LLP
(8) Based on industry sources
(9) = (6) x (7) x (8)
(10) = (9) / [(2) x (3)]
(11) = (14) / (7) / (8) * (3)
(12) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(13) Selected for by Deloitte Consulting LLP Based on (14)
(14) Selected by Deloitte Consulting LLP

Commonwealth of Massachusetts
All Other
All Other - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Frequency Severity Method

Accident Year	Payroll (00)'s	Ultimate Reported Severity	Include For Fit	Exponential Fitted Reported Severity	Initial Selected Ultimate Severity	Selected Ultimate Claim Counts	Benefit Level Adjustment Factor	Selected Severity Trend	Trended Severity	On-Level Selected Ultimate Severity	Indicated Ultimate Loss	Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Prior to 7/1/1993			Exclude	13,221		0					0	
7/1/93 - 6/30/94			Exclude	13,940		0	1.347	3.584	0,000		0	
7/1/94 - 6/30/95			Exclude	14,699		0	1.335	3.430	0,000		0	
7/1/95 - 6/30/96			Exclude	15,498		0	1.324	3.282	0,000		0	
7/1/96 - 6/30/97			Exclude	16,341		0	1.311	3.141	0,000		0	
7/1/97 - 6/30/98			Exclude	17,230		0	1.294	3.005	0,000		0	
7/1/98 - 6/30/99	19,448,360		Exclude	18,167		0	1.276	2.876	0,000		0	0.00
7/1/99 - 6/30/00	20,693,510		Exclude	19,155		0	1.254	2.752	0,000		0	0.00
7/1/00 - 6/30/01	20,558,590		Exclude	20,196		0	1.225	2.634	0,000		0	0.00
7/1/01 - 6/30/02	21,523,690		Exclude	21,295		0	1.203	2.520	0,000		0	0.00
7/1/02 - 6/30/03	21,202,840		Exclude	22,453		0	1.198	2.412	0,000		0	0.00
7/1/03 - 6/30/04	21,185,340		Exclude	23,674		0	1.197	2.308	0,000		0	0.00
7/1/04 - 6/30/05	21,640,500		Exclude	24,961		0	1.190	2.208	0,000		0	0.00
7/1/05 - 6/30/06	23,243,030		Exclude	26,319		0	1.178	2.113	0,000		0	0.00
7/1/06 - 6/30/07	24,554,310		Exclude	27,750		0	1.165	2.022	0,000		0	0.00
7/1/07 - 6/30/08	26,150,540		Exclude	29,260		0	1.152	1.935	0,000		0	0.00
7/1/08 - 6/30/09	25,704,510		Exclude	30,851		0	1.141	1.852	0,000		0	0.00
7/1/09 - 6/30/10	26,029,100		Exclude	32,529		0	1.136	1.772	0,000		0	0.00
7/1/10 - 6/30/11	27,458,630		Exclude	34,298		0	1.136	1.696	0,000		0	0.00
7/1/11 - 6/30/12	27,995,990		Exclude	36,163		0	1.129	1.623	0,000		0	0.00
7/1/12 - 6/30/13	29,200,210	31,576	Include	38,130	38,833	532	1.120	1.553	67,536	64,476	19,723,366	0.68
7/1/13 - 6/30/14	30,801,820	39,068	Include	40,204	31,340	536	1.114	1.486	51,904	64,476	20,867,101	0.68
7/1/14 - 6/30/15	32,591,780	36,747	Include	42,390	34,843	601	1.109	1.422	54,933	64,476	24,578,747	0.75
7/1/15 - 6/30/16	32,518,420	42,343	Include	44,695	37,117	595	1.100	1.361	55,575	64,476	25,622,240	0.79
7/1/16 - 6/30/17	31,362,360	43,438	Include	47,126	46,143	546	1.091	1.302	65,572	64,476	24,772,936	0.79
7/1/17 - 6/30/18	31,972,210	50,921	Include	49,689	44,002	539	1.081	1.246	59,289	64,476	25,792,159	0.81
7/1/18 - 6/30/19	33,600,390	42,665	Include	52,392	64,428	426	1.071	1.193	82,251	64,476	21,515,240	0.64
7/1/19 - 6/30/20	35,047,860	53,171	Include	55,241	53,171	435	1.060	1.141	64,298	64,476	23,212,226	0.66
7/1/20 - 6/30/21	35,216,283	55,923	Include	58,245	55,923	434	1.045	1.092	***63,797***	64,476	24,528,997	0.70
7/1/21 - 6/30/22	37,107,388	64,926	Exclude	61,413	64,926	445	1.020	1.045	***69,192***	64,476	26,904,438	0.73
7/1/22 - 6/30/23	38,502,230	62,922	Exclude	64,753	62,922	437	1.000	1.000	***62,922***	64,476	28,146,268	0.73
			Implied Trend	5.4%	-3.1%			Last 5 Wtd Avg	64,476			
								Last 4 Wtd Avg	67,198			
								Last 3 Wtd Avg	67,831			
Total	695,309,891					5,526		Last 3 Avg	68,613		265,663,719	
								Selected	64,476			

Reported Exponential Regressio	
Constant	11.131
X Coefficient	(0.053)
R Squared	0.789

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Section VII, Exhibit I, Sheet 0, Column (7) / Section VII, Exhibit I, Sheet 13, Column (7) x 1
(4) Years included for purposes of fit
(5) Result of Exponential fit of Column (3) * Column (8)
(6) Selected by Deloitte Consulting LLP
(7) From Section VII, Exhibit I, Sheet 13, Column (7)
(8) Based on industry sources
(9) Selected by Deloitte Consulting LLP
(10) = (6) x (8) x (9)
(11) Selected by Deloitte Consulting, LLP
(12) Selected in column (11) x (7) / (8) / (9)
(13) = (12) / (3)

Commonwealth of Massachusetts
All Other
All Other - Indemnity (Including Lump Sum)

Section VII
Exhibit I
Sheet 10

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss Development Method

Accident Year	Age of Losses @ 06/30/2023	Retention	Payroll (00)'s	Unlimited Paid Loss @ 06/30/2023	Paid LDF	Indicated Ultimate Loss	Unlimited Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Prior to 7/1/1993	372.0	Unlimited		206,642,368	1.068	220,783,970	
7/1/93 - 6/30/94	360.0	Unlimited		11,547,856	1.074	12,398,678	
7/1/94 - 6/30/95	348.0	Unlimited		10,153,089	1.079	10,957,290	
7/1/95 - 6/30/96	336.0	Unlimited		10,661,071	1.091	11,635,014	
7/1/96 - 6/30/97	324.0	Unlimited		10,842,645	1.101	11,935,141	
7/1/97 - 6/30/98	312.0	Unlimited		9,111,868	1.111	10,127,706	
7/1/98 - 6/30/99	300.0	Unlimited	19,448,360	9,713,565	1.120	10,879,597	0.56
7/1/99 - 6/30/00	288.0	Unlimited	20,693,510	11,472,474	1.129	12,955,037	0.63
7/1/00 - 6/30/01	276.0	Unlimited	20,558,590	10,416,510	1.140	11,873,541	0.58
7/1/01 - 6/30/02	264.0	Unlimited	21,523,690	10,561,383	1.150	12,140,570	0.56
7/1/02 - 6/30/03	252.0	Unlimited	21,202,840	10,373,156	1.159	12,023,151	0.57
7/1/03 - 6/30/04	240.0	Unlimited	21,185,340	9,727,856	1.170	11,380,428	0.54
7/1/04 - 6/30/05	228.0	Unlimited	21,640,500	11,671,149	1.181	13,782,163	0.64
7/1/05 - 6/30/06	216.0	Unlimited	23,243,030	10,451,514	1.193	12,463,861	0.54
7/1/06 - 6/30/07	204.0	Unlimited	24,554,310	9,318,885	1.204	11,218,713	0.46
7/1/07 - 6/30/08	192.0	Unlimited	26,150,540	13,761,809	1.218	16,756,932	0.64
7/1/08 - 6/30/09	180.0	Unlimited	25,704,510	13,216,694	1.230	16,262,396	0.63
7/1/09 - 6/30/10	168.0	Unlimited	26,029,100	13,642,977	1.244	16,972,829	0.65
7/1/10 - 6/30/11	156.0	Unlimited	27,458,630	15,243,243	1.258	19,169,351	0.70
7/1/11 - 6/30/12	144.0	Unlimited	27,995,990	16,245,336	1.272	20,659,227	0.74
7/1/12 - 6/30/13	132.0	Unlimited	29,200,210	13,050,411	1.287	16,798,317	0.58
7/1/13 - 6/30/14	120.0	Unlimited	30,801,820	16,009,156	1.308	20,940,658	0.68
7/1/14 - 6/30/15	108.0	Unlimited	32,591,780	16,627,544	1.328	22,084,748	0.68
7/1/15 - 6/30/16	96.0	Unlimited	32,518,420	18,660,468	1.350	25,194,064	0.77
7/1/16 - 6/30/17	84.0	Unlimited	31,362,360	17,124,211	1.385	23,717,008	0.76
7/1/17 - 6/30/18	72.0	Unlimited	31,972,210	19,003,726	1.444	27,446,538	0.86
7/1/18 - 6/30/19	60.0	Unlimited	33,600,390	11,696,090	1.554	18,175,300	0.54
7/1/19 - 6/30/20	48.0	Unlimited	35,047,860	13,082,044	1.769	23,147,927	0.66
7/1/20 - 6/30/21	36.0	Unlimited	35,216,283	11,096,484	2.187	24,270,506	0.69
7/1/21 - 6/30/22	24.0	Unlimited	37,107,388	9,282,726	3.110	28,872,346	0.78
7/1/22 - 6/30/23	12.0	Unlimited	38,502,230	4,093,933	6.709	27,467,826	0.71
Total			695,309,891	574,502,242		734,490,832	

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1)
(3) Provided by Entity
(4) Provided by Entity
(5) Provided by Entity
(6) From Section VII, Exhibit I, Sheet 11
(7) = (5) x (6)
(8) = (7) / (4)

Commonwealth of Massachusetts
All Other
All Other - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Months of Development

Accident Year	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	348	360	372	As of 6/30/2023
Prior to 7/1/1993	326,875,400	97,179,350	106,696,529	114,782,560	121,501,585	127,284,663	133,074,918	138,118,007	143,598,574	148,656,505	153,304,682	157,657,245	161,570,696	165,688,675	169,505,453	173,273,268	176,667,549	179,449,325	182,166,139	184,774,624	187,517,201	189,919,519	192,260,896	194,455,393	196,560,211	198,447,707	200,154,792	201,794,707	203,396,061	205,118,212	206,642,368	206,642,368
7/1/93 - 6/30/94	1,117,841	2,724,984	3,985,763	4,793,234	5,631,334	6,218,545	6,685,910	7,347,819	7,594,400	7,867,330	8,119,562	8,642,694	8,936,060	9,147,858	9,343,054	9,514,580	9,695,280	9,872,790	10,042,039	10,186,364	10,320,039	10,456,079	10,593,580	10,730,882	10,870,666	11,012,994	11,157,885	11,299,713	11,426,902	11,547,856		11,547,856
7/1/94 - 6/30/95	1,506,056	3,090,871	4,397,379	5,437,897	5,951,575	6,414,907	6,756,268	6,975,956	7,213,547	7,472,583	7,727,994	7,949,823	8,134,767	8,382,418	8,543,602	8,717,611	8,874,767	9,056,940	9,199,018	9,342,077	9,466,673	9,589,523	9,692,183	9,774,552	9,858,420	9,943,800	10,031,982	10,112,879	10,153,089			10,153,089
7/1/95 - 6/30/96	1,114,821	2,519,089	3,960,690	4,758,228	5,472,279	5,998,826	6,397,342	6,822,412	7,180,107	7,472,337	7,781,738	8,130,452	8,395,506	8,644,853	8,895,055	9,120,225	9,310,729	9,444,993	9,575,094	9,830,137	10,098,554	10,188,557	10,280,186	10,373,484	10,468,463	10,543,486	10,609,781	10,661,071				10,661,071
7/1/96 - 6/30/97	1,108,491	2,872,900	4,303,564	5,602,841	6,655,310	7,465,420	7,917,543	8,310,136	8,563,310	8,782,225	8,976,612	9,183,469	9,302,701	9,422,327	9,582,666	9,782,874	9,907,530	10,023,896	10,114,020	10,209,411	10,295,717	10,379,301	10,466,281	10,552,880	10,641,012	10,730,514	10,842,645					10,842,645
7/1/97 - 6/30/98	1,047,390	2,852,210	4,249,117	5,367,229	6,250,443	6,711,525	7,054,669	7,333,737	7,515,038	7,659,925	7,790,340	8,098,257	8,256,791	8,441,999	8,625,521	8,671,657	8,718,110	8,765,116	8,812,898	8,860,612	8,909,186	8,958,647	9,008,998	9,060,279	9,111,868	9,111,868						9,111,868
7/1/98 - 6/30/99	1,363,894	2,847,810	4,256,613	5,321,277	6,007,934	6,492,560	7,036,902	7,427,415	7,656,903	8,061,107	8,223,937	8,430,401	8,547,488	8,640,902	8,735,352	8,831,179	8,978,147	9,123,501	9,255,951	9,368,288	9,459,746	9,525,649	9,565,958	9,678,418	9,713,565							9,713,565
7/1/99 - 6/30/00	1,575,818	3,953,969	5,492,529	6,594,940	7,425,373	8,124,616	8,681,749	9,054,223	9,269,837	9,499,290	9,643,074	9,787,363	9,935,745	10,085,767	10,239,749	10,395,635	10,555,715	10,717,331	10,885,406	11,063,071	11,162,495	11,263,751	11,366,464	11,472,474								11,472,474
7/1/00 - 6/30/01	1,619,875	3,797,706	5,228,807	6,125,427	6,970,327	7,622,439	8,008,024	8,462,350	8,613,073	8,766,222	8,966,510	9,193,961	9,431,077	9,580,767	9,728,666	9,859,316	9,956,725	10,032,389	10,110,334	10,188,418	10,276,071	10,345,565	10,416,510									10,416,510
7/1/01 - 6/30/02	1,821,131	4,248,783	5,918,285	7,081,541	7,948,705	8,542,766	8,900,436	9,349,044	9,592,486	9,828,478	9,994,625	10,122,859	10,235,262	10,309,842	10,341,607	10,373,026	10,404,471	10,435,848	10,466,911	10,497,868	10,528,826	10,561,383										10,561,383
7/1/02 - 6/30/03	2,185,619	4,723,787	6,729,664	7,756,602	8,336,993	8,809,290	9,112,848	9,342,461	9,466,361	9,572,220	9,653,393	9,841,466	9,958,503	10,039,172	10,114,763	10,197,574	10,372,940	10,373,100	10,373,156	10,373,156	10,373,156											10,373,156
7/1/03 - 6/30/04	1,800,576	3,829,238	5,297,940	6,602,264	7,326,841	7,753,070	7,974,679	8,295,096	8,555,058	8,692,548	8,834,954	8,966,544	9,102,262	9,235,334	9,393,236	9,486,616	9,605,509	9,645,474	9,686,014	9,727,856												9,727,856
7/1/04 - 6/30/05	1,825,935	4,000,320	5,773,693	7,435,692	8,130,964	8,628,466	9,175,968	9,621,847	9,998,983	10,215,808	10,449,273	10,648,179	10,779,399	10,946,829	11,111,459	11,247,387	11,384,037	11,524,786	11,671,149													11,671,149
7/1/05 - 6/30/06	1,788,326	3,988,526	5,439,937	6,688,147	7,448,023	8,487,753	9,212,575	9,460,257	9,535,433	9,777,461	10,035,538	10,082,879	10,128,608	10,201,602	10,297,526	10,348,681	10,400,912	10,451,514														10,451,514
7/1/06 - 6/30/07	1,760,963	3,896,971	4,929,682	6,264,718	7,223,702	7,797,213	8,184,076	8,384,961	8,626,153	8,814,707	8,920,852	9,006,935	9,093,121	9,147,053	9,200,838	9,254,623	9,318,885															9,318,885
7/1/07 - 6/30/08	2,020,827	4,787,931	6,755,478	8,719,019	10,279,740	11,077,339	11,942,624	12,185,409	12,400,577	12,575,721	12,811,049	12,990,017	13,191,701	13,379,864	13,567,330	13,761,809																13,761,809
7/1/08 - 6/30/09	2,202,179	5,036,609	7,454,337	9,391,181	10,629,497	11,843,411	12,360,192	12,702,293	12,769,525	12,872,086	13,037,636	13,092,393	13,112,818	13,199,076	13,216,694																	13,216,694
7/1/09 - 6/30/10	2,633,117	6,021,422	8,360,727	10,102,995	11,505,262	12,197,134	12,683,574	12,873,744	13,033,706	13,157,115	13,278,031	13,393,916	13,515,429	13,642,977																		13,642,977
7/1/10 - 6/30/11	3,358,496	6,862,614	9,293,110	10,959,503	12,766,870	13,527,617	14,062,407	14,340,514	14,608,827	14,819,803	14,973,488	15,113,938	15,243,243																			15,243,243
7/1/11 - 6/30/12	3,091,255	6,703,056	9,311,955	11,820,877	13,140,551	14,340,603	14,907,008	15,352,371	15,596,904	15,831,003	16,074,547	16,245,336																				16,245,336
7/1/12 - 6/30/13	2,921,115	5,927,207	7,988,486	9,839,795	11,065,357	11,479,327	12,123,625	12,412,314	12,577,195	12,771,303	13,050,411																					13,050,411
7/1/13 - 6/30/14	3,088,319	6,713,405	9,888,758	11,841,698	13,059,365	14,159,281	14,805,789	15,288,039	15,709,792	16,009,156																						16,009,156
7/1/14 - 6/30/15	3,209,240	6,942,346	10,061,141	12,409,075	14,093,072	15,207,194	15,995,028	16,429,966	16,627,544																							16,627,544
7/1/15 - 6/30/16	3,490,008	7,576,809	11,556,614	14,416,364	16,301,364	17,554,052	18,085,870	18,660,468																								18,660,468
7/1/16 - 6/30/17	3,197,555	7,083,130	10,342,637	13,166,969	15,271,736	16,415,744	17,124,211																									17,124,211
7/1/17 - 6/30/18	3,818,672	8,350,852	11,894,627	14,390,927	17,230,352	19,003,726																										19,003,726
7/1/18 - 6/30/19	3,224,537	6,519,693	8,928,943	10,603,013	11,696,090																											11,696,090
7/1/19 - 6/30/20	3,617,783	7,534,023	10,286,446	13,082,044																												13,082,044
7/1/20 - 6/30/21	3,641,981	8,079,173	11,096,484																													11,096,484
7/1/21 - 6/30/22	4,273,310	9,282,726																														9,282,726
7/1/22 - 6/30/23	4,093,933																															4,093,933
																																574,502,242

Age-to-Age Development Factors

Accident Year	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993	***0.297***	***1.098***	***1.076***	***1.059***	***1.048***	***1.045***	***1.038***	***1.040***	***1.035***	***1.031***	***1.028***	***1.025***	***1.025***	***1.023***	***1.022***	***1.020***	***1.016***	***1.015***	***1.014***	***1.015***	***1.013***	***1.012***	***1.011***	***1.011***	***1.010***	***1.009***	***1.008***	***1.008***	***1.008***	***1.007***	
7/1/93 - 6/30/94	2.438	1.463	1.203	1.175	1.104	1.075	1.099	1.034	1.036	1.032	1.064	1.034	1.024	1.021	1.018	1.019	1.018	1.017	1.014	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.011	1.011		
7/1/94 - 6/30/95	2.052	1.423	1.237	1.094	1.078	1.053	1.033	1.034	1.036	1.034	1.029	1.023	1.030	1.019	1.020	1.018	1.021	1.016	1.016	1.013	1.013	1.011	1.008	1.009	1.009	1.009	1.008	1.004			
7/1/95 - 6/30/96	2.260	1.572	1.201	1.150	1.096	1.066	1.066	1.052	1.041	1.041	1.045	1.033	1.030	1.029	1.025	1.021	1.014	1.014	1.027	1.027	1.009	1.009	1.009	1.009	1.007	1.006	1.005				
7/1/96 - 6/30/97	2.592	1.498	1.302	1.188	1.122	1.061	1.050	1.030	1.026	1.022	1.023	1.013	1.013	1.017	1.021	1.013	1.012	1.009	1.009	1.008	1.008	1.008	1.008	1.008	1.008	1.010					
7/1/97 - 6/30/98	2.723	1.490	1.263	1.165	1.074	1.051	1.040	1.025	1.019	1.017	1.040	1.020	1.022	1.022	1.005	1.005	1.005	1.005	1.005	1.005	1.006	1.006	1.006	1.006	1.000						
7/1/98 - 6/30/99	2.088	1.495	1.250	1.129	1.081	1.084	1.055	1.031	1.053	1.020	1.025	1.014	1.011	1.011	1.011	1.017	1.016	1.015	1.012	1.010	1.007	1.004	1.012	1.004							
7/1/99 - 6/30/00	2.509	1.389	1.201	1.126	1.094	1.069	1.043	1.024	1.025	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.016	1.016	1.009	1.009	1.009	1.009								
7/1/00 - 6/30/01	2.344	1.377	1.171	1.138	1.094	1.051	1.057	1.018	1.018	1.023	1.025	1.026	1.016	1.015	1.013	1.010	1.008	1.008	1.008	1.009	1.007	1.007									
7/1/01 - 6/30/02	2.333	1.393	1.197	1.122	1.075	1.042	1.050	1.026	1.025	1.017	1.013	1.011	1.007	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003										
7/1/02 - 6/30/03	2.161	1.425	1.153	1.075	1.057	1.034	1.025	1.013	1.011	1.008	1.019	1.012	1.008	1.008	1.008	1.017	1.000	1.000	1.000	1.000											
7/1/03 - 6/30/04	2.127	1.384	1.246	1.110	1.058	1.029	1.040	1.031	1.016	1.016	1.015	1.015	1.015	1.017	1.010	1.013	1.004	1.004	1.004												
7/1/04 - 6/30/05	2.191	1.443	1.288	1.094	1.061	1.063	1.049	1.039	1.022	1.023	1.019	1.012	1.016	1.015	1.012	1.012	1.012	1.013													
7/1/05 - 6/30/06	2.230	1.364	1.229	1.114	1.140	1.085	1.027	1.008	1.025	1.026	1.005	1.005	1.007	1.009	1.005	1.005	1.005														
7/1/06 - 6/30/07	2.213	1.265	1.271	1.153	1.079	1.050	1.025	1.029	1.022	1.012	1.010	1.010	1.006	1.006	1.006	1.007															
7/1/07 - 6/30/08	2.369	1.411	1.291	1.179	1.078	1.078	1.020	1.018	1.014	1.019	1.014	1.016	1.014	1.014	1.014																
7/1/08 - 6/30/09	2.287	1.480	1.260	1.132	1.114	1.044	1.028	1.005	1.008	1.013	1.004	1.002	1.007	1.001																	
7/1/09 - 6/30/10	2.287	1.388	1.208	1.139	1.060	1.040	1.015	1.012	1.009	1.009	1.009	1.009	1.009																		
7/1/10 - 6/30/11	2.043	1.354	1.179	1.165	1.060	1.040	1.020	1.019	1.014	1.010	1.009	1.009																			
7/1/11 - 6/30/12	2.168	1.389	1.269	1.112	1.091	1.039	1.030	1.016	1.015	1.015	1.011																				
7/1/12 - 6/30/13	2.029	1.348	1.232	1.125	1.037	1.056	1.024	1.013	1.015	1.022																					
7/1/13 - 6/30/14	2.174	1.473	1.197	1.103	1.084	1.046	1.033	1.028	1.019																						
7/1/14 - 6/30/15	2.163	1.449	1.233	1.136	1.079	1.052	1.027	1.012																							
7/1/15 - 6/30/16	2.171	1.525	1.247	1.131	1.077	1.030	1.032																								
7/1/16 - 6/30/17	2.215	1.460	1.273	1.160	1.075	1.043																									
7/1/17 - 6/30/18	2.187	1.424	1.210	1.197	1.103																										
7/1/18 - 6/30/19	2.022	1.370	1.187	1.103																											
7/1/19 - 6/30/20	2.082	1.365	1.272																												
7/1/20 - 6/30/21	2.218	1.373																													
7/1/21 - 6/30/22	2.172																														

(Note: numbers in bold and italics and with borders are excluded from the calculated averages)

Last 3 Wtd Avg	2.159	1.370	1.224	1.158	1.085	1.041	1.031	1.018	1.017	1.016	1.010	1.007	1.010	1.007	1.009	1.008	1.007	1.006	1.002	1.004	1.006	1.007	1.009	1.006	1.005	1.009	1.009				
Last 5 Wtd Avg	2.141	1.399	1.239	1.148	1.084	1.044	1.029	1.018	1.015	1.014	1.009	1.009	1.009	1.009	1.010	1.011	1.005	1.006	1.006	1.006	1.006	1.007	1.009	1.007	1.008						
Last 9 Wtd Avg	2.157	1.422	1.236	1.139	1.076	1.043	1.026	1.017	1.015	1.016	1.010	1.010	1.010	1.010	1.010	1.011	1.008	1.008	1.009	1.009	1.008										
Last 12 Wtd Avg	2.140	1.412	1.231	1.141	1.079	1.048	1.027	1.018	1.016	1.016	1.012	1.011	1.011	1.011	1.011	1.011	1.009	1.010													
All Per Wtd Avg	2.200	1.416	1.232	1.136	1.082	1.051	1.035	1.022	1.021	1.019	1.019	1.014	1.014	1.013	1.012	1.012	1.010	1.010	1.010	1.010	1.008	1.008	1.009	1.008	1.008	1.010	1.009	1.008	1.011		
Industry																															
Age-to-Age	2.944	1.572	1.221	1.082	1.038	1.014	1.011	1.008	1.006	1.005	1.005	1.002	1.003	1.002	1.003	1.002	1.002	1.001	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	
Age-to-Ult	7.016	2.383	1.516	1.242	1.148	1.106	1.091	1.079	1.070	1.064	1.059	1.054	1.052	1.049	1.047	1.044	1.042	1.040	1.039	1.037	1.036	1.034	1.032	1.031	1.029	1.027	1.025	1.023	1.022	1.020	1.018
Prior Selected																															
Age-to-Age	2.143	1.425	1.226	1.142	1.075	1.046	1.025	1.016	1.015	1.016	1.013	1.012	1.012	1.013	1.011	1.012	1.011	1.011	1.011	1.011	1.009	1.007	1.009	1.009	1.009	1.009	1.009	1.008	1.005	1.005	
Age-to-Ult	6.697	3.126	2.194	1.789	1.567	1.457	1.393	1.359	1.337	1.317	1.297	1.280	1.266	1.251	1.235	1.222	1.207	1.194	1.181	1.169	1.156	1.145	1.137	1.127	1.117	1.107	1.097	1.087	1.078	1.073	1.067
Selected																															
Age-to-Age	2.157	1.422	1.236	1.139	1.076	1.043	1.026	1.017	1.015	1.016	1.012	1.011	1.011	1.011	1.011	1.011	1.009	1.010	1.009	1.009	1.008	1.008	1.009	1.008	1.008	1.010	1.009	1.011	1.005	1.005	
Age-to-Ult	6.709	3.110	2.187	1.769	1.554	1.444	1.385	1.350	1.328	1.308	1.287	1.272	1.258	1.244	1.230	1.218	1.204	1.193	1.181	1.170	1.159	1.150	1.140	1.129	1.120	1.111	1.101	1.091	1.079	1.074	1.068

Commonwealth of Massachusetts
All Other
All Other - Indemnity (Including Lump Sum)

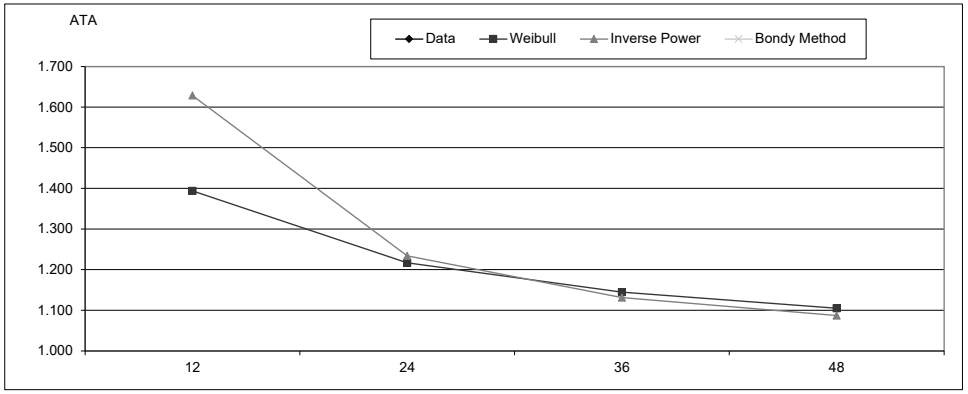
Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

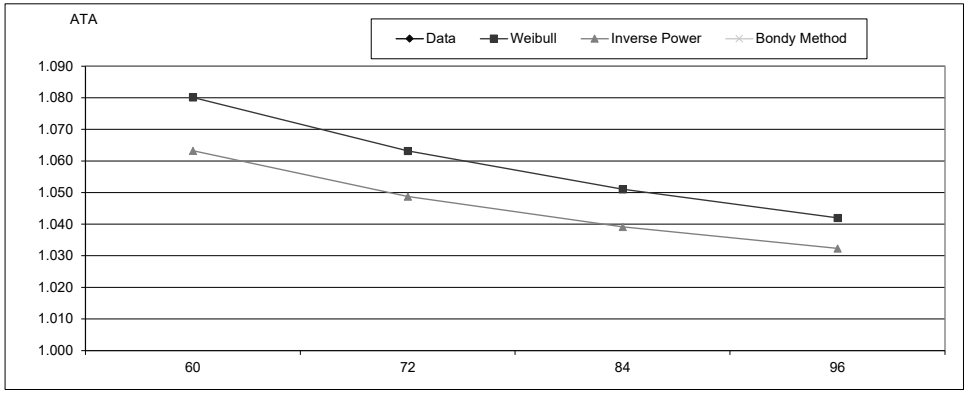
Curve Fitting Methods
Paid Loss

Tail at Period:	**31**	(To display in table)
Cut-off point:(<=Tail & <51)	**50**	(to run-out pattern)

Summary of Curve Fitting Methods

Method	Tail	R^2
Weibull	**1.029**	**0.818**
Inverse Power	**1.068**	**0.871**
Bondy Method		**N/A**





				Weibull		Inverse Power		Bondy Method			
									Sel. Decay Ratio=		
PERIOD	AGE	ATA	Use	**ATA***	**ATU***	**ATA***	**ATU***	Ln(ATA)	Decay	**ATA***	**ATU***
1	12	0.000	Exclude	**1.394**	3.591	**1.629**	4.040				
2	24	1.422	Include	**1.217**	2.577	**1.234**	2.480				
3	36	1.236	Include	**1.145**	2.117	**1.131**	2.010				
4	48	1.139	Include	**1.105**	1.850	**1.087**	1.777				
5	60	1.076	Include	**1.080**	1.674	**1.063**	1.635				
6	72	1.043	Include	**1.063**	1.550	**1.049**	1.538				
7	84	1.026	Include	**1.051**	1.458	**1.039**	1.466				
8	96	1.017	Include	**1.042**	1.387	**1.032**	1.411				
9	108	1.015	Include	**1.035**	1.331	**1.027**	1.367				
10	120	1.016	Include	**1.030**	1.286	**1.024**	1.331				
11	132	1.012	Include	**1.025**	1.249	**1.021**	1.300				
12	144	1.011	Include	**1.022**	1.218	**1.018**	1.274				
13	156	1.011	Include	**1.019**	1.192	**1.016**	1.251				
14	168	1.011	Include	**1.016**	1.170	**1.015**	1.231				
15	180	1.011	Include	**1.014**	1.151	**1.013**	1.214				
16	192	1.011	Include	**1.013**	1.135	**1.012**	1.198				
17	204	1.009	Include	**1.011**	1.121	**1.011**	1.183				
18	216	1.010	Include	**1.010**	1.109	**1.010**	1.171				
19	228	1.009	Include	**1.009**	1.098	**1.009**	1.159				
20	240	1.009	Include	**1.008**	1.088	**1.009**	1.148				
21	252	1.008	Include	**1.007**	1.079	**1.008**	1.138				
22	264	1.008	Include	**1.006**	1.072	**1.008**	1.129				
23	276	1.009	Include	**1.006**	1.065	**1.007**	1.120				
24	288	1.008	Include	**1.005**	1.059	**1.007**	1.112				
25	300	1.008	Include	**1.005**	1.053	**1.006**	1.105				
26	312	1.010	Include	**1.004**	1.048	**1.006**	1.098				
27	324	1.009	Include	**1.004**	1.044	**1.006**	1.091				
28	336	1.011	Include	**1.004**	1.040	**1.005**	1.085				
29	348	0.000	Exclude	**1.003**	1.036	**1.005**	1.079				
30	360	0.000	Exclude	**1.003**	1.032	**1.005**	1.074				
31	372	0.000	Exclude	**1.003**	1.029	**1.005**	1.068				
32	384	0.000	Exclude	**1.003**	1.027	**1.004**	1.063				
33	396	0.000	Exclude	**1.002**	1.024	**1.004**	1.059				
34	408	0.000	Exclude	**1.002**	1.022	**1.004**	1.054				
35	420	0.000	Exclude	**1.002**	1.019	**1.004**	1.050				
36	432	0.000	Exclude	**1.002**	1.017	**1.004**	1.046				
37	444	0.000	Exclude	**1.002**	1.016	**1.004**	1.042				
38	456	0.000	Exclude	**1.002**	1.014	**1.004**	1.038				
39	468	0.000	Exclude	**1.001**	1.012	**1.003**	1.034				
40	480	0.000	Exclude	**1.001**	1.011	**1.003**	1.031				
41	492	0.000	Exclude	**1.001**	1.009	**1.003**	1.028				
42	504	0.000	Exclude	**1.001**	1.008	**1.003**	1.024				
43	516	0.000	Exclude	**1.001**	1.007	**1.003**	1.021				
44	528	0.000	Exclude	**1.001**	1.006	**1.003**	1.018				
45	540	0.000	Exclude	**1.001**	1.005	**1.003**	1.015				
46	552	0.000	Exclude	**1.001**	1.004	**1.003**	1.013				
47	564	0.000	Exclude	**1.001**	1.003	**1.003**	1.010				
48	576	0.000	Exclude	**1.001**	1.002	**1.003**	1.007				
49	588	0.000	Exclude	**1.001**	1.001	**1.002**	1.005				
50	600	0.000	Exclude	**1.001**	1.001	**1.002**	1.002				

Unpaid Claim Analysis as of 06/30/2023

Ultimate Claim Count Development

Accident Year	Age of Counts @ 06/30/2023	Payroll (00)'s	Reported Claim Counts @ 06/30/2023	Reported Count Dev Factor	Indicated Ultimate Claim Counts	Selected Ultimate Claim Counts	Selected Ultimate Frequency	Selected Ultimate Frequency (Inflation-Adjusted)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	372.0		111	1.000	111			
7/1/93 - 6/30/94	360.0		10	1.000	10			
7/1/94 - 6/30/95	348.0		14	1.000	14			
7/1/95 - 6/30/96	336.0		10	1.000	10			
7/1/96 - 6/30/97	324.0		13	1.000	13			
7/1/97 - 6/30/98	312.0		6	1.000	6			
7/1/98 - 6/30/99	300.0	19,448,360	15	1.000	15		0.00%	0.00%
7/1/99 - 6/30/00	288.0	20,693,510	11	1.000	11		0.00%	0.00%
7/1/00 - 6/30/01	276.0	20,558,590	20	1.000	20		0.00%	0.00%
7/1/01 - 6/30/02	264.0	21,523,690	22	1.000	22		0.00%	0.00%
7/1/02 - 6/30/03	252.0	21,202,840	25	1.000	25		0.00%	0.00%
7/1/03 - 6/30/04	240.0	21,185,340	22	1.000	22		0.00%	0.00%
7/1/04 - 6/30/05	228.0	21,640,500	32	1.000	32		0.00%	0.00%
7/1/05 - 6/30/06	216.0	23,243,030	44	1.000	44		0.00%	0.00%
7/1/06 - 6/30/07	204.0	24,554,310	41	1.000	41		0.00%	0.00%
7/1/07 - 6/30/08	192.0	26,150,540	59	1.000	59		0.00%	0.00%
7/1/08 - 6/30/09	180.0	25,704,510	75	1.000	75		0.00%	0.00%
7/1/09 - 6/30/10	168.0	26,029,100	100	1.000	100		0.00%	0.00%
7/1/10 - 6/30/11	156.0	27,458,630	172	1.000	172		0.00%	0.00%
7/1/11 - 6/30/12	144.0	27,995,990	394	1.000	394		0.00%	0.00%
7/1/12 - 6/30/13	132.0	29,200,210	532	1.000	532	532	18.22%	13.56%
7/1/13 - 6/30/14	120.0	30,801,820	536	1.000	536	536	17.40%	13.34%
7/1/14 - 6/30/15	108.0	32,591,780	601	1.000	601	601	18.44%	14.56%
7/1/15 - 6/30/16	96.0	32,518,420	595	1.000	595	595	18.30%	14.88%
7/1/16 - 6/30/17	84.0	31,362,360	546	1.000	546	546	17.41%	14.58%
7/1/17 - 6/30/18	72.0	31,972,210	539	1.000	539	539	16.86%	14.54%
7/1/18 - 6/30/19	60.0	33,600,390	426	1.000	426	426	12.68%	11.26%
7/1/19 - 6/30/20	48.0	35,047,860	435	1.001	435	435	12.42%	11.37%
7/1/20 - 6/30/21	36.0	35,216,283	432	1.005	434	434	12.32%	11.62%
7/1/21 - 6/30/22	24.0	37,107,388	437	1.018	445	445	11.98%	11.64%
7/1/22 - 6/30/23	12.0	38,502,230	372	1.138	423	437	11.34%	11.34%
Total		695,309,891	6,647		6,708	5,526		

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1)
(3) Provided by Entity
(4) Provided by Entity
(5) From Section VII, Exhibit I, Sheet 14
(6) = (4) x (5)
(7) Selected by Deloitte Consulting LLP
(8) = (7) / (3)
(9) = (7) / [(3) x Section VII, Exhibit I, Sheet 8, Column (3)]

Commonwealth of Massachusetts
All Other
All Other - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Reported Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																															111	111
7/1/93 - 6/30/94																														10		10
7/1/94 - 6/30/95																													14			14
7/1/95 - 6/30/96																												10				10
7/1/96 - 6/30/97																											13					13
7/1/97 - 6/30/98																										6						6
7/1/98 - 6/30/99																									15							15
7/1/99 - 6/30/00																								11								11
7/1/00 - 6/30/01																							20									20
7/1/01 - 6/30/02																						22										22
7/1/02 - 6/30/03																					25											25
7/1/03 - 6/30/04																				22												22
7/1/04 - 6/30/05																			32													32
7/1/05 - 6/30/06																		44														44
7/1/06 - 6/30/07																	41															41
7/1/07 - 6/30/08																59																59
7/1/08 - 6/30/09															75																	75
7/1/09 - 6/30/10														100																		100
7/1/10 - 6/30/11													172																			172
7/1/11 - 6/30/12												394																				394
7/1/12 - 6/30/13	475	523	532	531	531	531	532	532	532	532	532																					532
7/1/13 - 6/30/14	465	522	533	536	537	537	536	536	536	536																						536
7/1/14 - 6/30/15	527	587	595	598	599	599	601	601	601																							601
7/1/15 - 6/30/16	519	583	591	594	595	595	595	595																								595
7/1/16 - 6/30/17	485	539	544	544	545	545	546																									546
7/1/17 - 6/30/18	474	529	537	540	539	539																										539
7/1/18 - 6/30/19	390	422	425	426	426																											426
7/1/19 - 6/30/20	368	425	431	435																												435
7/1/20 - 6/30/21	377	431	432																													432
7/1/21 - 6/30/22	389	437																														437
7/1/22 - 6/30/23	372																															372
																																6,647

Accident Year	Age-to-Age Development Factors																														
	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993																															
7/1/93 - 6/30/94																															
7/1/94 - 6/30/95																															
7/1/95 - 6/30/96																															
7/1/96 - 6/30/97																															
7/1/97 - 6/30/98																															
7/1/98 - 6/30/99																															
7/1/99 - 6/30/00																															
7/1/00 - 6/30/01																															
7/1/01 - 6/30/02																															
7/1/02 - 6/30/03																															
7/1/03 - 6/30/04																															
7/1/04 - 6/30/05																															
7/1/05 - 6/30/06																															
7/1/06 - 6/30/07																															
7/1/07 - 6/30/08																															
7/1/08 - 6/30/09																															
7/1/09 - 6/30/10																															
7/1/10 - 6/30/11																															
7/1/11 - 6/30/12																															
7/1/12 - 6/30/13	1.101	1.017	0.998	1.000	1.000	1.002	1.000	1.000	1.000	1.000																					
7/1/13 - 6/30/14	1.123	1.021	1.006	1.002	1.000	0.998	1.000	1.000	1.000																						
7/1/14 - 6/30/15	1.114	1.014	1.005	1.002	1.000	1.003	1.000	1.000																							
7/1/15 - 6/30/16	1.123	1.014	1.005	1.002	1.000	1.000	1.000																								
7/1/16 - 6/30/17	1.111	1.009	1.000	1.002	1.000	1.002																									
7/1/17 - 6/30/18	1.116	1.015	1.006	0.998	1.000																										
7/1/18 - 6/30/19	1.082	1.007	1.002	1.000																											
7/1/19 - 6/30/20	1.155	1.014	1.009																												
7/1/20 - 6/30/21	1.143	1.002																													
7/1/21 - 6/30/22	1.123																														
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																															
Last 3 Wtd Avg	1.140	1.008	1.006	1.000	1.000	1.002	1.000	1.000																							
Last 4 Wtd Avg	1.125	1.010	1.004	1.000	1.000	1.001	1.000																								
Last 5 Wtd Avg	1.123	1.010	1.004	1.001	1.000	1.001																									
All Per Wtd Avg	1.118	1.013	1.004	1.001	1.000	1.001	1.000	1.000	1.000	1.000																					
Average ex Hi/Lo	1.119	1.013	1.004	1.001	1.000	1.001	1.000	1.000																							
Prior Selected																															
Age-to-Age	1.118	1.014	1.003	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	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	
Age-to-Ult	1.138	1.018	1.004	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	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
Selected																															
Age-to-Age	1.118	1.013	1.004	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	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	
Age-to-Ult	1.138	1.018	1.005	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	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

Commonwealth of Massachusetts
All Other
All Other - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Reported Counts to Payroll (00)'s

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94																																-
7/1/94 - 6/30/95																																-
7/1/95 - 6/30/96																																-
7/1/96 - 6/30/97																																-
7/1/97 - 6/30/98																																-
7/1/98 - 6/30/99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01							19,448,360
7/1/99 - 6/30/00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01								20,693,510
7/1/00 - 6/30/01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01									20,558,590
7/1/01 - 6/30/02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01										21,523,690
7/1/02 - 6/30/03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01											21,202,840
7/1/03 - 6/30/04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01												21,185,340
7/1/04 - 6/30/05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01													21,640,500
7/1/05 - 6/30/06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02														23,243,030
7/1/06 - 6/30/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02															24,554,310
7/1/07 - 6/30/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02																26,150,540
7/1/08 - 6/30/09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03																	25,704,510
7/1/09 - 6/30/10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04																		26,029,100
7/1/10 - 6/30/11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06																			27,458,630
7/1/11 - 6/30/12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14																				27,995,990
7/1/12 - 6/30/13	0.16	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18																					29,200,210
7/1/13 - 6/30/14	0.15	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17																						30,801,820
7/1/14 - 6/30/15	0.16	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18																							32,591,780
7/1/15 - 6/30/16	0.16	0.18	0.18	0.18	0.18	0.18	0.18	0.18																								32,518,420
7/1/16 - 6/30/17	0.15	0.17	0.17	0.17	0.17	0.17	0.17																									31,362,360
7/1/17 - 6/30/18	0.15	0.17	0.17	0.17	0.17	0.17																										31,972,210
7/1/18 - 6/30/19	0.12	0.13	0.13	0.13	0.13																											33,600,390
7/1/19 - 6/30/20	0.10	0.12	0.12	0.12																												35,047,860
7/1/20 - 6/30/21	0.11	0.12	0.12																													35,216,283
7/1/21 - 6/30/22	0.10	0.12																														37,107,388
7/1/22 - 6/30/23	0.10																															38,502,230

Commonwealth of Massachusetts
All Other
All Other - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss Rates

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														Payroll
	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	348	360	372	(00)'s
Prior to 7/1/1993																																-
7/1/93 - 6/30/94																																-
7/1/94 - 6/30/95																																-
7/1/95 - 6/30/96																																-
7/1/96 - 6/30/97																																-
7/1/97 - 6/30/98																																-
7/1/98 - 6/30/99	0.07	0.15	0.22	0.27	0.31	0.33	0.36	0.38	0.39	0.41	0.42	0.43	0.44	0.44	0.45	0.45	0.46	0.47	0.48	0.48	0.49	0.49	0.49	0.50	0.50							19,448,360
7/1/99 - 6/30/00	0.08	0.19	0.27	0.32	0.36	0.39	0.42	0.44	0.45	0.46	0.47	0.47	0.48	0.49	0.49	0.50	0.51	0.52	0.53	0.53	0.54	0.54	0.55	0.55								20,693,510
7/1/00 - 6/30/01	0.08	0.18	0.25	0.30	0.34	0.37	0.39	0.41	0.42	0.43	0.44	0.45	0.46	0.47	0.47	0.48	0.48	0.49	0.49	0.50	0.50	0.50	0.51									20,558,590
7/1/01 - 6/30/02	0.08	0.20	0.27	0.33	0.37	0.40	0.41	0.43	0.45	0.46	0.46	0.47	0.48	0.48	0.48	0.48	0.48	0.48	0.49	0.49	0.49	0.49										21,523,690
7/1/02 - 6/30/03	0.10	0.22	0.32	0.37	0.39	0.42	0.43	0.44	0.45	0.45	0.46	0.46	0.47	0.47	0.48	0.48	0.49	0.49	0.49	0.49	0.49											21,202,840
7/1/03 - 6/30/04	0.08	0.18	0.25	0.31	0.35	0.37	0.38	0.39	0.40	0.41	0.42	0.42	0.43	0.44	0.44	0.45	0.45	0.46	0.46	0.46												21,185,340
7/1/04 - 6/30/05	0.08	0.18	0.27	0.34	0.38	0.40	0.42	0.44	0.46	0.47	0.48	0.49	0.50	0.51	0.51	0.52	0.53	0.53	0.54													21,640,500
7/1/05 - 6/30/06	0.08	0.17	0.23	0.29	0.32	0.37	0.40	0.41	0.41	0.42	0.43	0.43	0.44	0.44	0.44	0.45	0.45	0.45														23,243,030
7/1/06 - 6/30/07	0.07	0.16	0.20	0.26	0.29	0.32	0.33	0.34	0.35	0.36	0.36	0.37	0.37	0.37	0.37	0.38	0.38															24,554,310
7/1/07 - 6/30/08	0.08	0.18	0.26	0.33	0.39	0.42	0.46	0.47	0.47	0.48	0.49	0.50	0.50	0.51	0.52	0.53																26,150,540
7/1/08 - 6/30/09	0.09	0.20	0.29	0.37	0.41	0.46	0.48	0.49	0.50	0.50	0.51	0.51	0.51	0.51	0.51																	25,704,510
7/1/09 - 6/30/10	0.10	0.23	0.32	0.39	0.44	0.47	0.49	0.49	0.50	0.51	0.51	0.51	0.52	0.52																		26,029,100
7/1/10 - 6/30/11	0.12	0.25	0.34	0.40	0.46	0.49	0.51	0.52	0.53	0.54	0.55	0.55	0.56																			27,458,630
7/1/11 - 6/30/12	0.11	0.24	0.33	0.42	0.47	0.51	0.53	0.55	0.56	0.57	0.57	0.58																				27,995,990
7/1/12 - 6/30/13	0.10	0.20	0.27	0.34	0.38	0.39	0.42	0.43	0.43	0.44	0.45																					29,200,210
7/1/13 - 6/30/14	0.10	0.22	0.32	0.38	0.42	0.46	0.48	0.50	0.51	0.52																						30,801,820
7/1/14 - 6/30/15	0.10	0.21	0.31	0.38	0.43	0.47	0.49	0.50	0.51																							32,591,780
7/1/15 - 6/30/16	0.11	0.23	0.36	0.44	0.50	0.54	0.56	0.57																								32,518,420
7/1/16 - 6/30/17	0.10	0.23	0.33	0.42	0.49	0.52	0.55																									31,362,360
7/1/17 - 6/30/18	0.12	0.26	0.37	0.45	0.54	0.59																										31,972,210
7/1/18 - 6/30/19	0.10	0.19	0.27	0.32	0.35																											33,600,390
7/1/19 - 6/30/20	0.10	0.21	0.29	0.37																												35,047,860
7/1/20 - 6/30/21	0.10	0.23	0.32																													35,216,283
7/1/21 - 6/30/22	0.12	0.25																														37,107,388
7/1/22 - 6/30/23	0.11																															38,502,230

Commonwealth of Massachusetts
All Other
All Other - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Settlement Rates (Closed Claim Count / Ultimate Claim Count)

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
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7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	0.00	0.32	0.72	0.85	0.90	0.92	0.94	0.95	0.95	0.96	0.97																					0.97
7/1/13 - 6/30/14	0.00	0.33	0.70	0.84	0.88	0.91	0.93	0.94	0.95	0.96																						0.96
7/1/14 - 6/30/15	0.00	0.39	0.73	0.83	0.89	0.92	0.94	0.95	0.96																							0.96
7/1/15 - 6/30/16	0.00	0.38	0.70	0.81	0.88	0.91	0.93	0.95																								0.95
7/1/16 - 6/30/17	0.00	0.36	0.77	0.85	0.89	0.92	0.94																									0.94
7/1/17 - 6/30/18	0.00	0.41	0.73	0.80	0.86	0.90																										0.90
7/1/18 - 6/30/19	0.00	0.42	0.74	0.85	0.90																											0.90
7/1/19 - 6/30/20	0.00	0.42	0.74	0.82																												0.82
7/1/20 - 6/30/21	0.00	0.36	0.66																													0.66
7/1/21 - 6/30/22	0.00	0.35																														0.35
7/1/22 - 6/30/23	0.00																															0.00

Commonwealth of Massachusetts
All Other
All Other - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Open Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993	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	0	0	0	36	36
7/1/93 - 6/30/94	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	0	0	4		4
7/1/94 - 6/30/95	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	0	3			3
7/1/95 - 6/30/96	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	2				2
7/1/96 - 6/30/97	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	5					5
7/1/97 - 6/30/98	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	2						2
7/1/98 - 6/30/99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4							4
7/1/99 - 6/30/00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7								7
7/1/00 - 6/30/01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4									4
7/1/01 - 6/30/02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8										8
7/1/02 - 6/30/03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2											2
7/1/03 - 6/30/04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6												6
7/1/04 - 6/30/05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3													3
7/1/05 - 6/30/06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8														8
7/1/06 - 6/30/07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3															3
7/1/07 - 6/30/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10																10
7/1/08 - 6/30/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4																	4
7/1/09 - 6/30/10	0	0	0	0	0	0	0	0	0	0	0	0	0	7																		7
7/1/10 - 6/30/11	0	0	0	0	0	0	0	0	0	0	0	0	12																			12
7/1/11 - 6/30/12	0	0	0	0	0	0	0	0	0	0	0	19																				19
7/1/12 - 6/30/13	475	351	147	77	51	40	33	26	26	21	16																					16
7/1/13 - 6/30/14	465	345	156	84	64	48	39	32	26	23																						23
7/1/14 - 6/30/15	527	352	158	98	62	48	37	33	24																							24
7/1/15 - 6/30/16	519	357	172	112	74	51	39	29																								29
7/1/16 - 6/30/17	485	341	126	79	59	45	32																									32
7/1/17 - 6/30/18	474	308	141	107	76	54																										54
7/1/18 - 6/30/19	390	242	111	64	41																											41
7/1/19 - 6/30/20	368	240	110	79																												79
7/1/20 - 6/30/21	377	275	144																													144
7/1/21 - 6/30/22	389	281																														281
7/1/22 - 6/30/23	372																															372
																																1,244

Commonwealth of Massachusetts
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Section VII
Exhibit II
Sheet 1

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Unpaid Loss & ALAE Estimates

Accident Year	Payroll (00)'s	Retention	Unlimited Paid Loss & ALAE @ 06/30/2023	Unlimited Reported Loss & ALAE @ 06/30/2023	Ultimate Loss & ALAE Low	Ultimate Loss & ALAE High	Indicated Total Unpaid Loss & ALAE Estimates Low	Indicated Total Unpaid Loss & ALAE Estimates High	Case Reserves	Indicated IBNR Estimate Low	Indicated IBNR Estimate High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993		Unlimited	25,886,951	25,886,951	26,594,950	26,752,284	708,000	865,333	0	708,000	865,333
7/1/93 - 6/30/94		Unlimited	3,011,884	3,011,884	3,142,800	3,156,600	130,916	144,716	0	130,916	144,716
7/1/94 - 6/30/95		Unlimited	2,639,191	2,639,191	2,760,100	2,772,800	120,909	133,609	0	120,909	133,609
7/1/95 - 6/30/96		Unlimited	2,102,910	2,102,910	2,208,000	2,219,100	105,090	116,190	0	105,090	116,190
7/1/96 - 6/30/97		Unlimited	3,081,132	3,081,132	3,244,400	3,261,500	163,269	180,369	0	163,269	180,369
7/1/97 - 6/30/98		Unlimited	2,044,594	2,044,594	2,163,600	2,176,100	119,006	131,506	0	119,006	131,506
7/1/98 - 6/30/99	19,448,360	Unlimited	2,766,141	2,766,141	2,937,500	2,955,600	171,359	189,459	0	171,359	189,459
7/1/99 - 6/30/00	20,693,510	Unlimited	3,237,995	3,237,995	3,454,500	3,477,300	216,505	239,305	0	216,505	239,305
7/1/00 - 6/30/01	20,558,590	Unlimited	3,612,807	3,612,807	3,876,900	3,904,700	264,093	291,893	0	264,093	291,893
7/1/01 - 6/30/02	21,523,690	Unlimited	3,192,007	3,192,007	3,461,100	3,489,400	269,093	297,393	0	269,093	297,393
7/1/02 - 6/30/03	21,202,840	Unlimited	3,304,553	3,304,553	3,625,600	3,659,400	321,047	354,847	0	321,047	354,847
7/1/03 - 6/30/04	21,185,340	Unlimited	3,203,120	3,203,120	3,548,100	3,584,400	344,980	381,280	0	344,980	381,280
7/1/04 - 6/30/05	21,640,500	Unlimited	4,632,749	4,632,749	5,179,400	5,237,000	546,651	604,251	0	546,651	604,251
7/1/05 - 6/30/06	23,243,030	Unlimited	3,587,839	3,587,839	4,047,700	4,096,100	459,861	508,261	0	459,861	508,261
7/1/06 - 6/30/07	24,554,310	Unlimited	4,968,863	4,968,863	5,679,500	5,754,300	710,637	785,437	0	710,637	785,437
7/1/07 - 6/30/08	26,150,540	Unlimited	4,163,345	4,163,345	4,817,000	4,885,800	653,655	722,455	0	653,655	722,455
7/1/08 - 6/30/09	25,704,510	Unlimited	4,529,830	4,529,830	5,310,300	5,392,400	780,470	862,570	0	780,470	862,570
7/1/09 - 6/30/10	26,029,100	Unlimited	4,434,621	4,434,621	5,259,900	5,346,800	825,279	912,179	0	825,279	912,179
7/1/10 - 6/30/11	27,458,630	Unlimited	5,280,920	5,280,920	6,345,100	6,457,100	1,064,180	1,176,180	0	1,064,180	1,176,180
7/1/11 - 6/30/12	27,995,990	Unlimited	4,832,705	4,832,705	5,880,500	5,990,800	1,047,795	1,158,095	0	1,047,795	1,158,095
7/1/12 - 6/30/13	29,200,210	Unlimited	4,134,401	4,134,401	5,093,000	5,193,900	958,599	1,059,499	0	958,599	1,059,499
7/1/13 - 6/30/14	30,801,820	Unlimited	4,627,346	4,627,346	5,778,300	5,899,400	1,150,954	1,272,054	0	1,150,954	1,272,054
7/1/14 - 6/30/15	32,591,780	Unlimited	4,653,576	4,653,576	5,902,700	6,034,200	1,249,124	1,380,624	0	1,249,124	1,380,624
7/1/15 - 6/30/16	32,518,420	Unlimited	5,161,833	5,161,833	6,638,800	6,861,200	1,476,967	1,699,367	0	1,476,967	1,699,367
7/1/16 - 6/30/17	31,362,360	Unlimited	4,676,680	4,676,680	6,142,600	6,363,300	1,465,920	1,686,620	0	1,465,920	1,686,620
7/1/17 - 6/30/18	31,972,210	Unlimited	4,939,962	4,939,962	6,659,100	6,917,900	1,719,138	1,977,938	0	1,719,138	1,977,938
7/1/18 - 6/30/19	33,600,390	Unlimited	3,512,363	3,512,363	4,899,600	5,108,500	1,387,237	1,596,137	0	1,387,237	1,596,137
7/1/19 - 6/30/20	35,047,860	Unlimited	3,108,756	3,108,756	5,121,900	5,425,000	2,013,144	2,316,244	0	2,013,144	2,316,244
7/1/20 - 6/30/21	35,216,283	Unlimited	2,877,374	2,877,374	5,511,000	6,096,000	2,633,626	3,218,626	0	2,633,626	3,218,626
7/1/21 - 6/30/22	37,107,388	Unlimited	3,052,180	3,052,180	6,243,000	6,953,000	3,190,820	3,900,820	0	3,190,820	3,900,820
7/1/22 - 6/30/23	38,502,230	Unlimited	1,413,829	1,413,829	6,095,000	7,135,000	4,681,171	5,721,171	0	4,681,171	5,721,171
Total	695,309,891		136,672,457	136,672,457	167,621,950	172,556,884	30,949,493	35,884,426	0	30,949,493	35,884,426

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	Provided by Entity
(6)	From Section VII, Exhibit II, Sheet 6, Column (11)
(7)	From Section VII, Exhibit II, Sheet 6, Column (12)
(8)	= (6) - (4)
(9)	= (7) - (4)
(10)	= (5) - (4)
(11)	= (8) - (10)
(12)	= (9) - (10)

Commonwealth of Massachusetts
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Section VII
Exhibit II
Sheet 2

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Short-Term Portion

Accident Year	Age of Losses @ 06/30/2023	Selected Paid Test LDF @ 06/30/2023	Implied Paid LDF	Paid LDF	Cumulative Percent Paid	Incremental Percent Paid	Average Total Unpaid ss & ALAE Estimate	Undiscounted Cash Flow of Payments 2024
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
						0.40%		
Prior to 7/1/1993	372.0	1.042	1.030	1.042	95.92%	0.30%	786,666	77,202
7/1/93 - 6/30/94	360.0	1.046	1.046	1.046	95.63%	0.23%	137,816	9,399
7/1/94 - 6/30/95	348.0	1.048	1.048	1.048	95.40%	0.40%	127,259	6,242
7/1/95 - 6/30/96	336.0	1.053	1.053	1.053	95.00%	0.28%	110,640	8,824
7/1/96 - 6/30/97	324.0	1.056	1.056	1.056	94.72%	0.49%	171,819	9,200
7/1/97 - 6/30/98	312.0	1.061	1.061	1.061	94.23%	0.35%	125,256	10,654
7/1/98 - 6/30/99	300.0	1.065	1.065	1.065	93.88%	0.45%	180,409	10,324
7/1/99 - 6/30/00	288.0	1.070	1.070	1.070	93.42%	0.57%	227,905	15,674
7/1/00 - 6/30/01	276.0	1.077	1.077	1.077	92.85%	1.00%	277,993	22,179
7/1/01 - 6/30/02	264.0	1.089	1.089	1.089	91.85%	1.13%	283,243	34,909
7/1/02 - 6/30/03	252.0	1.102	1.102	1.102	90.72%	0.90%	337,947	41,058
7/1/03 - 6/30/04	240.0	1.113	1.113	1.113	89.82%	0.87%	363,130	32,267
7/1/04 - 6/30/05	228.0	1.124	1.124	1.124	88.95%	0.84%	575,451	45,171
7/1/05 - 6/30/06	216.0	1.135	1.135	1.135	88.11%	1.20%	484,061	34,174
7/1/06 - 6/30/07	204.0	1.151	1.151	1.151	86.92%	1.10%	748,037	68,358
7/1/07 - 6/30/08	192.0	1.165	1.165	1.165	85.82%	1.17%	688,055	53,261
7/1/08 - 6/30/09	180.0	1.181	1.181	1.181	84.65%	1.03%	821,520	62,590
7/1/09 - 6/30/10	168.0	1.196	1.196	1.196	83.62%	1.12%	868,729	54,577
7/1/10 - 6/30/11	156.0	1.212	1.212	1.212	82.50%	1.08%	1,120,180	71,648
7/1/11 - 6/30/12	144.0	1.228	1.228	1.228	81.42%	1.04%	1,102,945	64,236
7/1/12 - 6/30/13	132.0	1.244	1.244	1.244	80.38%	1.13%	1,009,049	53,280
7/1/13 - 6/30/14	120.0	1.262	1.262	1.262	79.25%	1.28%	1,211,504	66,039
7/1/14 - 6/30/15	108.0	1.283	1.283	1.283	77.97%	1.50%	1,314,874	76,443
7/1/15 - 6/30/16	96.0	1.308	1.308	1.308	76.47%	1.68%	1,588,167	101,151
7/1/16 - 6/30/17	84.0	1.337	1.337	1.337	74.79%	2.02%	1,576,270	105,060
7/1/17 - 6/30/18	72.0	1.374	1.374	1.374	72.77%	2.58%	1,848,538	137,261
7/1/18 - 6/30/19	60.0	1.425	1.425	1.425	70.19%	3.58%	1,491,687	129,034
7/1/19 - 6/30/20	48.0	1.501	1.696	1.501	66.61%	5.79%	2,164,694	231,979
7/1/20 - 6/30/21	36.0	1.644	2.017	1.644	60.82%	10.83%	2,926,126	432,445
7/1/21 - 6/30/22	24.0	2.000	2.162	2.000	49.99%	27.21%	3,545,820	768,097
7/1/22 - 6/30/23	12.0	4.390	4.679	4.390	22.78%	22.78%	5,201,171	1,832,676
Total							33,416,960	4,665,411

	Undiscounted	Discounted			
Short-Term Portion	14%	18%	(10)	Interest Rate	4%

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1) @ 06/30/2023
(3) From Section VII, Exhibit II, Sheet 10, Column (6)
(4) Average Ultimate Loss Divided by Paid Loss From Section VII, Exhibit II, Sheet 6
(5) Selected
(6) = 1 / (5)
(7) = (6) from Current Age - (6) from Subsequent Age
(8) From Section VII, Exhibit II, Sheet 3
(9) - (9) Based on (5)

Commonwealth of Massachusetts
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Section VII
Exhibit II
Sheet 3

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Discounted at (4%) Unpaid Loss & ALAE Estimate

Accident Year	Indicated Total Unpaid Loss & ALAE Estimate Low	Indicated Total Unpaid Loss & ALAE Estimate High	Discount Factor	Discounted Total Unpaid Loss & ALAE Estimate Low	Discounted Total Unpaid Loss & ALAE Estimate High
(1)	(2)	(3)	(4)	(5)	(6)
Prior to 7/1/1993	708,000	865,333	1.000	708,000	865,333
7/1/93 - 6/30/94	130,916	144,716	0.981	128,374	141,906
7/1/94 - 6/30/95	120,909	133,609	0.945	114,225	126,223
7/1/95 - 6/30/96	105,090	116,190	0.914	96,067	106,213
7/1/96 - 6/30/97	163,269	180,369	0.884	144,398	159,522
7/1/97 - 6/30/98	119,006	131,506	0.861	102,521	113,290
7/1/98 - 6/30/99	171,359	189,459	0.837	143,437	158,588
7/1/99 - 6/30/00	216,505	239,305	0.817	176,873	195,499
7/1/00 - 6/30/01	264,093	291,893	0.801	211,561	233,831
7/1/01 - 6/30/02	269,093	297,393	0.796	214,250	236,782
7/1/02 - 6/30/03	321,047	354,847	0.792	254,170	280,930
7/1/03 - 6/30/04	344,980	381,280	0.781	269,338	297,678
7/1/04 - 6/30/05	546,651	604,251	0.769	420,238	464,518
7/1/05 - 6/30/06	459,861	508,261	0.756	347,758	384,359
7/1/06 - 6/30/07	710,637	785,437	0.750	533,191	589,313
7/1/07 - 6/30/08	653,655	722,455	0.742	484,686	535,701
7/1/08 - 6/30/09	780,470	862,570	0.733	572,373	632,583
7/1/09 - 6/30/10	825,279	912,179	0.722	596,236	659,019
7/1/10 - 6/30/11	1,064,180	1,176,180	0.713	758,724	838,576
7/1/11 - 6/30/12	1,047,795	1,158,095	0.703	736,314	813,825
7/1/12 - 6/30/13	958,599	1,059,499	0.692	663,157	732,959
7/1/13 - 6/30/14	1,150,954	1,272,054	0.682	785,390	868,027
7/1/14 - 6/30/15	1,249,124	1,380,624	0.675	843,157	931,920
7/1/15 - 6/30/16	1,476,967	1,699,367	0.670	989,794	1,138,836
7/1/16 - 6/30/17	1,465,920	1,686,620	0.667	977,456	1,124,616
7/1/17 - 6/30/18	1,719,138	1,977,938	0.666	1,145,540	1,317,990
7/1/18 - 6/30/19	1,387,237	1,596,137	0.670	929,609	1,069,596
7/1/19 - 6/30/20	2,013,144	2,316,244	0.680	1,369,693	1,575,914
7/1/20 - 6/30/21	2,633,626	3,218,626	0.702	1,849,966	2,260,894
7/1/21 - 6/30/22	3,190,820	3,900,820	0.742	2,366,079	2,892,563
7/1/22 - 6/30/23	4,681,171	5,721,171	0.807	3,779,056	4,618,636
Total	30,949,493	35,884,426		22,711,629	26,365,639

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From Section VII, Exhibit II, Sheet 1, Column (8)
(3) From Section VII, Exhibit II, Sheet 1, Column (9)
(4) From Section VII, Exhibit II, Sheet 0, Column (8)
(5) = (2) x (4)
(6) = (3) x (4)

Commonwealth of Massachusetts
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All Other - Medical

Section VII
Exhibit II
Sheet 4

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Actual vs Expected - Paid Loss & ALAE Emergence

Accident Year	Selected Low Ultimate Loss & ALAE @ 06/30/2022	Selected High Ultimate Loss & ALAE @ 06/30/2022	Unlimited Paid Loss & ALAE @ 06/30/2022	Unlimited Paid Loss & ALAE @ 06/30/2023	Paid LDF @ 06/30/2022	Projected Paid LDF @ 06/30/2023	Method 1 Low Expected Paid Emergence Loss & ALAE @ 06/30/2023	Method 1 High Expected Paid Emergence Loss & ALAE @ 06/30/2023	Actual Paid Emergence Loss & ALAE @ 06/30/2023	Actual - Expected Method 1 Low Paid	Actual - Expected Method 1 High Paid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993	26,831,779	27,036,310	25,854,334	25,886,951	1.045	1.041	95,810	115,858	32,617	(63,193)	(83,241)
7/1/93 - 6/30/94	3,136,600	3,150,500	3,004,777	3,011,884	1.046	1.045	2,573	2,845	7,107	4,534	4,262
7/1/94 - 6/30/95	2,754,000	2,766,900	2,631,008	2,639,191	1.049	1.046	7,223	7,980	8,182	960	202
7/1/95 - 6/30/96	2,207,600	2,218,900	2,101,136	2,102,910	1.053	1.049	7,901	8,740	1,775	(6,126)	(6,965)
7/1/96 - 6/30/97	2,945,700	2,961,900	2,791,250	3,081,132	1.058	1.053	12,261	13,547	289,882	277,621	276,335
7/1/97 - 6/30/98	2,166,700	2,179,600	2,044,176	2,044,594	1.063	1.058	8,953	9,896	418	(8,535)	(9,478)
7/1/98 - 6/30/99	2,915,500	2,933,800	2,741,092	2,766,141	1.067	1.063	9,447	10,439	25,049	15,601	14,610
7/1/99 - 6/30/00	3,407,600	3,430,400	3,190,982	3,237,995	1.071	1.067	12,774	14,119	47,013	34,239	32,895
7/1/00 - 6/30/01	3,772,800	3,800,500	3,509,103	3,612,807	1.079	1.071	23,721	26,213	103,704	79,982	77,490
7/1/01 - 6/30/02	3,383,300	3,411,500	3,116,019	3,192,007	1.090	1.079	30,754	33,999	75,988	45,234	41,990
7/1/02 - 6/30/03	3,617,900	3,651,600	3,297,694	3,304,553	1.102	1.090	34,256	37,862	6,860	(27,396)	(31,002)
7/1/03 - 6/30/04	3,533,600	3,569,800	3,190,233	3,203,120	1.113	1.102	30,462	33,674	12,887	(17,576)	(20,787)
7/1/04 - 6/30/05	5,156,700	5,214,100	4,610,537	4,632,749	1.125	1.113	44,787	49,494	22,212	(22,575)	(27,281)
7/1/05 - 6/30/06	4,053,800	4,104,300	3,573,406	3,587,839	1.142	1.125	50,767	56,104	14,433	(36,334)	(41,671)
7/1/06 - 6/30/07	5,694,600	5,772,900	4,951,025	4,968,863	1.158	1.142	68,349	75,546	17,837	(50,511)	(57,709)
7/1/07 - 6/30/08	4,841,600	4,914,500	4,148,470	4,163,345	1.176	1.158	60,502	66,865	14,875	(45,626)	(51,990)
7/1/08 - 6/30/09	5,290,700	5,376,200	4,478,132	4,529,830	1.191	1.176	54,765	60,527	51,699	(3,066)	(8,829)
7/1/09 - 6/30/10	5,298,700	5,390,900	4,422,060	4,434,621	1.209	1.191	62,302	68,855	12,561	(49,742)	(56,294)
7/1/10 - 6/30/11	6,348,700	6,466,600	5,229,248	5,280,920	1.225	1.209	68,560	75,781	51,672	(16,888)	(24,109)
7/1/11 - 6/30/12	5,914,300	6,030,900	4,806,758	4,832,705	1.243	1.225	64,055	70,799	25,947	(38,109)	(44,852)
7/1/12 - 6/30/13	5,098,400	5,204,900	4,086,451	4,134,401	1.261	1.243	56,643	62,604	47,950	(8,693)	(14,655)
7/1/13 - 6/30/14	5,820,100	5,949,600	4,589,971	4,627,346	1.282	1.261	74,151	81,957	37,375	(36,776)	(44,582)
7/1/14 - 6/30/15	5,904,400	6,102,300	4,590,130	4,653,576	1.308	1.282	85,831	98,756	63,446	(22,386)	(35,310)
7/1/15 - 6/30/16	6,674,700	6,914,700	5,080,194	5,161,833	1.337	1.308	106,966	123,066	81,640	(25,326)	(41,426)
7/1/16 - 6/30/17	6,166,700	6,406,700	4,572,870	4,676,680	1.375	1.337	118,562	136,415	103,809	(14,752)	(32,605)
7/1/17 - 6/30/18	6,733,800	7,021,400	4,823,686	4,939,962	1.426	1.375	166,466	191,530	116,276	(50,190)	(75,254)
7/1/18 - 6/30/19	4,993,500	5,233,400	3,399,630	3,512,363	1.504	1.426	173,694	199,837	112,733	(60,961)	(87,104)
7/1/19 - 6/30/20	5,502,000	6,087,000	2,869,708	3,108,756	1.647	1.504	386,591	472,506	239,048	(147,543)	(233,459)
7/1/20 - 6/30/21	5,788,000	6,539,000	2,405,715	2,877,374	2.006	1.647	732,144	894,708	471,659	(260,485)	(423,049)
7/1/21 - 6/30/22	6,593,000	7,725,000	1,499,402	3,052,180	4.445	2.006	1,798,287	2,197,938	1,552,779	(245,508)	(645,159)
Total	162,546,779	167,566,110	131,609,197	135,258,628			4,449,557	5,298,458	3,649,431	(800,126)	(1,649,027)

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Selected by Deloitte Consulting LLP @ 06/30/2022
(3)	Selected by Deloitte Consulting LLP @ 06/30/2022
(4)	Provided by Entity
(5)	Provided by Entity
(6)	Selected by Deloitte Consulting LLP @ 06/30/2022
(7)	Interpolated From (6)
(8)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((2) - (4))
(9)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((3) - (4))
(10)	= (5) - (4)
(11)	= (10) - (8)
(12)	= (10) - (9)

Commonwealth of Massachusetts
All Other
All Other - Medical

Section VII
Exhibit II
Sheet 5

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Ultimate Loss & ALAE Runoff

Accident Year	Ultimate Loss & ALAE @ 06/30/2022 Low	Ultimate Loss & ALAE @ 06/30/2022 High	Ultimate Loss & ALAE @ 06/30/2023 Low	Ultimate Loss & ALAE @ 06/30/2023 High	Deloitte Change Low	Deloitte Change High	Paid Loss & ALAE @ 06/30/2023	Reported Loss & ALAE @ 06/30/2023
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	26,831,779	27,036,310	26,594,950	26,752,284	(236,829)	(284,026)	25,886,951	25,886,951
7/1/93 - 6/30/94	3,136,600	3,150,500	3,142,800	3,156,600	6,200	6,100	3,011,884	3,011,884
7/1/94 - 6/30/95	2,754,000	2,766,900	2,760,100	2,772,800	6,100	5,900	2,639,191	2,639,191
7/1/95 - 6/30/96	2,207,600	2,218,900	2,208,000	2,219,100	400	200	2,102,910	2,102,910
7/1/96 - 6/30/97	2,945,700	2,961,900	3,244,400	3,261,500	298,700	299,600	3,081,132	3,081,132
7/1/97 - 6/30/98	2,166,700	2,179,600	2,163,600	2,176,100	(3,100)	(3,500)	2,044,594	2,044,594
7/1/98 - 6/30/99	2,915,500	2,933,800	2,937,500	2,955,600	22,000	21,800	2,766,141	2,766,141
7/1/99 - 6/30/00	3,407,600	3,430,400	3,454,500	3,477,300	46,900	46,900	3,237,995	3,237,995
7/1/00 - 6/30/01	3,772,800	3,800,500	3,876,900	3,904,700	104,100	104,200	3,612,807	3,612,807
7/1/01 - 6/30/02	3,383,300	3,411,500	3,461,100	3,489,400	77,800	77,900	3,192,007	3,192,007
7/1/02 - 6/30/03	3,617,900	3,651,600	3,625,600	3,659,400	7,700	7,800	3,304,553	3,304,553
7/1/03 - 6/30/04	3,533,600	3,569,800	3,548,100	3,584,400	14,500	14,600	3,203,120	3,203,120
7/1/04 - 6/30/05	5,156,700	5,214,100	5,179,400	5,237,000	22,700	22,900	4,632,749	4,632,749
7/1/05 - 6/30/06	4,053,800	4,104,300	4,047,700	4,096,100	(6,100)	(8,200)	3,587,839	3,587,839
7/1/06 - 6/30/07	5,694,600	5,772,900	5,679,500	5,754,300	(15,100)	(18,600)	4,968,863	4,968,863
7/1/07 - 6/30/08	4,841,600	4,914,500	4,817,000	4,885,800	(24,600)	(28,700)	4,163,345	4,163,345
7/1/08 - 6/30/09	5,290,700	5,376,200	5,310,300	5,392,400	19,600	16,200	4,529,830	4,529,830
7/1/09 - 6/30/10	5,298,700	5,390,900	5,259,900	5,346,800	(38,800)	(44,100)	4,434,621	4,434,621
7/1/10 - 6/30/11	6,348,700	6,466,600	6,345,100	6,457,100	(3,600)	(9,500)	5,280,920	5,280,920
7/1/11 - 6/30/12	5,914,300	6,030,900	5,880,500	5,990,800	(33,800)	(40,100)	4,832,705	4,832,705
7/1/12 - 6/30/13	5,098,400	5,204,900	5,093,000	5,193,900	(5,400)	(11,000)	4,134,401	4,134,401
7/1/13 - 6/30/14	5,820,100	5,949,600	5,778,300	5,899,400	(41,800)	(50,200)	4,627,346	4,627,346
7/1/14 - 6/30/15	5,904,400	6,102,300	5,902,700	6,034,200	(1,700)	(68,100)	4,653,576	4,653,576
7/1/15 - 6/30/16	6,674,700	6,914,700	6,638,800	6,861,200	(35,900)	(53,500)	5,161,833	5,161,833
7/1/16 - 6/30/17	6,166,700	6,406,700	6,142,600	6,363,300	(24,100)	(43,400)	4,676,680	4,676,680
7/1/17 - 6/30/18	6,733,800	7,021,400	6,659,100	6,917,900	(74,700)	(103,500)	4,939,962	4,939,962
7/1/18 - 6/30/19	4,993,500	5,233,400	4,899,600	5,108,500	(93,900)	(124,900)	3,512,363	3,512,363
7/1/19 - 6/30/20	5,502,000	6,087,000	5,121,900	5,425,000	(380,100)	(662,000)	3,108,756	3,108,756
7/1/20 - 6/30/21	5,788,000	6,539,000	5,511,000	6,096,000	(277,000)	(443,000)	2,877,374	2,877,374
7/1/21 - 6/30/22	6,593,000	7,725,000	6,243,000	6,953,000	(350,000)	(772,000)	3,052,180	3,052,180
Total	162,546,779	167,566,110	161,526,950	165,421,884	(1,019,829)	(2,144,226)	135,258,628	135,258,628

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(3) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(4) From Section VII, Exhibit II, Sheet 6, Column (11)
(5) From Section VII, Exhibit II, Sheet 6, Column (12)
(6) = (4) - (2)
(7) = (5) - (3)
(8) Provided by Entity
(9) Provided by Entity

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Selection of Ultimate Loss & ALAE

Accident Year	Payroll (00)'s	Unlimited Paid Loss & ALAE @ 06/30/2023	Unlimited Reported Loss & ALAE @ 06/30/2023	Ultimate Loss & ALAE Indications: Paid LDM	Ultimate Loss & ALAE Indications: Expected Loss & ALAE	Ultimate Loss & ALAE Indications: Paid B-F	Ultimate Loss & ALAE Indications: Frequency Severity	Prior Selected Ultimate Loss & ALAE: Low	Prior Selected Ultimate Loss & ALAE: High	Selected Ultimate Loss & ALAE: Low	Selected Ultimate Loss & ALAE: High	Ultimate Loss & ALAE Rates: Low	Ultimate Loss & ALAE Rates: High	Ultimate Loss & ALAE Severity: Low	Ultimate Loss & ALAE Severity: High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Prior to 7/1/1993		25,886,951	25,886,951	26,987,036	0		0	26,831,779	27,036,310	26,594,950	26,752,284				
7/1/93 - 6/30/94		3,011,884	3,011,884	3,149,673	0	3,011,884	0	3,136,600	3,150,500	3,142,800	3,156,600				
7/1/94 - 6/30/95		2,639,191	2,639,191	2,766,457	0	2,639,191	0	2,754,000	2,766,900	2,760,100	2,772,800				
7/1/95 - 6/30/96		2,102,910	2,102,910	2,213,568	0	2,102,910	0	2,207,600	2,218,900	2,208,000	2,219,100				
7/1/96 - 6/30/97		3,081,132	3,081,132	3,252,948	0	3,081,132	0	2,945,700	2,961,900	3,244,400	3,261,500				
7/1/97 - 6/30/98		2,044,594	2,044,594	2,169,857	0	2,044,594	0	2,166,700	2,179,600	2,163,600	2,176,100				
7/1/98 - 6/30/99	19,448,360	2,766,141	2,766,141	2,946,568	2,446,821	2,915,967	0	2,915,500	2,933,800	2,937,500	2,955,600	0.15	0.15		
7/1/99 - 6/30/00	20,693,510	3,237,995	3,237,995	3,465,895	2,654,966	3,412,573	0	3,407,600	3,430,400	3,454,500	3,477,300	0.17	0.17		
7/1/00 - 6/30/01	20,558,590	3,612,807	3,612,807	3,890,830	2,717,127	3,806,962	0	3,772,800	3,800,500	3,876,900	3,904,700	0.19	0.19		
7/1/01 - 6/30/02	21,523,690	3,192,007	3,192,007	3,475,242	2,921,929	3,430,147	0	3,383,300	3,411,500	3,461,100	3,489,400	0.16	0.16		
7/1/02 - 6/30/03	21,202,840	3,304,553	3,304,553	3,642,472	2,994,458	3,582,355	0	3,617,900	3,651,600	3,625,600	3,659,400	0.17	0.17		
7/1/03 - 6/30/04	21,185,340	3,203,120	3,203,120	3,566,231	3,114,828	3,520,270	0	3,533,600	3,569,800	3,548,100	3,584,400	0.17	0.17		
7/1/04 - 6/30/05	21,640,500	4,632,749	4,632,749	5,208,218	3,250,578	4,991,914	0	5,156,700	5,214,100	5,179,400	5,237,000	0.24	0.24		
7/1/05 - 6/30/06	23,243,030	3,587,839	3,587,839	4,071,935	3,558,588	4,010,905	0	4,053,800	4,104,300	4,047,700	4,096,100	0.17	0.18		
7/1/06 - 6/30/07	24,554,310	4,968,863	4,968,863	5,716,874	3,814,097	5,467,909	0	5,694,600	5,772,900	5,679,500	5,754,300	0.23	0.23		
7/1/07 - 6/30/08	26,150,540	4,163,345	4,163,345	4,851,370	4,121,201	4,747,817	0	4,841,600	4,914,500	4,817,000	4,885,800	0.18	0.19		
7/1/08 - 6/30/09	25,704,510	4,529,830	4,529,830	5,351,354	4,158,636	5,168,251	0	5,290,700	5,376,200	5,310,300	5,392,400	0.21	0.21		
7/1/09 - 6/30/10	26,029,100	4,434,621	4,434,621	5,303,353	4,340,571	5,145,641	0	5,298,700	5,390,900	5,259,900	5,346,800	0.20	0.21		
7/1/10 - 6/30/11	27,458,630	5,280,920	5,280,920	6,401,125	4,663,788	6,097,089	0	6,348,700	6,466,600	6,345,100	6,457,100	0.23	0.24		
7/1/11 - 6/30/12	27,995,990	4,832,705	4,832,705	5,935,698	4,824,306	5,729,175	0	5,914,300	6,030,900	5,880,500	5,990,800	0.21	0.21		
7/1/12 - 6/30/13	29,200,210	4,134,401	4,134,401	5,143,458	5,105,098	5,135,932	5,191,178	5,098,400	5,204,900	5,093,000	5,193,900	0.17	0.18	9,573	9,763
7/1/13 - 6/30/14	30,801,820	4,627,346	4,627,346	5,838,871	5,463,533	5,760,991	5,465,569	5,820,100	5,949,600	5,778,300	5,899,400	0.19	0.19	10,780	11,006
7/1/14 - 6/30/15	32,591,780	4,653,576	4,653,576	5,968,424	5,865,220	5,945,688	6,404,148	5,904,400	6,102,300	5,902,700	6,034,200	0.18	0.19	9,821	10,040
7/1/15 - 6/30/16	32,518,420	5,161,833	5,161,833	6,750,021	5,937,242	6,558,785	6,625,523	6,674,700	6,914,700	6,638,800	6,861,200	0.20	0.21	11,158	11,531
7/1/16 - 6/30/17	31,362,360	4,676,680	4,676,680	6,252,983	5,809,558	6,141,201	6,353,487	6,166,700	6,406,700	6,142,600	6,363,300	0.20	0.20	11,250	11,654
7/1/17 - 6/30/18	31,972,210	4,939,962	4,939,962	6,788,534	6,008,777	6,576,200	6,554,273	6,733,800	7,021,400	6,659,100	6,917,900	0.21	0.22	12,355	12,835
7/1/18 - 6/30/19	33,600,390	3,512,363	3,512,363	5,004,035	6,406,736	5,422,171	5,413,295	4,993,500	5,233,400	4,899,600	5,108,500	0.15	0.15	11,501	11,992
7/1/19 - 6/30/20	35,047,860	3,108,756	3,108,756	4,666,913	6,780,053	5,372,434	5,781,003	5,502,000	6,087,000	5,121,900	5,425,000	0.15	0.15	11,765	12,461
7/1/20 - 6/30/21	35,216,283	2,877,374	2,877,374	4,730,751	6,911,848	5,585,244	6,022,405	5,788,000	6,539,000	5,511,000	6,096,000	0.16	0.17	12,698	14,046
7/1/21 - 6/30/22	37,107,388	3,052,180	3,052,180	6,105,646	7,389,075	6,747,496	6,448,606	6,593,000	7,725,000	6,243,000	6,953,000	0.17	0.19	14,039	15,635
7/1/22 - 6/30/23	38,502,230	1,413,829	1,413,829	6,206,297	7,778,479	7,420,327	6,615,118			6,095,000	7,135,000	0.16	0.19	13,962	16,345
Total	695,309,891	136,672,457	136,672,457	167,822,637	119,037,513	141,573,153	66,874,606	162,546,779	167,566,110	167,621,950	172,556,884				

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Provided by Entity
(4) Provided by Entity
(5) From Section VII, Exhibit II, Sheet 10, Column (7)
(6) From Section VII, Exhibit II, Sheet 7, Column (4)
(7) From Section VII, Exhibit II, Sheet 7, Column (10)
(8) From Section VII, Exhibit II, Sheet 9, Column (12)
(9) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(10) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(11) Selected by Deloitte Consulting LLP
(12) Selected by Deloitte Consulting LLP
(13) = (11) / (2)
(14) = (12) / (2)
(15) (11) Divided by Ultimate Claims From Section VII, Exhibit II, Sheet 13, Column (7)
(16) (12) Divided by Ultimate Claims From Section VII, Exhibit II, Sheet 13, Column (7)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Bornhuetter-Ferguson Method

Accident Year	Payroll (00)'s	Initial Expected Loss & ALAE Rates	Initial Expected Loss & ALAE	Expected % of Paid Loss & ALAE	Expected Paid Loss & ALAE	Unlimited Actual Paid Loss & ALAE	Expected % of Unpaid Loss & ALAE	Expected Unpaid Loss & ALAE	Unlimited Indicated Ultimate Loss & ALAE	Unlimited Indicated Ultimate Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
7/1/93 - 6/30/94		0.11	0	95.6%	0	3,011,884	4.4%	0	3,011,884	
7/1/94 - 6/30/95		0.12	0	95.4%	0	2,639,191	4.6%	0	2,639,191	
7/1/95 - 6/30/96		0.12	0	95.0%	0	2,102,910	5.0%	0	2,102,910	
7/1/96 - 6/30/97		0.12	0	94.7%	0	3,081,132	5.3%	0	3,081,132	
7/1/97 - 6/30/98		0.12	0	94.2%	0	2,044,594	5.8%	0	2,044,594	
7/1/98 - 6/30/99	19,448,360	0.13	2,446,821	93.9%	2,296,994	2,766,141	6.1%	149,826	2,915,967	0.15
7/1/99 - 6/30/00	20,693,510	0.13	2,654,966	93.4%	2,480,388	3,237,995	6.6%	174,578	3,412,573	0.16
7/1/00 - 6/30/01	20,558,590	0.13	2,717,127	92.9%	2,522,972	3,612,807	7.1%	194,155	3,806,962	0.19
7/1/01 - 6/30/02	21,523,690	0.14	2,921,929	91.8%	2,683,789	3,192,007	8.2%	238,140	3,430,147	0.16
7/1/02 - 6/30/03	21,202,840	0.14	2,994,458	90.7%	2,716,656	3,304,553	9.3%	277,801	3,582,355	0.17
7/1/03 - 6/30/04	21,185,340	0.15	3,114,828	89.8%	2,797,679	3,203,120	10.2%	317,150	3,520,270	0.17
7/1/04 - 6/30/05	21,640,500	0.15	3,250,578	89.0%	2,891,413	4,632,749	11.0%	359,165	4,991,914	0.23
7/1/05 - 6/30/06	23,243,030	0.15	3,558,588	88.1%	3,135,522	3,587,839	11.9%	423,066	4,010,905	0.17
7/1/06 - 6/30/07	24,554,310	0.16	3,814,097	86.9%	3,315,051	4,968,863	13.1%	499,046	5,467,909	0.22
7/1/07 - 6/30/08	26,150,540	0.16	4,121,201	85.8%	3,536,729	4,163,345	14.2%	584,472	4,747,817	0.18
7/1/08 - 6/30/09	25,704,510	0.16	4,158,636	84.6%	3,520,215	4,529,830	15.4%	638,421	5,168,251	0.20
7/1/09 - 6/30/10	26,029,100	0.17	4,340,571	83.6%	3,629,551	4,434,621	16.4%	711,020	5,145,641	0.20
7/1/10 - 6/30/11	27,458,630	0.17	4,663,788	82.5%	3,847,620	5,280,920	17.5%	816,169	6,097,089	0.22
7/1/11 - 6/30/12	27,995,990	0.17	4,824,306	81.4%	3,927,836	4,832,705	18.6%	896,471	5,729,175	0.20
7/1/12 - 6/30/13	29,200,210	0.17	5,105,098	80.4%	4,103,567	4,134,401	19.6%	1,001,531	5,135,932	0.18
7/1/13 - 6/30/14	30,801,820	0.18	5,463,533	79.3%	4,329,888	4,627,346	20.7%	1,133,645	5,760,991	0.19
7/1/14 - 6/30/15	32,591,780	0.18	5,865,220	78.0%	4,573,108	4,653,576	22.0%	1,292,112	5,945,688	0.18
7/1/15 - 6/30/16	32,518,420	0.18	5,937,242	76.5%	4,540,290	5,161,833	23.5%	1,396,951	6,558,785	0.20
7/1/16 - 6/30/17	31,362,360	0.19	5,809,558	74.8%	4,345,037	4,676,680	25.2%	1,464,521	6,141,201	0.20
7/1/17 - 6/30/18	31,972,210	0.19	6,008,777	72.8%	4,372,539	4,939,962	27.2%	1,636,238	6,576,200	0.21
7/1/18 - 6/30/19	33,600,390	0.19	6,406,736	70.2%	4,496,928	3,512,363	29.8%	1,909,808	5,422,171	0.16
7/1/19 - 6/30/20	35,047,860	0.19	6,780,053	66.6%	4,516,375	3,108,756	33.4%	2,263,678	5,372,434	0.15
7/1/20 - 6/30/21	35,216,283	0.20	6,911,848	60.8%	4,203,978	2,877,374	39.2%	2,707,870	5,585,244	0.16
7/1/21 - 6/30/22	37,107,388	0.20	7,389,075	50.0%	3,693,760	3,052,180	50.0%	3,695,316	6,747,496	0.18
7/1/22 - 6/30/23	38,502,230	0.20	7,778,479	22.8%	1,771,981	1,413,829	77.2%	6,006,497	7,420,327	0.19
Total	695,309,891		119,037,513		88,249,867	110,785,506		30,787,646	141,573,153	

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	From Section VII, Exhibit II, Sheet 8, Column (13)
(4)	= (2) x (3)
(5)	= 1 / Section VII, Exhibit II, Sheet 10, Column (6)
(6)	= (4) x (5)
(7)	Provided by Entity
(8)	= 1 - (5)
(9)	= (4) x (8)
(10)	= (7) + (9)
(11)	= (10) / (2)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Calculation of Initial Expected Loss & ALAE Rates

Accident Year	Payroll (00)'s	Payroll Trend	Loss Development Unlimited Indicated Ultimate Loss & ALAE Paid	Loss Development Unlimited Indicated Ultimate Loss & ALAE Reported	Selected Initial Ultimate Loss & ALAE	Loss & ALAE Trend Factor	Benefit Level Adjustment Factors	Trended Ultimate	On-level Loss & ALAE Rates	Detrended Loss & ALAE Rates	Prior Expected Loss & ALAE Rates	Initial Expected Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
7/1/93 - 6/30/94	0	2.357	3,149,673	3,149,673	26,673,617	3.584	1.180	112,835,912		0.11	0.12	0.11
7/1/94 - 6/30/95	0	2.288	2,766,457	2,766,457	3,149,700	3.430	1.167	12,609,739		0.12	0.12	0.12
7/1/95 - 6/30/96	0	2.221	2,213,568	2,213,568	2,766,450	3.282	1.151	10,452,029		0.12	0.13	0.12
7/1/96 - 6/30/97	0	2.157	3,252,948	3,252,948	2,213,550	3.141	1.140	7,925,698		0.12	0.13	0.12
7/1/97 - 6/30/98	0	2.094	2,169,857	2,169,857	3,252,950	3.005	1.135	11,096,262		0.12	0.13	0.12
7/1/98 - 6/30/99	19,448,360	2.033	2,946,568	2,946,568	2,169,850	2.876	1.135	7,082,927	0.18	0.13	0.13	0.13
7/1/99 - 6/30/00	20,693,510	1.974	3,465,895	3,465,895	2,946,550	2.752	1.129	9,157,015	0.22	0.13	0.14	0.13
7/1/00 - 6/30/01	20,558,590	1.916	3,890,830	3,890,830	3,465,900	2.634	1.112	10,151,426	0.26	0.13	0.14	0.13
7/1/01 - 6/30/02	21,523,690	1.860	3,475,242	3,475,242	3,890,800	2.520	1.098	10,771,507	0.27	0.14	0.14	0.14
7/1/02 - 6/30/03	21,202,840	1.806	3,642,472	3,642,472	3,475,250	2.412	1.071	8,978,735	0.23	0.14	0.15	0.14
7/1/03 - 6/30/04	21,185,340	1.754	3,566,231	3,566,231	3,642,500	2.308	1.044	8,776,410	0.24	0.15	0.16	0.15
7/1/04 - 6/30/05	21,640,500	1.702	5,208,218	5,208,218	3,566,250	2.208	1.037	8,165,774	0.22	0.15	0.16	0.15
7/1/05 - 6/30/06	23,243,030	1.653	4,071,935	4,071,935	5,208,200	2.113	1.032	11,359,110	0.30	0.15	0.16	0.15
7/1/06 - 6/30/07	24,554,310	1.605	5,716,874	5,716,874	4,071,900	2.022	1.032	8,498,405	0.22	0.16	0.16	0.16
7/1/07 - 6/30/08	26,150,540	1.558	4,851,370	4,851,370	5,716,900	1.935	1.032	11,417,858	0.28	0.16	0.17	0.16
7/1/08 - 6/30/09	25,704,510	1.513	5,351,354	5,351,354	4,851,400	1.852	1.020	9,163,374	0.24	0.16	0.17	0.16
7/1/09 - 6/30/10	26,029,100	1.469	5,303,353	5,303,353	5,351,350	1.772	1.004	9,520,687	0.25	0.17	0.18	0.17
7/1/10 - 6/30/11	27,458,630	1.426	6,401,125	6,401,125	5,303,350	1.696	1.000	8,993,853	0.23	0.17	0.18	0.17
7/1/11 - 6/30/12	27,995,990	1.384	5,935,698	5,935,698	6,401,100	1.623	1.000	10,388,045	0.27	0.17	0.18	0.17
7/1/12 - 6/30/13	29,200,210	1.344	5,143,458	5,143,458	5,935,650	1.553	1.000	9,217,883	0.23	0.17	0.19	0.17
7/1/13 - 6/30/14	30,801,820	1.305	5,838,871	5,838,871	5,143,450	1.486	1.000	7,643,656	0.19	0.18	0.19	0.18
7/1/14 - 6/30/15	32,591,780	1.267	5,968,424	5,968,424	5,838,850	1.422	1.000	8,303,432	0.20	0.18	0.19	0.18
7/1/15 - 6/30/16	32,518,420	1.230	6,750,021	6,750,021	5,968,450	1.361	1.000	8,122,236	0.20	0.18	0.19	0.18
7/1/16 - 6/30/17	31,362,360	1.194	6,252,983	6,252,983	6,750,000	1.302	1.000	8,790,256	0.23	0.19	0.20	0.19
7/1/17 - 6/30/18	31,972,210	1.159	6,788,534	6,788,534	6,252,950	1.246	1.000	7,792,313	0.21	0.19	0.20	0.19
7/1/18 - 6/30/19	33,600,390	1.126	5,004,035	5,004,035	6,788,500	1.193	1.000	8,095,413	0.21	0.19	0.20	0.19
7/1/19 - 6/30/20	35,047,860	1.093	4,666,913	4,666,913	5,004,050	1.141	1.000	5,710,452	0.15	0.19	0.20	0.19
7/1/20 - 6/30/21	35,216,283	1.061	4,730,751	4,730,751	4,730,751	1.092	1.000	5,166,098	***0.14***	0.20	0.21	0.20
7/1/21 - 6/30/22	37,107,388	1.030	6,105,646	6,105,646	6,105,646	1.045	1.000	6,380,400	***0.17***	0.20	0.21	0.20
7/1/22 - 6/30/23	38,502,230	1.000	6,206,297	6,206,297	6,206,297	1.000	1.000	6,206,297	***0.16***	0.20		0.20
			140,835,601	140,835,601				Last 3 Wtd Avg	0.19			
								Last 4 Wtd Avg	0.20			
								Last 5 Wtd Avg	0.20			
								All Per Wtd Avg	0.23			

(Note: numbers in bold and italics and with borders are excluded from the calculated averages)

Selected (14) 0.20

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Selected by Deloitte Consulting LLP
(4) From Section VII, Exhibit II, Sheet 10, Column (7)
(5) From Section VII, Exhibit II, Sheet 0, Column (7)
(6) Selected by Deloitte Consulting LLP
(7) Selected by Deloitte Consulting LLP
(8) Based on industry sources
(9) = (6) x (7) x (8)
(10) = (9) / [(2) x (3)]
(11) = (14) / (7) / (8) * (3)
(12) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss & ALAE Estimate Analysis
(13) Selected for by Deloitte Consulting LLP Based on (14)
(14) Selected by Deloitte Consulting LLP

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Frequency Severity Method

Accident Year	Payroll (00)'s	Ultimate Reported Severity	Include For Fit	Exponential Fitted Reported Severity	Initial Selected Ultimate Severity	Selected Ultimate Claim Counts	Benefit Level Adjustment Factor	Selected Severity Trend	Trended Severity	On-Level Selected Ultimate Severity	Indicated Ultimate Loss & ALAE	Indicated Ultimate Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Prior to 7/1/1993			Exclude	7,757		0					0	
7/1/93 - 6/30/94			Exclude	7,871		0	1.180	3.584	0,000		0	
7/1/94 - 6/30/95			Exclude	7,986		0	1.167	3.430	0,000		0	
7/1/95 - 6/30/96			Exclude	8,103		0	1.151	3.282	0,000		0	
7/1/96 - 6/30/97			Exclude	8,222		0	1.140	3.141	0,000		0	
7/1/97 - 6/30/98			Exclude	8,342		0	1.135	3.005	0,000		0	
7/1/98 - 6/30/99	19,448,360		Exclude	8,464		0	1.135	2.876	0,000		0	0.00
7/1/99 - 6/30/00	20,693,510		Exclude	8,588		0	1.129	2.752	0,000		0	0.00
7/1/00 - 6/30/01	20,558,590		Exclude	8,714		0	1.112	2.634	0,000		0	0.00
7/1/01 - 6/30/02	21,523,690		Exclude	8,841		0	1.098	2.520	0,000		0	0.00
7/1/02 - 6/30/03	21,202,840		Exclude	8,971		0	1.071	2.412	0,000		0	0.00
7/1/03 - 6/30/04	21,185,340		Exclude	9,102		0	1.044	2.308	0,000		0	0.00
7/1/04 - 6/30/05	21,640,500		Exclude	9,236		0	1.037	2.208	0,000		0	0.00
7/1/05 - 6/30/06	23,243,030		Exclude	9,371		0	1.032	2.113	0,000		0	0.00
7/1/06 - 6/30/07	24,554,310		Exclude	9,508		0	1.032	2.022	0,000		0	0.00
7/1/07 - 6/30/08	26,150,540		Exclude	9,647		0	1.032	1.935	0,000		0	0.00
7/1/08 - 6/30/09	25,704,510		Exclude	9,788		0	1.020	1.852	0,000		0	0.00
7/1/09 - 6/30/10	26,029,100		Exclude	9,932		0	1.004	1.772	0,000		0	0.00
7/1/10 - 6/30/11	27,458,630		Exclude	10,077		0	1.000	1.696	0,000		0	0.00
7/1/11 - 6/30/12	27,995,990		Exclude	10,225		0	1.000	1.623	0,000		0	0.00
7/1/12 - 6/30/13	29,200,210	9,668	Include	10,374	11,157	532	1.000	1.553	17,327	15,154	5,191,178	0.18
7/1/13 - 6/30/14	30,801,820	10,893	Include	10,526	9,596	536	1.000	1.486	14,261	15,154	5,465,569	0.18
7/1/14 - 6/30/15	32,591,780	9,931	Include	10,680	9,715	601	1.000	1.422	13,816	15,154	6,404,148	0.20
7/1/15 - 6/30/16	32,518,420	11,345	Include	10,837	10,031	595	1.000	1.361	13,651	15,154	6,625,523	0.20
7/1/16 - 6/30/17	31,362,360	11,452	Include	10,995	12,363	546	1.000	1.302	16,099	15,154	6,353,487	0.20
7/1/17 - 6/30/18	31,972,210	12,595	Include	11,156	11,601	539	1.000	1.246	14,457	15,154	6,554,273	0.20
7/1/18 - 6/30/19	33,600,390	11,747	Include	11,320	15,935	426	1.000	1.193	19,003	15,154	5,413,295	0.16
7/1/19 - 6/30/20	35,047,860	10,720	Include	11,486	11,494	435	1.000	1.141	13,117	15,154	5,781,003	0.16
7/1/20 - 6/30/21	35,216,283	10,900	Include	11,654	10,900	434	1.000	1.092	***11,904***	15,154	6,022,405	0.17
7/1/21 - 6/30/22	37,107,388	13,730	Exclude	11,824	13,730	445	1.000	1.045	***14,348***	15,154	6,448,606	0.17
7/1/22 - 6/30/23	38,502,230	14,217	Exclude	11,997	14,217	437	1.000	1.000	***14,217***	15,154	6,615,118	0.17
			Implied Trend	1.5%	3.5%			Last 5 Wtd Avg	15,154			
								Last 4 Wtd Avg	15,613			
								Last 3 Wtd Avg	15,423			
Total	695,309,891					5,526		Last 3 Avg	15,526		66,874,606	
								Selected	15,154			

Reported Exponential Regressio	
Constant	9.407
X Coefficient	(0.015)
R Squared	0.238

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Section VII, Exhibit II, Sheet 0, Column (7) / Section VII, Exhibit II, Sheet 13, Column (7) x 1
(4) Years included for purposes of fit
(5) Result of Exponential fit of Column (3) * Column (8)
(6) Selected by Deloitte Consulting LLP
(7) From Section VII, Exhibit II, Sheet 13, Column (7)
(8) Based on industry sources
(9) Selected by Deloitte Consulting LLP
(10) = (6) x (8) x (9)
(11) Selected by Deloitte Consulting, LLP
(12) Selected in column (11) x (7) / (8) / (9)
(13) = (12) / (3)

Commonwealth of Massachusetts
All Other
All Other - Medical

Section VII
Exhibit II
Sheet 10

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss & ALAE Development Method

Accident Year	Age of Losses @ 06/30/2023	Retention	Payroll (00)'s	Unlimited Paid Loss & ALAE @ 06/30/2023	Paid LDF	Indicated Ultimate Loss & ALAE	Unlimited Indicated Ultimate Loss & ALAE Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Prior to 7/1/1993	372.0	Unlimited		25,886,951	1.042	26,987,036	
7/1/93 - 6/30/94	360.0	Unlimited		3,011,884	1.046	3,149,673	
7/1/94 - 6/30/95	348.0	Unlimited		2,639,191	1.048	2,766,457	
7/1/95 - 6/30/96	336.0	Unlimited		2,102,910	1.053	2,213,568	
7/1/96 - 6/30/97	324.0	Unlimited		3,081,132	1.056	3,252,948	
7/1/97 - 6/30/98	312.0	Unlimited		2,044,594	1.061	2,169,857	
7/1/98 - 6/30/99	300.0	Unlimited	19,448,360	2,766,141	1.065	2,946,568	0.15
7/1/99 - 6/30/00	288.0	Unlimited	20,693,510	3,237,995	1.070	3,465,895	0.17
7/1/00 - 6/30/01	276.0	Unlimited	20,558,590	3,612,807	1.077	3,890,830	0.19
7/1/01 - 6/30/02	264.0	Unlimited	21,523,690	3,192,007	1.089	3,475,242	0.16
7/1/02 - 6/30/03	252.0	Unlimited	21,202,840	3,304,553	1.102	3,642,472	0.17
7/1/03 - 6/30/04	240.0	Unlimited	21,185,340	3,203,120	1.113	3,566,231	0.17
7/1/04 - 6/30/05	228.0	Unlimited	21,640,500	4,632,749	1.124	5,208,218	0.24
7/1/05 - 6/30/06	216.0	Unlimited	23,243,030	3,587,839	1.135	4,071,935	0.18
7/1/06 - 6/30/07	204.0	Unlimited	24,554,310	4,968,863	1.151	5,716,874	0.23
7/1/07 - 6/30/08	192.0	Unlimited	26,150,540	4,163,345	1.165	4,851,370	0.19
7/1/08 - 6/30/09	180.0	Unlimited	25,704,510	4,529,830	1.181	5,351,354	0.21
7/1/09 - 6/30/10	168.0	Unlimited	26,029,100	4,434,621	1.196	5,303,353	0.20
7/1/10 - 6/30/11	156.0	Unlimited	27,458,630	5,280,920	1.212	6,401,125	0.23
7/1/11 - 6/30/12	144.0	Unlimited	27,995,990	4,832,705	1.228	5,935,698	0.21
7/1/12 - 6/30/13	132.0	Unlimited	29,200,210	4,134,401	1.244	5,143,458	0.18
7/1/13 - 6/30/14	120.0	Unlimited	30,801,820	4,627,346	1.262	5,838,871	0.19
7/1/14 - 6/30/15	108.0	Unlimited	32,591,780	4,653,576	1.283	5,968,424	0.18
7/1/15 - 6/30/16	96.0	Unlimited	32,518,420	5,161,833	1.308	6,750,021	0.21
7/1/16 - 6/30/17	84.0	Unlimited	31,362,360	4,676,680	1.337	6,252,983	0.20
7/1/17 - 6/30/18	72.0	Unlimited	31,972,210	4,939,962	1.374	6,788,534	0.21
7/1/18 - 6/30/19	60.0	Unlimited	33,600,390	3,512,363	1.425	5,004,035	0.15
7/1/19 - 6/30/20	48.0	Unlimited	35,047,860	3,108,756	1.501	4,666,913	0.13
7/1/20 - 6/30/21	36.0	Unlimited	35,216,283	2,877,374	1.644	4,730,751	0.13
7/1/21 - 6/30/22	24.0	Unlimited	37,107,388	3,052,180	2.000	6,105,646	0.16
7/1/22 - 6/30/23	12.0	Unlimited	38,502,230	1,413,829	4.390	6,206,297	0.16
Total			695,309,891	136,672,457		167,822,637	

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1)
(3) Provided by Entity
(4) Provided by Entity
(5) Provided by Entity
(6) From Section VII, Exhibit II, Sheet 11
(7) = (5) x (6)
(8) = (7) / (4)

Commonwealth of Massachusetts
All Other
All Other - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss & ALAE

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Months of Development

Accident Year	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	348	360	372	As of 6/30/2023
Prior to 7/1/1993	58,140,507	19,427,597	20,517,932	21,210,433	21,783,057	22,082,960	22,402,631	22,629,623	22,837,680	23,031,736	23,214,851	23,468,565	23,667,331	23,867,060	24,120,815	24,299,322	24,447,514	24,629,559	24,827,030	24,929,738	25,125,351	25,287,535	25,410,555	25,504,811	25,587,388	25,651,007	25,699,778	25,756,634	25,818,052	25,854,334	25,886,951	25,886,951
7/1/93 - 6/30/94	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	2,822,448	2,841,619	2,860,084	2,873,772	2,889,005	2,899,219	2,917,678	2,933,138	2,948,104	2,961,671	2,977,331	2,989,372	3,004,777	3,011,884		3,011,884
7/1/94 - 6/30/95	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	2,289,441	2,313,135	2,411,441	2,433,317	2,455,206	2,481,185	2,502,499	2,528,643	2,552,973	2,576,240	2,598,884	2,621,831	2,631,008	2,639,191			2,639,191
7/1/95 - 6/30/96	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	2,023,635	2,041,150	2,054,604	2,061,274	2,065,138	2,075,120	2,079,457	2,083,738	2,087,949	2,092,196	2,096,493	2,099,823	2,101,136	2,102,910				2,102,910
7/1/96 - 6/30/97	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	2,350,446	2,367,170	2,457,338	2,600,717	2,743,594	2,748,674	2,758,408	2,763,942	2,770,747	2,776,127	2,779,548	2,784,738	2,791,250	3,081,132					3,081,132
7/1/97 - 6/30/98	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	1,842,103	1,916,231	1,958,225	1,973,618	1,982,211	2,008,680	2,017,092	2,022,334	2,027,263	2,034,029	2,042,927	2,043,651	2,044,176	2,044,594						2,044,594
7/1/98 - 6/30/99	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	2,353,171	2,390,481	2,459,300	2,478,265	2,492,756	2,537,768	2,555,809	2,577,311	2,599,965	2,644,097	2,699,583	2,724,124	2,741,092	2,766,141							2,766,141
7/1/99 - 6/30/00	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	2,644,619	2,679,121	2,756,324	2,789,711	2,832,209	2,886,177	2,911,378	2,946,240	2,986,348	3,065,697	3,110,802	3,145,613	3,190,982	3,237,995								3,237,995
7/1/00 - 6/30/01	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	2,581,034	2,640,810	2,693,375	2,744,014	2,818,670	2,885,691	3,038,230	3,113,599	3,172,843	3,255,234	3,330,557	3,419,997	3,509,103	3,612,807									3,612,807
7/1/01 - 6/30/02	456,844	1,259,496	1,683,493	1,908,166	2,029,871	2,101,432	2,140,880	2,212,890	2,279,178	2,337,107	2,491,961	2,572,185	2,649,898	2,711,358	2,784,343	2,855,835	2,935,282	2,978,596	3,046,748	3,079,966	3,116,019	3,192,007										3,192,007
7/1/02 - 6/30/03	314,443	1,423,035	2,006,147	2,291,763	2,403,958	2,513,521	2,608,269	2,678,105	2,752,202	2,844,031	2,865,777	2,953,576	3,023,914	3,113,783	3,159,546	3,202,292	3,230,794	3,252,756	3,284,608	3,297,694	3,304,553											3,304,553
7/1/03 - 6/30/04	598,148	1,733,246	2,216,316	2,434,141	2,548,142	2,669,710	2,729,591	2,840,027	2,905,967	2,933,401	2,965,521	2,991,185	3,016,597	3,078,167	3,105,870	3,161,370	3,169,942	3,182,973	3,190,233	3,203,120												3,203,120
7/1/04 - 6/30/05	744,557	2,314,627	3,030,458	3,409,706	3,640,720	3,806,314	3,993,880	4,101,306	4,220,479	4,293,649	4,338,122	4,383,056	4,414,535	4,459,727	4,510,598	4,551,658	4,588,447	4,610,537	4,632,749													4,632,749
7/1/05 - 6/30/06	971,841	2,207,952	2,611,952	2,837,745	3,016,501	3,153,780	3,240,647	3,313,274	3,360,968	3,387,687	3,418,778	3,442,396	3,488,057	3,520,707	3,542,816	3,556,131	3,573,406	3,587,839														3,587,839
7/1/06 - 6/30/07	1,118,370	3,111,007	3,990,645	4,226,540	4,465,130	4,612,091	4,747,438	4,793,987	4,836,943	4,881,851	4,901,649	4,914,126	4,929,188	4,937,177	4,944,384	4,951,025	4,968,863															4,968,863
7/1/07 - 6/30/08	1,399,818	2,842,788	3,291,021	3,540,051	3,665,019	3,830,079	3,878,824	3,924,469	3,957,205	3,979,957	4,015,071	4,037,973	4,104,670	4,123,603	4,148,470	4,163,345																4,163,345
7/1/08 - 6/30/09	1,326,874	2,783,994	3,440,192	3,757,225	3,939,642	4,047,800	4,149,820	4,184,146	4,336,321	4,364,127	4,405,571	4,420,031	4,441,312	4,478,132	4,529,830																	4,529,830
7/1/09 - 6/30/10	1,396,833	3,068,894	3,532,579	3,807,127	4,010,505	4,089,365	4,188,683	4,236,750	4,260,010	4,372,589	4,385,004	4,407,271	4,422,060	4,434,621																		4,434,621
7/1/10 - 6/30/11	1,591,468	3,339,318	3,941,378	4,325,237	4,572,824	4,750,085	4,910,632	5,001,392	5,074,163	5,115,821	5,162,338	5,229,248	5,280,920																			5,280,920
7/1/11 - 6/30/12	1,578,463	3,289,387	3,889,597	4,181,628	4,443,231	4,521,226	4,602,036	4,683,163	4,722,019	4,751,008	4,806,758	4,832,705																				4,832,705
7/1/12 - 6/30/13	1,392,133	2,774,818	3,290,925	3,527,035	3,680,623	3,791,763	3,897,889	3,981,817	4,029,798	4,086,451	4,134,401																					4,134,401
7/1/13 - 6/30/14	1,364,720	3,050,421	3,796,889	4,069,032	4,256,192	4,374,833	4,473,396	4,546,036	4,589,971	4,627,346																						4,627,346
7/1/14 - 6/30/15	1,692,222	3,155,920	3,751,659	4,243,229	4,380,532	4,507,313	4,552,917	4,590,130	4,653,576																							4,653,576
7/1/15 - 6/30/16	1,830,966	3,409,422	4,245,616	4,630,492	4,835,975	4,955,234	5,080,194	5,161,833																								5,161,833
7/1/16 - 6/30/17	1,627,876	3,376,865	4,077,498	4,325,852	4,464,117	4,572,870	4,676,680																									4,676,680
7/1/17 - 6/30/18	1,694,462	3,521,206	4,075,893	4,451,412	4,823,686	4,939,962																										4,939,962
7/1/18 - 6/30/19	1,448,120	2,671,118	3,153,098	3,399,630	3,512,363																											3,512,363
7/1/19 - 6/30/20	1,242,167	2,490,817	2,869,708	3,108,756																												3,108,756
7/1/20 - 6/30/21	1,102,528	2,405,715	2,877,374																													2,877,374
7/1/21 - 6/30/22	1,499,402	3,052,180																														3,052,180
7/1/22 - 6/30/23	1,413,829																															1,413,829
																																136,672,457

Age-to-Age Development Factors

Accident Year	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993	***0.334***	***1.056***	***1.034***	***1.027***	***1.014***	***1.014***	***1.010***	***1.009***	***1.008***	***1.008***	***1.011***	***1.008***	***1.008***	***1.011***	***1.007***	***1.006***	***1.007***	***1.008***	***1.004***	***1.008***	***1.006***	***1.005***	***1.004***	***1.003***	***1.002***	***1.002***	***1.002***	***1.002***	***1.001***	***1.001***	
7/1/93 - 6/30/94	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	1.006	1.007	1.006	1.005	1.005	1.004	1.006	1.005	1.005	1.005	1.005	1.004	1.005	1.002		
7/1/94 - 6/30/95	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	1.011	1.010	1.042	1.009	1.009	1.011	1.009	1.010	1.010	1.009	1.009	1.009	1.004	1.003			
7/1/95 - 6/30/96	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	1.017	1.009	1.007	1.003	1.002	1.005	1.002	1.002	1.002	1.002	1.002	1.002	1.001	1.001				
7/1/96 - 6/30/97	2.402	1.407	1.117	1.048	1.059	1.022	1.027	1.023	1.018	1.024	1.006	1.010	1.005	1.007	1.038	1.058	1.055	1.002	1.004	1.002	1.002	1.002	1.001	1.002	1.002	***1.104***					
7/1/97 - 6/30/98	2.982	1.258	1.101	1.094	1.051	1.055	1.048	1.018	1.013	1.015	1.013	1.011	1.040	1.022	1.008	1.004	1.013	1.004	1.003	1.002	1.003	1.004	1.000	1.000	1.000						
7/1/98 - 6/30/99	2.483	1.209	1.130	1.068	1.062	1.036	1.069	1.034	1.025	1.035	1.039	1.016	1.029	1.008	1.006	1.018	1.007	1.008	1.009	1.017	1.021	1.009	1.006	1.009							
7/1/99 - 6/30/00	2.049	1.215	1.114	1.099	1.079	1.051	1.055	1.024	1.020	1.010	1.013	1.029	1.012	1.015	1.019	1.009	1.012	1.014	1.027	1.015	1.011	1.014	1.015								
7/1/00 - 6/30/01	2.439	1.230	1.178	1.087	1.060	1.030	1.024	1.037	1.042	1.023	1.020	1.019	1.027	1.024	1.053	1.025	1.019	1.026	1.023	1.027	1.026	1.030									
7/1/01 - 6/30/02	2.757	1.337	1.133	1.064	1.035	1.019	1.034	1.030	1.025	1.066	1.032	1.030	1.023	1.027	1.026	1.028	1.015	1.023	1.011	1.012	1.024										
7/1/02 - 6/30/03	4.526	1.410	1.142	1.049	1.046	1.038	1.027	1.028	1.033	1.008	1.031	1.024	1.030	1.015	1.014	1.009	1.007	1.010	1.004	1.002											
7/1/03 - 6/30/04	2.898	1.279	1.098	1.047	1.048	1.022	1.040	1.023	1.009	1.011	1.009	1.008	1.020	1.009	1.018	1.003	1.004	1.002	1.004												
7/1/04 - 6/30/05	3.109	1.309	1.125	1.068	1.045	1.049	1.027	1.029	1.017	1.010	1.010	1.007	1.010	1.011	1.009	1.008	1.005	1.005													
7/1/05 - 6/30/06	2.272	1.183	1.086	1.063	1.046	1.028	1.022	1.014	1.008	1.009	1.007	1.013	1.009	1.006	1.004	1.005	1.004														
7/1/06 - 6/30/07	2.782	1.283	1.059	1.056	1.033	1.029	1.010	1.009	1.009	1.004	1.003	1.003	1.002	1.001	1.001	1.004															
7/1/07 - 6/30/08	2.031	1.158	1.076	1.035	1.045	1.013	1.012	1.008	1.006	1.009	1.006	1.017	1.005	1.006	1.004																
7/1/08 - 6/30/09	2.098	1.236	1.092	1.049	1.027	1.025	1.008	1.036	1.006	1.009	1.003	1.005	1.008	1.012																	
7/1/09 - 6/30/10	2.197	1.151	1.078	1.053	1.020	1.024	1.011	1.005	1.026	1.003	1.005	1.003	1.003																		
7/1/10 - 6/30/11	2.098	1.180	1.097	1.057	1.039	1.034	1.018	1.015	1.008	1.009	1.013	1.010																			
7/1/11 - 6/30/12	2.084	1.182	1.075	1.063	1.018	1.018	1.018	1.008	1.006	1.012	1.005																				
7/1/12 - 6/30/13	1.993	1.186	1.072	1.044	1.030	1.028	1.022	1.012	1.014	1.012																					
7/1/13 - 6/30/14	2.235	1.245	1.072	1.046	1.028	1.023	1.016	1.010	1.008																						
7/1/14 - 6/30/15	1.865	1.189	1.131	1.032	1.029	1.010	1.008	1.014																							
7/1/15 - 6/30/16	1.862	1.245	1.091	1.044	1.025	1.025	1.016																								
7/1/16 - 6/30/17	2.074	1.207	1.061	1.032	1.024	1.023																									
7/1/17 - 6/30/18	2.078	1.158	1.092	1.084	1.024																										
7/1/18 - 6/30/19	1.845	1.180	1.078	1.033																											
7/1/19 - 6/30/20	2.005	1.152	1.083																												
7/1/20 - 6/30/21	2.182	1.196																													
7/1/21 - 6/30/22	2.036																														
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																															
Last 3 Wtd Avg	2.068	1.176	1.085	1.051	1.024	1.020	1.014	1.012	1.009	1.011	1.008	1.006	1.005	1.006	1.003	1.006	1.004	1.006	1.006	1.014	1.021	1.019	1.008	1.004	1.001	1.005	1.003				
Last 5 Wtd Avg	2.024	1.179	1.081	1.046	1.026	1.022	1.016	1.012	1.012	1.009	1.007	1.007	1.005	1.007	1.006	1.006	1.007	1.012	1.014	1.014	1.018	1.013	1.006	1.005	1.004						
Last 9 Wtd Avg	2.010	1.197	1.084	1.049	1.026	1.023	1.014	1.013	1.010	1.009	1.007	1.009	1.011	1.011	1.014	1.011	1.009	1.010	1.010	1.011	1.012										
Last 12 Wtd Avg	2.023	1.190	1.085	1.048	1.028	1.023	1.016	1.015	1.012	1.011	1.010	1.012	1.013	1.012	1.015	1.013	1.014	1.010													
All Per Wtd Avg	2.194	1.217	1.095	1.054	1.037	1.028	1.022	1.020	1.016	1.014	1.013	1.013	1.014	1.012	1.014	1.013	1.014	1.010	1.010	1.010	1.012	1.011	1.006	1.005	1.004	1.005	1.003	1.004	1.002		
Industry																															
Age-to-Age	1.952	1.143	1.054	1.022	1.017	1.007	1.012	1.008	1.009	1.008	1.007	1.008	1.007	1.008	1.007	1.007	1.008	1.007	1.004	1.004	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.004	1.004	
Age-to-Ult	2.959	1.516	1.326	1.258	1.231	1.210	1.202	1.188	1.179	1.168	1.159	1.151	1.142	1.134	1.125	1.117	1.109	1.100	1.092	1.088	1.083	1.078	1.073	1.068	1.063	1.058	1.052	1.047	1.043	1.038	1.034
Prior Selected																															
Age-to-Age	2.216	1.218	1.095	1.055	1.037	1.028	1.023	1.020	1.017	1.015	1.014	1.014	1.015	1.013	1.015	1.015	1.015	1.010	1.010	1.011	1.010	1.007	1.004	1.004	1.005	1.005	1.004	1.003	1.001	1.003	
Age-to-Ult	4.445	2.006	1.647	1.504	1.426	1.375	1.337	1.308	1.282	1.261	1.243	1.225	1.209	1.191	1.176	1.158	1.142	1.125	1.113	1.102	1.090	1.079	1.071	1.067	1.063	1.058	1.053	1.049	1.046	1.045	1.042
Selected																															
Age-to-Age	2.194	1.217	1.095	1.054	1.037	1.028	1.022	1.020	1.016	1.014	1.013	1.013	1.014	1.012	1.014	1.013	1.014	1.010	1.010	1.010	1.012	1.011	1.006	1.005	1.004	1.005	1.003	1.004	1.002	1.003	
Age-to-Ult	4.390	2.000	1.644	1.501	1.425	1.374	1.337	1.308	1.283	1.262	1.244	1.228	1.212	1.196	1.181	1.165	1.151	1.135	1.124	1.113	1.102	1.089	1.077	1.070	1.065	1.061	1.056	1.053	1.048	1.046	1.042

Commonwealth of Massachusetts
All Other
All Other - Medical

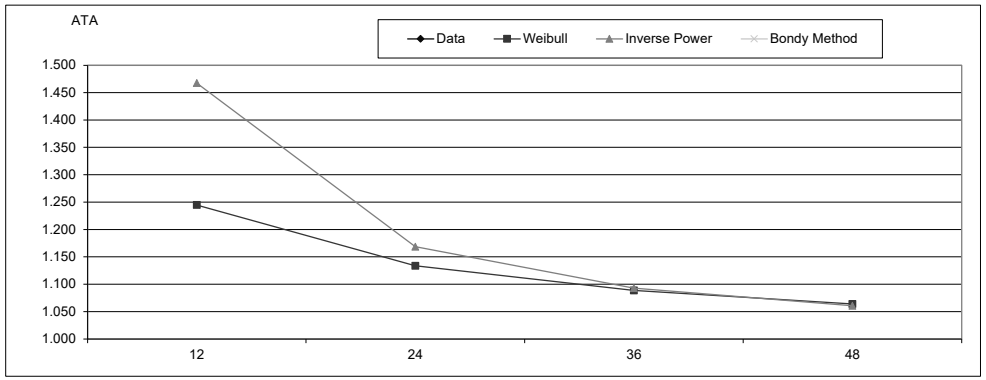
Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

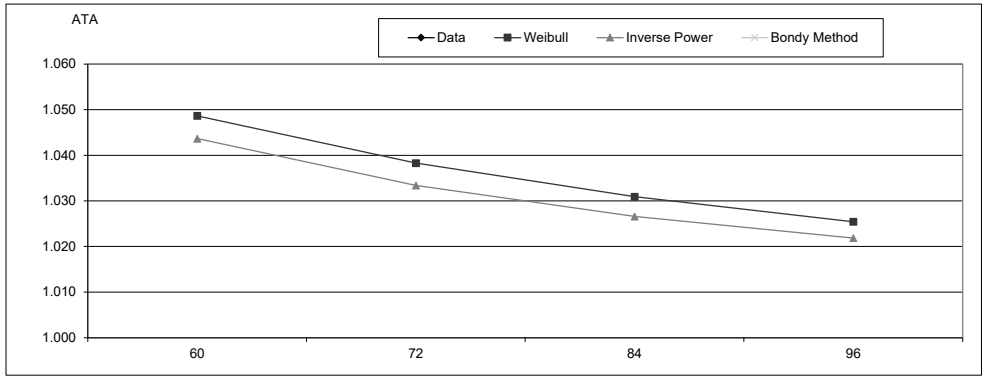
Curve Fitting Methods
Paid Loss & ALAE

Tail at Period:	**31**	(To display in table)
Cut-off point:(<=Tail & <51)	**50**	(to run-out pattern)

Summary of Curve Fitting Methods

Method	Tail	R^2
Weibull	**1.020**	**0.929**
Inverse Power	**1.042**	**0.965**
Bondy Method		**N/A**





				Weibull		Inverse Power		Bondy Method			
									Sel. Decay Ratio=		
PERIOD	AGE	ATA	Use	**ATA***	**ATU***	**ATA***	**ATU***	Ln(ATA)	Decay	**ATA***	**ATU***
1	12	0.000	Exclude	**1.245**	2.250	**1.468**	2.757				
2	24	1.217	Include	**1.134**	1.807	**1.168**	1.878				
3	36	1.095	Include	**1.089**	1.594	**1.093**	1.608				
4	48	1.054	Include	**1.064**	1.465	**1.061**	1.471				
5	60	1.037	Include	**1.049**	1.377	**1.044**	1.387				
6	72	1.028	Include	**1.038**	1.313	**1.033**	1.329				
7	84	1.022	Include	**1.031**	1.264	**1.027**	1.286				
8	96	1.020	Include	**1.025**	1.226	**1.022**	1.253				
9	108	1.016	Include	**1.021**	1.196	**1.018**	1.226				
10	120	1.014	Include	**1.018**	1.171	**1.016**	1.204				
11	132	1.013	Include	**1.015**	1.150	**1.014**	1.185				
12	144	1.013	Include	**1.013**	1.133	**1.012**	1.169				
13	156	1.014	Include	**1.011**	1.118	**1.011**	1.155				
14	168	1.012	Include	**1.010**	1.105	**1.010**	1.143				
15	180	1.014	Include	**1.009**	1.094	**1.009**	1.132				
16	192	0.000	Exclude	**1.008**	1.085	**1.008**	1.122				
17	204	0.000	Exclude	**1.007**	1.076	**1.007**	1.114				
18	216	0.000	Exclude	**1.006**	1.069	**1.007**	1.106				
19	228	0.000	Exclude	**1.006**	1.062	**1.006**	1.098				
20	240	0.000	Exclude	**1.005**	1.057	**1.006**	1.092				
21	252	0.000	Exclude	**1.004**	1.051	**1.005**	1.086				
22	264	0.000	Exclude	**1.004**	1.047	**1.005**	1.080				
23	276	0.000	Exclude	**1.004**	1.042	**1.005**	1.075				
24	288	1.005	Include	**1.003**	1.039	**1.004**	1.070				
25	300	1.004	Include	**1.003**	1.035	**1.004**	1.065				
26	312	0.000	Exclude	**1.003**	1.032	**1.004**	1.061				
27	324	0.000	Exclude	**1.003**	1.029	**1.004**	1.057				
28	336	0.000	Exclude	**1.002**	1.027	**1.003**	1.053				
29	348	1.002	Include	**1.002**	1.024	**1.003**	1.049				
30	360	0.000	Exclude	**1.002**	1.022	**1.003**	1.046				
31	372	0.000	Exclude	**1.002**	1.020	**1.003**	1.042				
32	384	0.000	Exclude	**1.002**	1.018	**1.003**	1.039				
33	396	0.000	Exclude	**1.002**	1.016	**1.003**	1.036				
34	408	0.000	Exclude	**1.001**	1.015	**1.003**	1.034				
35	420	0.000	Exclude	**1.001**	1.013	**1.002**	1.031				
36	432	0.000	Exclude	**1.001**	1.012	**1.002**	1.028				
37	444	0.000	Exclude	**1.001**	1.011	**1.002**	1.026				
38	456	0.000	Exclude	**1.001**	1.010	**1.002**	1.024				
39	468	0.000	Exclude	**1.001**	1.009	**1.002**	1.021				
40	480	0.000	Exclude	**1.001**	1.008	**1.002**	1.019				
41	492	0.000	Exclude	**1.001**	1.007	**1.002**	1.017				
42	504	0.000	Exclude	**1.001**	1.006	**1.002**	1.015				
43	516	0.000	Exclude	**1.001**	1.005	**1.002**	1.013				
44	528	0.000	Exclude	**1.001**	1.004	**1.002**	1.011				
45	540	0.000	Exclude	**1.001**	1.003	**1.002**	1.010				
46	552	0.000	Exclude	**1.001**	1.003	**1.002**	1.008				
47	564	0.000	Exclude	**1.001**	1.002	**1.002**	1.006				
48	576	0.000	Exclude	**1.001**	1.002	**1.002**	1.005				
49	588	0.000	Exclude	**1.001**	1.001	**1.002**	1.003				
50	600	0.000	Exclude	**1.000**	1.000	**1.001**	1.001				

Unpaid Claim Analysis as of 06/30/2023

Ultimate Claim Count Development

Accident Year	Age of Counts @ 06/30/2023	Payroll (00)'s	Reported Claim Counts @ 06/30/2023	Reported Count Dev Factor	Indicated Ultimate Claim Counts	Selected Ultimate Claim Counts	Selected Ultimate Frequency	Selected Ultimate Frequency (Inflation-Adjusted)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	372.0		111	1.000	111			
7/1/93 - 6/30/94	360.0		10	1.000	10			
7/1/94 - 6/30/95	348.0		14	1.000	14			
7/1/95 - 6/30/96	336.0		10	1.000	10			
7/1/96 - 6/30/97	324.0		13	1.000	13			
7/1/97 - 6/30/98	312.0		6	1.000	6			
7/1/98 - 6/30/99	300.0	19,448,360	15	1.000	15		0.00%	0.00%
7/1/99 - 6/30/00	288.0	20,693,510	11	1.000	11		0.00%	0.00%
7/1/00 - 6/30/01	276.0	20,558,590	20	1.000	20		0.00%	0.00%
7/1/01 - 6/30/02	264.0	21,523,690	22	1.000	22		0.00%	0.00%
7/1/02 - 6/30/03	252.0	21,202,840	25	1.000	25		0.00%	0.00%
7/1/03 - 6/30/04	240.0	21,185,340	22	1.000	22		0.00%	0.00%
7/1/04 - 6/30/05	228.0	21,640,500	32	1.000	32		0.00%	0.00%
7/1/05 - 6/30/06	216.0	23,243,030	44	1.000	44		0.00%	0.00%
7/1/06 - 6/30/07	204.0	24,554,310	41	1.000	41		0.00%	0.00%
7/1/07 - 6/30/08	192.0	26,150,540	59	1.000	59		0.00%	0.00%
7/1/08 - 6/30/09	180.0	25,704,510	75	1.000	75		0.00%	0.00%
7/1/09 - 6/30/10	168.0	26,029,100	100	1.000	100		0.00%	0.00%
7/1/10 - 6/30/11	156.0	27,458,630	172	1.000	172		0.00%	0.00%
7/1/11 - 6/30/12	144.0	27,995,990	394	1.000	394		0.00%	0.00%
7/1/12 - 6/30/13	132.0	29,200,210	532	1.000	532	532	18.22%	13.56%
7/1/13 - 6/30/14	120.0	30,801,820	536	1.000	536	536	17.40%	13.34%
7/1/14 - 6/30/15	108.0	32,591,780	601	1.000	601	601	18.44%	14.56%
7/1/15 - 6/30/16	96.0	32,518,420	595	1.000	595	595	18.30%	14.88%
7/1/16 - 6/30/17	84.0	31,362,360	546	1.000	546	546	17.41%	14.58%
7/1/17 - 6/30/18	72.0	31,972,210	539	1.000	539	539	16.86%	14.54%
7/1/18 - 6/30/19	60.0	33,600,390	426	1.000	426	426	12.68%	11.26%
7/1/19 - 6/30/20	48.0	35,047,860	435	1.001	435	435	12.42%	11.37%
7/1/20 - 6/30/21	36.0	35,216,283	432	1.005	434	434	12.32%	11.62%
7/1/21 - 6/30/22	24.0	37,107,388	437	1.018	445	445	11.98%	11.64%
7/1/22 - 6/30/23	12.0	38,502,230	372	1.138	423	437	11.34%	11.34%
Total		695,309,891	6,647		6,708	5,526		

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1)
(3) Provided by Entity
(4) Provided by Entity
(5) From Section VII, Exhibit II, Sheet 14
(6) = (4) x (5)
(7) Selected by Deloitte Consulting LLP
(8) = (7) / (3)
(9) = (7) / [(3) x Section VII, Exhibit II, Sheet 8, Column (3)]

Commonwealth of Massachusetts
All Other
All Other - Medical

Unpaid Claim Analysis as of 06/30/2023

Reported Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																															As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																															111	111
7/1/93 - 6/30/94																														10		10
7/1/94 - 6/30/95																													14			14
7/1/95 - 6/30/96																												10				10
7/1/96 - 6/30/97																											13					13
7/1/97 - 6/30/98																										6						6
7/1/98 - 6/30/99																									15							15
7/1/99 - 6/30/00																								11								11
7/1/00 - 6/30/01																							20									20
7/1/01 - 6/30/02																						22										22
7/1/02 - 6/30/03																					25											25
7/1/03 - 6/30/04																				22												22
7/1/04 - 6/30/05																			32													32
7/1/05 - 6/30/06																		44														44
7/1/06 - 6/30/07																	41															41
7/1/07 - 6/30/08																59																59
7/1/08 - 6/30/09															75																	75
7/1/09 - 6/30/10														100																		100
7/1/10 - 6/30/11													172																			172
7/1/11 - 6/30/12												394																				394
7/1/12 - 6/30/13	475	523	532	531	531	531	532	532	532	532	532																					532
7/1/13 - 6/30/14	465	522	533	536	537	537	536	536	536	536																						536
7/1/14 - 6/30/15	527	587	595	598	599	599	601	601	601																							601
7/1/15 - 6/30/16	519	583	591	594	595	595	595	595																								595
7/1/16 - 6/30/17	485	539	544	544	545	545	546																									546
7/1/17 - 6/30/18	474	529	537	540	539	539																										539
7/1/18 - 6/30/19	390	422	425	426	426																											426
7/1/19 - 6/30/20	368	425	431	435																												435
7/1/20 - 6/30/21	377	431	432																													432
7/1/21 - 6/30/22	389	437																														437
7/1/22 - 6/30/23	372																															372
																																6,647

Accident Year	Age-to-Age Development Factors																															
	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
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7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	1.101	1.017	0.998	1.000	1.000	1.002	1.000	1.000	1.000	1.000																						
7/1/13 - 6/30/14	1.123	1.021	1.006	1.002	1.000	0.998	1.000	1.000	1.000																							
7/1/14 - 6/30/15	1.114	1.014	1.005	1.002	1.000	1.003	1.000	1.000																								
7/1/15 - 6/30/16	1.123	1.014	1.005	1.002	1.000	1.000	1.000																									
7/1/16 - 6/30/17	1.111	1.009	1.000	1.002	1.000	1.002																										
7/1/17 - 6/30/18	1.116	1.015	1.006	0.998	1.000																											
7/1/18 - 6/30/19	1.082	1.007	1.002	1.000																												
7/1/19 - 6/30/20	1.155	1.014	1.009																													
7/1/20 - 6/30/21	1.143	1.002																														
7/1/21 - 6/30/22	1.123																															
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																																
Last 3 Wtd Avg	1.140	1.008	1.006	1.000	1.000	1.002	1.000	1.000																								
Last 4 Wtd Avg	1.125	1.010	1.004	1.000	1.000	1.001	1.000																									
Last 5 Wtd Avg	1.123	1.010	1.004	1.001	1.000	1.001																										
All Per Wtd Avg	1.118	1.013	1.004	1.001	1.000	1.001	1.000	1.000	1.000	1.000																						
Average ex Hi/Lo	1.119	1.013	1.004	1.001	1.000	1.001	1.000	1.000																								
Prior Selected																																
Age-to-Age	1.118	1.014	1.003	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	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		
Age-to-Ult	1.138	1.018	1.004	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	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	
Selected																																
Age-to-Age	1.118	1.013	1.004	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	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		
Age-to-Ult	1.138	1.018	1.005	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	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	

Commonwealth of Massachusetts
All Other
All Other - Medical

Unpaid Claim Analysis as of 06/30/2023

Reported Counts to Payroll (00)'s

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94																																-
7/1/94 - 6/30/95																																-
7/1/95 - 6/30/96																																-
7/1/96 - 6/30/97																																-
7/1/97 - 6/30/98																																-
7/1/98 - 6/30/99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01							19,448,360
7/1/99 - 6/30/00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01								20,693,510
7/1/00 - 6/30/01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01									20,558,590
7/1/01 - 6/30/02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01										21,523,690
7/1/02 - 6/30/03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01											21,202,840
7/1/03 - 6/30/04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01												21,185,340
7/1/04 - 6/30/05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01													21,640,500
7/1/05 - 6/30/06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02														23,243,030
7/1/06 - 6/30/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02															24,554,310
7/1/07 - 6/30/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02																26,150,540
7/1/08 - 6/30/09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03																	25,704,510
7/1/09 - 6/30/10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04																		26,029,100
7/1/10 - 6/30/11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06																			27,458,630
7/1/11 - 6/30/12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14																				27,995,990
7/1/12 - 6/30/13	0.16	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18																					29,200,210
7/1/13 - 6/30/14	0.15	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17																						30,801,820
7/1/14 - 6/30/15	0.16	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18																							32,591,780
7/1/15 - 6/30/16	0.16	0.18	0.18	0.18	0.18	0.18	0.18	0.18																								32,518,420
7/1/16 - 6/30/17	0.15	0.17	0.17	0.17	0.17	0.17	0.17																									31,362,360
7/1/17 - 6/30/18	0.15	0.17	0.17	0.17	0.17	0.17																										31,972,210
7/1/18 - 6/30/19	0.12	0.13	0.13	0.13	0.13																											33,600,390
7/1/19 - 6/30/20	0.10	0.12	0.12	0.12																												35,047,860
7/1/20 - 6/30/21	0.11	0.12	0.12																													35,216,283
7/1/21 - 6/30/22	0.10	0.12																														37,107,388
7/1/22 - 6/30/23	0.10																															38,502,230

Commonwealth of Massachusetts
All Other
All Other - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss & ALAE Rates

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														Payroll
	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	348	360	372	(00)'s
Prior to 7/1/1993																																-
7/1/93 - 6/30/94																																-
7/1/94 - 6/30/95																																-
7/1/95 - 6/30/96																																-
7/1/96 - 6/30/97																																-
7/1/97 - 6/30/98																																-
7/1/98 - 6/30/99	0.02	0.06	0.07	0.08	0.09	0.10	0.10	0.11	0.11	0.11	0.12	0.12	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.14							19,448,360
7/1/99 - 6/30/00	0.03	0.07	0.08	0.09	0.10	0.11	0.11	0.12	0.12	0.13	0.13	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.16								20,693,510
7/1/00 - 6/30/01	0.03	0.07	0.08	0.10	0.10	0.11	0.11	0.12	0.12	0.13	0.13	0.13	0.13	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.17	0.17	0.18									20,558,590
7/1/01 - 6/30/02	0.02	0.06	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.11	0.12	0.12	0.12	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.14	0.15										21,523,690
7/1/02 - 6/30/03	0.01	0.07	0.09	0.11	0.11	0.12	0.12	0.13	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.16	0.16											21,202,840
7/1/03 - 6/30/04	0.03	0.08	0.10	0.11	0.12	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.15												21,185,340
7/1/04 - 6/30/05	0.03	0.11	0.14	0.16	0.17	0.18	0.18	0.19	0.20	0.20	0.20	0.20	0.20	0.21	0.21	0.21	0.21	0.21	0.21													21,640,500
7/1/05 - 6/30/06	0.04	0.09	0.11	0.12	0.13	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15														23,243,030
7/1/06 - 6/30/07	0.05	0.13	0.16	0.17	0.18	0.19	0.19	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20															24,554,310
7/1/07 - 6/30/08	0.05	0.11	0.13	0.14	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.16																26,150,540
7/1/08 - 6/30/09	0.05	0.11	0.13	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.18																	25,704,510
7/1/09 - 6/30/10	0.05	0.12	0.14	0.15	0.15	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17																		26,029,100
7/1/10 - 6/30/11	0.06	0.12	0.14	0.16	0.17	0.17	0.18	0.18	0.18	0.19	0.19	0.19	0.19																			27,458,630
7/1/11 - 6/30/12	0.06	0.12	0.14	0.15	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17																				27,995,990
7/1/12 - 6/30/13	0.05	0.10	0.11	0.12	0.13	0.13	0.13	0.14	0.14	0.14	0.14																					29,200,210
7/1/13 - 6/30/14	0.04	0.10	0.12	0.13	0.14	0.14	0.15	0.15	0.15	0.15																						30,801,820
7/1/14 - 6/30/15	0.05	0.10	0.12	0.13	0.13	0.14	0.14	0.14	0.14																							32,591,780
7/1/15 - 6/30/16	0.06	0.10	0.13	0.14	0.15	0.15	0.16	0.16																								32,518,420
7/1/16 - 6/30/17	0.05	0.11	0.13	0.14	0.14	0.15	0.15																									31,362,360
7/1/17 - 6/30/18	0.05	0.11	0.13	0.14	0.15	0.15																										31,972,210
7/1/18 - 6/30/19	0.04	0.08	0.09	0.10	0.10																											33,600,390
7/1/19 - 6/30/20	0.04	0.07	0.08	0.09																												35,047,860
7/1/20 - 6/30/21	0.03	0.07	0.08																													35,216,283
7/1/21 - 6/30/22	0.04	0.08																														37,107,388
7/1/22 - 6/30/23	0.04																															38,502,230

Commonwealth of Massachusetts
All Other
All Other - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Settlement Rates (Closed Claim Count / Ultimate Claim Count)

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
7/1/98 - 6/30/99																																
7/1/99 - 6/30/00																																
7/1/00 - 6/30/01																																
7/1/01 - 6/30/02																																
7/1/02 - 6/30/03																																
7/1/03 - 6/30/04																																
7/1/04 - 6/30/05																																
7/1/05 - 6/30/06																																
7/1/06 - 6/30/07																																
7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	0.00	0.32	0.72	0.85	0.90	0.92	0.94	0.95	0.95	0.96	0.97																					0.97
7/1/13 - 6/30/14	0.00	0.33	0.70	0.84	0.88	0.91	0.93	0.94	0.95	0.96																						0.96
7/1/14 - 6/30/15	0.00	0.39	0.73	0.83	0.89	0.92	0.94	0.95	0.96																							0.96
7/1/15 - 6/30/16	0.00	0.38	0.70	0.81	0.88	0.91	0.93	0.95																								0.95
7/1/16 - 6/30/17	0.00	0.36	0.77	0.85	0.89	0.92	0.94																									0.94
7/1/17 - 6/30/18	0.00	0.41	0.73	0.80	0.86	0.90																										0.90
7/1/18 - 6/30/19	0.00	0.42	0.74	0.85	0.90																											0.90
7/1/19 - 6/30/20	0.00	0.42	0.74	0.82																												0.82
7/1/20 - 6/30/21	0.00	0.36	0.66																													0.66
7/1/21 - 6/30/22	0.00	0.35																														0.35
7/1/22 - 6/30/23	0.00																															0.00

Commonwealth of Massachusetts
All Other
All Other - Medical

Unpaid Claim Analysis as of 06/30/2023

Open Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993	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	0	0	0	36	36
7/1/93 - 6/30/94	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	0	0	4		4
7/1/94 - 6/30/95	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	0	3			3
7/1/95 - 6/30/96	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	2				2
7/1/96 - 6/30/97	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	5					5
7/1/97 - 6/30/98	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	2						2
7/1/98 - 6/30/99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4							4
7/1/99 - 6/30/00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7								7
7/1/00 - 6/30/01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4									4
7/1/01 - 6/30/02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8										8
7/1/02 - 6/30/03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2											2
7/1/03 - 6/30/04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6												6
7/1/04 - 6/30/05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3													3
7/1/05 - 6/30/06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8														8
7/1/06 - 6/30/07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3															3
7/1/07 - 6/30/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10																10
7/1/08 - 6/30/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4																	4
7/1/09 - 6/30/10	0	0	0	0	0	0	0	0	0	0	0	0	0	7																		7
7/1/10 - 6/30/11	0	0	0	0	0	0	0	0	0	0	0	0	12																			12
7/1/11 - 6/30/12	0	0	0	0	0	0	0	0	0	0	0	19																				19
7/1/12 - 6/30/13	475	351	147	77	51	40	33	26	26	21	16																					16
7/1/13 - 6/30/14	465	345	156	84	64	48	39	32	26	23																						23
7/1/14 - 6/30/15	527	352	158	98	62	48	37	33	24																							24
7/1/15 - 6/30/16	519	357	172	112	74	51	39	29																								29
7/1/16 - 6/30/17	485	341	126	79	59	45	32																									32
7/1/17 - 6/30/18	474	308	141	107	76	54																										54
7/1/18 - 6/30/19	390	242	111	64	41																											41
7/1/19 - 6/30/20	368	240	110	79																												79
7/1/20 - 6/30/21	377	275	144																													144
7/1/21 - 6/30/22	389	281																														281
7/1/22 - 6/30/23	372																															372
																																1,244

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Unpaid Loss Estimates

Accident Year	Payroll (00)'s	Retention	Unlimited Paid Loss @ 06/30/2023	Unlimited Reported Loss @ 06/30/2023	Ultimate Loss Low	Ultimate Loss High	Indicated Total Unpaid Loss Estimates Low	Indicated Total Unpaid Loss Estimates High	Case Reserves	Indicated IBNR Estimate Low	Indicated IBNR Estimate High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993		Unlimited	3,984,738	3,984,738	5,281,584	5,569,772	1,296,846	1,585,035	0	1,296,846	1,585,035
7/1/93 - 6/30/94		Unlimited	396,613	396,613	424,400	427,300	27,787	30,687	0	27,787	30,687
7/1/94 - 6/30/95		Unlimited	47,745	47,745	51,300	51,700	3,555	3,955	0	3,555	3,955
7/1/95 - 6/30/96		Unlimited	0	0	0	0	0	0	0	0	0
7/1/96 - 6/30/97		Unlimited	612,267	612,267	670,900	677,000	58,633	64,733	0	58,633	64,733
7/1/97 - 6/30/98		Unlimited	0	0	0	0	0	0	0	0	0
7/1/98 - 6/30/99		Unlimited	474,376	474,376	528,500	534,200	54,124	59,824	0	54,124	59,824
7/1/99 - 6/30/00		Unlimited	5,478	5,478	6,200	6,200	722	722	0	722	722
7/1/00 - 6/30/01	2,119,040	Unlimited	275,517	275,517	312,100	316,000	36,583	40,483	0	36,583	40,483
7/1/01 - 6/30/02	2,124,720	Unlimited	51,635	51,635	59,000	59,700	7,365	8,065	0	7,365	8,065
7/1/02 - 6/30/03	2,087,950	Unlimited	15,095	15,095	17,400	17,600	2,305	2,505	0	2,305	2,505
7/1/03 - 6/30/04	2,077,380	Unlimited	69,834	69,834	81,100	82,300	11,266	12,466	0	11,266	12,466
7/1/04 - 6/30/05	2,176,960	Unlimited	321,022	321,022	376,200	382,000	55,178	60,978	0	55,178	60,978
7/1/05 - 6/30/06	2,309,760	Unlimited	135,621	135,621	160,400	163,000	24,779	27,379	0	24,779	27,379
7/1/06 - 6/30/07	2,339,880	Unlimited	257,524	257,524	307,400	312,600	49,876	55,076	0	49,876	55,076
7/1/07 - 6/30/08	2,458,840	Unlimited	800,721	800,721	966,300	983,700	165,579	182,979	0	165,579	182,979
7/1/08 - 6/30/09	2,512,270	Unlimited	640,226	640,226	780,400	795,100	140,174	154,874	0	140,174	154,874
7/1/09 - 6/30/10	2,739,090	Unlimited	1,396,847	1,396,847	1,720,700	1,754,800	323,853	357,953	0	323,853	357,953
7/1/10 - 6/30/11	2,636,870	Unlimited	1,175,310	1,175,310	1,462,900	1,493,200	287,590	317,890	0	287,590	317,890
7/1/11 - 6/30/12	2,753,440	Unlimited	2,490,642	2,490,642	3,133,500	3,201,200	642,858	710,558	0	642,858	710,558
7/1/12 - 6/30/13	2,873,490	Unlimited	2,816,365	2,816,365	3,584,700	3,665,600	768,335	849,235	0	768,335	849,235
7/1/13 - 6/30/14	3,041,530	Unlimited	2,747,039	2,747,039	3,550,900	3,635,600	803,861	888,561	0	803,861	888,561
7/1/14 - 6/30/15	3,230,070	Unlimited	5,515,979	5,515,979	7,235,800	7,416,900	1,719,821	1,900,921	0	1,719,821	1,900,921
7/1/15 - 6/30/16	3,033,160	Unlimited	4,567,246	4,567,246	6,054,400	6,278,300	1,487,154	1,711,054	0	1,487,154	1,711,054
7/1/16 - 6/30/17	2,570,440	Unlimited	3,502,585	3,502,585	4,813,400	5,010,700	1,310,815	1,508,115	0	1,310,815	1,508,115
7/1/17 - 6/30/18	2,493,740	Unlimited	3,361,707	3,361,707	4,960,900	5,201,600	1,599,193	1,839,893	0	1,599,193	1,839,893
7/1/18 - 6/30/19	2,576,230	Unlimited	3,270,569	3,270,569	4,501,900	4,687,300	1,231,331	1,416,731	0	1,231,331	1,416,731
7/1/19 - 6/30/20	2,916,990	Unlimited	1,978,578	1,978,578	4,309,200	4,660,000	2,330,622	2,681,422	0	2,330,622	2,681,422
7/1/20 - 6/30/21	2,919,796	Unlimited	1,982,067	1,982,067	4,530,000	5,097,000	2,547,933	3,114,933	0	2,547,933	3,114,933
7/1/21 - 6/30/22	3,065,815	Unlimited	1,711,981	1,711,981	5,457,000	6,289,000	3,745,019	4,577,019	0	3,745,019	4,577,019
7/1/22 - 6/30/23	3,396,233	Unlimited	662,536	662,536	4,999,000	5,962,000	4,336,464	5,299,464	0	4,336,464	5,299,464
Total	60,453,694		45,267,862	45,267,862	70,337,484	74,731,372	25,069,622	29,463,510	0	25,069,622	29,463,510

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	Provided by Entity
(6)	From Section VIII, Exhibit I, Sheet 6, Column (11)
(7)	From Section VIII, Exhibit I, Sheet 6, Column (12)
(8)	= (6) - (4)
(9)	= (7) - (4)
(10)	= (5) - (4)
(11)	= (8) - (10)
(12)	= (9) - (10)

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Short-Term Portion

Accident Year	Age of Losses @ 06/30/2023	Selected Paid Test LDF @ 06/30/2023	Implied Paid LDF	Paid LDF	Cumulative Percent Paid	Incremental Percent Paid	Average Total Unpaid Loss Estimate	Undiscounted Cash Flow of Payments 2024
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
						0.62%		
Prior to 7/1/1993	372.0	1.068	1.362	1.068	93.59%	0.46%	1,440,941	139,840
7/1/93 - 6/30/94	360.0	1.074	1.074	1.074	93.14%	0.48%	29,237	1,947
7/1/94 - 6/30/95	348.0	1.079	1.079	1.079	92.66%	1.03%	3,755	244
7/1/95 - 6/30/96	336.0	1.091		1.091	91.63%	0.78%	0	0
7/1/96 - 6/30/97	324.0	1.101	1.101	1.101	90.85%	0.88%	61,683	5,275
7/1/97 - 6/30/98	312.0	1.111		1.111	89.97%	0.69%	0	0
7/1/98 - 6/30/99	300.0	1.120	1.120	1.120	89.28%	0.73%	56,974	3,654
7/1/99 - 6/30/00	288.0	1.129	1.132	1.129	88.56%	0.83%	722	46
7/1/00 - 6/30/01	276.0	1.140	1.140	1.140	87.73%	0.74%	38,533	2,598
7/1/01 - 6/30/02	264.0	1.150	1.149	1.150	86.99%	0.72%	7,715	437
7/1/02 - 6/30/03	252.0	1.159	1.159	1.159	86.28%	0.80%	2,405	125
7/1/03 - 6/30/04	240.0	1.170	1.170	1.170	85.48%	0.80%	11,866	652
7/1/04 - 6/30/05	228.0	1.181	1.181	1.181	84.68%	0.83%	58,078	3,018
7/1/05 - 6/30/06	216.0	1.193	1.192	1.193	83.85%	0.79%	26,079	1,338
7/1/06 - 6/30/07	204.0	1.204	1.204	1.204	83.07%	0.94%	52,476	2,445
7/1/07 - 6/30/08	192.0	1.218	1.218	1.218	82.13%	0.85%	174,279	9,160
7/1/08 - 6/30/09	180.0	1.230	1.230	1.230	81.27%	0.89%	147,524	6,731
7/1/09 - 6/30/10	168.0	1.244	1.244	1.244	80.38%	0.86%	340,903	15,469
7/1/10 - 6/30/11	156.0	1.258	1.258	1.258	79.52%	0.88%	302,740	12,748
7/1/11 - 6/30/12	144.0	1.272	1.272	1.272	78.63%	0.95%	676,708	28,001
7/1/12 - 6/30/13	132.0	1.287	1.287	1.287	77.69%	1.24%	808,785	34,291
7/1/13 - 6/30/14	120.0	1.308	1.308	1.308	76.45%	1.16%	846,211	44,510
7/1/14 - 6/30/15	108.0	1.328	1.328	1.328	75.29%	1.22%	1,810,371	85,015
7/1/15 - 6/30/16	96.0	1.350	1.350	1.350	74.07%	2.76%	1,599,104	75,401
7/1/16 - 6/30/17	84.0	1.402	1.402	1.402	71.31%	5.15%	1,409,465	135,601
7/1/17 - 6/30/18	72.0	1.512	1.512	1.512	66.16%	5.68%	1,719,543	261,542
7/1/18 - 6/30/19	60.0	1.653	1.405	1.653	60.48%	8.13%	1,324,031	190,327
7/1/19 - 6/30/20	48.0	1.910	2.267	1.910	52.35%	11.95%	2,506,022	427,482
7/1/20 - 6/30/21	36.0	2.475	2.429	2.475	40.40%	10.24%	2,831,433	567,547
7/1/21 - 6/30/22	24.0	3.315	3.431	3.315	30.16%	15.29%	4,161,019	610,253
7/1/22 - 6/30/23	12.0	6.726	8.272	6.726	14.87%	14.87%	4,817,964	865,552
Total							27,266,566	3,531,249

	Undiscounted	Discounted			
Short-Term Portion	13%	17%	(10)	Interest Rate	4%

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1) @ 06/30/2023
(3) From Section VIII, Exhibit I, Sheet 10, Column (6)
(4) Average Ultimate Loss Divided by Paid Loss From Section VIII, Exhibit I, Sheet 6
(5) Selected
(6) = 1 / (5)
(7) = (6) from Current Age - (6) from Subsequent Age
(8) From Section VIII, Exhibit I, Sheet 3
(9) - (9) Based on (5)

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Indemnity (Including Lump Sum)

Section VIII
Exhibit I
Sheet 3

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Discounted at (4%) Unpaid Loss Estimate

Accident Year	Indicated Total Unpaid Loss Estimate Low	Indicated Total Unpaid Loss Estimate High	Discount Factor	Discounted Total Unpaid Loss Estimate Low	Discounted Total Unpaid Loss Estimate High
(1)	(2)	(3)	(4)	(5)	(6)
Prior to 7/1/1993	1,296,846	1,585,035	1.000	1,296,846	1,585,035
7/1/93 - 6/30/94	27,787	30,687	0.981	27,247	30,091
7/1/94 - 6/30/95	3,555	3,955	0.945	3,361	3,739
7/1/95 - 6/30/96	0	0	0.918	0	0
7/1/96 - 6/30/97	58,633	64,733	0.891	52,235	57,669
7/1/97 - 6/30/98	0	0	0.867	0	0
7/1/98 - 6/30/99	54,124	59,824	0.843	45,653	50,460
7/1/99 - 6/30/00	722	722	0.822	593	593
7/1/00 - 6/30/01	36,583	40,483	0.803	29,377	32,508
7/1/01 - 6/30/02	7,365	8,065	0.784	5,774	6,323
7/1/02 - 6/30/03	2,305	2,505	0.766	1,765	1,918
7/1/03 - 6/30/04	11,266	12,466	0.750	8,445	9,344
7/1/04 - 6/30/05	55,178	60,978	0.734	40,516	44,774
7/1/05 - 6/30/06	24,779	27,379	0.720	17,844	19,716
7/1/06 - 6/30/07	49,876	55,076	0.706	35,205	38,875
7/1/07 - 6/30/08	165,579	182,979	0.695	115,005	127,090
7/1/08 - 6/30/09	140,174	154,874	0.682	95,615	105,642
7/1/09 - 6/30/10	323,853	357,953	0.671	217,181	240,049
7/1/10 - 6/30/11	287,590	317,890	0.659	189,511	209,478
7/1/11 - 6/30/12	642,858	710,558	0.648	416,555	460,423
7/1/12 - 6/30/13	768,335	849,235	0.638	490,359	541,990
7/1/13 - 6/30/14	803,861	888,561	0.633	508,815	562,427
7/1/14 - 6/30/15	1,719,821	1,900,921	0.626	1,076,756	1,190,140
7/1/15 - 6/30/16	1,487,154	1,711,054	0.620	921,821	1,060,607
7/1/16 - 6/30/17	1,310,815	1,508,115	0.633	829,764	954,657
7/1/17 - 6/30/18	1,599,193	1,839,893	0.665	1,063,839	1,223,961
7/1/18 - 6/30/19	1,231,331	1,416,731	0.689	847,965	975,642
7/1/19 - 6/30/20	2,330,622	2,681,422	0.716	1,669,857	1,921,200
7/1/20 - 6/30/21	2,547,933	3,114,933	0.747	1,904,296	2,328,065
7/1/21 - 6/30/22	3,745,019	4,577,019	0.757	2,835,198	3,465,071
7/1/22 - 6/30/23	4,336,464	5,299,464	0.773	3,353,508	4,098,223
Total	25,069,622	29,463,510		18,100,905	21,345,712

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From Section VIII, Exhibit I, Sheet 1, Column (8)
(3) From Section VIII, Exhibit I, Sheet 1, Column (9)
(4) From Section VIII, Exhibit I, Sheet 0, Column (8)
(5) = (2) x (4)
(6) = (3) x (4)

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Actual vs Expected - Paid Loss Emergence

Accident Year	Selected Low Ultimate Loss @ 06/30/2022	Selected High Ultimate Loss @ 06/30/2022	Unlimited Paid Loss @ 06/30/2022	Unlimited Paid Loss @ 06/30/2023	Paid LDF @ 06/30/2022	Projected Paid LDF @ 06/30/2023	Method 1 Low Expected Paid Emergence Loss @ 06/30/2023	Method 1 High Expected Paid Emergence Loss @ 06/30/2023	Actual Paid Emergence Loss @ 06/30/2023	Actual - Expected Method 1 Low Paid	Actual - Expected Method 1 High Paid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993	5,281,180	5,616,028	3,769,010	3,984,738	1.073	1.065	146,487	178,925	215,727	69,240	36,802
7/1/93 - 6/30/94	397,700	400,600	370,160	396,613	1.078	1.073	1,853	2,048	26,453	24,600	24,404
7/1/94 - 6/30/95	51,700	52,100	47,745	47,745	1.087	1.078	381	419	0	(381)	(419)
7/1/95 - 6/30/96	0	0	0	0	1.097	1.087	0	0	0	0	0
7/1/96 - 6/30/97	674,300	680,800	612,267	612,267	1.107	1.097	5,131	5,669	0	(5,131)	(5,669)
7/1/97 - 6/30/98	0	0	0	0	1.117	1.107	0	0	0	0	0
7/1/98 - 6/30/99	531,600	537,600	474,376	474,376	1.127	1.117	4,090	4,518	0	(4,090)	(4,518)
7/1/99 - 6/30/00	6,200	6,300	5,478	5,478	1.137	1.127	46	52	0	(46)	(52)
7/1/00 - 6/30/01	285,400	289,100	250,833	275,517	1.145	1.137	1,760	1,948	24,685	22,925	22,737
7/1/01 - 6/30/02	54,900	55,600	47,777	51,635	1.156	1.145	429	471	3,858	3,429	3,387
7/1/02 - 6/30/03	17,000	17,300	14,675	15,095	1.169	1.156	150	169	420	270	251
7/1/03 - 6/30/04	81,800	83,100	69,834	69,834	1.181	1.169	700	777	0	(700)	(777)
7/1/04 - 6/30/05	380,200	386,400	321,022	321,022	1.194	1.181	3,392	3,748	0	(3,392)	(3,748)
7/1/05 - 6/30/06	162,300	165,100	135,621	135,621	1.207	1.194	1,372	1,516	0	(1,372)	(1,516)
7/1/06 - 6/30/07	311,000	316,700	256,924	257,524	1.222	1.207	2,999	3,315	600	(2,399)	(2,715)
7/1/07 - 6/30/08	901,900	919,200	737,153	800,721	1.235	1.222	7,845	8,669	63,568	55,723	54,899
7/1/08 - 6/30/09	792,800	808,800	640,226	640,226	1.251	1.235	7,677	8,482	0	(7,677)	(8,482)
7/1/09 - 6/30/10	1,615,300	1,649,500	1,289,878	1,396,847	1.266	1.251	14,445	15,963	106,968	92,523	91,005
7/1/10 - 6/30/11	1,488,400	1,521,400	1,175,310	1,175,310	1.280	1.266	13,112	14,494	0	(13,112)	(14,494)
7/1/11 - 6/30/12	3,051,300	3,121,900	2,380,655	2,490,642	1.297	1.280	28,437	31,430	109,987	81,550	78,556
7/1/12 - 6/30/13	3,663,600	3,752,800	2,816,364	2,816,365	1.317	1.297	41,579	45,957	1	(41,578)	(45,956)
7/1/13 - 6/30/14	3,602,200	3,694,100	2,728,552	2,747,039	1.337	1.317	40,082	44,298	18,486	(21,596)	(25,812)
7/1/14 - 6/30/15	7,261,200	7,534,800	5,443,606	5,515,979	1.359	1.337	83,253	95,785	72,373	(10,880)	(23,412)
7/1/15 - 6/30/16	5,674,200	5,898,700	4,182,987	4,567,246	1.383	1.359	69,615	80,096	384,260	314,644	304,164
7/1/16 - 6/30/17	4,750,900	4,973,300	3,273,631	3,502,585	1.485	1.383	224,230	257,988	228,953	4,723	(29,034)
7/1/17 - 6/30/18	4,898,300	5,168,800	3,101,517	3,361,707	1.623	1.485	267,429	307,689	260,190	(7,238)	(47,499)
7/1/18 - 6/30/19	4,497,000	4,770,400	2,680,931	3,270,569	1.872	1.623	319,809	367,954	589,638	269,829	221,684
7/1/19 - 6/30/20	4,238,000	4,833,000	1,562,400	1,978,578	2.440	1.872	563,368	688,650	416,178	(147,190)	(272,472)
7/1/20 - 6/30/21	4,408,000	5,077,000	1,397,133	1,982,067	3.248	2.440	443,627	542,199	584,935	141,308	42,736
7/1/21 - 6/30/22	5,270,000	6,262,000	804,782	1,711,981	6.594	3.248	822,418	1,005,127	907,199	84,781	(97,929)
Total	64,348,380	68,592,428	40,590,848	44,605,326			3,115,716	3,718,357	4,014,478	898,763	296,121

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Selected by Deloitte Consulting LLP @ 06/30/2022
(3)	Selected by Deloitte Consulting LLP @ 06/30/2022
(4)	Provided by Entity
(5)	Provided by Entity
(6)	Selected by Deloitte Consulting LLP @ 06/30/2022
(7)	Interpolated From (6)
(8)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((2) - (4))
(9)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((3) - (4))
(10)	= (5) - (4)
(11)	= (10) - (8)
(12)	= (10) - (9)

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Ultimate Loss Runoff

Accident Year	Ultimate Loss @ 06/30/2022 Low	Ultimate Loss @ 06/30/2022 High	Ultimate Loss @ 06/30/2023 Low	Ultimate Loss @ 06/30/2023 High	Deloitte Change Low	Deloitte Change High	Paid Loss @ 06/30/2023	Reported Loss @ 06/30/2023
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	5,281,180	5,616,028	5,281,584	5,569,772	405	(46,255)	3,984,738	3,984,738
7/1/93 - 6/30/94	397,700	400,600	424,400	427,300	26,700	26,700	396,613	396,613
7/1/94 - 6/30/95	51,700	52,100	51,300	51,700	(400)	(400)	47,745	47,745
7/1/95 - 6/30/96	0	0	0	0	0	0	0	0
7/1/96 - 6/30/97	674,300	680,800	670,900	677,000	(3,400)	(3,800)	612,267	612,267
7/1/97 - 6/30/98	0	0	0	0	0	0	0	0
7/1/98 - 6/30/99	531,600	537,600	528,500	534,200	(3,100)	(3,400)	474,376	474,376
7/1/99 - 6/30/00	6,200	6,300	6,200	6,200	0	(100)	5,478	5,478
7/1/00 - 6/30/01	285,400	289,100	312,100	316,000	26,700	26,900	275,517	275,517
7/1/01 - 6/30/02	54,900	55,600	59,000	59,700	4,100	4,100	51,635	51,635
7/1/02 - 6/30/03	17,000	17,300	17,400	17,600	400	300	15,095	15,095
7/1/03 - 6/30/04	81,800	83,100	81,100	82,300	(700)	(800)	69,834	69,834
7/1/04 - 6/30/05	380,200	386,400	376,200	382,000	(4,000)	(4,400)	321,022	321,022
7/1/05 - 6/30/06	162,300	165,100	160,400	163,000	(1,900)	(2,100)	135,621	135,621
7/1/06 - 6/30/07	311,000	316,700	307,400	312,600	(3,600)	(4,100)	257,524	257,524
7/1/07 - 6/30/08	901,900	919,200	966,300	983,700	64,400	64,500	800,721	800,721
7/1/08 - 6/30/09	792,800	808,800	780,400	795,100	(12,400)	(13,700)	640,226	640,226
7/1/09 - 6/30/10	1,615,300	1,649,500	1,720,700	1,754,800	105,400	105,300	1,396,847	1,396,847
7/1/10 - 6/30/11	1,488,400	1,521,400	1,462,900	1,493,200	(25,500)	(28,200)	1,175,310	1,175,310
7/1/11 - 6/30/12	3,051,300	3,121,900	3,133,500	3,201,200	82,200	79,300	2,490,642	2,490,642
7/1/12 - 6/30/13	3,663,600	3,752,800	3,584,700	3,665,600	(78,900)	(87,200)	2,816,365	2,816,365
7/1/13 - 6/30/14	3,602,200	3,694,100	3,550,900	3,635,600	(51,300)	(58,500)	2,747,039	2,747,039
7/1/14 - 6/30/15	7,261,200	7,534,800	7,235,800	7,416,900	(25,400)	(117,900)	5,515,979	5,515,979
7/1/15 - 6/30/16	5,674,200	5,898,700	6,054,400	6,278,300	380,200	379,600	4,567,246	4,567,246
7/1/16 - 6/30/17	4,750,900	4,973,300	4,813,400	5,010,700	62,500	37,400	3,502,585	3,502,585
7/1/17 - 6/30/18	4,898,300	5,168,800	4,960,900	5,201,600	62,600	32,800	3,361,707	3,361,707
7/1/18 - 6/30/19	4,497,000	4,770,400	4,501,900	4,687,300	4,900	(83,100)	3,270,569	3,270,569
7/1/19 - 6/30/20	4,238,000	4,833,000	4,309,200	4,660,000	71,200	(173,000)	1,978,578	1,978,578
7/1/20 - 6/30/21	4,408,000	5,077,000	4,530,000	5,097,000	122,000	20,000	1,982,067	1,982,067
7/1/21 - 6/30/22	5,270,000	6,262,000	5,457,000	6,289,000	187,000	27,000	1,711,981	1,711,981
Total	64,348,380	68,592,428	65,338,484	68,769,372	990,105	176,945	44,605,326	44,605,326

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(3) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(4) From Section VIII, Exhibit I, Sheet 6, Column (11)
(5) From Section VIII, Exhibit I, Sheet 6, Column (12)
(6) = (4) - (2)
(7) = (5) - (3)
(8) Provided by Entity
(9) Provided by Entity

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Selection of Ultimate Loss

Accident Year	Payroll (00)'s	Unlimited Paid Loss @ 06/30/2023	Unlimited Reported Loss @ 06/30/2023	Ultimate Loss Indications: Paid LDM	Ultimate Loss Indications: Expected Loss	Ultimate Loss Indications: Paid B-F	Ultimate Loss Indications: Frequency Severity	Prior Selected Ultimate Loss: Low	Prior Selected Ultimate Loss: High	Selected Ultimate Loss: Low	Selected Ultimate Loss: High	Ultimate Loss Rates: Low	Ultimate Loss Rates: High	Ultimate Loss Severity: Low	Ultimate Loss Severity: High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Prior to 7/1/1993		3,984,738	3,984,738	4,257,434	0		0	5,281,180	5,616,028	5,281,584	5,569,772				
7/1/93 - 6/30/94		396,613	396,613	425,835	0	396,613	0	397,700	400,600	424,400	427,300				
7/1/94 - 6/30/95		47,745	47,745	51,527	0	47,745	0	51,700	52,100	51,300	51,700				
7/1/95 - 6/30/96		0	0	0	0	0	0	0	0	0	0				
7/1/96 - 6/30/97		612,267	612,267	673,958	0	612,267	0	674,300	680,800	670,900	677,000				
7/1/97 - 6/30/98		0	0	0	0	0	0	0	0	0	0				
7/1/98 - 6/30/99		474,376	474,376	531,321	0	474,376	0	531,600	537,600	528,500	534,200				
7/1/99 - 6/30/00		5,478	5,478	6,186	0	5,478	0	6,200	6,300	6,200	6,200				
7/1/00 - 6/30/01	2,119,040	275,517	275,517	314,056	2,274,415	554,616	0	285,400	289,100	312,100	316,000	0.15	0.15		
7/1/01 - 6/30/02	2,124,720	51,635	51,635	59,355	2,367,744	359,620	0	54,900	55,600	59,000	59,700	0.03	0.03		
7/1/02 - 6/30/03	2,087,950	15,095	15,095	17,496	2,382,851	342,105	0	17,000	17,300	17,400	17,600	0.01	0.01		
7/1/03 - 6/30/04	2,077,380	69,834	69,834	81,698	2,417,723	420,916	0	81,800	83,100	81,100	82,300	0.04	0.04		
7/1/04 - 6/30/05	2,176,960	321,022	321,022	379,086	2,597,948	718,950	0	380,200	386,400	376,200	382,000	0.17	0.18		
7/1/05 - 6/30/06	2,309,760	135,621	135,621	161,733	2,838,747	593,949	0	162,300	165,100	160,400	163,000	0.07	0.07		
7/1/06 - 6/30/07	2,339,880	257,524	257,524	310,025	2,963,853	759,436	0	311,000	316,700	307,400	312,600	0.13	0.13		
7/1/07 - 6/30/08	2,458,840	800,721	800,721	974,990	3,210,336	1,374,534	0	901,900	919,200	966,300	983,700	0.39	0.40		
7/1/08 - 6/30/09	2,512,270	640,226	640,226	787,763	3,377,618	1,272,803	0	792,800	808,800	780,400	795,100	0.31	0.32		
7/1/09 - 6/30/10	2,739,090	1,396,847	1,396,847	1,737,776	3,769,972	2,136,467	0	1,615,300	1,649,500	1,720,700	1,754,800	0.63	0.64		
7/1/10 - 6/30/11	2,636,870	1,175,310	1,175,310	1,478,027	3,701,128	1,933,344	0	1,488,400	1,521,400	1,462,900	1,493,200	0.55	0.57		
7/1/11 - 6/30/12	2,753,440	2,490,642	2,490,642	3,167,354	3,962,332	3,337,203	0	3,051,300	3,121,900	3,133,500	3,201,200	1.14	1.16		
7/1/12 - 6/30/13	2,873,490	2,816,365	2,816,365	3,625,188	4,250,680	3,764,743	4,519,007	3,663,600	3,752,800	3,584,700	3,665,600	1.25	1.28	39,392	40,281
7/1/13 - 6/30/14	3,041,530	2,747,039	2,747,039	3,593,244	4,608,977	3,832,448	5,082,464	3,602,200	3,694,100	3,550,900	3,635,600	1.17	1.20	36,607	37,480
7/1/14 - 6/30/15	3,230,070	5,515,979	5,515,979	7,326,338	5,015,891	6,755,420	5,585,794	7,261,200	7,534,800	7,235,800	7,416,900	2.24	2.30	71,642	73,435
7/1/15 - 6/30/16	3,033,160	4,567,246	4,567,246	6,166,378	4,838,181	5,821,936	5,149,132	5,674,200	5,898,700	6,054,400	6,278,300	2.00	2.07	68,800	71,344
7/1/16 - 6/30/17	2,570,440	3,502,585	3,502,585	4,912,021	4,214,196	4,711,790	4,583,960	4,750,900	4,973,300	4,813,400	5,010,700	1.87	1.95	65,046	67,712
7/1/17 - 6/30/18	2,493,740	3,361,707	3,361,707	5,081,237	4,206,378	4,785,178	4,726,381	4,898,300	5,168,800	4,960,900	5,201,600	1.99	2.09	68,901	72,244
7/1/18 - 6/30/19	2,576,230	3,270,569	3,270,569	5,407,864	4,474,199	5,038,861	4,594,633	4,497,000	4,770,400	4,501,900	4,687,300	1.75	1.82	68,211	71,020
7/1/19 - 6/30/20	2,916,990	1,978,578	1,978,578	3,779,536	5,217,311	4,464,639	4,504,588	4,238,000	4,833,000	4,309,200	4,660,000	1.48	1.60	70,643	76,393
7/1/20 - 6/30/21	2,919,796	1,982,067	1,982,067	4,905,619	5,400,234	5,200,390	4,426,767	4,408,000	5,077,000	4,530,000	5,097,000	1.55	1.75	80,486	90,560
7/1/21 - 6/30/22	3,065,815	1,711,981	1,711,981	5,676,038	5,921,153	5,847,223	5,898,818	5,270,000	6,262,000	5,457,000	6,289,000	1.78	2.05	78,260	90,191
7/1/22 - 6/30/23	3,396,233	662,536	662,536	4,456,307	6,819,227	6,467,922	4,493,195			4,999,000	5,962,000	1.47	1.76	100,784	120,199
Total	60,453,694	45,267,862	45,267,862	70,345,390	90,831,095	72,030,973	53,564,738	64,348,380	68,592,428	70,337,484	74,731,372				

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	From Section VIII, Exhibit I, Sheet 10, Column (7)
(6)	From Section VIII, Exhibit I, Sheet 7, Column (4)
(7)	From Section VIII, Exhibit I, Sheet 7, Column (10)
(8)	From Section VIII, Exhibit I, Sheet 9, Column (12)
(9)	From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(10)	From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(11)	Selected by Deloitte Consulting LLP
(12)	Selected by Deloitte Consulting LLP
(13)	= (11) / (2)
(14)	= (12) / (2)
(15)	(11) Divided by Ultimate Claims From Section VIII, Exhibit I, Sheet 13, Column (7)
(16)	(12) Divided by Ultimate Claims From Section VIII, Exhibit I, Sheet 13, Column (7)

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Bornhuetter-Ferguson Method

Accident Year	Payroll (00)'s	Initial Expected Loss Rates	Initial Expected Loss	Expected % of Paid Loss	Expected Paid Loss	Unlimited Actual Paid Loss	Expected % of Unpaid Loss	Expected Unpaid Loss	Unlimited Indicated Ultimate Loss	Unlimited Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
7/1/93 - 6/30/94		0.85	0	93.1%	0	396,613	6.9%	0	396,613	
7/1/94 - 6/30/95		0.88	0	92.7%	0	47,745	7.3%	0	47,745	
7/1/95 - 6/30/96		0.90	0	91.6%	0	0	8.4%	0	0	
7/1/96 - 6/30/97		0.93	0	90.8%	0	612,267	9.2%	0	612,267	
7/1/97 - 6/30/98		0.96	0	90.0%	0	0	10.0%	0	0	
7/1/98 - 6/30/99		0.99	0	89.3%	0	474,376	10.7%	0	474,376	
7/1/99 - 6/30/00		1.03	0	88.6%	0	5,478	11.4%	0	5,478	
7/1/00 - 6/30/01	2,119,040	1.07	2,274,415	87.7%	1,995,316	275,517	12.3%	279,099	554,616	0.26
7/1/01 - 6/30/02	2,124,720	1.11	2,367,744	87.0%	2,059,760	51,635	13.0%	307,985	359,620	0.17
7/1/02 - 6/30/03	2,087,950	1.14	2,382,851	86.3%	2,055,841	15,095	13.7%	327,010	342,105	0.16
7/1/03 - 6/30/04	2,077,380	1.16	2,417,723	85.5%	2,066,641	69,834	14.5%	351,082	420,916	0.20
7/1/04 - 6/30/05	2,176,960	1.19	2,597,948	84.7%	2,200,020	321,022	15.3%	397,928	718,950	0.33
7/1/05 - 6/30/06	2,309,760	1.23	2,838,747	83.9%	2,380,419	135,621	16.1%	458,328	593,949	0.26
7/1/06 - 6/30/07	2,339,880	1.27	2,963,853	83.1%	2,461,941	257,524	16.9%	501,912	759,436	0.32
7/1/07 - 6/30/08	2,458,840	1.31	3,210,336	82.1%	2,636,523	800,721	17.9%	573,813	1,374,534	0.56
7/1/08 - 6/30/09	2,512,270	1.34	3,377,618	81.3%	2,745,041	640,226	18.7%	632,577	1,272,803	0.51
7/1/09 - 6/30/10	2,739,090	1.38	3,769,972	80.4%	3,030,352	1,396,847	19.6%	739,620	2,136,467	0.78
7/1/10 - 6/30/11	2,636,870	1.40	3,701,128	79.5%	2,943,094	1,175,310	20.5%	758,035	1,933,344	0.73
7/1/11 - 6/30/12	2,753,440	1.44	3,962,332	78.6%	3,115,771	2,490,642	21.4%	846,561	3,337,203	1.21
7/1/12 - 6/30/13	2,873,490	1.48	4,250,680	77.7%	3,302,302	2,816,365	22.3%	948,378	3,764,743	1.31
7/1/13 - 6/30/14	3,041,530	1.52	4,608,977	76.5%	3,523,568	2,747,039	23.5%	1,085,409	3,832,448	1.26
7/1/14 - 6/30/15	3,230,070	1.55	5,015,891	75.3%	3,776,450	5,515,979	24.7%	1,239,441	6,755,420	2.09
7/1/15 - 6/30/16	3,033,160	1.60	4,838,181	74.1%	3,583,492	4,567,246	25.9%	1,254,689	5,821,936	1.92
7/1/16 - 6/30/17	2,570,440	1.64	4,214,196	71.3%	3,004,991	3,502,585	28.7%	1,209,205	4,711,790	1.83
7/1/17 - 6/30/18	2,493,740	1.69	4,206,378	66.2%	2,782,907	3,361,707	33.8%	1,423,472	4,785,178	1.92
7/1/18 - 6/30/19	2,576,230	1.74	4,474,199	60.5%	2,705,906	3,270,569	39.5%	1,768,292	5,038,861	1.96
7/1/19 - 6/30/20	2,916,990	1.79	5,217,311	52.3%	2,731,249	1,978,578	47.7%	2,486,062	4,464,639	1.53
7/1/20 - 6/30/21	2,919,796	1.85	5,400,234	40.4%	2,181,912	1,982,067	59.6%	3,218,322	5,200,390	1.78
7/1/21 - 6/30/22	3,065,815	1.93	5,921,153	30.2%	1,785,912	1,711,981	69.8%	4,135,242	5,847,223	1.91
7/1/22 - 6/30/23	3,396,233	2.01	6,819,227	14.9%	1,013,841	662,536	85.1%	5,805,386	6,467,922	1.90
Total	60,453,694		90,831,095		60,083,247	41,283,124		30,747,848	72,030,973	

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	From Section VIII, Exhibit I, Sheet 8, Column (13)
(4)	= (2) x (3)
(5)	= 1 / Section VIII, Exhibit I, Sheet 10, Column (6)
(6)	= (4) x (5)
(7)	Provided by Entity
(8)	= 1 - (5)
(9)	= (4) x (8)
(10)	= (7) + (9)
(11)	= (10) / (2)

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Calculation of Initial Expected Loss Rates

Accident Year	Payroll (00)'s	Payroll Trend	Loss Development Unlimited Indicated Ultimate Loss Paid	Reported	Selected Initial Ultimate Loss	Loss Trend Factor	Benefit Level Adjustment Factors	Trended Ultimate	On-level Loss Rates	Detrended Loss Rates	Prior Expected Loss Rates	Initial Expected Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
7/1/93 - 6/30/94	0	2.357	425,835	425,835	5,425,678	4.116	1.347	30,088,498		0.85	0.85	0.85
7/1/94 - 6/30/95	0	2.288	51,527	51,527	425,850	3.920	1.335	2,228,995		0.88	0.87	0.88
7/1/95 - 6/30/96	0	2.221	0	0	51,500	3.733	1.324	254,594		0.90	0.90	0.90
7/1/96 - 6/30/97	0	2.157	673,958	673,958	0	3.556	1.311	0		0.93	0.92	0.93
7/1/97 - 6/30/98	0	2.094	0	0	673,950	3.386	1.294	2,953,673		0.96	0.95	0.96
7/1/98 - 6/30/99	0	2.033	531,321	531,321	0	3.225	1.276	0		0.99	0.99	0.99
7/1/99 - 6/30/00	0	1.974	6,186	6,186	531,350	3.072	1.254	2,046,981		1.03	1.02	1.03
7/1/00 - 6/30/01	2,119,040	1.916	314,056	314,056	6,200	2.925	1.225	22,224	0.01	1.07	1.07	1.07
7/1/01 - 6/30/02	2,124,720	1.860	59,355	59,355	314,050	2.786	1.203	1,052,652	0.27	1.11	1.11	1.11
7/1/02 - 6/30/03	2,087,950	1.806	17,496	17,496	59,350	2.653	1.198	188,593	0.05	1.14	1.14	1.14
7/1/03 - 6/30/04	2,077,380	1.754	81,698	81,698	17,500	2.527	1.197	52,941	0.01	1.16	1.16	1.16
7/1/04 - 6/30/05	2,176,960	1.702	379,086	379,086	81,700	2.407	1.190	234,018	0.06	1.19	1.19	1.19
7/1/05 - 6/30/06	2,309,760	1.653	161,733	161,733	379,100	2.292	1.178	1,023,680	0.27	1.23	1.22	1.23
7/1/06 - 6/30/07	2,339,880	1.605	310,025	310,025	161,700	2.183	1.165	411,320	0.11	1.27	1.26	1.27
7/1/07 - 6/30/08	2,458,840	1.558	974,990	974,990	310,000	2.079	1.152	742,741	0.19	1.31	1.30	1.31
7/1/08 - 6/30/09	2,512,270	1.513	787,763	787,763	975,000	1.980	1.141	2,202,517	0.58	1.34	1.34	1.34
7/1/09 - 6/30/10	2,739,090	1.469	1,737,776	1,737,776	787,750	1.886	1.136	1,687,634	0.42	1.38	1.37	1.38
7/1/10 - 6/30/11	2,636,870	1.426	1,478,027	1,478,027	1,737,750	1.796	1.136	3,544,265	0.94	1.40	1.40	1.40
7/1/11 - 6/30/12	2,753,440	1.384	3,167,354	3,167,354	1,478,050	1.710	1.129	2,854,703	0.75	1.44	1.43	1.44
7/1/12 - 6/30/13	2,873,490	1.344	3,625,188	3,625,188	3,167,350	1.629	1.120	5,777,730	1.50	1.48	1.47	1.48
7/1/13 - 6/30/14	3,041,530	1.305	3,593,244	3,593,244	3,625,150	1.551	1.114	6,267,382	1.58	1.52	1.51	1.52
7/1/14 - 6/30/15	3,230,070	1.267	7,326,338	7,326,338	3,593,250	1.477	1.109	5,885,545	1.44	1.55	1.55	1.55
7/1/15 - 6/30/16	3,033,160	1.230	6,166,378	6,166,378	7,326,350	1.407	1.100	11,342,246	3.04	1.60	1.59	1.60
7/1/16 - 6/30/17	2,570,440	1.194	4,912,021	4,912,021	6,166,350	1.340	1.091	9,017,411	2.94	1.64	1.63	1.64
7/1/17 - 6/30/18	2,493,740	1.159	5,081,237	5,081,237	4,912,050	1.276	1.081	6,778,434	2.34	1.69	1.68	1.69
7/1/18 - 6/30/19	2,576,230	1.126	5,407,864	5,407,864	5,081,250	1.216	1.071	6,611,903	2.28	1.74	1.73	1.74
7/1/19 - 6/30/20	2,916,990	1.093	3,779,536	3,779,536	3,779,536	1.158	1.060	4,636,348	1.45	1.79	1.78	1.79
7/1/20 - 6/30/21	2,919,796	1.061	4,905,619	4,905,619	4,905,619	1.103	1.045	5,649,965	***1.82***	1.85	1.84	1.85
7/1/21 - 6/30/22	3,065,815	1.030	5,676,038	5,676,038	5,676,038	1.050	1.020	6,077,987	***1.92***	1.93	1.92	1.93
7/1/22 - 6/30/23	3,396,233	1.000	4,456,307	4,456,307	4,456,307	1.000	1.000	4,456,307	***1.31***	2.01		2.01
			66,087,956	66,087,956				Last 3 Wtd Avg	2.01			
								Last 4 Wtd Avg	2.24			
								Last 5 Wtd Avg	2.43			
								All Per Wtd Avg	0.96			

(Note: numbers in bold and italics and with borders are excluded from the calculated averages)

Selected (14) 2.01

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Selected by Deloitte Consulting LLP
(4) From Section VIII, Exhibit I, Sheet 10, Column (7)
(5) From Section VIII, Exhibit I, Sheet 0, Column (7)
(6) Selected by Deloitte Consulting LLP
(7) Selected by Deloitte Consulting LLP
(8) Based on industry sources
(9) = (6) x (7) x (8)
(10) = (9) / [(2) x (3)]
(11) = (14) / (7) / (8) * (3)
(12) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(13) Selected for by Deloitte Consulting LLP Based on (14)
(14) Selected by Deloitte Consulting LLP

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Frequency Severity Method

Accident Year	Payroll (00)'s	Ultimate Reported Severity	Include For Fit	Exponential Fitted Reported Severity	Initial Selected Ultimate Severity	Selected Ultimate Claim Counts	Benefit Level Adjustment Factor	Selected Severity Trend	Trended Severity	On-Level Selected Ultimate Severity	Indicated Ultimate Loss	Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Prior to 7/1/1993			Exclude	11,738		0					0	
7/1/93 - 6/30/94			Exclude	12,633		0	1.347	4.116	0,000		0	
7/1/94 - 6/30/95			Exclude	13,596		0	1.335	3.920	0,000		0	
7/1/95 - 6/30/96			Exclude	14,633		0	1.324	3.733	0,000		0	
7/1/96 - 6/30/97			Exclude	15,749		0	1.311	3.556	0,000		0	
7/1/97 - 6/30/98			Exclude	16,950		0	1.294	3.386	0,000		0	
7/1/98 - 6/30/99			Exclude	18,242		0	1.276	3.225	0,000		0	
7/1/99 - 6/30/00			Exclude	19,633		0	1.254	3.072	0,000		0	
7/1/00 - 6/30/01	2,119,040		Exclude	21,130		0	1.225	2.925	0,000		0	0.00
7/1/01 - 6/30/02	2,124,720		Exclude	22,742		0	1.203	2.786	0,000		0	0.00
7/1/02 - 6/30/03	2,087,950		Exclude	24,476		0	1.198	2.653	0,000		0	0.00
7/1/03 - 6/30/04	2,077,380		Exclude	26,342		0	1.197	2.527	0,000		0	0.00
7/1/04 - 6/30/05	2,176,960		Exclude	28,351		0	1.190	2.407	0,000		0	0.00
7/1/05 - 6/30/06	2,309,760		Exclude	30,512		0	1.178	2.292	0,000		0	0.00
7/1/06 - 6/30/07	2,339,880		Exclude	32,839		0	1.165	2.183	0,000		0	0.00
7/1/07 - 6/30/08	2,458,840		Exclude	35,343		0	1.152	2.079	0,000		0	0.00
7/1/08 - 6/30/09	2,512,270		Exclude	38,038		0	1.141	1.980	0,000		0	0.00
7/1/09 - 6/30/10	2,739,090		Exclude	40,938		0	1.136	1.886	0,000		0	0.00
7/1/10 - 6/30/11	2,636,870		Exclude	44,060		0	1.136	1.796	0,000		0	0.00
7/1/11 - 6/30/12	2,753,440		Exclude	47,420		0	1.129	1.710	0,000		0	0.00
7/1/12 - 6/30/13	2,873,490	39,837	Include	51,036	34,806	91	1.120	1.629	63,492	90,586	4,519,007	1.57
7/1/13 - 6/30/14	3,041,530	37,044	Include	54,927	37,373	97	1.114	1.551	64,612	90,586	5,082,464	1.67
7/1/14 - 6/30/15	3,230,070	72,538	Include	59,116	35,577	101	1.109	1.477	58,273	90,586	5,585,794	1.73
7/1/15 - 6/30/16	3,033,160	70,072	Include	63,623	83,254	88	1.100	1.407	128,889	90,586	5,149,132	1.70
7/1/16 - 6/30/17	2,570,440	66,379	Include	68,475	83,329	74	1.091	1.340	121,857	90,586	4,583,960	1.78
7/1/17 - 6/30/18	2,493,740	70,573	Include	73,696	68,223	72	1.081	1.276	94,145	90,586	4,726,381	1.90
7/1/18 - 6/30/19	2,576,230	81,937	Include	79,315	76,989	66	1.071	1.216	100,180	90,586	4,594,633	1.78
7/1/19 - 6/30/20	2,916,990	61,960	Include	85,363	61,960	61	1.060	1.158	76,006	90,586	4,504,588	1.54
7/1/20 - 6/30/21	2,919,796	87,160	Include	91,873	87,160	56	1.045	1.103	***100,385***	90,586	4,426,767	1.52
7/1/21 - 6/30/22	3,065,815	81,401	Exclude	98,878	81,401	70	1.020	1.050	***87,165***	90,586	5,898,818	1.92
7/1/22 - 6/30/23	3,396,233	89,843	Exclude	106,418	89,843	50	1.000	1.000	***89,843***	90,586	4,493,195	1.32
			Implied Trend	7.6%	10.4%			Last 5 Wtd Avg	106,333			
								Last 4 Wtd Avg	99,063			
								Last 3 Wtd Avg	90,586			
Total	60,453,694					826		Last 3 Avg	90,110		53,564,738	
								Selected	90,586			

Reported Exponential Regression	
Constant	11.649
X Coefficient	(0.073)
R Squared	0.507

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Section VIII, Exhibit I, Sheet 0, Column (7) / Section VIII, Exhibit I, Sheet 13, Column (7) x 1
(4) Years included for purposes of fit
(5) Result of Exponential fit of Column (3) * Column (8)
(6) Selected by Deloitte Consulting LLP
(7) From Section VIII, Exhibit I, Sheet 13, Column (7)
(8) Based on industry sources
(9) Selected by Deloitte Consulting LLP
(10) = (6) x (8) x (9)
(11) Selected by Deloitte Consulting, LLP
(12) Selected in column (11) x (7) / (8) / (9)
(13) = (12) / (3)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss Development Method

Accident Year	Age of Losses @ 06/30/2023	Retention	Payroll (00)'s	Unlimited Paid Loss @ 06/30/2023	Paid LDF	Indicated Ultimate Loss	Unlimited Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Prior to 7/1/1993	372.0	Unlimited		3,984,738	1.068	4,257,434	
7/1/93 - 6/30/94	360.0	Unlimited		396,613	1.074	425,835	
7/1/94 - 6/30/95	348.0	Unlimited		47,745	1.079	51,527	
7/1/95 - 6/30/96	336.0	Unlimited		0	1.091	0	
7/1/96 - 6/30/97	324.0	Unlimited		612,267	1.101	673,958	
7/1/97 - 6/30/98	312.0	Unlimited		0	1.111	0	
7/1/98 - 6/30/99	300.0	Unlimited		474,376	1.120	531,321	
7/1/99 - 6/30/00	288.0	Unlimited		5,478	1.129	6,186	
7/1/00 - 6/30/01	276.0	Unlimited	2,119,040	275,517	1.140	314,056	0.15
7/1/01 - 6/30/02	264.0	Unlimited	2,124,720	51,635	1.150	59,355	0.03
7/1/02 - 6/30/03	252.0	Unlimited	2,087,950	15,095	1.159	17,496	0.01
7/1/03 - 6/30/04	240.0	Unlimited	2,077,380	69,834	1.170	81,698	0.04
7/1/04 - 6/30/05	228.0	Unlimited	2,176,960	321,022	1.181	379,086	0.17
7/1/05 - 6/30/06	216.0	Unlimited	2,309,760	135,621	1.193	161,733	0.07
7/1/06 - 6/30/07	204.0	Unlimited	2,339,880	257,524	1.204	310,025	0.13
7/1/07 - 6/30/08	192.0	Unlimited	2,458,840	800,721	1.218	974,990	0.40
7/1/08 - 6/30/09	180.0	Unlimited	2,512,270	640,226	1.230	787,763	0.31
7/1/09 - 6/30/10	168.0	Unlimited	2,739,090	1,396,847	1.244	1,737,776	0.63
7/1/10 - 6/30/11	156.0	Unlimited	2,636,870	1,175,310	1.258	1,478,027	0.56
7/1/11 - 6/30/12	144.0	Unlimited	2,753,440	2,490,642	1.272	3,167,354	1.15
7/1/12 - 6/30/13	132.0	Unlimited	2,873,490	2,816,365	1.287	3,625,188	1.26
7/1/13 - 6/30/14	120.0	Unlimited	3,041,530	2,747,039	1.308	3,593,244	1.18
7/1/14 - 6/30/15	108.0	Unlimited	3,230,070	5,515,979	1.328	7,326,338	2.27
7/1/15 - 6/30/16	96.0	Unlimited	3,033,160	4,567,246	1.350	6,166,378	2.03
7/1/16 - 6/30/17	84.0	Unlimited	2,570,440	3,502,585	1.402	4,912,021	1.91
7/1/17 - 6/30/18	72.0	Unlimited	2,493,740	3,361,707	1.512	5,081,237	2.04
7/1/18 - 6/30/19	60.0	Unlimited	2,576,230	3,270,569	1.653	5,407,864	2.10
7/1/19 - 6/30/20	48.0	Unlimited	2,916,990	1,978,578	1.910	3,779,536	1.30
7/1/20 - 6/30/21	36.0	Unlimited	2,919,796	1,982,067	2.475	4,905,619	1.68
7/1/21 - 6/30/22	24.0	Unlimited	3,065,815	1,711,981	3.315	5,676,038	1.85
7/1/22 - 6/30/23	12.0	Unlimited	3,396,233	662,536	6.726	4,456,307	1.31
Total			60,453,694	45,267,862		70,345,390	

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1)
(3) Provided by Entity
(4) Provided by Entity
(5) Provided by Entity
(6) From Section VIII, Exhibit I, Sheet 11
(7) = (5) x (6)
(8) = (7) / (4)

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development 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	348	360	372	As of 6/30/2023
Prior to 7/1/1993																					431,309	875,528	1,327,257	1,751,936	2,161,544	2,529,457	2,853,613	3,209,834	3,520,406	3,769,010	3,984,738	3,984,738
7/1/93 - 6/30/94																				40,261	81,410	123,045	165,366	207,625	250,649	294,456	319,264	344,531	370,160	396,613		396,613
7/1/94 - 6/30/95																			22,548	45,252	47,745	47,745	47,745	47,745	47,745	47,745	47,745	47,745	47,745			47,745
7/1/95 - 6/30/96																		0	0	0	0	0	0	0	0	0	0	0				0
7/1/96 - 6/30/97																	49,502	96,560	142,158	188,508	234,790	282,057	612,267	612,267	612,267	612,267	612,267					612,267
7/1/97 - 6/30/98																0	0	0	0	0	0	0	0	0	0	0						0
7/1/98 - 6/30/99															49,096	141,025	200,531	248,313	296,027	346,599	396,060	446,411	474,376	474,376	474,376							474,376
7/1/99 - 6/30/00														554	985	1,243	1,243	1,243	2,338	3,654	3,654	4,725	5,478	5,478								5,478
7/1/00 - 6/30/01													48,236	69,594	91,207	113,177	135,114	157,449	180,190	203,340	226,917	250,833	275,517									275,517
7/1/01 - 6/30/02												4,111	5,358	7,808	9,518	11,690	18,010	34,083	38,656	40,338	47,777	51,635										51,635
7/1/02 - 6/30/03											1,908	2,328	2,748	4,069	4,489	7,780	10,275	10,555	11,080	14,675	15,095											15,095
7/1/03 - 6/30/04										68,244	68,244	69,084	69,084	69,084	69,834	69,834	69,834	69,834	69,834	69,834												69,834
7/1/04 - 6/30/05									267,828	311,712	312,501	314,463	315,963	315,963	315,963	321,022	321,022	321,022	321,022													321,022
7/1/05 - 6/30/06								13,202	29,277	42,729	56,403	70,045	83,946	98,102	112,351	126,562	135,621	135,621														135,621
7/1/06 - 6/30/07							70,279	136,227	193,403	229,432	236,721	253,110	254,162	255,179	255,922	256,924	257,524															257,524
7/1/07 - 6/30/08						51,687	145,635	268,371	323,914	389,235	518,875	572,688	626,585	681,474	737,153	800,721																800,721
7/1/08 - 6/30/09					245,076	449,792	548,050	598,362	620,837	624,296	624,296	624,296	640,226	640,226	640,226																	640,226
7/1/09 - 6/30/10				327,735	561,513	769,791	1,023,821	1,092,514	666,725	807,303	954,980	1,094,611	1,289,878	1,396,847																		1,396,847
7/1/10 - 6/30/11			475,198	711,554	861,775	972,452	1,110,436	1,110,436	1,110,436	1,137,731	1,175,310	1,175,310	1,175,310																			1,175,310
7/1/11 - 6/30/12		601,311	1,422,327	1,860,787	2,016,874	2,133,108	2,207,761	2,265,672	2,304,056	2,342,226	2,380,655	2,490,642																				2,490,642
7/1/12 - 6/30/13	600,382	1,300,502	1,857,989	2,186,848	2,286,943	2,451,633	2,629,693	2,733,686	2,794,108	2,816,364	2,816,365																					2,816,365
7/1/13 - 6/30/14	564,294	1,308,940	1,794,815	2,140,084	2,332,353	2,432,518	2,569,280	2,586,093	2,728,552	2,747,039																						2,747,039
7/1/14 - 6/30/15	737,246	1,861,887	2,959,645	3,946,009	4,502,419	5,008,296	5,375,180	5,443,606	5,515,979																							5,515,979
7/1/15 - 6/30/16	707,828	1,549,690	2,180,941	2,769,017	3,277,902	3,775,587	4,182,987	4,567,246																								4,567,246
7/1/16 - 6/30/17	494,231	1,421,780	1,993,536	2,567,027	3,104,590	3,273,631	3,502,585																									3,502,585
7/1/17 - 6/30/18	585,174	1,376,910	1,919,026	2,723,923	3,101,517	3,361,707																										3,361,707
7/1/18 - 6/30/19	761,675	1,627,938	2,217,176	2,680,931	3,270,569																											3,270,569
7/1/19 - 6/30/20	628,307	1,275,988	1,562,400	1,978,578																												1,978,578
7/1/20 - 6/30/21	728,438	1,397,133	1,982,067																													1,982,067
7/1/21 - 6/30/22	804,782	1,711,981																														1,711,981
7/1/22 - 6/30/23	662,536																															662,536
																																45,267,862

Accident Year	Age-to-Age Development Factors 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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993																					2.030	***1.516***	***1.320***	***1.234***	***1.170***	***1.128***	***1.125***	***1.097***	***1.071***	***1.057***	
7/1/93 - 6/30/94																				2.022	1.511	1.344	1.256	1.207	1.175	1.084	1.079	1.074	1.071		
7/1/94 - 6/30/95																			2.007	1.055	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
7/1/95 - 6/30/96																															
7/1/96 - 6/30/97																	1.951	1.472	1.326	1.246	1.201	2.171	1.000	1.000	1.000	1.000					
7/1/97 - 6/30/98																0.000		1.000	0.000												
7/1/98 - 6/30/99															2.872	1.422	1.238	1.192	1.171	1.143	1.127	1.063	1.000	1.000							
7/1/99 - 6/30/00														1.777	1.263	1.000	1.000	1.881	1.562	1.000	1.293	1.159	1.000								
7/1/00 - 6/30/01													1.443	1.311	1.241	1.194	1.165	1.144	1.128	1.116	1.105	1.098									
7/1/01 - 6/30/02												1.303	1.457	1.219	1.228	1.541	1.893	1.134	1.044	1.184	1.081										
7/1/02 - 6/30/03											1.220	1.180	1.481	1.103	1.733	1.321	1.027	1.050	1.324	1.029											
7/1/03 - 6/30/04										1.000	1.012	1.000	1.000	1.011	1.000	1.000	1.000	1.000	1.000												
7/1/04 - 6/30/05									1.164	1.003	1.006	1.005	1.000	1.000	1.016	1.000	1.000	1.000													
7/1/05 - 6/30/06								2.218	1.459	1.320	1.242	1.198	1.169	1.145	1.126	1.072	1.000														
7/1/06 - 6/30/07							1.938	1.420	1.186	1.032	1.069	1.004	1.004	1.003	1.004	1.002															
7/1/07 - 6/30/08						2.818	1.843	1.207	1.202	1.333	1.104	1.094	1.088	1.082	1.086																
7/1/08 - 6/30/09					1.835	1.218	1.092	1.038	1.006	1.000	1.000	1.026	1.000	1.000																	
7/1/09 - 6/30/10				1.713	1.371	1.330	1.067	0.610	1.211	1.183	1.146	1.178	1.083																		
7/1/10 - 6/30/11			1.497	1.211	1.128	1.142	1.000	1.000	1.025	1.033	1.000	1.000																			
7/1/11 - 6/30/12		2.365	1.308	1.084	1.058	1.035	1.026	1.017	1.017	1.016	1.046																				
7/1/12 - 6/30/13	2.166	1.429	1.177	1.046	1.072	1.073	1.040	1.022	1.008	1.000																					
7/1/13 - 6/30/14	2.320	1.371	1.192	1.090	1.043	1.056	1.007	1.055	1.007																						
7/1/14 - 6/30/15	2.525	1.590	1.333	1.141	1.112	1.073	1.013	1.013																							
7/1/15 - 6/30/16	2.189	1.407	1.270	1.184	1.152	1.108	1.092																								
7/1/16 - 6/30/17	2.877	1.402	1.288	1.209	1.054	1.070																									
7/1/17 - 6/30/18	2.353	1.394	1.419	1.139	1.084																										
7/1/18 - 6/30/19	2.137	1.362	1.209	1.220																											
7/1/19 - 6/30/20	2.031	1.224	1.266																												
7/1/20 - 6/30/21	1.918	1.419																													
7/1/21 - 6/30/22	2.127																														
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																															
Last 3 Wtd Avg	2.029	1.340	1.296	1.189	1.098	1.083	1.039	1.026	1.010	1.012	1.055	1.073	1.063	1.036	1.071	1.014	1.000	1.001	1.044	1.122	1.104	1.076	1.000	1.000	1.000	1.000	1.069				
Last 5 Wtd Avg	2.106	1.363	1.288	1.175	1.094	1.078	1.037	1.022	1.026	1.029	1.054	1.072	1.061	1.035	1.056	1.016	1.029	1.047	1.098	1.133	1.117	1.390	1.000	1.000	1.048						
Last 8 Wtd Avg	2.244	1.405	1.273	1.145	1.090	1.086	1.038	0.998	1.033	1.045	1.054	1.067	1.054	1.035	1.070	1.044	1.097	1.091	1.171	1.160	1.132	1.369									
Last 12 Wtd Avg																															
All Per Wtd Avg	2.243	1.449	1.282	1.155	1.105	1.093	1.047	1.002	1.037	1.043	1.053	1.068	1.061	1.045	1.124	1.095	1.142	1.130	1.196	1.194	1.417	1.369	1.032	1.032	1.048	1.026	1.069	1.065	1.071		
Industry																															
Age-to-Age	2.944	1.572	1.221	1.082	1.038	1.014	1.011	1.008	1.006	1.005	1.005	1.002	1.003	1.002	1.003	1.002	1.002	1.001	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	
Age-to-Ult	7.016	2.383	1.516	1.242	1.148	1.106	1.091	1.079	1.070	1.064	1.059	1.054	1.052	1.049	1.047	1.044	1.042	1.040	1.039	1.037	1.036	1.034	1.032	1.031	1.029	1.027	1.025	1.023	1.022	1.020	1.018
Prior Selected																															
Age-to-Age	2.030	1.331	1.303	1.154	1.093	1.074	1.018	1.016	1.015	1.016	1.013	1.012	1.012	1.013	1.011	1.012	1.011	1.011	1.011	1.011	1.009	1.007	1.009	1.009	1.009	1.009	1.009	1.008	1.005	1.005	
Age-to-Ult	6.594	3.248	2.440	1.872	1.623	1.485	1.383	1.359	1.337	1.317	1.297	1.280	1.266	1.251	1.235	1.222	1.207	1.194	1.181	1.169	1.156	1.145	1.137	1.127	1.117	1.107	1.097	1.087	1.078	1.073	1.067
Selected																															
Age-to-Age	2.029	1.340	1.296	1.155	1.094	1.078	1.039	1.017	1.015	1.016	1.012	1.011	1.011	1.011	1.011	1.011	1.009	1.010	1.009	1.009	1.008	1.008	1.009	1.008	1.008	1.010	1.009	1.011	1.005	1.005	
Age-to-Ult	6.726	3.315	2.475	1.910	1.653	1.512	1.402	1.350	1.328	1.308	1.287	1.272	1.258	1.244	1.230	1.218	1.204	1.193	1.181	1.170	1.159	1.150	1.140	1.129	1.120	1.111	1.101	1.091	1.079	1.074	1.068

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Indemnity (Including Lump Sum)

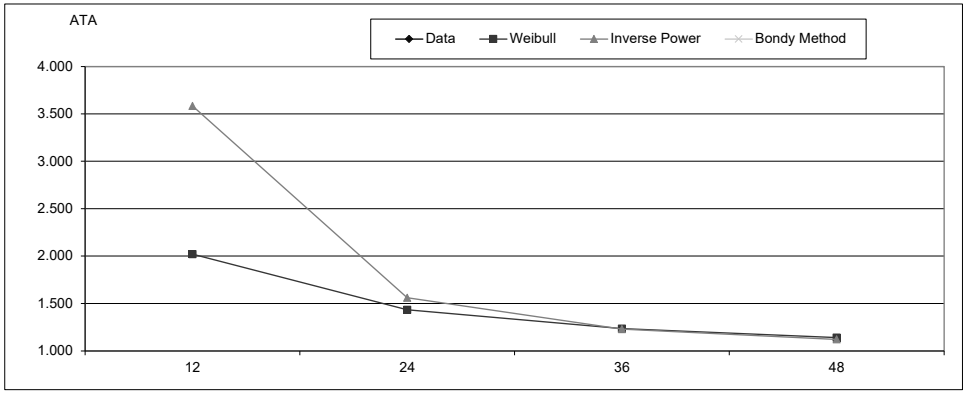
Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

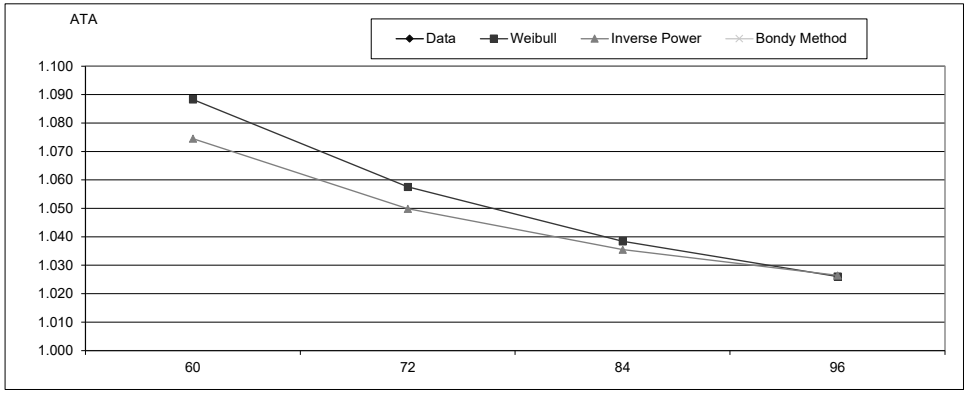
Curve Fitting Methods
Paid Loss

Tail at Period:	**31**	(To display in table)
Cut-off point:(<=Tail & <51)	**50**	(to run-out pattern)

Summary of Curve Fitting Methods

Method	Tail	R^2
Weibull	**1.000**	**0.953**
Inverse Power	**1.016**	**0.906**
Bondy Method		**N/A**





				Weibull		Inverse Power		Bondy Method			
									Sel. Decay Ratio=		
PERIOD	AGE	ATA	Use	**ATA***	**ATU***	**ATA***	**ATU***	Ln(ATA)	Decay	**ATA***	**ATU***
1	12	0.000	Exclude	**2.020**	5.308	**3.584**	10.686				
2	24	1.340	Include	**1.433**	2.628	**1.561**	2.982				
3	36	1.296	Include	**1.234**	1.834	**1.230**	1.910				
4	48	1.155	Include	**1.140**	1.485	**1.122**	1.553				
5	60	1.094	Include	**1.088**	1.303	**1.075**	1.384				
6	72	1.078	Include	**1.058**	1.197	**1.050**	1.288				
7	84	1.039	Include	**1.038**	1.132	**1.036**	1.227				
8	96	1.017	Include	**1.026**	1.090	**1.026**	1.185				
9	108	1.015	Include	**1.018**	1.062	**1.020**	1.154				
10	120	0.000	Exclude	**1.012**	1.044	**1.016**	1.131				
11	132	0.000	Exclude	**1.009**	1.031	**1.013**	1.113				
12	144	0.000	Exclude	**1.006**	1.022	**1.011**	1.099				
13	156	0.000	Exclude	**1.004**	1.016	**1.009**	1.087				
14	168	0.000	Exclude	**1.003**	1.011	**1.008**	1.077				
15	180	0.000	Exclude	**1.002**	1.008	**1.007**	1.069				
16	192	0.000	Exclude	**1.002**	1.006	**1.006**	1.062				
17	204	0.000	Exclude	**1.001**	1.004	**1.005**	1.056				
18	216	0.000	Exclude	**1.001**	1.003	**1.004**	1.051				
19	228	0.000	Exclude	**1.001**	1.002	**1.004**	1.046				
20	240	0.000	Exclude	**1.000**	1.002	**1.004**	1.042				
21	252	0.000	Exclude	**1.000**	1.001	**1.003**	1.038				
22	264	0.000	Exclude	**1.000**	1.001	**1.003**	1.035				
23	276	0.000	Exclude	**1.000**	1.001	**1.003**	1.032				
24	288	0.000	Exclude	**1.000**	1.001	**1.002**	1.029				
25	300	0.000	Exclude	**1.000**	1.000	**1.002**	1.027				
26	312	0.000	Exclude	**1.000**	1.000	**1.002**	1.025				
27	324	0.000	Exclude	**1.000**	1.000	**1.002**	1.023				
28	336	0.000	Exclude	**1.000**	1.000	**1.002**	1.021				
29	348	0.000	Exclude	**1.000**	1.000	**1.002**	1.019				
30	360	0.000	Exclude	**1.000**	1.000	**1.001**	1.018				
31	372	0.000	Exclude	**1.000**	1.000	**1.001**	1.016				
32	384	0.000	Exclude	**1.000**	1.000	**1.001**	1.015				
33	396	0.000	Exclude	**1.000**	1.000	**1.001**	1.013				
34	408	0.000	Exclude	**1.000**	1.000	**1.001**	1.012				
35	420	0.000	Exclude	**1.000**	1.000	**1.001**	1.011				
36	432	0.000	Exclude	**1.000**	1.000	**1.001**	1.010				
37	444	0.000	Exclude	**1.000**	1.000	**1.001**	1.009				
38	456	0.000	Exclude	**1.000**	1.000	**1.001**	1.008				
39	468	0.000	Exclude	**1.000**	1.000	**1.001**	1.007				
40	480	0.000	Exclude	**1.000**	1.000	**1.001**	1.007				
41	492	0.000	Exclude	**1.000**	1.000	**1.001**	1.006				
42	504	0.000	Exclude	**1.000**	1.000	**1.001**	1.005				
43	516	0.000	Exclude	**1.000**	1.000	**1.001**	1.004				
44	528	0.000	Exclude	**1.000**	1.000	**1.001**	1.004				
45	540	0.000	Exclude	**1.000**	1.000	**1.001**	1.003				
46	552	0.000	Exclude	**1.000**	1.000	**1.001**	1.003				
47	564	0.000	Exclude	**1.000**	1.000	**1.001**	1.002				
48	576	0.000	Exclude	**1.000**	1.000	**1.001**	1.001				
49	588	0.000	Exclude	**1.000**	1.000	**1.000**	1.001				
50	600	0.000	Exclude	**1.000**	1.000	**1.000**	1.000				

Unpaid Claim Analysis as of 06/30/2023

Ultimate Claim Count Development

Accident Year	Age of Counts @ 06/30/2023	Payroll (00)'s	Reported Claim Counts @ 06/30/2023	Reported Count Dev Factor	Indicated Ultimate Claim Counts	Selected Ultimate Claim Counts	Selected Ultimate Frequency	Selected Ultimate Frequency (Inflation-Adjusted)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	372.0		14	1.000	14			
7/1/93 - 6/30/94	360.0		4	1.000	4			
7/1/94 - 6/30/95	348.0		3	1.000	3			
7/1/95 - 6/30/96	336.0		0	1.000	0			
7/1/96 - 6/30/97	324.0		3	1.000	3			
7/1/97 - 6/30/98	312.0		2	1.000	2			
7/1/98 - 6/30/99	300.0		4	1.000	4			
7/1/99 - 6/30/00	288.0		4	1.000	4			
7/1/00 - 6/30/01	276.0	2,119,040	5	1.000	5		0.00%	0.00%
7/1/01 - 6/30/02	264.0	2,124,720	7	1.000	7		0.00%	0.00%
7/1/02 - 6/30/03	252.0	2,087,950	5	1.000	5		0.00%	0.00%
7/1/03 - 6/30/04	240.0	2,077,380	7	1.000	7		0.00%	0.00%
7/1/04 - 6/30/05	228.0	2,176,960	9	1.000	9		0.00%	0.00%
7/1/05 - 6/30/06	216.0	2,309,760	6	1.000	6		0.00%	0.00%
7/1/06 - 6/30/07	204.0	2,339,880	9	1.000	9		0.00%	0.00%
7/1/07 - 6/30/08	192.0	2,458,840	9	1.000	9		0.00%	0.00%
7/1/08 - 6/30/09	180.0	2,512,270	20	1.000	20		0.00%	0.00%
7/1/09 - 6/30/10	168.0	2,739,090	26	1.000	26		0.00%	0.00%
7/1/10 - 6/30/11	156.0	2,636,870	36	1.000	36		0.00%	0.00%
7/1/11 - 6/30/12	144.0	2,753,440	71	1.000	71		0.00%	0.00%
7/1/12 - 6/30/13	132.0	2,873,490	91	1.000	91	91	31.67%	23.56%
7/1/13 - 6/30/14	120.0	3,041,530	97	1.000	97	97	31.89%	24.44%
7/1/14 - 6/30/15	108.0	3,230,070	101	1.000	101	101	31.27%	24.68%
7/1/15 - 6/30/16	96.0	3,033,160	88	1.000	88	88	29.01%	23.59%
7/1/16 - 6/30/17	84.0	2,570,440	74	1.000	74	74	28.79%	24.11%
7/1/17 - 6/30/18	72.0	2,493,740	72	1.000	72	72	28.87%	24.91%
7/1/18 - 6/30/19	60.0	2,576,230	66	1.000	66	66	25.62%	22.76%
7/1/19 - 6/30/20	48.0	2,916,990	61	1.000	61	61	20.91%	19.14%
7/1/20 - 6/30/21	36.0	2,919,796	56	1.005	56	56	19.28%	18.17%
7/1/21 - 6/30/22	24.0	3,065,815	69	1.011	70	70	22.74%	22.08%
7/1/22 - 6/30/23	12.0	3,396,233	41	1.119	46	50	14.60%	14.60%
Total		60,453,694	1,060		1,066	826		

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1)
(3) Provided by Entity
(4) Provided by Entity
(5) From Section VIII, Exhibit I, Sheet 14
(6) = (4) x (5)
(7) Selected by Deloitte Consulting LLP
(8) = (7) / (3)
(9) = (7) / [(3) x Section VIII, Exhibit I, Sheet 8, Column (3)]

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Reported Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																															14	14
7/1/93 - 6/30/94																														4		4
7/1/94 - 6/30/95																													3			3
7/1/95 - 6/30/96																												0				0
7/1/96 - 6/30/97																											3					3
7/1/97 - 6/30/98																										2						2
7/1/98 - 6/30/99																									4							4
7/1/99 - 6/30/00																								4								4
7/1/00 - 6/30/01																							5									5
7/1/01 - 6/30/02																						7										7
7/1/02 - 6/30/03																					5											5
7/1/03 - 6/30/04																				7												7
7/1/04 - 6/30/05																			9													9
7/1/05 - 6/30/06																		6														6
7/1/06 - 6/30/07																	9															9
7/1/07 - 6/30/08																9																9
7/1/08 - 6/30/09															20																	20
7/1/09 - 6/30/10														26																		26
7/1/10 - 6/30/11													36																			36
7/1/11 - 6/30/12												71																				71
7/1/12 - 6/30/13	78	91	91	91	91	91	91	91	91	91	91																					91
7/1/13 - 6/30/14	76	94	96	96	98	98	97	97	97	97																						97
7/1/14 - 6/30/15	83	97	100	100	100	100	101	101	101																							101
7/1/15 - 6/30/16	74	84	85	87	88	88	88	88																								88
7/1/16 - 6/30/17	62	74	74	74	73	73	74																									74
7/1/17 - 6/30/18	66	71	71	72	72	72																										72
7/1/18 - 6/30/19	57	65	66	66	66																											66
7/1/19 - 6/30/20	56	61	61	61																												61
7/1/20 - 6/30/21	51	56	56																													56
7/1/21 - 6/30/22	61	69																														69
7/1/22 - 6/30/23	41																															41
																																1,060

Accident Year	Age-to-Age Development Factors																															
	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
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7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	1.167	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000																						
7/1/13 - 6/30/14	1.237	1.021	1.000	1.021	1.000	0.990	1.000	1.000	1.000																							
7/1/14 - 6/30/15	1.169	1.031	1.000	1.000	1.000	1.010	1.000	1.000																								
7/1/15 - 6/30/16	1.135	1.012	1.024	1.011	1.000	1.000	1.000																									
7/1/16 - 6/30/17	1.194	1.000	1.000	0.986	1.000	1.014																										
7/1/17 - 6/30/18	1.076	1.000	1.014	1.000	1.000																											
7/1/18 - 6/30/19	1.140	1.015	1.000	1.000																												
7/1/19 - 6/30/20	1.089	1.000	1.000																													
7/1/20 - 6/30/21	1.098	1.000																														
7/1/21 - 6/30/22	1.131																															
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																																
Last 3 Wtd Avg	1.107	1.005	1.005	0.995	1.000	1.008	1.000	1.000																								
Last 4 Wtd Avg	1.116	1.004	1.004	1.000	1.000	1.003	1.000																									
Last 5 Wtd Avg	1.107	1.003	1.008	1.000	1.000	1.002																										
All Per Wtd Avg	1.148	1.010	1.005	1.003	1.000	1.002	1.000	1.000	1.000	1.000																						
Average ex Hi/Lo	1.140	1.007	1.002	1.002	1.000	1.003	1.000	1.000																								
Prior Selected																																
Age-to-Age	1.110	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	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		
Age-to-Ult	1.121	1.010	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	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	
Selected																																
Age-to-Age	1.107	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	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		
Age-to-Ult	1.119	1.011	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	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	

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Reported Counts to Payroll (00)'s

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94																																-
7/1/94 - 6/30/95																																-
7/1/95 - 6/30/96																																-
7/1/96 - 6/30/97																																-
7/1/97 - 6/30/98																																-
7/1/98 - 6/30/99																																-
7/1/99 - 6/30/00																																-
7/1/00 - 6/30/01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02									2,119,040
7/1/01 - 6/30/02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03										2,124,720
7/1/02 - 6/30/03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02											2,087,950
7/1/03 - 6/30/04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03												2,077,380
7/1/04 - 6/30/05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04													2,176,960
7/1/05 - 6/30/06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03														2,309,760
7/1/06 - 6/30/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04															2,339,880
7/1/07 - 6/30/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04																2,458,840
7/1/08 - 6/30/09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08																	2,512,270
7/1/09 - 6/30/10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09																		2,739,090
7/1/10 - 6/30/11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14																			2,636,870
7/1/11 - 6/30/12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26																				2,753,440
7/1/12 - 6/30/13	0.27	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32																					2,873,490
7/1/13 - 6/30/14	0.25	0.31	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32																						3,041,530
7/1/14 - 6/30/15	0.26	0.30	0.31	0.31	0.31	0.31	0.31	0.31	0.31																							3,230,070
7/1/15 - 6/30/16	0.24	0.28	0.28	0.29	0.29	0.29	0.29	0.29																								3,033,160
7/1/16 - 6/30/17	0.24	0.29	0.29	0.29	0.28	0.28	0.29																									2,570,440
7/1/17 - 6/30/18	0.26	0.28	0.28	0.29	0.29	0.29																										2,493,740
7/1/18 - 6/30/19	0.22	0.25	0.26	0.26	0.26																											2,576,230
7/1/19 - 6/30/20	0.19	0.21	0.21	0.21																												2,916,990
7/1/20 - 6/30/21	0.17	0.19	0.19																													2,919,796
7/1/21 - 6/30/22	0.20	0.23																														3,065,815
7/1/22 - 6/30/23	0.12																															3,396,233

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss Rates

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94																																-
7/1/94 - 6/30/95																																-
7/1/95 - 6/30/96																																-
7/1/96 - 6/30/97																																-
7/1/97 - 6/30/98																																-
7/1/98 - 6/30/99																																-
7/1/99 - 6/30/00																																-
7/1/00 - 6/30/01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.04	0.05	0.06	0.07	0.09	0.10	0.11	0.12	0.13									2,119,040
7/1/01 - 6/30/02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.02	0.02	0.02										2,124,720
7/1/02 - 6/30/03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01											2,087,950
7/1/03 - 6/30/04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03												2,077,380
7/1/04 - 6/30/05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.15													2,176,960
7/1/05 - 6/30/06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.03	0.04	0.04	0.05	0.05	0.06	0.06														2,309,760
7/1/06 - 6/30/07	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.06	0.08	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11															2,339,880
7/1/07 - 6/30/08	0.00	0.00	0.00	0.00	0.00	0.02	0.06	0.11	0.13	0.16	0.21	0.23	0.25	0.28	0.30	0.33																2,458,840
7/1/08 - 6/30/09	0.00	0.00	0.00	0.00	0.10	0.18	0.22	0.24	0.25	0.25	0.25	0.25	0.25	0.25	0.25																	2,512,270
7/1/09 - 6/30/10	0.00	0.00	0.00	0.12	0.20	0.28	0.37	0.40	0.24	0.29	0.35	0.40	0.47	0.51																		2,739,090
7/1/10 - 6/30/11	0.00	0.00	0.18	0.27	0.33	0.37	0.42	0.42	0.42	0.43	0.45	0.45	0.45																			2,636,870
7/1/11 - 6/30/12	0.00	0.22	0.52	0.68	0.73	0.77	0.80	0.82	0.84	0.85	0.86	0.90																				2,753,440
7/1/12 - 6/30/13	0.21	0.45	0.65	0.76	0.80	0.85	0.92	0.95	0.97	0.98	0.98																					2,873,490
7/1/13 - 6/30/14	0.19	0.43	0.59	0.70	0.77	0.80	0.84	0.85	0.90	0.90																						3,041,530
7/1/14 - 6/30/15	0.23	0.58	0.92	1.22	1.39	1.55	1.66	1.69	1.71																							3,230,070
7/1/15 - 6/30/16	0.23	0.51	0.72	0.91	1.08	1.24	1.38	1.51																								3,033,160
7/1/16 - 6/30/17	0.19	0.55	0.78	1.00	1.21	1.27	1.36																									2,570,440
7/1/17 - 6/30/18	0.23	0.55	0.77	1.09	1.24	1.35																										2,493,740
7/1/18 - 6/30/19	0.30	0.63	0.86	1.04	1.27																											2,576,230
7/1/19 - 6/30/20	0.22	0.44	0.54	0.68																												2,916,990
7/1/20 - 6/30/21	0.25	0.48	0.68																													2,919,796
7/1/21 - 6/30/22	0.26	0.56																														3,065,815
7/1/22 - 6/30/23	0.20																															3,396,233

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Settlement Rates (Closed Claim Count / Ultimate Claim Count)

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
7/1/98 - 6/30/99																																
7/1/99 - 6/30/00																																
7/1/00 - 6/30/01																																
7/1/01 - 6/30/02																																
7/1/02 - 6/30/03																																
7/1/03 - 6/30/04																																
7/1/04 - 6/30/05																																
7/1/05 - 6/30/06																																
7/1/06 - 6/30/07																																
7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	0.00	0.24	0.67	0.81	0.87	0.91	0.92	0.93	0.93	0.96	0.96																					0.96
7/1/13 - 6/30/14	0.00	0.30	0.66	0.76	0.88	0.89	0.89	0.92	0.94	0.92																						0.92
7/1/14 - 6/30/15	0.00	0.28	0.55	0.72	0.79	0.84	0.87	0.89	0.93																							0.93
7/1/15 - 6/30/16	0.00	0.26	0.63	0.73	0.81	0.85	0.88	0.89																								0.89
7/1/16 - 6/30/17	0.00	0.23	0.64	0.78	0.80	0.82	0.84																									0.84
7/1/17 - 6/30/18	0.00	0.31	0.68	0.79	0.82	0.89																										0.89
7/1/18 - 6/30/19	0.00	0.21	0.61	0.70	0.79																											0.79
7/1/19 - 6/30/20	0.00	0.30	0.57	0.75																												0.75
7/1/20 - 6/30/21	0.00	0.23	0.68																													0.68
7/1/21 - 6/30/22	0.00	0.33																														0.33
7/1/22 - 6/30/23	0.00																															0.00

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023

Open Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993	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	0	0	0	3	3
7/1/93 - 6/30/94	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	0	0	1		1
7/1/94 - 6/30/95	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	0	1			1
7/1/95 - 6/30/96	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	0				0
7/1/96 - 6/30/97	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					0
7/1/97 - 6/30/98	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
7/1/98 - 6/30/99	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
7/1/99 - 6/30/00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2								2
7/1/00 - 6/30/01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1									1
7/1/01 - 6/30/02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2										2
7/1/02 - 6/30/03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4											4
7/1/03 - 6/30/04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2												2
7/1/04 - 6/30/05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2													2
7/1/05 - 6/30/06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2														2
7/1/06 - 6/30/07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3															3
7/1/07 - 6/30/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2																2
7/1/08 - 6/30/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1																	1
7/1/09 - 6/30/10	0	0	0	0	0	0	0	0	0	0	0	0	0	6																		6
7/1/10 - 6/30/11	0	0	0	0	0	0	0	0	0	0	0	0	3																			3
7/1/11 - 6/30/12	0	0	0	0	0	0	0	0	0	0	0	4																				4
7/1/12 - 6/30/13	78	69	30	17	12	8	7	6	6	4	4																					4
7/1/13 - 6/30/14	76	65	32	22	13	12	11	8	6	8																						8
7/1/14 - 6/30/15	83	69	44	27	20	15	13	11	7																							7
7/1/15 - 6/30/16	74	61	30	23	17	13	11	10																								10
7/1/16 - 6/30/17	62	57	27	16	14	12	12																									12
7/1/17 - 6/30/18	66	49	22	15	13	8																										8
7/1/18 - 6/30/19	57	51	26	20	14																											14
7/1/19 - 6/30/20	56	43	26	15																												15
7/1/20 - 6/30/21	51	43	18																													18
7/1/21 - 6/30/22	61	46																														46
7/1/22 - 6/30/23	41																															41
																																222

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Unpaid Loss Estimates

Accident Year	Payroll (00)'s	Retention	Unlimited Paid Loss @ 06/30/2023	Unlimited Reported Loss @ 06/30/2023	Ultimate Loss Low	Ultimate Loss High	Indicated Total Unpaid Loss Estimates Low	Indicated Total Unpaid Loss Estimates High	Case Reserves	Indicated IBNR Estimate Low	Indicated IBNR Estimate High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993		Unlimited	14,798	14,798	14,798	14,798	0	0	0	0	0
7/1/93 - 6/30/94		Unlimited	40,908	40,908	42,690	42,870	1,782	1,962	0	1,782	1,962
7/1/94 - 6/30/95		Unlimited	39,386	39,386	41,200	41,400	1,814	2,014	0	1,814	2,014
7/1/95 - 6/30/96		Unlimited	0	0	0	0	0	0	0	0	0
7/1/96 - 6/30/97		Unlimited	289,668	289,668	305,000	306,600	15,332	16,932	0	15,332	16,932
7/1/97 - 6/30/98		Unlimited	4,625	4,625	4,900	4,900	275	275	0	275	275
7/1/98 - 6/30/99		Unlimited	141,096	141,096	149,800	150,800	8,704	9,704	0	8,704	9,704
7/1/99 - 6/30/00		Unlimited	355,460	355,460	379,200	381,700	23,740	26,240	0	23,740	26,240
7/1/00 - 6/30/01	2,119,040	Unlimited	19,974	19,974	21,400	21,600	1,426	1,626	0	1,426	1,626
7/1/01 - 6/30/02	2,124,720	Unlimited	34,990	34,990	37,900	38,200	2,910	3,210	0	2,910	3,210
7/1/02 - 6/30/03	2,087,950	Unlimited	235,793	235,793	258,700	261,100	22,907	25,307	0	22,907	25,307
7/1/03 - 6/30/04	2,077,380	Unlimited	80,580	80,580	89,300	90,200	8,720	9,620	0	8,720	9,620
7/1/04 - 6/30/05	2,176,960	Unlimited	54,781	54,781	61,200	61,900	6,419	7,119	0	6,419	7,119
7/1/05 - 6/30/06	2,309,760	Unlimited	112,601	112,601	127,000	128,600	14,399	15,999	0	14,399	15,999
7/1/06 - 6/30/07	2,339,880	Unlimited	1,169,438	1,169,438	1,336,700	1,354,300	167,262	184,862	0	167,262	184,862
7/1/07 - 6/30/08	2,458,840	Unlimited	77,236	77,236	89,400	90,600	12,164	13,364	0	12,164	13,364
7/1/08 - 6/30/09	2,512,270	Unlimited	195,709	195,709	229,400	233,000	33,691	37,291	0	33,691	37,291
7/1/09 - 6/30/10	2,739,090	Unlimited	1,117,348	1,117,348	1,325,300	1,347,200	207,952	229,852	0	207,952	229,852
7/1/10 - 6/30/11	2,636,870	Unlimited	138,005	138,005	165,800	168,700	27,795	30,695	0	27,795	30,695
7/1/11 - 6/30/12	2,753,440	Unlimited	671,344	671,344	816,900	832,200	145,556	160,856	0	145,556	160,856
7/1/12 - 6/30/13	2,873,490	Unlimited	1,130,547	1,130,547	1,392,700	1,420,300	262,153	289,753	0	262,153	289,753
7/1/13 - 6/30/14	3,041,530	Unlimited	1,024,770	1,024,770	1,279,700	1,306,500	254,930	281,730	0	254,930	281,730
7/1/14 - 6/30/15	3,230,070	Unlimited	1,355,189	1,355,189	1,718,900	1,757,200	363,711	402,011	0	363,711	402,011
7/1/15 - 6/30/16	3,033,160	Unlimited	1,168,293	1,168,293	1,502,600	1,552,900	334,307	384,607	0	334,307	384,607
7/1/16 - 6/30/17	2,570,440	Unlimited	989,655	989,655	1,302,100	1,349,100	312,445	359,445	0	312,445	359,445
7/1/17 - 6/30/18	2,493,740	Unlimited	1,213,038	1,213,038	1,652,200	1,718,300	439,162	505,262	0	439,162	505,262
7/1/18 - 6/30/19	2,576,230	Unlimited	874,916	874,916	1,243,800	1,299,300	368,884	424,384	0	368,884	424,384
7/1/19 - 6/30/20	2,916,990	Unlimited	816,953	816,953	1,306,200	1,379,800	489,247	562,847	0	489,247	562,847
7/1/20 - 6/30/21	2,919,796	Unlimited	672,464	672,464	1,259,000	1,389,000	586,536	716,536	0	586,536	716,536
7/1/21 - 6/30/22	3,065,815	Unlimited	696,522	696,522	1,520,000	1,703,000	823,478	1,006,478	0	823,478	1,006,478
7/1/22 - 6/30/23	3,396,233	Unlimited	188,419	188,419	1,155,000	1,370,000	966,581	1,181,581	0	966,581	1,181,581
Total	60,453,694		14,924,504	14,924,504	20,828,788	21,816,068	5,904,284	6,891,564	0	5,904,284	6,891,564

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	Provided by Entity
(6)	From Section VIII, Exhibit II, Sheet 6, Column (11)
(7)	From Section VIII, Exhibit II, Sheet 6, Column (12)
(8)	= (6) - (4)
(9)	= (7) - (4)
(10)	= (5) - (4)
(11)	= (8) - (10)
(12)	= (9) - (10)

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Short-Term Portion

Accident Year	Age of Losses @ 06/30/2023	Selected Paid Test LDF @ 06/30/2023	Implied Paid LDF	Paid LDF	Cumulative Percent Paid	Incremental Percent Paid	Average Total Unpaid Loss Estimate	Undiscounted Cash Flow of Payments 2024
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
						0.40%		
Prior to 7/1/1993	372.0	1.042	1.000	1.042	95.92%	0.30%	0	0
7/1/93 - 6/30/94	360.0	1.046	1.046	1.046	95.63%	0.23%	1,872	128
7/1/94 - 6/30/95	348.0	1.048	1.049	1.048	95.40%	0.40%	1,914	94
7/1/95 - 6/30/96	336.0	1.053		1.053	95.00%	0.28%	0	0
7/1/96 - 6/30/97	324.0	1.056	1.056	1.056	94.72%	0.49%	16,132	864
7/1/97 - 6/30/98	312.0	1.061	1.060	1.061	94.23%	0.35%	275	23
7/1/98 - 6/30/99	300.0	1.065	1.065	1.065	93.88%	0.45%	9,204	527
7/1/99 - 6/30/00	288.0	1.070	1.070	1.070	93.42%	0.57%	24,990	1,719
7/1/00 - 6/30/01	276.0	1.077	1.076	1.077	92.85%	1.00%	1,526	122
7/1/01 - 6/30/02	264.0	1.089	1.087	1.089	91.85%	1.13%	3,060	377
7/1/02 - 6/30/03	252.0	1.102	1.102	1.102	90.72%	0.90%	24,107	2,929
7/1/03 - 6/30/04	240.0	1.113	1.114	1.113	89.82%	0.87%	9,170	815
7/1/04 - 6/30/05	228.0	1.124	1.124	1.124	88.95%	0.84%	6,769	531
7/1/05 - 6/30/06	216.0	1.135	1.135	1.135	88.11%	1.20%	15,199	1,073
7/1/06 - 6/30/07	204.0	1.151	1.151	1.151	86.92%	1.10%	176,062	16,089
7/1/07 - 6/30/08	192.0	1.165	1.165	1.165	85.82%	1.17%	12,764	988
7/1/08 - 6/30/09	180.0	1.181	1.181	1.181	84.65%	1.03%	35,491	2,704
7/1/09 - 6/30/10	168.0	1.196	1.196	1.196	83.62%	1.12%	218,902	13,752
7/1/10 - 6/30/11	156.0	1.212	1.212	1.212	82.50%	1.08%	29,245	1,871
7/1/11 - 6/30/12	144.0	1.228	1.228	1.228	81.42%	1.04%	153,206	8,923
7/1/12 - 6/30/13	132.0	1.244	1.244	1.244	80.38%	1.13%	275,953	14,571
7/1/13 - 6/30/14	120.0	1.262	1.262	1.262	79.25%	1.28%	268,330	14,627
7/1/14 - 6/30/15	108.0	1.283	1.283	1.283	77.97%	1.50%	382,861	22,258
7/1/15 - 6/30/16	96.0	1.308	1.308	1.308	76.47%	1.81%	359,457	22,894
7/1/16 - 6/30/17	84.0	1.339	1.339	1.339	74.66%	2.68%	335,945	24,039
7/1/17 - 6/30/18	72.0	1.389	1.389	1.389	71.98%	3.17%	472,212	45,130
7/1/18 - 6/30/19	60.0	1.453	1.453	1.453	68.81%	3.66%	396,634	40,342
7/1/19 - 6/30/20	48.0	1.535	1.644	1.535	65.15%	5.44%	526,047	55,179
7/1/20 - 6/30/21	36.0	1.675	1.969	1.675	59.71%	11.18%	651,536	88,025
7/1/21 - 6/30/22	24.0	2.061	2.314	2.061	48.53%	23.95%	914,978	198,761
7/1/22 - 6/30/23	12.0	4.069	6.700	4.069	24.58%	24.58%	1,074,081	341,073
Total							6,397,924	920,427

	Undiscounted	Discounted			
Short-Term Portion	14%	17%	(10)	Interest Rate	4%

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1) @ 06/30/2023
(3) From Section VIII, Exhibit II, Sheet 10, Column (6)
(4) Average Ultimate Loss Divided by Paid Loss From Section VIII, Exhibit II, Sheet 6
(5) Selected
(6) = 1 / (5)
(7) = (6) from Current Age - (6) from Subsequent Age
(8) From Section VIII, Exhibit II, Sheet 3
(9) - (9) Based on (5)

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Medical

Section VIII
Exhibit II
Sheet 3

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Summary of Discounted at (4%) Unpaid Loss Estimate

Accident Year	Indicated Total Unpaid Loss Estimate Low	Indicated Total Unpaid Loss Estimate High	Discount Factor	Discounted Total Unpaid Loss Estimate Low	Discounted Total Unpaid Loss Estimate High
(1)	(2)	(3)	(4)	(5)	(6)
Prior to 7/1/1993	0	0	1.000	0	0
7/1/93 - 6/30/94	1,782	1,962	0.981	1,748	1,924
7/1/94 - 6/30/95	1,814	2,014	0.945	1,714	1,903
7/1/95 - 6/30/96	0	0	0.914	0	0
7/1/96 - 6/30/97	15,332	16,932	0.884	13,560	14,975
7/1/97 - 6/30/98	275	275	0.861	237	237
7/1/98 - 6/30/99	8,704	9,704	0.837	7,286	8,123
7/1/99 - 6/30/00	23,740	26,240	0.817	19,394	21,436
7/1/00 - 6/30/01	1,426	1,626	0.801	1,143	1,303
7/1/01 - 6/30/02	2,910	3,210	0.796	2,317	2,556
7/1/02 - 6/30/03	22,907	25,307	0.792	18,135	20,035
7/1/03 - 6/30/04	8,720	9,620	0.781	6,808	7,511
7/1/04 - 6/30/05	6,419	7,119	0.769	4,935	5,473
7/1/05 - 6/30/06	14,399	15,999	0.756	10,889	12,099
7/1/06 - 6/30/07	167,262	184,862	0.750	125,497	138,702
7/1/07 - 6/30/08	12,164	13,364	0.742	9,020	9,910
7/1/08 - 6/30/09	33,691	37,291	0.733	24,708	27,348
7/1/09 - 6/30/10	207,952	229,852	0.722	150,238	166,060
7/1/10 - 6/30/11	27,795	30,695	0.713	19,817	21,885
7/1/11 - 6/30/12	145,556	160,856	0.703	102,286	113,038
7/1/12 - 6/30/13	262,153	289,753	0.692	181,357	200,451
7/1/13 - 6/30/14	254,930	281,730	0.682	173,960	192,248
7/1/14 - 6/30/15	363,711	402,011	0.675	245,505	271,357
7/1/15 - 6/30/16	334,307	384,607	0.670	224,037	257,746
7/1/16 - 6/30/17	312,445	359,445	0.668	208,849	240,266
7/1/17 - 6/30/18	439,162	505,262	0.675	296,441	341,060
7/1/18 - 6/30/19	368,884	424,384	0.683	251,864	289,758
7/1/19 - 6/30/20	489,247	562,847	0.691	337,828	388,649
7/1/20 - 6/30/21	586,536	716,536	0.707	414,520	506,394
7/1/21 - 6/30/22	823,478	1,006,478	0.745	613,440	749,764
7/1/22 - 6/30/23	966,581	1,181,581	0.800	773,471	945,517
Total	5,904,284	6,891,564		4,241,003	4,957,726

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From Section VIII, Exhibit II, Sheet 1, Column (8)
(3) From Section VIII, Exhibit II, Sheet 1, Column (9)
(4) From Section VIII, Exhibit II, Sheet 0, Column (8)
(5) = (2) x (4)
(6) = (3) x (4)

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Medical

Section VIII
Exhibit II
Sheet 4

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Actual vs Expected - Paid Loss Emergence

Accident Year	Selected Low Ultimate Loss @ 06/30/2022	Selected High Ultimate Loss @ 06/30/2022	Unlimited Paid Loss @ 06/30/2022	Unlimited Paid Loss @ 06/30/2023	Paid LDF @ 06/30/2022	Projected Paid LDF @ 06/30/2023	Method 1 Low Expected Paid Emergence Loss @ 06/30/2023	Method 1 High Expected Paid Emergence Loss @ 06/30/2023	Actual Paid Emergence Loss @ 06/30/2023	Actual - Expected Method 1 Low Paid	Actual - Expected Method 1 High Paid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Prior to 7/1/1993	20,279	21,496	14,798	14,798	1.045	1.041	537	657	(0)	(537)	(657)
7/1/93 - 6/30/94	42,600	42,700	40,765	40,908	1.046	1.045	36	38	143	107	105
7/1/94 - 6/30/95	37,600	37,700	35,894	39,386	1.049	1.046	100	106	3,493	3,392	3,386
7/1/95 - 6/30/96	0	0	0	0	1.053	1.049	0	0	0	0	0
7/1/96 - 6/30/97	305,700	307,400	289,668	289,668	1.058	1.053	1,273	1,408	0	(1,273)	(1,408)
7/1/97 - 6/30/98	4,900	4,900	4,625	4,625	1.063	1.058	20	20	0	(20)	(20)
7/1/98 - 6/30/99	150,100	151,000	141,096	141,096	1.067	1.063	488	536	0	(488)	(536)
7/1/99 - 6/30/00	348,800	351,100	326,589	355,460	1.071	1.067	1,310	1,445	28,872	27,562	27,426
7/1/00 - 6/30/01	21,500	21,600	19,974	19,974	1.079	1.071	137	146	0	(137)	(146)
7/1/01 - 6/30/02	36,200	36,500	33,298	34,990	1.090	1.079	334	368	1,692	1,358	1,324
7/1/02 - 6/30/03	236,300	238,500	215,384	235,793	1.102	1.090	2,238	2,473	20,409	18,171	17,936
7/1/03 - 6/30/04	87,600	88,500	79,052	80,580	1.113	1.102	758	838	1,528	770	690
7/1/04 - 6/30/05	54,000	54,600	48,306	54,781	1.125	1.113	467	516	6,474	6,007	5,958
7/1/05 - 6/30/06	126,600	128,200	111,577	112,601	1.142	1.125	1,588	1,757	1,024	(564)	(733)
7/1/06 - 6/30/07	789,600	800,400	686,479	1,169,438	1.158	1.142	9,479	10,472	482,959	473,480	472,488
7/1/07 - 6/30/08	85,400	86,700	73,157	77,236	1.176	1.158	1,069	1,182	4,079	3,010	2,897
7/1/08 - 6/30/09	226,500	230,200	191,725	195,709	1.191	1.176	2,344	2,593	3,984	1,640	1,391
7/1/09 - 6/30/10	1,327,500	1,350,600	1,107,896	1,117,348	1.209	1.191	15,607	17,249	9,452	(6,155)	(7,797)
7/1/10 - 6/30/11	164,400	167,500	135,418	138,005	1.225	1.209	1,775	1,965	2,587	812	622
7/1/11 - 6/30/12	812,400	828,400	660,274	671,344	1.243	1.225	8,798	9,724	11,070	2,272	1,346
7/1/12 - 6/30/13	1,380,200	1,409,000	1,106,249	1,130,547	1.261	1.243	15,334	16,946	24,298	8,964	7,352
7/1/13 - 6/30/14	1,279,900	1,308,400	1,009,401	1,024,770	1.282	1.261	16,305	18,023	15,368	(937)	(2,655)
7/1/14 - 6/30/15	1,738,000	1,796,200	1,351,116	1,355,189	1.308	1.282	25,266	29,067	4,073	(21,194)	(24,995)
7/1/15 - 6/30/16	1,453,700	1,505,000	1,112,810	1,168,293	1.329	1.308	16,984	19,539	55,483	38,499	35,943
7/1/16 - 6/30/17	1,279,500	1,329,400	947,707	989,655	1.376	1.329	31,204	35,897	41,948	10,744	6,051
7/1/17 - 6/30/18	1,636,200	1,707,400	1,162,889	1,213,038	1.438	1.376	48,117	55,356	50,149	2,031	(5,207)
7/1/18 - 6/30/19	1,350,000	1,428,800	826,306	874,916	1.525	1.438	60,480	69,580	48,610	(11,870)	(20,970)
7/1/19 - 6/30/20	1,334,000	1,466,000	737,635	816,953	1.666	1.525	83,122	101,520	79,318	(3,804)	(22,202)
7/1/20 - 6/30/21	1,320,000	1,481,000	591,288	672,464	2.089	1.666	169,614	207,088	81,177	(88,437)	(125,912)
7/1/21 - 6/30/22	1,599,000	1,872,000	368,492	696,522	4.862	2.089	423,090	516,957	328,031	(95,060)	(188,926)
Total	19,248,479	20,251,196	13,429,866	14,736,085			937,874	1,123,468	1,306,219	368,345	182,751

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Selected by Deloitte Consulting LLP @ 06/30/2022
(3)	Selected by Deloitte Consulting LLP @ 06/30/2022
(4)	Provided by Entity
(5)	Provided by Entity
(6)	Selected by Deloitte Consulting LLP @ 06/30/2022
(7)	Interpolated From (6)
(8)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((2) - (4))
(9)	= (1/(7) - 1/(6)) / (1 - 1/(6)) * ((3) - (4))
(10)	= (5) - (4)
(11)	= (10) - (8)
(12)	= (10) - (9)

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Medical

Section VIII
Exhibit II
Sheet 5

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Ultimate Loss Runoff

Accident Year	Ultimate Loss @ 06/30/2022 Low	Ultimate Loss @ 06/30/2022 High	Ultimate Loss @ 06/30/2023 Low	Ultimate Loss @ 06/30/2023 High	Deloitte Change Low	Deloitte Change High	Paid Loss @ 06/30/2023	Reported Loss @ 06/30/2023
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	20,279	21,496	14,798	14,798	(5,481)	(6,698)	14,798	14,798
7/1/93 - 6/30/94	42,600	42,700	42,690	42,870	90	170	40,908	40,908
7/1/94 - 6/30/95	37,600	37,700	41,200	41,400	3,600	3,700	39,386	39,386
7/1/95 - 6/30/96	0	0	0	0	0	0	0	0
7/1/96 - 6/30/97	305,700	307,400	305,000	306,600	(700)	(800)	289,668	289,668
7/1/97 - 6/30/98	4,900	4,900	4,900	4,900	0	0	4,625	4,625
7/1/98 - 6/30/99	150,100	151,000	149,800	150,800	(300)	(200)	141,096	141,096
7/1/99 - 6/30/00	348,800	351,100	379,200	381,700	30,400	30,600	355,460	355,460
7/1/00 - 6/30/01	21,500	21,600	21,400	21,600	(100)	0	19,974	19,974
7/1/01 - 6/30/02	36,200	36,500	37,900	38,200	1,700	1,700	34,990	34,990
7/1/02 - 6/30/03	236,300	238,500	258,700	261,100	22,400	22,600	235,793	235,793
7/1/03 - 6/30/04	87,600	88,500	89,300	90,200	1,700	1,700	80,580	80,580
7/1/04 - 6/30/05	54,000	54,600	61,200	61,900	7,200	7,300	54,781	54,781
7/1/05 - 6/30/06	126,600	128,200	127,000	128,600	400	400	112,601	112,601
7/1/06 - 6/30/07	789,600	800,400	1,336,700	1,354,300	547,100	553,900	1,169,438	1,169,438
7/1/07 - 6/30/08	85,400	86,700	89,400	90,600	4,000	3,900	77,236	77,236
7/1/08 - 6/30/09	226,500	230,200	229,400	233,000	2,900	2,800	195,709	195,709
7/1/09 - 6/30/10	1,327,500	1,350,600	1,325,300	1,347,200	(2,200)	(3,400)	1,117,348	1,117,348
7/1/10 - 6/30/11	164,400	167,500	165,800	168,700	1,400	1,200	138,005	138,005
7/1/11 - 6/30/12	812,400	828,400	816,900	832,200	4,500	3,800	671,344	671,344
7/1/12 - 6/30/13	1,380,200	1,409,000	1,392,700	1,420,300	12,500	11,300	1,130,547	1,130,547
7/1/13 - 6/30/14	1,279,900	1,308,400	1,279,700	1,306,500	(200)	(1,900)	1,024,770	1,024,770
7/1/14 - 6/30/15	1,738,000	1,796,200	1,718,900	1,757,200	(19,100)	(39,000)	1,355,189	1,355,189
7/1/15 - 6/30/16	1,453,700	1,505,000	1,502,600	1,552,900	48,900	47,900	1,168,293	1,168,293
7/1/16 - 6/30/17	1,279,500	1,329,400	1,302,100	1,349,100	22,600	19,700	989,655	989,655
7/1/17 - 6/30/18	1,636,200	1,707,400	1,652,200	1,718,300	16,000	10,900	1,213,038	1,213,038
7/1/18 - 6/30/19	1,350,000	1,428,800	1,243,800	1,299,300	(106,200)	(129,500)	874,916	874,916
7/1/19 - 6/30/20	1,334,000	1,466,000	1,306,200	1,379,800	(27,800)	(86,200)	816,953	816,953
7/1/20 - 6/30/21	1,320,000	1,481,000	1,259,000	1,389,000	(61,000)	(92,000)	672,464	672,464
7/1/21 - 6/30/22	1,599,000	1,872,000	1,520,000	1,703,000	(79,000)	(169,000)	696,522	696,522
Total	19,248,479	20,251,196	19,673,788	20,446,068	425,309	194,872	14,736,085	14,736,085

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(3) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(4) From Section VIII, Exhibit II, Sheet 6, Column (11)
(5) From Section VIII, Exhibit II, Sheet 6, Column (12)
(6) = (4) - (2)
(7) = (5) - (3)
(8) Provided by Entity
(9) Provided by Entity

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Selection of Ultimate Loss

Accident Year	Payroll (00)'s	Unlimited Paid Loss @ 06/30/2023	Unlimited Reported Loss @ 06/30/2023	Ultimate Loss Indications: Paid LDM	Ultimate Loss Indications: Expected Loss	Ultimate Loss Indications: Paid B-F	Ultimate Loss Indications: Frequency Severity	Prior Selected Ultimate Loss: Low	Prior Selected Ultimate Loss: High	Selected Ultimate Loss: Low	Selected Ultimate Loss: High	Ultimate Loss Rates: Low	Ultimate Loss Rates: High	Ultimate Loss Severity: Low	Ultimate Loss Severity: High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Prior to 7/1/1993		14,798	14,798	15,427	0		0	20,279	21,496	14,798	14,798				
7/1/93 - 6/30/94		40,908	40,908	42,779	0	40,908	0	42,600	42,700	42,690	42,870				
7/1/94 - 6/30/95		39,386	39,386	41,285	0	39,386	0	37,600	37,700	41,200	41,400				
7/1/95 - 6/30/96		0	0	0	0	0	0	0	0	0	0				
7/1/96 - 6/30/97		289,668	289,668	305,821	0	289,668	0	305,700	307,400	305,000	306,600				
7/1/97 - 6/30/98		4,625	4,625	4,908	0	4,625	0	4,900	4,900	4,900	4,900				
7/1/98 - 6/30/99		141,096	141,096	150,299	0	141,096	0	150,100	151,000	149,800	150,800				
7/1/99 - 6/30/00		355,460	355,460	380,479	0	355,460	0	348,800	351,100	379,200	381,700				
7/1/00 - 6/30/01	2,119,040	19,974	19,974	21,511	901,698	84,406	0	21,500	21,600	21,400	21,600	0.01	0.01		
7/1/01 - 6/30/02	2,124,720	34,990	34,990	38,094	924,224	110,315	0	36,200	36,500	37,900	38,200	0.02	0.02		
7/1/02 - 6/30/03	2,087,950	235,793	235,793	259,905	940,338	323,030	0	236,300	238,500	258,700	261,100	0.12	0.13		
7/1/03 - 6/30/04	2,077,380	80,580	80,580	89,714	969,329	179,276	0	87,600	88,500	89,300	90,200	0.04	0.04		
7/1/04 - 6/30/05	2,176,960	54,781	54,781	61,585	1,032,803	168,898	0	54,000	54,600	61,200	61,900	0.03	0.03		
7/1/05 - 6/30/06	2,309,760	112,601	112,601	127,794	1,111,584	244,752	0	126,600	128,200	127,000	128,600	0.05	0.06		
7/1/06 - 6/30/07	2,339,880	1,169,438	1,169,438	1,345,485	1,137,013	1,318,208	0	789,600	800,400	1,336,700	1,354,300	0.57	0.58		
7/1/07 - 6/30/08	2,458,840	77,236	77,236	90,000	1,206,419	248,331	0	85,400	86,700	89,400	90,600	0.04	0.04		
7/1/08 - 6/30/09	2,512,270	195,709	195,709	231,203	1,259,359	389,042	0	226,500	230,200	229,400	233,000	0.09	0.09		
7/1/09 - 6/30/10	2,739,090	1,117,348	1,117,348	1,336,234	1,408,487	1,348,070	0	1,327,500	1,350,600	1,325,300	1,347,200	0.48	0.49		
7/1/10 - 6/30/11	2,636,870	138,005	138,005	167,279	1,374,436	378,533	0	164,400	167,500	165,800	168,700	0.06	0.06		
7/1/11 - 6/30/12	2,753,440	671,344	671,344	824,569	1,449,131	940,627	0	812,400	828,400	816,900	832,200	0.30	0.30		
7/1/12 - 6/30/13	2,873,490	1,130,547	1,130,547	1,406,472	1,526,996	1,430,117	1,564,542	1,380,200	1,409,000	1,392,700	1,420,300	0.48	0.49	15,304	15,608
7/1/13 - 6/30/14	3,041,530	1,024,770	1,024,770	1,293,074	1,631,986	1,363,395	1,734,406	1,279,900	1,308,400	1,279,700	1,306,500	0.42	0.43	13,193	13,469
7/1/14 - 6/30/15	3,230,070	1,355,189	1,355,189	1,738,092	1,749,977	1,740,710	1,878,165	1,738,000	1,796,200	1,718,900	1,757,200	0.53	0.54	17,019	17,398
7/1/15 - 6/30/16	3,033,160	1,168,293	1,168,293	1,527,752	1,659,250	1,558,692	1,701,878	1,453,700	1,505,000	1,502,600	1,552,900	0.50	0.51	17,075	17,647
7/1/16 - 6/30/17	2,570,440	989,655	989,655	1,325,585	1,419,777	1,349,455	1,488,370	1,279,500	1,329,400	1,302,100	1,349,100	0.51	0.52	17,596	18,231
7/1/17 - 6/30/18	2,493,740	1,213,038	1,213,038	1,685,241	1,390,785	1,602,734	1,506,069	1,636,200	1,707,400	1,652,200	1,718,300	0.66	0.69	22,947	23,865
7/1/18 - 6/30/19	2,576,230	874,916	874,916	1,271,542	1,450,739	1,327,438	1,435,786	1,350,000	1,428,800	1,243,800	1,299,300	0.48	0.50	18,845	19,686
7/1/19 - 6/30/20	2,916,990	816,953	816,953	1,253,915	1,658,578	1,394,931	1,380,095	1,334,000	1,466,000	1,306,200	1,379,800	0.45	0.47	21,413	22,620
7/1/20 - 6/30/21	2,919,796	672,464	672,464	1,126,243	1,676,292	1,347,865	1,324,306	1,320,000	1,481,000	1,259,000	1,389,000	0.43	0.48	22,369	24,679
7/1/21 - 6/30/22	3,065,815	696,522	696,522	1,435,324	1,777,211	1,611,303	1,706,328	1,599,000	1,872,000	1,520,000	1,703,000	0.50	0.56	21,799	24,423
7/1/22 - 6/30/23	3,396,233	188,419	188,419	766,661	1,987,864	1,687,735	1,262,326			1,155,000	1,370,000	0.34	0.40	23,286	27,620
Total	60,453,694	14,924,504	14,924,504	20,364,269	31,644,274	23,019,003	16,982,270	19,248,479	20,251,196	20,828,788	21,816,068				

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	Provided by Entity
(4)	Provided by Entity
(5)	From Section VIII, Exhibit II, Sheet 10, Column (7)
(6)	From Section VIII, Exhibit II, Sheet 7, Column (4)
(7)	From Section VIII, Exhibit II, Sheet 7, Column (10)
(8)	From Section VIII, Exhibit II, Sheet 9, Column (12)
(9)	From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(10)	From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(11)	Selected by Deloitte Consulting LLP
(12)	Selected by Deloitte Consulting LLP
(13)	= (11) / (2)
(14)	= (12) / (2)
(15)	(11) Divided by Ultimate Claims From Section VIII, Exhibit II, Sheet 13, Column (7)
(16)	(12) Divided by Ultimate Claims From Section VIII, Exhibit II, Sheet 13, Column (7)

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Bornhuetter-Ferguson Method

Accident Year	Payroll (00)'s	Initial Expected Loss Rates	Initial Expected Loss	Expected % of Paid Loss	Expected Paid Loss	Unlimited Actual Paid Loss	Expected % of Unpaid Loss	Expected Unpaid Loss	Unlimited Indicated Ultimate Loss	Unlimited Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
7/1/93 - 6/30/94		0.37	0	95.6%	0	40,908	4.4%	0	40,908	
7/1/94 - 6/30/95		0.38	0	95.4%	0	39,386	4.6%	0	39,386	
7/1/95 - 6/30/96		0.39	0	95.0%	0	0	5.0%	0	0	
7/1/96 - 6/30/97		0.40	0	94.7%	0	289,668	5.3%	0	289,668	
7/1/97 - 6/30/98		0.41	0	94.2%	0	4,625	5.8%	0	4,625	
7/1/98 - 6/30/99		0.41	0	93.9%	0	141,096	6.1%	0	141,096	
7/1/99 - 6/30/00		0.42	0	93.4%	0	355,460	6.6%	0	355,460	
7/1/00 - 6/30/01	2,119,040	0.43	901,698	92.9%	837,266	19,974	7.1%	64,432	84,406	0.04
7/1/01 - 6/30/02	2,124,720	0.43	924,224	91.8%	848,899	34,990	8.2%	75,325	110,315	0.05
7/1/02 - 6/30/03	2,087,950	0.45	940,338	90.7%	853,101	235,793	9.3%	87,237	323,030	0.15
7/1/03 - 6/30/04	2,077,380	0.47	969,329	89.8%	870,633	80,580	10.2%	98,696	179,276	0.09
7/1/04 - 6/30/05	2,176,960	0.47	1,032,803	89.0%	918,686	54,781	11.0%	114,117	168,898	0.08
7/1/05 - 6/30/06	2,309,760	0.48	1,111,584	88.1%	979,433	112,601	11.9%	132,152	244,752	0.11
7/1/06 - 6/30/07	2,339,880	0.49	1,137,013	86.9%	988,243	1,169,438	13.1%	148,770	1,318,208	0.56
7/1/07 - 6/30/08	2,458,840	0.49	1,206,419	85.8%	1,035,324	77,236	14.2%	171,095	248,331	0.10
7/1/08 - 6/30/09	2,512,270	0.50	1,259,359	84.6%	1,066,026	195,709	15.4%	193,333	389,042	0.15
7/1/09 - 6/30/10	2,739,090	0.51	1,408,487	83.6%	1,177,766	1,117,348	16.4%	230,721	1,348,070	0.49
7/1/10 - 6/30/11	2,636,870	0.52	1,374,436	82.5%	1,133,908	138,005	17.5%	240,528	378,533	0.14
7/1/11 - 6/30/12	2,753,440	0.53	1,449,131	81.4%	1,179,848	671,344	18.6%	269,283	940,627	0.34
7/1/12 - 6/30/13	2,873,490	0.53	1,526,996	80.4%	1,227,426	1,130,547	19.6%	299,570	1,430,117	0.50
7/1/13 - 6/30/14	3,041,530	0.54	1,631,986	79.3%	1,293,360	1,024,770	20.7%	338,626	1,363,395	0.45
7/1/14 - 6/30/15	3,230,070	0.54	1,749,977	78.0%	1,364,456	1,355,189	22.0%	385,521	1,740,710	0.54
7/1/15 - 6/30/16	3,033,160	0.55	1,659,250	76.5%	1,268,851	1,168,293	23.5%	390,399	1,558,692	0.51
7/1/16 - 6/30/17	2,570,440	0.55	1,419,777	74.7%	1,059,977	989,655	25.3%	359,799	1,349,455	0.52
7/1/17 - 6/30/18	2,493,740	0.56	1,390,785	72.0%	1,001,088	1,213,038	28.0%	389,696	1,602,734	0.64
7/1/18 - 6/30/19	2,576,230	0.56	1,450,739	68.8%	998,217	874,916	31.2%	452,522	1,327,438	0.52
7/1/19 - 6/30/20	2,916,990	0.57	1,658,578	65.2%	1,080,600	816,953	34.8%	577,978	1,394,931	0.48
7/1/20 - 6/30/21	2,919,796	0.57	1,676,292	59.7%	1,000,891	672,464	40.3%	675,400	1,347,865	0.46
7/1/21 - 6/30/22	3,065,815	0.58	1,777,211	48.5%	862,431	696,522	51.5%	914,780	1,611,303	0.53
7/1/22 - 6/30/23	3,396,233	0.59	1,987,864	24.6%	488,549	188,419	75.4%	1,499,316	1,687,735	0.50
Total	60,453,694		31,644,274		23,534,978	14,909,706		8,109,297	23,019,003	

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Provided by Entity
(3)	From Section VIII, Exhibit II, Sheet 8, Column (13)
(4)	= (2) x (3)
(5)	= 1 / Section VIII, Exhibit II, Sheet 10, Column (6)
(6)	= (4) x (5)
(7)	Provided by Entity
(8)	= 1 - (5)
(9)	= (4) x (8)
(10)	= (7) + (9)
(11)	= (10) / (2)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Calculation of Initial Expected Loss Rates

Accident Year	Payroll (00)'s	Payroll Trend	Loss Development Unlimited Indicated Ultimate Loss Paid	Reported	Selected Initial Ultimate Loss	Loss Trend Factor	Benefit Level Adjustment Factors	Trended Ultimate	On-level Loss Rates	Detrended Loss Rates	Prior Expected Loss Rates	Initial Expected Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
7/1/93 - 6/30/94	0	2.357	42,779	42,779	14,798	3.119	1.180	54,471		0.37	0.37	0.37
7/1/94 - 6/30/95	0	2.288	41,285	41,285	42,780	2.999	1.167	149,746		0.38	0.37	0.38
7/1/95 - 6/30/96	0	2.221	0	0	41,300	2.883	1.151	137,084		0.39	0.38	0.39
7/1/96 - 6/30/97	0	2.157	305,821	305,821	0	2.772	1.140	0		0.40	0.39	0.40
7/1/97 - 6/30/98	0	2.094	4,908	4,908	305,800	2.666	1.135	925,258		0.41	0.39	0.41
7/1/98 - 6/30/99	0	2.033	150,299	150,299	4,900	2.563	1.135	14,256		0.41	0.40	0.41
7/1/99 - 6/30/00	0	1.974	380,479	380,479	150,300	2.465	1.129	418,303		0.42	0.40	0.42
7/1/00 - 6/30/01	2,119,040	1.916	21,511	21,511	380,450	2.370	1.112	1,002,729	0.25	0.43	0.41	0.43
7/1/01 - 6/30/02	2,124,720	1.860	38,094	38,094	21,500	2.279	1.098	53,819	0.01	0.43	0.42	0.43
7/1/02 - 6/30/03	2,087,950	1.806	259,905	259,905	38,050	2.191	1.071	89,315	0.02	0.45	0.44	0.45
7/1/03 - 6/30/04	2,077,380	1.754	89,714	89,714	259,900	2.107	1.044	571,673	0.16	0.47	0.45	0.47
7/1/04 - 6/30/05	2,176,960	1.702	61,585	61,585	89,750	2.026	1.037	188,507	0.05	0.47	0.46	0.47
7/1/05 - 6/30/06	2,309,760	1.653	127,794	127,794	61,550	1.948	1.032	123,730	0.03	0.48	0.47	0.48
7/1/06 - 6/30/07	2,339,880	1.605	1,345,485	1,345,485	127,800	1.873	1.032	247,027	0.07	0.49	0.47	0.49
7/1/07 - 6/30/08	2,458,840	1.558	90,000	90,000	1,345,500	1.801	1.032	2,500,711	0.65	0.49	0.48	0.49
7/1/08 - 6/30/09	2,512,270	1.513	231,203	231,203	90,000	1.732	1.020	158,953	0.04	0.50	0.49	0.50
7/1/09 - 6/30/10	2,739,090	1.469	1,336,234	1,336,234	231,200	1.665	1.004	386,469	0.10	0.51	0.50	0.51
7/1/10 - 6/30/11	2,636,870	1.426	167,279	167,279	1,336,250	1.601	1.000	2,139,379	0.57	0.52	0.51	0.52
7/1/11 - 6/30/12	2,753,440	1.384	824,569	824,569	167,250	1.539	1.000	257,474	0.07	0.53	0.51	0.53
7/1/12 - 6/30/13	2,873,490	1.344	1,406,472	1,406,472	824,550	1.480	1.000	1,220,535	0.32	0.53	0.52	0.53
7/1/13 - 6/30/14	3,041,530	1.305	1,293,074	1,293,074	1,406,500	1.423	1.000	2,001,888	0.50	0.54	0.52	0.54
7/1/14 - 6/30/15	3,230,070	1.267	1,738,092	1,738,092	1,293,100	1.369	1.000	1,769,697	0.43	0.54	0.53	0.54
7/1/15 - 6/30/16	3,033,160	1.230	1,527,752	1,527,752	1,738,050	1.316	1.000	2,287,155	0.61	0.55	0.53	0.55
7/1/16 - 6/30/17	2,570,440	1.194	1,325,585	1,325,585	1,527,750	1.265	1.000	1,933,091	0.63	0.55	0.54	0.55
7/1/17 - 6/30/18	2,493,740	1.159	1,685,241	1,685,241	1,325,600	1.217	1.000	1,612,795	0.56	0.56	0.54	0.56
7/1/18 - 6/30/19	2,576,230	1.126	1,271,542	1,271,542	1,685,250	1.170	1.000	1,971,504	0.68	0.56	0.55	0.56
7/1/19 - 6/30/20	2,916,990	1.093	1,253,915	1,253,915	1,271,550	1.125	1.000	1,430,321	0.45	0.57	0.55	0.57
7/1/20 - 6/30/21	2,919,796	1.061	1,126,243	1,126,243	1,126,243	1.082	1.000	1,218,144	***0.39***	0.57	0.56	0.57
7/1/21 - 6/30/22	3,065,815	1.030	1,435,324	1,435,324	1,435,324	1.040	1.000	1,492,737	***0.47***	0.58	0.56	0.58
7/1/22 - 6/30/23	3,396,233	1.000	766,661	766,661	766,661	1.000	1.000	766,661	***0.23***	0.59		0.59
			20,348,842	20,348,842				Last 3 Wtd Avg	0.56			
								Last 4 Wtd Avg	0.58			
								Last 5 Wtd Avg	0.59			
								All Per Wtd Avg	0.30			

(Note: numbers in bold and italics and with borders are excluded from the calculated averages)

Selected (14) 0.59

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Selected by Deloitte Consulting LLP
(4) From Section VIII, Exhibit II, Sheet 10, Column (7)
(5) From Section VIII, Exhibit II, Sheet 0, Column (7)
(6) Selected by Deloitte Consulting LLP
(7) Selected by Deloitte Consulting LLP
(8) Based on industry sources
(9) = (6) x (7) x (8)
(10) = (9) / [(2) x (3)]
(11) = (14) / (7) / (8) * (3)
(12) From prior 06/30/2022 Deloitte Consulting LLP Unpaid Loss Estimate Analysis
(13) Selected for by Deloitte Consulting LLP Based on (14)
(14) Selected by Deloitte Consulting LLP

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Frequency Severity Method

Accident Year	Payroll (00)'s	Ultimate Reported Severity	Include For Fit	Exponential Fitted Reported Severity	Initial Selected Ultimate Severity	Selected Ultimate Claim Counts	Benefit Level Adjustment Factor	Selected Severity Trend	Trended Severity	On-Level Selected Ultimate Severity	Indicated Ultimate Loss	Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Prior to 7/1/1993			Exclude	5,760		0					0	
7/1/93 - 6/30/94			Exclude	6,041		0	1.180	3.119	0,000		0	
7/1/94 - 6/30/95			Exclude	6,336		0	1.167	2.999	0,000		0	
7/1/95 - 6/30/96			Exclude	6,645		0	1.151	2.883	0,000		0	
7/1/96 - 6/30/97			Exclude	6,969		0	1.140	2.772	0,000		0	
7/1/97 - 6/30/98			Exclude	7,309		0	1.135	2.666	0,000		0	
7/1/98 - 6/30/99			Exclude	7,665		0	1.135	2.563	0,000		0	
7/1/99 - 6/30/00			Exclude	8,039		0	1.129	2.465	0,000		0	
7/1/00 - 6/30/01	2,119,040		Exclude	8,431		0	1.112	2.370	0,000		0	0.00
7/1/01 - 6/30/02	2,124,720		Exclude	8,842		0	1.098	2.279	0,000		0	0.00
7/1/02 - 6/30/03	2,087,950		Exclude	9,273		0	1.071	2.191	0,000		0	0.00
7/1/03 - 6/30/04	2,077,380		Exclude	9,726		0	1.044	2.107	0,000		0	0.00
7/1/04 - 6/30/05	2,176,960		Exclude	10,200		0	1.037	2.026	0,000		0	0.00
7/1/05 - 6/30/06	2,309,760		Exclude	10,697		0	1.032	1.948	0,000		0	0.00
7/1/06 - 6/30/07	2,339,880		Exclude	11,219		0	1.032	1.873	0,000		0	0.00
7/1/07 - 6/30/08	2,458,840		Exclude	11,766		0	1.032	1.801	0,000		0	0.00
7/1/08 - 6/30/09	2,512,270		Exclude	12,340		0	1.020	1.732	0,000		0	0.00
7/1/09 - 6/30/10	2,739,090		Exclude	12,942		0	1.004	1.665	0,000		0	0.00
7/1/10 - 6/30/11	2,636,870		Exclude	13,573		0	1.000	1.601	0,000		0	0.00
7/1/11 - 6/30/12	2,753,440		Exclude	14,235		0	1.000	1.539	0,000		0	0.00
7/1/12 - 6/30/13	2,873,490	15,456	Include	14,929	9,061	91	1.000	1.480	13,412	25,449	1,564,542	0.54
7/1/13 - 6/30/14	3,041,530	13,331	Include	15,657	14,500	97	1.000	1.423	20,638	25,449	1,734,406	0.57
7/1/14 - 6/30/15	3,230,070	17,209	Include	16,421	12,803	101	1.000	1.369	17,522	25,449	1,878,165	0.58
7/1/15 - 6/30/16	3,033,160	17,361	Include	17,221	19,751	88	1.000	1.316	25,990	25,449	1,701,878	0.56
7/1/16 - 6/30/17	2,570,440	17,913	Include	18,061	20,645	74	1.000	1.265	26,123	25,449	1,488,370	0.58
7/1/17 - 6/30/18	2,493,740	23,406	Include	18,942	18,411	72	1.000	1.217	22,400	25,449	1,506,069	0.60
7/1/18 - 6/30/19	2,576,230	19,266	Include	19,866	25,534	66	1.000	1.170	29,871	25,449	1,435,786	0.56
7/1/19 - 6/30/20	2,916,990	20,556	Include	20,835	20,845	61	1.000	1.125	23,448	25,449	1,380,095	0.47
7/1/20 - 6/30/21	2,919,796	20,010	Include	21,851	20,010	56	1.000	1.082	***21,643***	25,449	1,324,306	0.45
7/1/21 - 6/30/22	3,065,815	20,584	Exclude	22,916	20,584	70	1.000	1.040	***21,408***	25,449	1,706,328	0.56
7/1/22 - 6/30/23	3,396,233	15,456	Exclude	24,034	15,456	50	1.000	1.000	***15,456***	25,449	1,262,326	0.37
			Implied Trend	4.9%	-24.9%			Last 5 Wtd Avg	25,581			
								Last 4 Wtd Avg	25,449			
								Last 3 Wtd Avg	25,199			
Total	60,453,694					826		Last 3 Avg	25,240		16,982,270	
								Selected	25,449			

Reported Exponential Regressio	
Constant	10.135
X Coefficient	(0.048)
R Squared	0.621

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Provided by Entity
(3) Section VIII, Exhibit II, Sheet 0, Column (7) / Section VIII, Exhibit II, Sheet 13, Column (7) x 1
(4) Years included for purposes of fit
(5) Result of Exponential fit of Column (3) * Column (8)
(6) Selected by Deloitte Consulting LLP
(7) From Section VIII, Exhibit II, Sheet 13, Column (7)
(8) Based on industry sources
(9) Selected by Deloitte Consulting LLP
(10) = (6) x (8) x (9)
(11) Selected by Deloitte Consulting, LLP
(12) Selected in column (11) x (7) / (8) / (9)
(13) = (12) / (3)

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss Development Method

Accident Year	Age of Losses @ 06/30/2023	Retention	Payroll (00)'s	Unlimited Paid Loss @ 06/30/2023	Paid LDF	Indicated Ultimate Loss	Unlimited Indicated Ultimate Loss Rates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Prior to 7/1/1993	372.0	Unlimited		14,798	1.042	15,427	
7/1/93 - 6/30/94	360.0	Unlimited		40,908	1.046	42,779	
7/1/94 - 6/30/95	348.0	Unlimited		39,386	1.048	41,285	
7/1/95 - 6/30/96	336.0	Unlimited		0	1.053	0	
7/1/96 - 6/30/97	324.0	Unlimited		289,668	1.056	305,821	
7/1/97 - 6/30/98	312.0	Unlimited		4,625	1.061	4,908	
7/1/98 - 6/30/99	300.0	Unlimited		141,096	1.065	150,299	
7/1/99 - 6/30/00	288.0	Unlimited		355,460	1.070	380,479	
7/1/00 - 6/30/01	276.0	Unlimited	2,119,040	19,974	1.077	21,511	0.01
7/1/01 - 6/30/02	264.0	Unlimited	2,124,720	34,990	1.089	38,094	0.02
7/1/02 - 6/30/03	252.0	Unlimited	2,087,950	235,793	1.102	259,905	0.12
7/1/03 - 6/30/04	240.0	Unlimited	2,077,380	80,580	1.113	89,714	0.04
7/1/04 - 6/30/05	228.0	Unlimited	2,176,960	54,781	1.124	61,585	0.03
7/1/05 - 6/30/06	216.0	Unlimited	2,309,760	112,601	1.135	127,794	0.06
7/1/06 - 6/30/07	204.0	Unlimited	2,339,880	1,169,438	1.151	1,345,485	0.58
7/1/07 - 6/30/08	192.0	Unlimited	2,458,840	77,236	1.165	90,000	0.04
7/1/08 - 6/30/09	180.0	Unlimited	2,512,270	195,709	1.181	231,203	0.09
7/1/09 - 6/30/10	168.0	Unlimited	2,739,090	1,117,348	1.196	1,336,234	0.49
7/1/10 - 6/30/11	156.0	Unlimited	2,636,870	138,005	1.212	167,279	0.06
7/1/11 - 6/30/12	144.0	Unlimited	2,753,440	671,344	1.228	824,569	0.30
7/1/12 - 6/30/13	132.0	Unlimited	2,873,490	1,130,547	1.244	1,406,472	0.49
7/1/13 - 6/30/14	120.0	Unlimited	3,041,530	1,024,770	1.262	1,293,074	0.43
7/1/14 - 6/30/15	108.0	Unlimited	3,230,070	1,355,189	1.283	1,738,092	0.54
7/1/15 - 6/30/16	96.0	Unlimited	3,033,160	1,168,293	1.308	1,527,752	0.50
7/1/16 - 6/30/17	84.0	Unlimited	2,570,440	989,655	1.339	1,325,585	0.52
7/1/17 - 6/30/18	72.0	Unlimited	2,493,740	1,213,038	1.389	1,685,241	0.68
7/1/18 - 6/30/19	60.0	Unlimited	2,576,230	874,916	1.453	1,271,542	0.49
7/1/19 - 6/30/20	48.0	Unlimited	2,916,990	816,953	1.535	1,253,915	0.43
7/1/20 - 6/30/21	36.0	Unlimited	2,919,796	672,464	1.675	1,126,243	0.39
7/1/21 - 6/30/22	24.0	Unlimited	3,065,815	696,522	2.061	1,435,324	0.47
7/1/22 - 6/30/23	12.0	Unlimited	3,396,233	188,419	4.069	766,661	0.23
Total			60,453,694	14,924,504		20,364,269	

Footnotes:

(1) Accident Year 7/1/xxxx - 6/30/xxxx+1
(2) Age of (1)
(3) Provided by Entity
(4) Provided by Entity
(5) Provided by Entity
(6) From Section VIII, Exhibit II, Sheet 11
(7) = (5) x (6)
(8) = (7) / (4)

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																					6,238	6,480	7,090	9,838	9,838	10,958	10,958	14,798	14,798	14,798	14,798	14,798
7/1/93 - 6/30/94																				2,192	4,606	6,832	10,779	11,029	15,125	20,560	28,321	36,127	40,765	40,908		40,908
7/1/94 - 6/30/95																			3,334	7,245	11,917	15,513	18,441	21,930	25,029	28,454	32,182	35,894	39,386			39,386
7/1/95 - 6/30/96																		0	0	0	0	0	0	0	0	0	0	0				0
7/1/96 - 6/30/97																	77,028	107,667	151,004	183,906	214,863	245,425	273,945	284,739	289,668	289,668	289,668					289,668
7/1/97 - 6/30/98																1,229	1,860	2,878	4,305	4,505	4,625	4,625	4,625	4,625	4,625	4,625						4,625
7/1/98 - 6/30/99															39,484	77,083	104,592	125,558	130,132	135,111	135,414	138,868	140,631	141,096	141,096							141,096
7/1/99 - 6/30/00														53,458	85,642	132,500	154,683	176,680	208,640	227,127	247,195	259,340	326,589	355,460								355,460
7/1/00 - 6/30/01													5,099	13,484	15,562	17,217	17,705	17,705	19,760	19,974	19,974	19,974	19,974									19,974
7/1/01 - 6/30/02												3,514	5,975	8,753	11,557	17,030	24,760	27,684	29,011	30,573	33,298	34,990										34,990
7/1/02 - 6/30/03											15,775	30,474	79,972	93,432	127,403	141,329	157,832	175,542	189,744	215,384	235,793											235,793
7/1/03 - 6/30/04										21,375	39,183	57,199	60,739	63,120	71,096	72,169	74,313	76,576	79,052	80,580												80,580
7/1/04 - 6/30/05									10,995	17,796	24,255	29,147	32,227	33,273	34,905	40,985	44,559	48,306	54,781													54,781
7/1/05 - 6/30/06								38,428	60,154	72,920	81,345	89,511	96,451	101,537	109,024	109,551	111,577	112,601														112,601
7/1/06 - 6/30/07							42,198	71,635	98,072	126,616	185,155	204,862	266,396	315,052	419,040	686,479	1,169,438															1,169,438
7/1/07 - 6/30/08						5,814	29,496	43,958	48,817	54,189	58,184	60,103	65,495	68,313	73,157	77,236																77,236
7/1/08 - 6/30/09					113,395	144,705	167,474	175,668	181,676	185,172	187,208	190,395	191,130	191,725	195,709																	195,709
7/1/09 - 6/30/10				214,626	352,027	504,840	655,281	678,249	988,154	1,038,311	1,063,509	1,088,738	1,107,896	1,117,348																		1,117,348
7/1/10 - 6/30/11			54,976	90,475	102,245	118,174	122,484	123,002	124,202	126,010	133,745	135,418	138,005																			138,005
7/1/11 - 6/30/12		319,908	415,959	521,390	556,733	580,676	604,009	616,933	633,144	640,351	660,274	671,344																				671,344
7/1/12 - 6/30/13	276,251	649,439	866,050	1,017,940	1,037,866	1,074,023	1,095,025	1,101,971	1,104,306	1,106,249	1,130,547																					1,130,547
7/1/13 - 6/30/14	231,968	629,763	755,626	809,833	879,626	928,667	963,971	991,457	1,009,401	1,024,770																						1,024,770
7/1/14 - 6/30/15	365,860	878,556	1,068,285	1,185,474	1,279,631	1,307,938	1,329,942	1,351,116	1,355,189																							1,355,189
7/1/15 - 6/30/16	351,930	739,915	878,117	908,579	998,971	1,053,644	1,112,810	1,168,293																								1,168,293
7/1/16 - 6/30/17	244,214	642,707	800,013	865,222	889,618	947,707	989,655																									989,655
7/1/17 - 6/30/18	431,758	778,228	1,025,533	1,143,884	1,162,889	1,213,038																										1,213,038
7/1/18 - 6/30/19	207,277	652,869	738,573	826,306	874,916																											874,916
7/1/19 - 6/30/20	284,798	564,887	737,635	816,953																												816,953
7/1/20 - 6/30/21	285,007	591,288	672,464																													672,464
7/1/21 - 6/30/22	368,492	696,522																														696,522
7/1/22 - 6/30/23	188,419																															188,419
																																14,924,504

Accident Year	Age-to-Age Development Factors																														
	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993																					1.039	***1.094***	***1.388***	***1.000***	***1.114***	***1.000***	***1.350***	***1.000***	***1.000***	***1.000***	
7/1/93 - 6/30/94																				2.102	1.484	1.578	1.023	1.371	1.359	1.378	1.276	1.128	1.004		
7/1/94 - 6/30/95																			2.173	1.645	1.302	1.189	1.189	1.141	1.137	1.131	1.115	1.097			
7/1/95 - 6/30/96																															
7/1/96 - 6/30/97																	1.398	1.403	1.218	1.168	1.142	1.116	1.039	1.017	1.000	1.000					
7/1/97 - 6/30/98																1.513	1.547	1.496	1.046	1.027	1.000	1.000	1.000	1.000	1.000						
7/1/98 - 6/30/99															1.952	1.357	1.200	1.036	1.038	1.002	1.026	1.013	1.003	1.000							
7/1/99 - 6/30/00														1.602	1.547	1.167	1.142	1.181	1.089	1.088	1.049	1.259	1.088								
7/1/00 - 6/30/01													2.644	1.154	1.106	1.028	1.000	1.116	1.011	1.000	1.000	1.000									
7/1/01 - 6/30/02												1.700	1.465	1.320	1.474	1.454	1.118	1.048	1.054	1.089	1.051										
7/1/02 - 6/30/03											1.932	2.624	1.168	1.364	1.109	1.117	1.112	1.081	1.135	1.095											
7/1/03 - 6/30/04										1.833	1.460	1.062	1.039	1.126	1.015	1.030	1.030	1.032	1.019												
7/1/04 - 6/30/05									1.619	1.363	1.202	1.106	1.032	1.049	1.174	1.087	1.084	1.134													
7/1/05 - 6/30/06								1.565	1.212	1.116	1.100	1.078	1.053	1.074	1.005	1.018	1.009														
7/1/06 - 6/30/07							1.698	1.369	1.291	1.462	1.106	1.300	1.183	1.330	1.638	1.704															
7/1/07 - 6/30/08						5.073	1.490	1.111	1.110	1.074	1.033	1.090	1.043	1.071	1.056																
7/1/08 - 6/30/09					1.276	1.157	1.049	1.034	1.019	1.011	1.017	1.004	1.003	1.021																	
7/1/09 - 6/30/10				1.640	1.434	1.298	1.035	1.457	1.051	1.024	1.024	1.018	1.009																		
7/1/10 - 6/30/11			1.646	1.130	1.156	1.036	1.004	1.010	1.015	1.061	1.013	1.019																			
7/1/11 - 6/30/12		1.300	1.253	1.068	1.043	1.040	1.021	1.026	1.011	1.031	1.017																				
7/1/12 - 6/30/13	2.351	1.334	1.175	1.020	1.035	1.020	1.006	1.002	1.002	1.022																					
7/1/13 - 6/30/14	2.715	1.200	1.072	1.086	1.056	1.038	1.029	1.018	1.015																						
7/1/14 - 6/30/15	2.401	1.216	1.110	1.079	1.022	1.017	1.016	1.003																							
7/1/15 - 6/30/16	2.102	1.187	1.035	1.099	1.055	1.056	1.050																								
7/1/16 - 6/30/17	2.632	1.245	1.082	1.028	1.065	1.044																									
7/1/17 - 6/30/18	1.802	1.318	1.115	1.017	1.043																										
7/1/18 - 6/30/19	3.150	1.131	1.119	1.059																											
7/1/19 - 6/30/20	1.983	1.306	1.108																												
7/1/20 - 6/30/21	2.075	1.137																													
7/1/21 - 6/30/22	1.890																														
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																															
Last 3 Wtd Avg	1.975	1.188	1.114	1.032	1.053	1.037	1.031	1.007	1.009	1.028	1.020	1.016	1.009	1.196	1.452	1.584	1.031	1.077	1.096	1.087	1.046	1.165	1.062	1.011	1.000	1.012	1.190				
Last 5 Wtd Avg	2.082	1.230	1.091	1.056	1.046	1.034	1.024	1.010	1.020	1.026	1.020	1.053	1.039	1.172	1.395	1.483	1.067	1.077	1.090	1.069	1.039	1.146	1.054	1.018	1.026						
Last 8 Wtd Avg	2.184	1.219	1.103	1.055	1.046	1.055	1.026	1.071	1.027	1.045	1.032	1.055	1.044	1.190	1.348	1.442	1.102	1.099	1.105	1.091	1.077	1.151									
Last 12 Wtd Avg																															
All Per Wtd Avg	2.239	1.234	1.115	1.073	1.068	1.061	1.033	1.079	1.031	1.051	1.044	1.082	1.050	1.213	1.390	1.437	1.133	1.142	1.110	1.099	1.080	1.151	1.057	1.026	1.026	1.034	1.190	1.113	1.004		
Industry																															
Age-to-Age	1.952	1.143	1.054	1.022	1.017	1.007	1.012	1.008	1.009	1.008	1.007	1.008	1.007	1.008	1.007	1.007	1.008	1.007	1.004	1.004	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.004	1.004	
Age-to-Ult	2.959	1.516	1.326	1.258	1.231	1.210	1.202	1.188	1.179	1.168	1.159	1.151	1.142	1.134	1.125	1.117	1.109	1.100	1.092	1.088	1.083	1.078	1.073	1.068	1.063	1.058	1.052	1.047	1.043	1.038	1.034
Prior Selected																															
Age-to-Age	2.328	1.253	1.093	1.061	1.044	1.035	1.016	1.020	1.017	1.015	1.014	1.014	1.015	1.013	1.015	1.015	1.015	1.010	1.010	1.011	1.010	1.007	1.004	1.004	1.005	1.005	1.004	1.003	1.001	1.003	
Age-to-Ult	4.862	2.089	1.666	1.525	1.438	1.376	1.329	1.308	1.282	1.261	1.243	1.225	1.209	1.191	1.176	1.158	1.142	1.125	1.113	1.102	1.090	1.079	1.071	1.067	1.063	1.058	1.053	1.049	1.046	1.045	1.042
Selected																															
Age-to-Age	1.975	1.230	1.091	1.056	1.046	1.037	1.024	1.020	1.016	1.014	1.013	1.013	1.014	1.012	1.014	1.013	1.014	1.010	1.010	1.010	1.012	1.011	1.006	1.005	1.004	1.005	1.003	1.004	1.002	1.003	
Age-to-Ult	4.069	2.061	1.675	1.535	1.453	1.389	1.339	1.308	1.283	1.262	1.244	1.228	1.212	1.196	1.181	1.165	1.151	1.135	1.124	1.113	1.102	1.089	1.077	1.070	1.065	1.061	1.056	1.053	1.048	1.046	1.042

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Medical

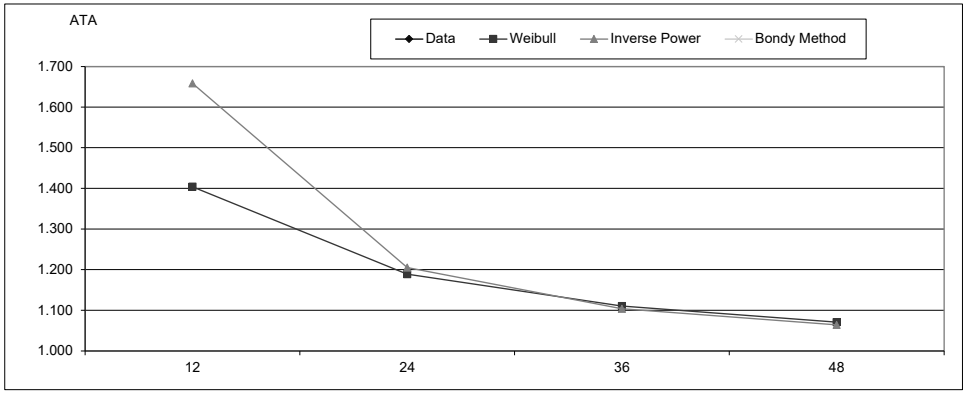
Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

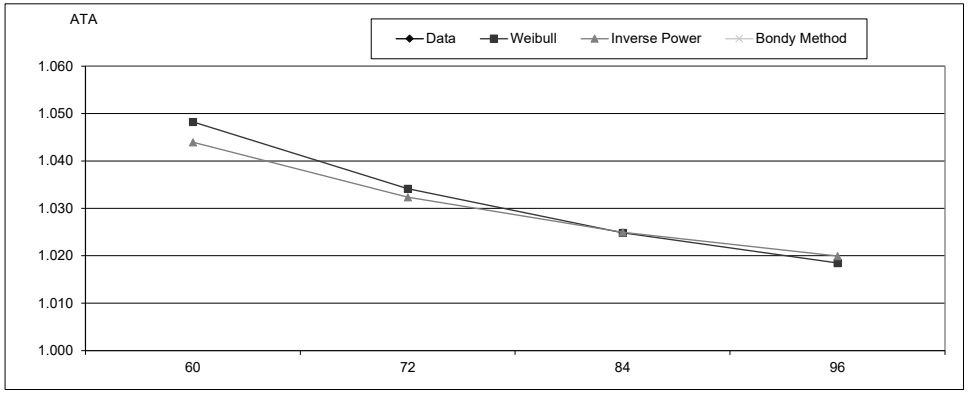
Curve Fitting Methods
Paid Loss

Tail at Period:	**31**	(To display in table)
Cut-off point:(<=Tail & <51)	**50**	(to run-out pattern)

Summary of Curve Fitting Methods

Method	Tail	R^2
Weibull	**1.001**	**0.963**
Inverse Power	**1.028**	**0.987**
Bondy Method		**N/A**





				Weibull		Inverse Power		Bondy Method			
									Sel. Decay Ratio=		
PERIOD	AGE	ATA	Use	**ATA***	**ATU***	**ATA***	**ATU***	Ln(ATA)	Decay	**ATA***	**ATU***
1	12	0.000	Exclude	**1.404**	2.404	**1.659**	3.096				
2	24	1.230	Include	**1.189**	1.712	**1.205**	1.866				
3	36	1.091	Include	**1.110**	1.440	**1.104**	1.549				
4	48	1.056	Include	**1.071**	1.297	**1.064**	1.403				
5	60	1.046	Include	**1.048**	1.211	**1.044**	1.319				
6	72	1.037	Include	**1.034**	1.155	**1.032**	1.263				
7	84	1.024	Include	**1.025**	1.117	**1.025**	1.223				
8	96	1.020	Include	**1.018**	1.090	**1.020**	1.194				
9	108	1.016	Include	**1.014**	1.070	**1.016**	1.170				
10	120	0.000	Exclude	**1.011**	1.055	**1.014**	1.151				
11	132	0.000	Exclude	**1.008**	1.044	**1.012**	1.136				
12	144	0.000	Exclude	**1.007**	1.036	**1.010**	1.123				
13	156	0.000	Exclude	**1.005**	1.029	**1.009**	1.112				
14	168	0.000	Exclude	**1.004**	1.024	**1.008**	1.102				
15	180	0.000	Exclude	**1.003**	1.019	**1.007**	1.093				
16	192	0.000	Exclude	**1.003**	1.016	**1.006**	1.086				
17	204	0.000	Exclude	**1.002**	1.013	**1.006**	1.079				
18	216	0.000	Exclude	**1.002**	1.011	**1.005**	1.073				
19	228	0.000	Exclude	**1.001**	1.009	**1.005**	1.068				
20	240	0.000	Exclude	**1.001**	1.008	**1.004**	1.063				
21	252	0.000	Exclude	**1.001**	1.007	**1.004**	1.058				
22	264	0.000	Exclude	**1.001**	1.005	**1.004**	1.054				
23	276	0.000	Exclude	**1.001**	1.005	**1.003**	1.050				
24	288	0.000	Exclude	**1.001**	1.004	**1.003**	1.047				
25	300	0.000	Exclude	**1.000**	1.003	**1.003**	1.043				
26	312	0.000	Exclude	**1.000**	1.003	**1.003**	1.040				
27	324	0.000	Exclude	**1.000**	1.002	**1.003**	1.037				
28	336	0.000	Exclude	**1.000**	1.002	**1.002**	1.035				
29	348	0.000	Exclude	**1.000**	1.002	**1.002**	1.032				
30	360	0.000	Exclude	**1.000**	1.002	**1.002**	1.030				
31	372	0.000	Exclude	**1.000**	1.001	**1.002**	1.028				
32	384	0.000	Exclude	**1.000**	1.001	**1.002**	1.026				
33	396	0.000	Exclude	**1.000**	1.001	**1.002**	1.024				
34	408	0.000	Exclude	**1.000**	1.001	**1.002**	1.022				
35	420	0.000	Exclude	**1.000**	1.001	**1.002**	1.020				
36	432	0.000	Exclude	**1.000**	1.001	**1.002**	1.018				
37	444	0.000	Exclude	**1.000**	1.001	**1.002**	1.017				
38	456	0.000	Exclude	**1.000**	1.000	**1.001**	1.015				
39	468	0.000	Exclude	**1.000**	1.000	**1.001**	1.014				
40	480	0.000	Exclude	**1.000**	1.000	**1.001**	1.012				
41	492	0.000	Exclude	**1.000**	1.000	**1.001**	1.011				
42	504	0.000	Exclude	**1.000**	1.000	**1.001**	1.010				
43	516	0.000	Exclude	**1.000**	1.000	**1.001**	1.008				
44	528	0.000	Exclude	**1.000**	1.000	**1.001**	1.007				
45	540	0.000	Exclude	**1.000**	1.000	**1.001**	1.006				
46	552	0.000	Exclude	**1.000**	1.000	**1.001**	1.005				
47	564	0.000	Exclude	**1.000**	1.000	**1.001**	1.004				
48	576	0.000	Exclude	**1.000**	1.000	**1.001**	1.003				
49	588	0.000	Exclude	**1.000**	1.000	**1.001**	1.002				
50	600	0.000	Exclude	**1.000**	1.000	**1.001**	1.001				

Unpaid Claim Analysis as of 06/30/2023

Ultimate Claim Count Development

Accident Year	Age of Counts @ 06/30/2023	Payroll (00)'s	Reported Claim Counts @ 06/30/2023	Reported Count Dev Factor	Indicated Ultimate Claim Counts	Selected Ultimate Claim Counts	Selected Ultimate Frequency	Selected Ultimate Frequency (Inflation-Adjusted)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior to 7/1/1993	372.0		14	1.000	14			
7/1/93 - 6/30/94	360.0		4	1.000	4			
7/1/94 - 6/30/95	348.0		3	1.000	3			
7/1/95 - 6/30/96	336.0		0	1.000	0			
7/1/96 - 6/30/97	324.0		3	1.000	3			
7/1/97 - 6/30/98	312.0		2	1.000	2			
7/1/98 - 6/30/99	300.0		4	1.000	4			
7/1/99 - 6/30/00	288.0		4	1.000	4			
7/1/00 - 6/30/01	276.0	2,119,040	5	1.000	5		0.00%	0.00%
7/1/01 - 6/30/02	264.0	2,124,720	7	1.000	7		0.00%	0.00%
7/1/02 - 6/30/03	252.0	2,087,950	5	1.000	5		0.00%	0.00%
7/1/03 - 6/30/04	240.0	2,077,380	7	1.000	7		0.00%	0.00%
7/1/04 - 6/30/05	228.0	2,176,960	9	1.000	9		0.00%	0.00%
7/1/05 - 6/30/06	216.0	2,309,760	6	1.000	6		0.00%	0.00%
7/1/06 - 6/30/07	204.0	2,339,880	9	1.000	9		0.00%	0.00%
7/1/07 - 6/30/08	192.0	2,458,840	9	1.000	9		0.00%	0.00%
7/1/08 - 6/30/09	180.0	2,512,270	20	1.000	20		0.00%	0.00%
7/1/09 - 6/30/10	168.0	2,739,090	26	1.000	26		0.00%	0.00%
7/1/10 - 6/30/11	156.0	2,636,870	36	1.000	36		0.00%	0.00%
7/1/11 - 6/30/12	144.0	2,753,440	71	1.000	71		0.00%	0.00%
7/1/12 - 6/30/13	132.0	2,873,490	91	1.000	91	91	31.67%	23.56%
7/1/13 - 6/30/14	120.0	3,041,530	97	1.000	97	97	31.89%	24.44%
7/1/14 - 6/30/15	108.0	3,230,070	101	1.000	101	101	31.27%	24.68%
7/1/15 - 6/30/16	96.0	3,033,160	88	1.000	88	88	29.01%	23.59%
7/1/16 - 6/30/17	84.0	2,570,440	74	1.000	74	74	28.79%	24.11%
7/1/17 - 6/30/18	72.0	2,493,740	72	1.000	72	72	28.87%	24.91%
7/1/18 - 6/30/19	60.0	2,576,230	66	1.000	66	66	25.62%	22.76%
7/1/19 - 6/30/20	48.0	2,916,990	61	1.000	61	61	20.91%	19.14%
7/1/20 - 6/30/21	36.0	2,919,796	56	1.005	56	56	19.28%	18.17%
7/1/21 - 6/30/22	24.0	3,065,815	69	1.011	70	70	22.74%	22.08%
7/1/22 - 6/30/23	12.0	3,396,233	41	1.119	46	50	14.60%	14.60%
Total		60,453,694	1,060		1,066	826		

Footnotes:

(1)	Accident Year 7/1/xxxx - 6/30/xxxx+1
(2)	Age of (1)
(3)	Provided by Entity
(4)	Provided by Entity
(5)	From Section VIII, Exhibit II, Sheet 14
(6)	= (4) x (5)
(7)	Selected by Deloitte Consulting LLP
(8)	= (7) / (3)
(9)	= (7) / [(3) x Section VIII, Exhibit II, Sheet 8, Column (3)]

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Medical

Unpaid Claim Analysis as of 06/30/2023

Reported Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																															14	14
7/1/93 - 6/30/94																														4		4
7/1/94 - 6/30/95																													3			3
7/1/95 - 6/30/96																												0				0
7/1/96 - 6/30/97																											3					3
7/1/97 - 6/30/98																										2						2
7/1/98 - 6/30/99																									4							4
7/1/99 - 6/30/00																								4								4
7/1/00 - 6/30/01																							5									5
7/1/01 - 6/30/02																						7										7
7/1/02 - 6/30/03																					5											5
7/1/03 - 6/30/04																				7												7
7/1/04 - 6/30/05																			9													9
7/1/05 - 6/30/06																		6														6
7/1/06 - 6/30/07																	9															9
7/1/07 - 6/30/08																9																9
7/1/08 - 6/30/09															20																	20
7/1/09 - 6/30/10														26																		26
7/1/10 - 6/30/11													36																			36
7/1/11 - 6/30/12												71																				71
7/1/12 - 6/30/13	78	91	91	91	91	91	91	91	91	91	91																					91
7/1/13 - 6/30/14	76	94	96	96	98	98	97	97	97	97																						97
7/1/14 - 6/30/15	83	97	100	100	100	100	101	101	101																							101
7/1/15 - 6/30/16	74	84	85	87	88	88	88	88																								88
7/1/16 - 6/30/17	62	74	74	74	73	73	74																									74
7/1/17 - 6/30/18	66	71	71	72	72	72																										72
7/1/18 - 6/30/19	57	65	66	66	66																											66
7/1/19 - 6/30/20	56	61	61	61																												61
7/1/20 - 6/30/21	51	56	56																													56
7/1/21 - 6/30/22	61	69																														69
7/1/22 - 6/30/23	41																															41
																																1,060

Accident Year	Age-to-Age Development Factors																														
	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	336 - 348	348 - 360	360 - 372	372 - ULT
Prior to 7/1/1993																															
7/1/93 - 6/30/94																															
7/1/94 - 6/30/95																															
7/1/95 - 6/30/96																															
7/1/96 - 6/30/97																															
7/1/97 - 6/30/98																															
7/1/98 - 6/30/99																															
7/1/99 - 6/30/00																															
7/1/00 - 6/30/01																															
7/1/01 - 6/30/02																															
7/1/02 - 6/30/03																															
7/1/03 - 6/30/04																															
7/1/04 - 6/30/05																															
7/1/05 - 6/30/06																															
7/1/06 - 6/30/07																															
7/1/07 - 6/30/08																															
7/1/08 - 6/30/09																															
7/1/09 - 6/30/10																															
7/1/10 - 6/30/11																															
7/1/11 - 6/30/12																															
7/1/12 - 6/30/13	1.167	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000																					
7/1/13 - 6/30/14	1.237	1.021	1.000	1.021	1.000	0.990	1.000	1.000	1.000																						
7/1/14 - 6/30/15	1.169	1.031	1.000	1.000	1.000	1.010	1.000	1.000																							
7/1/15 - 6/30/16	1.135	1.012	1.024	1.011	1.000	1.000	1.000																								
7/1/16 - 6/30/17	1.194	1.000	1.000	0.986	1.000	1.014																									
7/1/17 - 6/30/18	1.076	1.000	1.014	1.000	1.000																										
7/1/18 - 6/30/19	1.140	1.015	1.000	1.000																											
7/1/19 - 6/30/20	1.089	1.000	1.000																												
7/1/20 - 6/30/21	1.098	1.000																													
7/1/21 - 6/30/22	1.131																														
(Note: numbers in bold and italics and with borders are excluded from the calculated averages)																															
Last 3 Wtd Avg	1.107	1.005	1.005	0.995	1.000	1.008	1.000	1.000																							
Last 4 Wtd Avg	1.116	1.004	1.004	1.000	1.000	1.003	1.000																								
Last 5 Wtd Avg	1.107	1.003	1.008	1.000	1.000	1.002																									
All Per Wtd Avg	1.148	1.010	1.005	1.003	1.000	1.002	1.000	1.000	1.000	1.000																					
Average ex Hi/Lo	1.140	1.007	1.002	1.002	1.000	1.003	1.000	1.000																							
Prior Selected																															
Age-to-Age	1.110	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	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	
Age-to-Ult	1.121	1.010	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	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
Selected																															
Age-to-Age	1.107	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	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	
Age-to-Ult	1.119	1.011	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	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

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Medical

Unpaid Claim Analysis as of 06/30/2023

Reported Counts to Payroll (00)'s

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94																																-
7/1/94 - 6/30/95																																-
7/1/95 - 6/30/96																																-
7/1/96 - 6/30/97																																-
7/1/97 - 6/30/98																																-
7/1/98 - 6/30/99																																-
7/1/99 - 6/30/00																																-
7/1/00 - 6/30/01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02									2,119,040
7/1/01 - 6/30/02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03										2,124,720
7/1/02 - 6/30/03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02											2,087,950
7/1/03 - 6/30/04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03												2,077,380
7/1/04 - 6/30/05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04													2,176,960
7/1/05 - 6/30/06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03														2,309,760
7/1/06 - 6/30/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04															2,339,880
7/1/07 - 6/30/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04																2,458,840
7/1/08 - 6/30/09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08																	2,512,270
7/1/09 - 6/30/10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09																		2,739,090
7/1/10 - 6/30/11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14																			2,636,870
7/1/11 - 6/30/12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26																				2,753,440
7/1/12 - 6/30/13	0.27	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32																					2,873,490
7/1/13 - 6/30/14	0.25	0.31	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32																						3,041,530
7/1/14 - 6/30/15	0.26	0.30	0.31	0.31	0.31	0.31	0.31	0.31	0.31																							3,230,070
7/1/15 - 6/30/16	0.24	0.28	0.28	0.29	0.29	0.29	0.29	0.29																								3,033,160
7/1/16 - 6/30/17	0.24	0.29	0.29	0.29	0.28	0.28	0.29																									2,570,440
7/1/17 - 6/30/18	0.26	0.28	0.28	0.29	0.29	0.29																										2,493,740
7/1/18 - 6/30/19	0.22	0.25	0.26	0.26	0.26																											2,576,230
7/1/19 - 6/30/20	0.19	0.21	0.21	0.21																												2,916,990
7/1/20 - 6/30/21	0.17	0.19	0.19																													2,919,796
7/1/21 - 6/30/22	0.20	0.23																														3,065,815
7/1/22 - 6/30/23	0.12																															3,396,233

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Paid Loss Rates

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														Payroll (00)'s
	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	348	360	372	
Prior to 7/1/1993																																-
7/1/93 - 6/30/94																																-
7/1/94 - 6/30/95																																-
7/1/95 - 6/30/96																																-
7/1/96 - 6/30/97																																-
7/1/97 - 6/30/98																																-
7/1/98 - 6/30/99																																-
7/1/99 - 6/30/00																																-
7/1/00 - 6/30/01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01									2,119,040
7/1/01 - 6/30/02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02										2,124,720
7/1/02 - 6/30/03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.04	0.04	0.06	0.07	0.08	0.08	0.09	0.10	0.11											2,087,950
7/1/03 - 6/30/04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04												2,077,380
7/1/04 - 6/30/05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.03													2,176,960
7/1/05 - 6/30/06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05														2,309,760
7/1/06 - 6/30/07	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.04	0.05	0.08	0.09	0.11	0.13	0.18	0.29	0.50															2,339,880
7/1/07 - 6/30/08	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03																2,458,840
7/1/08 - 6/30/09	0.00	0.00	0.00	0.00	0.05	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08																	2,512,270
7/1/09 - 6/30/10	0.00	0.00	0.00	0.08	0.13	0.18	0.24	0.25	0.36	0.38	0.39	0.40	0.40	0.41																		2,739,090
7/1/10 - 6/30/11	0.00	0.00	0.02	0.03	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05																			2,636,870
7/1/11 - 6/30/12	0.00	0.12	0.15	0.19	0.20	0.21	0.22	0.22	0.23	0.23	0.24	0.24																				2,753,440
7/1/12 - 6/30/13	0.10	0.23	0.30	0.35	0.36	0.37	0.38	0.38	0.38	0.38	0.39																					2,873,490
7/1/13 - 6/30/14	0.08	0.21	0.25	0.27	0.29	0.31	0.32	0.33	0.33	0.34																						3,041,530
7/1/14 - 6/30/15	0.11	0.27	0.33	0.37	0.40	0.40	0.41	0.42	0.42																							3,230,070
7/1/15 - 6/30/16	0.12	0.24	0.29	0.30	0.33	0.35	0.37	0.39																								3,033,160
7/1/16 - 6/30/17	0.10	0.25	0.31	0.34	0.35	0.37	0.39																									2,570,440
7/1/17 - 6/30/18	0.17	0.31	0.41	0.46	0.47	0.49																										2,493,740
7/1/18 - 6/30/19	0.08	0.25	0.29	0.32	0.34																											2,576,230
7/1/19 - 6/30/20	0.10	0.19	0.25	0.28																												2,916,990
7/1/20 - 6/30/21	0.10	0.20	0.23																													2,919,796
7/1/21 - 6/30/22	0.12	0.23																														3,065,815
7/1/22 - 6/30/23	0.06																															3,396,233

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Medical

Unpaid Claim Analysis as of 06/30/2023
(U.S.$)

Settlement Rates (Closed Claim Count / Ultimate Claim Count)

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																													As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993																																
7/1/93 - 6/30/94																																
7/1/94 - 6/30/95																																
7/1/95 - 6/30/96																																
7/1/96 - 6/30/97																																
7/1/97 - 6/30/98																																
7/1/98 - 6/30/99																																
7/1/99 - 6/30/00																																
7/1/00 - 6/30/01																																
7/1/01 - 6/30/02																																
7/1/02 - 6/30/03																																
7/1/03 - 6/30/04																																
7/1/04 - 6/30/05																																
7/1/05 - 6/30/06																																
7/1/06 - 6/30/07																																
7/1/07 - 6/30/08																																
7/1/08 - 6/30/09																																
7/1/09 - 6/30/10																																
7/1/10 - 6/30/11																																
7/1/11 - 6/30/12																																
7/1/12 - 6/30/13	0.00	0.24	0.67	0.81	0.87	0.91	0.92	0.93	0.93	0.96	0.96																					0.96
7/1/13 - 6/30/14	0.00	0.30	0.66	0.76	0.88	0.89	0.89	0.92	0.94	0.92																						0.92
7/1/14 - 6/30/15	0.00	0.28	0.55	0.72	0.79	0.84	0.87	0.89	0.93																							0.93
7/1/15 - 6/30/16	0.00	0.26	0.63	0.73	0.81	0.85	0.88	0.89																								0.89
7/1/16 - 6/30/17	0.00	0.23	0.64	0.78	0.80	0.82	0.84																									0.84
7/1/17 - 6/30/18	0.00	0.31	0.68	0.79	0.82	0.89																										0.89
7/1/18 - 6/30/19	0.00	0.21	0.61	0.70	0.79																											0.79
7/1/19 - 6/30/20	0.00	0.30	0.57	0.75																												0.75
7/1/20 - 6/30/21	0.00	0.23	0.68																													0.68
7/1/21 - 6/30/22	0.00	0.33																														0.33
7/1/22 - 6/30/23	0.00																															0.00

Commonwealth of Massachusetts
Department of Transportation (Incl. MTA)
DOT - Medical

Unpaid Claim Analysis as of 06/30/2023

Open Claim Counts

Net of Subrogation, Counts are Indemnity (Lost-Time) Counts Only

Accident Year	Months of Development																														As of 6/30/2023
	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	348	360	372	
Prior to 7/1/1993	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	0	0	0	3	3
7/1/93 - 6/30/94	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	0	0	1		1
7/1/94 - 6/30/95	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	0	1			1
7/1/95 - 6/30/96	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	0				0
7/1/96 - 6/30/97	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					0
7/1/97 - 6/30/98	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
7/1/98 - 6/30/99	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
7/1/99 - 6/30/00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2								2
7/1/00 - 6/30/01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1									1
7/1/01 - 6/30/02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2										2
7/1/02 - 6/30/03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4											4
7/1/03 - 6/30/04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2												2
7/1/04 - 6/30/05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2													2
7/1/05 - 6/30/06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2														2
7/1/06 - 6/30/07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3															3
7/1/07 - 6/30/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2																2
7/1/08 - 6/30/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1																	1
7/1/09 - 6/30/10	0	0	0	0	0	0	0	0	0	0	0	0	0	6																		6
7/1/10 - 6/30/11	0	0	0	0	0	0	0	0	0	0	0	0	3																			3
7/1/11 - 6/30/12	0	0	0	0	0	0	0	0	0	0	0	4																				4
7/1/12 - 6/30/13	78	69	30	17	12	8	7	6	6	4	4																					4
7/1/13 - 6/30/14	76	65	32	22	13	12	11	8	6	8																						8
7/1/14 - 6/30/15	83	69	44	27	20	15	13	11	7																							7
7/1/15 - 6/30/16	74	61	30	23	17	13	11	10																								10
7/1/16 - 6/30/17	62	57	27	16	14	12	12																									12
7/1/17 - 6/30/18	66	49	22	15	13	8																										8
7/1/18 - 6/30/19	57	51	26	20	14																											14
7/1/19 - 6/30/20	56	43	26	15																												15
7/1/20 - 6/30/21	51	43	18																													18
7/1/21 - 6/30/22	61	46																														46
7/1/22 - 6/30/23	41																															41
																																222

Commonwealth of Massachusetts
Fiscal Accident Years 1993 & Prior
Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
($U.S.)

Fiscal Accident Years 1993 & Prior - Claim Survival Analysis (Based on 2005 Group Term Life Table)

Claim Number	Accident Year	Group	Gender	Age at 6/30/23	Life Expectancy Years	Deloitte Estimated Indemnity Unpaid	Selected Annual Payments 3.0%	Actual Historical Payments FY - CY 2023	FY - CY 2022	FY - CY 2021	FY - CY 2020	FY - CY 2019	FY - CY 2018	FY - CY 2017
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1714	1987	All OTHER DEPARTMENTS	M	69	11.6	1,420,782	91,115	91,115	85,629	76,840	74,221	71,539	69,161	66,891
7205	1991	DEPARTMENT OF MENTAL HEALTH	F	71	12.6	0	0	0	0	0	0	0	0	0
52	1975	DEPARTMENT OF CORRECTION	M	76	8.9	674,328	60,074	60,074	56,912	52,447	50,660	48,830	47,207	45,657
3561	1989	UMASS-AMHERST	F	74	11.2	720,753	48,370	48,370	45,823	42,229	40,790	39,316	38,009	36,763
239	1981	All OTHER DEPARTMENTS	F	85	7.2	469,810	54,395	54,395	51,531	47,490	45,871	44,213	42,744	41,341
7914	1992	UMASS-AMHERST	M	63	14.1	857,074	42,733	42,733	40,482	37,307	36,036	34,734	33,579	32,477
2768	1989	All OTHER DEPARTMENTS	M	60	15.5	0	0	0	0	0	0	0	0	0
4292	1990	DEPARTMENT OF CORRECTION	M	86	5.6	591,343	91,115	91,115	85,629	76,840	74,221	71,539	69,161	66,891
8450	1992	DEPARTMENT OF DEVELOPMENTAL SERVICES	F	69	13.6	495,942	26,230	26,230	25,413	25,053	24,600	24,164	22,589	20,704
389	1984	DEPARTMENT OF DEVELOPMENTAL SERVICES	F	99	2.2	82,411	34,449	34,449	39,747	39,747	39,856	39,084	37,114	36,314
11444	1993	All OTHER DEPARTMENTS	M	85	5.9	378,464	54,690	54,690	52,994	52,096	51,350	50,248	49,347	48,472
245	1982	UMASS-AMHERST	F	88	6.1	347,463	49,014	49,014	46,433	42,792	41,333	39,839	38,515	37,251
7610	1992	All OTHER DEPARTMENTS	F	61	17.7	2,440,752	91,115	91,115	85,629	76,840	74,221	71,539	69,161	66,891
7671	1992	DEPARTMENT OF CORRECTION	M	68	12.0	1,038,192	63,741	63,741	60,384	55,648	53,753	51,809	50,087	48,444
7423	1992	All OTHER DEPARTMENTS	M	91	4.0	168,590	37,709	37,709	35,723	32,921	31,800	30,651	29,632	28,660
1324	1985	DEPARTMENT OF TRANSPORTATION	M	101	1.9	177,770	85,308	85,308	80,817	74,478	71,939	69,948	69,068	66,219
4912	1990	All OTHER DEPARTMENTS	M	92	3.7	276,091	67,625	67,625	64,065	59,040	57,028	54,967	53,140	51,398
298	1984	DEPARTMENT OF DEVELOPMENTAL SERVICES	F	86	6.8	0	0	15,916	50,233	46,292	44,715	43,099	41,667	40,299
2310	1988	DEPARTMENT OF MENTAL HEALTH	F	76	10.4	694,366	51,048	51,048	48,361	44,567	51,840	45,019	40,114	39,637
7565	1992	DEPARTMENT OF CORRECTION	M	93	3.3	0	0	0	0	0	0	0	0	0
74077	1993	All OTHER DEPARTMENTS	M	67	12.4	0	0	0	0	0	0	0	0	0
1094	1987	ALL OTHER COLLEGES AND UNIVERSITIES	F	66	15.1	1,894,009	87,355	87,355	82,755	76,264	73,666	71,002	68,642	63,271
6603	1991	DEPARTMENT OF DEVELOPMENTAL SERVICES	M	90	4.3	0	0	0	0	0	0	0	0	0
464	1984	All OTHER DEPARTMENTS	F	73	11.7	0	0	8,510	50,584	46,616	46,157	43,400	41,958	40,582
5486	1991	All OTHER DEPARTMENTS	M	71	10.8	570,148	40,022	40,022	37,915	34,941	33,751	32,531	31,450	30,418
2405	1988	All OTHER DEPARTMENTS	F	67	14.6	0	0	0	0	0	0	0	0	0
3355	1989	All OTHER DEPARTMENTS	F	79	9.4	618,737	51,686	51,686	46,592	48,121	44,576	42,965	41,537	40,175
8966	1992	All OTHER DEPARTMENTS	F	76	10.4	486,258	35,748	35,748	34,635	34,144	33,527	32,933	32,345	31,771
74	1974	DEPARTMENT OF MENTAL HEALTH	F	72	12.1	826,403	50,378	50,378	47,726	43,983	42,484	40,949	39,587	38,289
3183	1989	All OTHER DEPARTMENTS	M	90	4.3	240,348	49,424	49,424	46,822	43,150	41,679	40,173	38,838	37,564
4134	1990	All OTHER DEPARTMENTS	F	76	10.4	833,060	61,245	61,245	58,020	53,469	51,647	49,780	48,126	46,548
5860	1991	DEPARTMENT OF TRANSPORTATION	M	67	12.4	922,669	54,258	54,258	51,401	47,370	45,756	44,102	42,636	41,237
195	1976	DEPARTMENT OF DEVELOPMENTAL SERVICES	F	89	5.7	319,244	48,394	48,394	45,847	42,250	40,811	39,336	38,028	36,781
225	1981	DEPARTMENT OF MENTAL HEALTH	F	90	5.3	0	0	10,244	49,369	45,497	43,946	42,358	40,951	39,607
9828	1993	DEPARTMENT OF MENTAL HEALTH	F	87	6.4	0	0	0	0	0	0	0	0	0
7927	1992	DEPARTMENT OF CORRECTION	M	61	15.0	0	0	0	0	0	0	0	3,884	0
4815	1990	All OTHER DEPARTMENTS	F	66	15.1	0	0	23,540	48,162	44,384	42,872	41,323	39,949	38,639
4432	1990	DEPARTMENT OF MENTAL HEALTH	F	79	9.4	845,082	70,593	70,593	66,876	61,631	59,531	57,379	55,472	53,653
754	1985	DEPARTMENT OF CORRECTION	M	78	8.2	744,741	72,745	72,745	68,915	63,510	61,345	59,128	57,163	55,287
4053	1990	All OTHER DEPARTMENTS	F	85	7.2	583,034	67,504	67,504	63,949	58,934	56,925	54,868	53,045	51,305
2601	1988	All OTHER DEPARTMENTS	M	81	7.3	388,763	44,183	44,183	42,808	42,202	41,439	40,707	39,978	39,267
302	1982	DEPARTMENT OF DEVELOPMENTAL SERVICES	M	94	3.0	227,606	68,693	68,693	65,076	59,972	57,929	55,835	53,980	52,208
4025	1990	DEPARTMENT OF MENTAL HEALTH	F	82	8.4	901,775	87,352	87,352	82,752	76,262	73,663	71,001	68,642	66,391
6473	1991	All OTHER DEPARTMENTS	F	58	19.3	0	0	0	0	0	0	0	0	0
6383	1991	All OTHER DEPARTMENTS	M	72	10.4	0	0	0	0	0	0	0	0	0
51648	1992	DEPARTMENT OF CORRECTION	M	71	10.8	71,593	5,026	12,000	2,987	0	0	0	0	0
7597	1991	All OTHER DEPARTMENTS	M	84	6.2	0	0	0	0	0	0	0	0	0
6571	1991	DEPARTMENT OF CORRECTION	M	64	13.7	1,682,675	87,354	87,354	81,393	71,595	71,791	71,003	68,642	66,389
316	1982	All OTHER DEPARTMENTS	M	85	5.9	602,606	87,080	87,080	82,496	76,026	73,435	70,781	70,236	66,182
58	1977	DEPARTMENT OF MENTAL HEALTH	F	71	12.6	0	0	15,096	48,310	44,521	43,004	41,450	40,072	38,757

Commonwealth of Massachusetts
Fiscal Accident Years 1993 & Prior
Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
($U.S.)

Fiscal Accident Years 1993 & Prior - Claim Survival Analysis (Based on 2005 Group Term Life Table)

Claim Number	Accident Year	Group	Gender	Age at 6/30/23	Life Expectancy Years	Deloitte Estimated Indemnity Unpaid	Selected Annual Payments 3.0%	Actual Historical Payments FY - CY 2023	FY - CY 2022	FY - CY 2021	FY - CY 2020	FY - CY 2019	FY - CY 2018	FY - CY 2017
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
7322	1992	ALL OTHER COLLEGES AND UNIVERSITIES	F	83	8.0	0	0	0	0	0	0	0	0	252
472	1984	DEPARTMENT OF DEVELOPMENTAL SERVICES	F	83	8.0	669,032	68,671	68,671	65,056	59,953	57,910	59,953	53,963	52,192
4190	1990	All OTHER DEPARTMENTS	F	97	2.6	188,299	65,231	65,231	67,071	62,770	62,409	60,154	58,155	55,789
1425	1986	All OTHER DEPARTMENTS	M	76	8.9	855,697	76,232	76,232	72,219	66,554	64,287	61,963	59,903	57,938
2866	1989	DEPARTMENT OF MENTAL HEALTH	F	65	15.6	840,552	37,130	37,130	35,175	32,416	31,311	30,180	29,176	28,219
1337	1987	All OTHER DEPARTMENTS	F	81	8.7	496,545	45,631	45,631	43,229	39,838	38,480	37,090	35,857	34,681
173	1975	DEPARTMENT OF DEVELOPMENTAL SERVICES	M	86	5.6	348,755	53,737	53,737	50,908	46,915	45,316	43,678	42,227	40,841
1294	1987	All OTHER DEPARTMENTS	M	71	10.8	1,298,102	91,121	91,121	86,447	76,840	74,221	71,530	69,170	66,891
5638	1991	UMASS-AMHERST	F	89	5.7	306,971	46,534	46,534	44,083	40,626	39,242	37,824	36,567	35,367
1933	1988	DEPARTMENT OF DEVELOPMENTAL SERVICES	F	86	6.8	649,241	80,107	80,107	75,890	69,937	67,554	65,113	62,948	60,882
7033	1992	All OTHER DEPARTMENTS	M	70	11.2	580,386	38,946	38,946	37,701	36,964	36,318	35,692	35,047	34,429
3264	1989	All OTHER DEPARTMENTS	F	77	10.1	884,728	67,878	67,878	64,304	59,260	57,241	55,172	53,338	51,589
34288	1978	All OTHER DEPARTMENTS	M	70	11.2	478,131	32,084	32,084	31,290	31,128	30,251	30,075	29,655	29,242
4887	1990	DEPARTMENT OF DEVELOPMENTAL SERVICES	F	74	11.2	0	0	0	0	0	0	0	0	0
1399	1987	All OTHER DEPARTMENTS	F	86	6.8	331,011	40,842	40,842	38,691	35,657	34,442	33,197	32,094	31,041
429	1982	DEPARTMENT OF CORRECTION	M	81	7.3	650,717	73,955	73,955	70,061	64,566	62,366	60,112	58,114	56,207
4164	1990	All OTHER DEPARTMENTS	M	70	11.2	0	0	0	0	0	0	0	0	0
3603	1990	DEPARTMENT OF TRANSPORTATION	M	91	4.0	340,502	76,161	76,161	72,151	66,492	64,226	61,905	59,847	57,884
69879	1990	All OTHER DEPARTMENTS	M	93	3.3	82	22	22	10	25	15	0	0	0
2615	1989	All OTHER DEPARTMENTS	F	70	13.1	1,576,089	87,354	87,354	82,755	76,264	73,666	71,004	70,009	65,025
345	1982	All OTHER DEPARTMENTS	M	101	1.9	132,531	63,599	63,599	60,250	55,525	53,633	51,694	49,977	48,336
5382	1991	All OTHER DEPARTMENTS	F	63	16.6	0	0	0	0	0	0	0	0	0
2777	1989	DEPARTMENT OF MENTAL HEALTH	M	93	3.3	219,917	59,495	59,495	56,362	51,942	50,172	48,358	46,751	45,217
1236	1987	All OTHER DEPARTMENTS	M	81	7.3	436,612	49,622	49,622	48,088	47,405	46,546	45,725	44,906	44,109
7288	1992	DEPARTMENT OF DEVELOPMENTAL SERVICES	F	55	20.9	934,492	27,536	27,536	26,679	26,951	25,824	25,369	24,898	24,471
Total:						35,811,277		3,279,943	3,289,614	3,045,492	2,959,600	2,859,330	2,768,056	2,669,230

Minimum Age: 55
Maximum Age: 101
Average Age: 78
Average Future Life Expectancy Years: 9.2
Average Life Expectancy Age: 87.6

Selected Historical Trend for Permanent Claims: 1.030
Selected Future Trend for Permanent Claims: 1.030

Commonwealth of Massachusetts
Fiscal Accident Years 1993 & Prior
Indemnity (Including Lump Sum)

Unpaid Claim Analysis as of 06/30/2023
($U.S.)

Fiscal Accident Years 1993 & Prior - Claim Survival Analysis (Based on 2005 Group Term Life Table)

Claim Number	Accident Year	Group	Gender	Age at 6/30/23	Life Expectancy Years	Deloitte Estimated Indemnity Unpaid	Selected Annual Payments 3.0%	Actual Historical Payments FY - CY 2023	FY - CY 2022	FY - CY 2021	FY - CY 2020	FY - CY 2019	FY - CY 2018	FY - CY 2017
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)

Summary Results 1993 & Prior - Indemnity

	Actual Paid	Unpaid Low	Unpaid High	Selected Ultimate Low	Selected Ultimate High
	(12)	(13)	(14)	(15)	(16)
DEPARTMENT OF DEVELOPMENTAL SERVICES	126,289,667	3,354,050	4,099,395	129,643,717	130,389,062
DEPARTMENT OF MENTAL HEALTH	76,975,854	3,895,285	4,760,904	80,871,140	81,736,759
DEPARTMENT OF CORRECTION	62,655,959	4,908,230	5,998,948	67,564,189	68,654,907
UMASS-AMHERST	17,890,046	2,009,035	2,455,488	19,899,081	20,345,533
UMASS-MEDICAL	20,652,284	0	0	20,652,284	20,652,284
ALL OTHER COLLEGES AND UNIVERSITIES	22,061,830	1,704,608	2,083,410	23,766,439	24,145,240
All OTHER DEPARTMENTS	206,642,368	15,062,093	18,409,225	221,704,461	225,051,593
DEPARTMENT OF TRANSPORTATION	3,984,738	1,296,846	1,585,035	5,281,584	5,569,772
	537,152,746	32,230,149	39,392,405	569,382,895	576,545,151

Commonwealth of Massachusetts
Fiscal Accident Years 1993 & Prior
Medical

Section IX
Exhibit 2

Unpaid Claim Analysis as of 06/30/2023
($U.S.)

Fiscal Accident Years 1993 & Prior - Claim Survival Analysis (Based on 2005 Group Term Life Table)

Claim Number	Accident Year	Group	Gender	Age at 6/30/23	Life Expectancy Years	Deloitte Estimated Medical Unpaid	On-Level Average Historical Payments 4.0%	Actual Historical Payments FY - CY 2023	FY - CY 2022	FY - CY 2021	FY - CY 2020	FY - CY 2019	FY - CY 2018	FY - CY 2017
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1714	1987	All OTHER DEPARTMENTS	M	69	11.6	5,848	337	700	300	0	0	0	0	0
7205	1991	DEPARTMENT OF MENTAL HEALTH	F	71	12.6	34,029	1,768	5,258	0	42	1,202	0	0	0
52	1975	DEPARTMENT OF CORRECTION	M	76	8.9	2,381,958	195,394	216,230	179,192	169,742	146,506	156,961	155,601	74,905
3561	1989	UMASS-AMHERST	F	74	11.2	0	0	0	0	0	0	0	1,175	950
239	1981	All OTHER DEPARTMENTS	F	85	7.2	0	0	0	0	0	0	0	0	0
7914	1992	UMASS-AMHERST	M	63	14.1	0	0	0	0	0	0	0	1,850	1,850
2768	1989	All OTHER DEPARTMENTS	M	60	15.5	152,232	5,844	3,339	4,307	8,982	5,912	805	1,316	1,200
4292	1990	DEPARTMENT OF CORRECTION	M	86	5.6	0	0	0	0	0	840	0	0	0
8450	1992	DEPARTMENT OF DEVELOPMENTAL	F	69	13.6	24,613	1,155	1,020	2,350	0	0	0	1,801	1,754
389	1984	DEPARTMENT OF DEVELOPMENTAL	F	99	2.2	2,843	1,158	510	1,420	1,376	473	518	3,151	171
11444	1993	All OTHER DEPARTMENTS	M	85	5.9	1,068	146	438	0	0	300	0	6,488	0
245	1982	UMASS-AMHERST	F	88	6.1	0	0	0	0	0	0	1,581	0	1,008
7610	1992	All OTHER DEPARTMENTS	F	61	17.7	0	0	0	0	0	618	395	731	395
7671	1992	DEPARTMENT OF CORRECTION	M	68	12.0	4,410	243	0	700	0	0	0	0	0
7423	1992	All OTHER DEPARTMENTS	M	91	4.0	0	0	0	0	0	0	0	0	0
1324	1985	DEPARTMENT OF TRANSPORTATIO	M	101	1.9	0	0	0	0	0	0	0	0	0
4912	1990	All OTHER DEPARTMENTS	M	92	3.7	0	0	0	0	0	0	0	0	1,750
298	1984	DEPARTMENT OF DEVELOPMENTAL	F	86	6.8	7,134	829	0	1,350	1,000	0	0	0	0
2310	1988	DEPARTMENT OF MENTAL HEALTH	F	76	10.4	38,066	2,547	1,936	2,306	3,057	2,422	3,710	2,882	12,581
7565	1992	DEPARTMENT OF CORRECTION	M	93	3.3	19,659	5,136	4,194	5,120	5,445	5,993	4,806	8,154	9,978
74077	1993	All OTHER DEPARTMENTS	M	67	12.4	38,585	2,026	3,122	2,280	541	10,572	5,610	6,694	4,881
1094	1987	ALL OTHER COLLEGES AND UNIVEI	F	66	15.1	0	0	0	0	0	0	280	0	0
6603	1991	DEPARTMENT OF DEVELOPMENTAL	M	90	4.3	37,954	7,482	7,415	6,598	7,553	5,418	3,479	4,393	3,912
464	1984	All OTHER DEPARTMENTS	F	73	11.7	12,322	710	0	1,175	840	0	0	2,500	4,465
5486	1991	All OTHER DEPARTMENTS	M	71	10.8	0	0	0	0	0	840	0	0	3,467
2405	1988	All OTHER DEPARTMENTS	F	67	14.6	177,087	7,511	7,530	6,474	7,646	9,112	9,583	7,711	6,604
3355	1989	All OTHER DEPARTMENTS	F	79	9.4	29,167	2,241	2,513	980	2,949	0	0	840	1,370
8966	1992	All OTHER DEPARTMENTS	F	76	10.4	36,595	2,449	488	727	5,641	2,228	278	1,253	349
74	1974	DEPARTMENT OF MENTAL HEALTH	F	72	12.1	2,744	150	450	0	0	0	0	175	0
3183	1989	All OTHER DEPARTMENTS	M	90	4.3	0	0	0	0	0	840	0	0	0
4134	1990	All OTHER DEPARTMENTS	F	76	10.4	1,370	92	275	0	0	0	0	99	133
5860	1991	DEPARTMENT OF TRANSPORTATIO	M	67	12.4	0	0	0	0	0	840	0	1,120	0
195	1976	DEPARTMENT OF DEVELOPMENTAL	F	89	5.7	0	0	0	0	0	0	0	0	0
225	1981	DEPARTMENT OF MENTAL HEALTH	F	90	5.3	1,360	212	0	300	300	0	0	333	0
9828	1993	DEPARTMENT OF MENTAL HEALTH	F	87	6.4	32,079	3,991	4,769	1,578	5,142	5,288	4,865	3,290	1,743
7927	1992	DEPARTMENT OF CORRECTION	M	61	15.0	211,011	8,465	407,796	13,446	2,637	2,930	4,037	7,410	13,374
4815	1990	All OTHER DEPARTMENTS	F	66	15.1	27,647	1,117	121	806	2,213	2,718	3,058	1,264	1,636
4432	1990	DEPARTMENT OF MENTAL HEALTH	F	79	9.4	4,459	343	0	0	950	950	0	0	1,345
754	1985	DEPARTMENT OF CORRECTION	M	78	8.2	0	0	0	0	0	0	1,833	14,707	25,373
4053	1990	All OTHER DEPARTMENTS	F	85	7.2	0	0	0	0	0	0	0	0	0
2601	1988	All OTHER DEPARTMENTS	M	81	7.3	65,134	6,922	6,689	7,507	5,796	5,738	3,758	4,798	8,812
302	1982	DEPARTMENT OF DEVELOPMENTAL	M	94	3.0	0	0	0	0	0	0	0	0	0
4025	1990	DEPARTMENT OF MENTAL HEALTH	F	82	8.4	1,202	108	0	0	300	0	0	0	0
6473	1991	All OTHER DEPARTMENTS	F	58	19.3	21,484	602	272	635	808	489	1,313	1,045	903
6383	1991	All OTHER DEPARTMENTS	M	72	10.4	14,515	971	101	111	2,493	301	271	393	369
51648	1992	DEPARTMENT OF CORRECTION	M	71	10.8	4,580	291	0	840	0	0	0	161	161
7597	1991	All OTHER DEPARTMENTS	M	84	6.2	4,513	578	622	1,069	0	1,149	1,043	2,932	605
6571	1991	DEPARTMENT OF CORRECTION	M	64	13.7	0	0	0	0	0	700	0	420	0

Commonwealth of Massachusetts
Fiscal Accident Years 1993 & Prior
Medical

Unpaid Claim Analysis as of 06/30/2023
($U.S.)

Fiscal Accident Years 1993 & Prior - Claim Survival Analysis (Based on 2005 Group Term Life Table)

Claim Number	Accident Year	Group	Gender	Age at 6/30/23	Life Expectancy Years	Deloitte Estimated Medical Unpaid	On-Level Average Historical Payments 4.0%	Actual Historical Payments FY - CY 2023	FY - CY 2022	FY - CY 2021	FY - CY 2020	FY - CY 2019	FY - CY 2018	FY - CY 2017
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
316	1982	All OTHER DEPARTMENTS	M	85	5.9	3,323	454	0	0	1,260	0	0	2,380	0
58	1977	DEPARTMENT OF MENTAL HEALTH	F	71	12.6	16,364	850	2,550	0	0	0	0	0	0
7322	1992	ALL OTHER COLLEGES AND UNIVEI	F	83	8.0	17,470	1,672	540	797	3,371	2,570	2,389	1,344	5,876
472	1984	DEPARTMENT OF DEVELOPMENTAL	F	83	8.0	9,135	874	0	2,521	0	0	2,334	1,450	0
4190	1990	All OTHER DEPARTMENTS	F	97	2.6	0	0	0	0	0	0	0	0	0
1425	1986	All OTHER DEPARTMENTS	M	76	8.9	0	0	0	0	0	0	0	0	0
2866	1989	DEPARTMENT OF MENTAL HEALTH	F	65	15.6	4,489	173	0	0	480	0	750	150	0
1337	1987	All OTHER DEPARTMENTS	F	81	8.7	0	0	0	0	0	0	0	0	0
173	1975	DEPARTMENT OF DEVELOPMENTAL	M	86	5.6	247	36	0	0	100	777	0	390	0
1294	1987	All OTHER DEPARTMENTS	M	71	10.8	0	0	0	0	0	2,500	0	0	0
5638	1991	UMASS-AMHERST	F	89	5.7	0	0	0	0	0	0	0	2,950	1,007
1933	1988	DEPARTMENT OF DEVELOPMENTAL	F	86	6.8	8,343	969	0	2,795	0	0	0	0	0
7033	1992	All OTHER DEPARTMENTS	M	70	11.2	21,933	1,329	1,543	3,143	(763)	1,413	456	380	1,230
3264	1989	All OTHER DEPARTMENTS	F	77	10.1	0	0	0	0	0	0	0	0	0
34288	1978	All OTHER DEPARTMENTS	M	70	11.2	4,285	260	0	0	720	0	70	0	240
4887	1990	DEPARTMENT OF DEVELOPMENTAL	F	74	11.2	2,365	143	180	132	105	312	66	171	66
1399	1987	All OTHER DEPARTMENTS	F	86	6.8	2,608	303	0	0	840	0	0	720	0
429	1982	DEPARTMENT OF CORRECTION	M	81	7.3	0	0	0	0	0	0	0	0	0
4164	1990	All OTHER DEPARTMENTS	M	70	11.2	5,183	314	119	588	196	201	181	246	415
3603	1990	DEPARTMENT OF TRANSPORTATIO	M	91	4.0	0	0	0	0	0	0	0	0	0
69879	1990	All OTHER DEPARTMENTS	M	93	3.3	1,652	432	323	496	422	241	454	595	581
2615	1989	All OTHER DEPARTMENTS	F	70	13.1	0	0	0	0	0	650	0	0	0
345	1982	All OTHER DEPARTMENTS	M	101	1.9	0	0	0	0	0	204	301	320	301
5382	1991	All OTHER DEPARTMENTS	F	63	16.6	120,896	4,244	2,826	2,840	6,428	4,246	2,899	2,730	2,177
2777	1989	DEPARTMENT OF MENTAL HEALTH	M	93	3.3	483	126	0	0	350	0	0	420	0
1236	1987	All OTHER DEPARTMENTS	M	81	7.3	39,219	4,168	1,597	2,116	8,049	5,172	5,393	7,781	17,367
7288	1992	DEPARTMENT OF DEVELOPMENTAL	F	55	20.9	781,234	19,195	32,657	6,472	11,390	5,526	4,650	8,836	47,616
Total:						4,434,897		718,122	263,471	268,401	238,192	228,127	275,550	262,919

Minimum Age: 55
Maximum Age: 101
Average Age: 78
Average Future Life Expectancy Years: 9.2
Average Life Expectancy Age: 87.6

Selected Historical Trend for Permanent Claims: 1.040
Selected Future Trend for Permanent Claims: 1.040

Commonwealth of Massachusetts
Fiscal Accident Years 1993 & Prior
Medical

Unpaid Claim Analysis as of 06/30/2023
($U.S.)

Fiscal Accident Years 1993 & Prior - Claim Survival Analysis (Based on 2005 Group Term Life Table)

Claim Number	Accident Year	Group	Gender	Age at 6/30/23	Life Expectancy Years	Deloitte Estimated Medical Unpaid	On-Level Average Historical Payments 4.0%	Actual Historical Payments FY - CY 2023	FY - CY 2022	FY - CY 2021	FY - CY 2020	FY - CY 2019	FY - CY 2018	FY - CY 2017
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)

Summary Results 1993 & Prior - Medical

	Actual Paid	Unpaid Low	Unpaid High	Selected Ultimate Low	Selected Ultimate High
	(12)	(13)	(14)	(15)	(16)
DEPARTMENT OF DEVELOPMENTAL	23,621,778	786,482	961,255	24,408,259	24,583,033
DEPARTMENT OF MENTAL HEALTH	11,923,386	121,747	148,802	12,045,133	12,072,188
DEPARTMENT OF CORRECTION	14,916,838	2,359,456	2,883,779	17,276,293	17,800,617
UMASS-AMHERST	2,477,219	0	0	2,477,219	2,477,219
UMASS-MEDICAL	3,604,381	0	0	3,604,381	3,604,381
ALL OTHER COLLEGES AND UNIVE	4,260,984	15,723	19,217	4,276,707	4,280,201
All OTHER DEPARTMENTS	25,886,951	708,000	865,333	26,594,950	26,752,284
DEPARTMENT OF TRANSPORTATIO	14,798	0	0	14,798	14,798
	86,706,333	3,991,407	4,878,387	90,697,741	91,584,720

Commonwealth of Massachusetts
All Combined
ULAE

Unpaid Claim Analysis as of 06/30/2023
($U.S.)

Paid ULAE to Paid Loss & ALAE Method

Fiscal Calendar Year	Paid Loss & ALAE	ULAE Paid	ULAE / Loss & ALAE Ratio	Cumulative ULAE / Loss & ALAE Ratio
(1)	(2)	(3)	(4)	(5)
Prior to 7/1/1993				
7/1/93 - 6/30/94				
7/1/94 - 6/30/95				
7/1/95 - 6/30/96				
7/1/96 - 6/30/97				
7/1/97 - 6/30/98				
7/1/98 - 6/30/99				
7/1/99 - 6/30/00				
7/1/00 - 6/30/01				
7/1/01 - 6/30/02				
7/1/02 - 6/30/03				
7/1/03 - 6/30/04				
7/1/04 - 6/30/05				
7/1/05 - 6/30/06				
7/1/06 - 6/30/07				
7/1/07 - 6/30/08				
7/1/08 - 6/30/09				
7/1/09 - 6/30/10				
7/1/10 - 6/30/11				
7/1/11 - 6/30/12				
7/1/12 - 6/30/13				
7/1/13 - 6/30/14				
7/1/14 - 6/30/15				
7/1/15 - 6/30/16	54,657,523	832,395	1.5%	1.5%
7/1/16 - 6/30/17	54,402,018	832,395	1.5%	1.5%
7/1/17 - 6/30/18	57,194,043	840,478	1.5%	1.5%
7/1/18 - 6/30/19	58,527,057	900,606	1.5%	1.5%
7/1/19 - 6/30/20	56,731,296	926,262	1.6%	1.5%
7/1/20 - 6/30/21	54,616,554	934,914	1.7%	1.6%
7/1/21 - 6/30/22	55,504,823	934,914	1.7%	1.6%
7/1/22 - 6/30/23	56,912,380	860,567	1.5%	1.6%
		(12)	Selected:	1.6%

Fiscal Accident Year	Loss & ALAE Case Reserves	Loss & ALAE Bulk & IBNR Low	Loss & ALAE Bulk & IBNR High	Indicated Unpaid ULAE Low	Indicated Unpaid ULAE High
(6)	(7)	(8)	(9)	(10)	(11)
Prior to 7/1/1993	0	36,221,556	44,270,791	339,405	414,828
7/1/93 - 6/30/94	0	1,674,669	1,851,049	15,692	17,345
7/1/94 - 6/30/95	0	1,496,474	1,653,974	14,022	15,498
7/1/95 - 6/30/96	0	1,641,353	1,814,153	15,380	16,999
7/1/96 - 6/30/97	0	2,023,890	2,236,990	18,964	20,961
7/1/97 - 6/30/98	0	2,137,539	2,362,639	20,029	22,138
7/1/98 - 6/30/99	0	2,298,503	2,540,703	21,538	23,807
7/1/99 - 6/30/00	0	2,732,503	3,020,203	25,604	28,300
7/1/00 - 6/30/01	0	3,245,692	3,587,292	30,413	33,614
7/1/01 - 6/30/02	0	2,843,720	3,143,120	26,646	29,452
7/1/02 - 6/30/03	0	3,350,442	3,703,142	31,394	34,699
7/1/03 - 6/30/04	0	3,216,229	3,554,829	30,137	33,310
7/1/04 - 6/30/05	0	3,986,786	4,406,386	37,357	41,289
7/1/05 - 6/30/06	0	4,084,000	4,514,100	38,268	42,298
7/1/06 - 6/30/07	0	4,282,353	4,732,953	40,127	44,349
7/1/07 - 6/30/08	0	5,726,086	6,328,786	53,655	59,302
7/1/08 - 6/30/09	0	5,995,421	6,626,321	56,179	62,090
7/1/09 - 6/30/10	0	7,032,594	7,772,894	65,897	72,834
7/1/10 - 6/30/11	0	7,651,167	8,456,867	71,693	79,243
7/1/11 - 6/30/12	0	8,567,699	9,469,599	80,281	88,732
7/1/12 - 6/30/13	0	8,138,962	8,995,762	76,264	84,292
7/1/13 - 6/30/14	0	10,068,742	11,128,742	94,346	104,279
7/1/14 - 6/30/15	0	12,506,624	13,836,824	117,190	129,654
7/1/15 - 6/30/16	0	14,491,149	16,672,849	135,785	156,229
7/1/16 - 6/30/17	0	14,682,632	16,892,632	137,580	158,288
7/1/17 - 6/30/18	0	16,855,098	19,392,398	157,936	181,711
7/1/18 - 6/30/19	0	17,258,131	19,856,231	161,713	186,058
7/1/19 - 6/30/20	0	22,624,243	26,030,043	211,994	243,908
7/1/20 - 6/30/21	0	28,296,213	34,582,213	265,142	324,043
7/1/21 - 6/30/22	0	38,432,808	46,973,808	360,124	440,156
7/1/22 - 6/30/23	0	49,649,339	60,680,339	465,226	568,589
Total	0	343,212,619	401,088,633	3,215,983	3,758,295
(13) ULAE Reserve to Loss Reserve Ratio:				0.9%	0.9%

(2) Provided by company
(3) Provided by company
(4) = (3) / (2)
(5) Cumulative of Column(4)
(6) Fiscal Calendar year
(7) Provided by company
(8) Bulk & IBNR loss - Low End
(9) Bulk & IBNR loss - High End
(10) = (12) x [[(7) + (8) x 98%] x (1- 43) + (8) x 2%]
(11) = (12) x [[(7) + (9) x 98%] x (1- 43) + (9) x 2%]
(12) Selected by Deloitte
(13) = (10) / (8) or (11) / (9)

	IBNR Claims	Average Severity	Pure IBNR
	(13)	(14)	(15)
Medical	153	13,739	2,105,842
Indemnity	153	53,483	8,197,430
Total			10,303,272

Ratio of Pure IBNR to total Bulk&IBNR: 3%
Percentage of Cost at Set Up: 43%