

Unemployment Insurance Trust Fund Report

Outlook Report August 2019

HIGHLIGHTS

This Outlook Report provides the status of the Unemployment Insurance Trust Fund and updated projections for the 2019 through 2023 outlook period.

As required by MGL Chapter 151A, Section 14F, DUA publishes quarterly outlooks for the Trust Fund based on forecasts for total unemployment rate, annual wage and salary growth rate, and annual labor force. DUA also provides monthly reports updating the status of the Trust Fund.

New economic assumptions from Moody's Analytics Data Services used in these projections show little or no changes to the 2019 and 2020 average annual unemployment rate but significant improvement in the 2021 to 2023 rates as compared to the assumptions used in the May 2019 Outlook Report. For 2019, the average annual unemployment rate remained at 3.0 percent followed by a 3.3 percent annual rate in 2020, which is one-tenth of a percentage point higher than the previous rate used. Total labor force decreased in 2019 to 2023 losing an annual average of 7,017. The annual wage and salary growth rates are lower in 2019 and 2020 but higher in 2021 and 2023, unchanged in 2022.

The outlook presented is for the regular UI program based on 2019 employer experience rates, benefit payments, and employer contributions through second quarter. A new forecasting model, UNIS-X, developed by the U.S. Department of Labor Employment and Training's Office of Unemployment Insurance was used for this outlook.

Chapter 63 of the Acts of 2017 sets tax rate schedule E for 2019 employer contributions.

The revised 2019 year-end projections indicate employer contributions, based on rate schedule E and a \$15,000 taxable wage base, will be \$1.730 billion, \$80 million less than the previous estimate of \$1.810 billion. Estimated benefit payments of \$1.293 billion are \$73 million less than the previous estimate of \$1.366 billion first released in the May 2019 Outlook Report. The private contributory account year-end balance estimated at \$1.563 billion is in-line with the previous estimate of \$1.572 billion. The projected 2019 ending balance is \$462 million more than last year's ending balance of \$1.101 billion.

For 2020 rate schedule E is projected to trigger for employer contributions. With a \$15,000 taxable wage

base, employer contributions are projected to be \$1.749 billion and benefit payments are estimated at \$1.520 billion. Year-end 2020 private contributory account balance is projected at \$1.818 billion, in-line with the previously released estimate of \$1.814 billion.

Tax rate schedule D is projected to trigger for 2021 employer payrolls. Employer contributions estimated at \$1.507 billion are in-line with the previous estimate of \$1.498 billion. Benefits payments projected at \$1.726 billion are \$148 million less than the previous projection. As a result, the year-end 2021 private contributory account balance projected at \$1.624 billion is \$151 million higher than the previously released estimate of \$1.473 billion.

Tax rate schedule E is projected to trigger for 2022 employer payrolls. Employer contributions are estimated at \$1.732 billion, an increase of \$61 million from the previous projection of \$1.671 billion due to a higher average contribution rate. Benefit payments projected at \$1.889 billion are \$143 million less as the annual average unemployment rate is three-tenths of a percentage point lower than the rate used in the previous report. The year-end balance of \$1.491 billion is \$348 million higher than the previous estimate of \$1.143 billion.

For 2023, tax rate schedule E is now projected to trigger for employer payrolls and generate \$1.778 billion in contributions. Benefit payments are projected at \$1.933 billion and a year-end balance of \$1.356 billion.

Based on the current economic assumptions and statutory provisions, no borrowing from the federal unemployment account is anticipated throughout the 2019 to 2023 outlook period.

ECONOMIC ASSUMPTIONS

DUA utilizes independent economic forecasts as the basis for its estimates of income and expenditure for the Massachusetts Unemployment Insurance program. Moody's Analytics Data Services July 2019 forecasts were used in the benefit financing simulations for this report. The current assumptions, along with assumptions used to produce the simulation estimates published in the February and May 2019 Outlook Reports are provided in Table 1.

The July 2019 Moody's Analytics Data Services Annual Wage and Salary Growth Rates forecasts for 2019 and 2020 were revised down but the 2021 to 2023 showed little to no revision, as compared to the rates released in April.

The projected annual average total unemployment rates for 2019 and 2020 showed little to no revision but the rates showed significant improvement in 2021 to 2023. In 2021

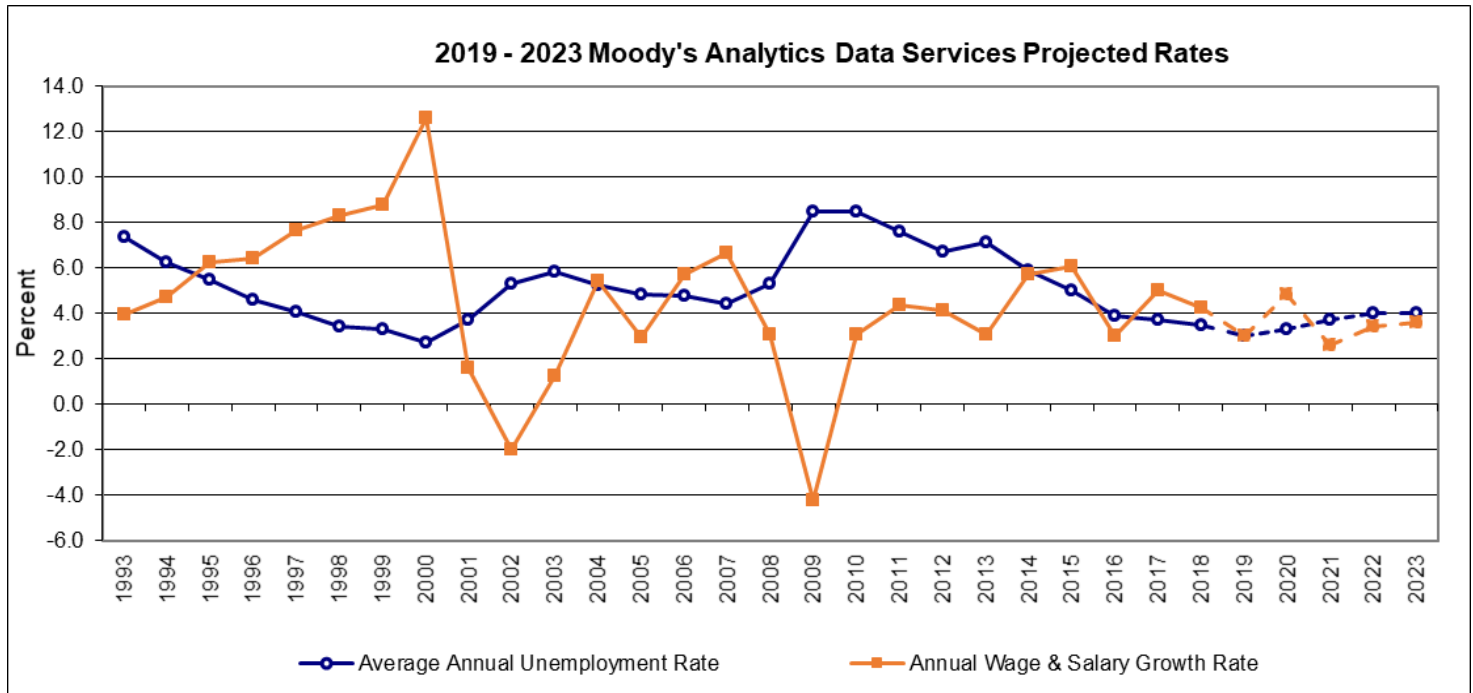
and 2022, the unemployment rates were three-tenths of a percentage point lower, from 4.0 percent to 3.7 percent, and from 4.3 percent to 4.0 percent, respectively. This is followed by a six-tenths of a percentage point decrease in the unemployment rate in 2023, from 4.6 percent to 4.0 percent.

The annual labor force projections were reduced in 2019 to 2023 with an average annual decrease of 7,017 from the Moody's Analytics Data Services projections released in April 2019. The labor force is projected to be 3,919,649 in 2023.

Table 1: Moody's Analytics Data Services Forecasts, Three Most Recent Reports

	Wage & Salary Growth (%)			Total Unemployment Rate (%)			Labor Force		
	19-Jan	19-Apr	19-Jul	19-Jan	19-Apr	19-Jul	19-Jan	19-Apr	19-Jul
2019	5.1	5.0	3.0	3.2	3.0	3.0	3,852,425	3,857,045	3,847,023
2020	4.2	5.1	4.8	3.5	3.2	3.3	3,863,952	3,869,128	3,862,652
2021	2.3	2.5	2.6	4.3	4.0	3.7	3,879,683	3,881,416	3,874,718
2022	3.4	3.4	3.4	4.5	4.3	4.0	3,904,142	3,906,191	3,899,021
2023	3.6	3.5	3.6	4.7	4.6	4.0	3,922,067	3,924,370	3,919,649

Source: Moody's Analytics Data Services



UNEMPLOYMENT INSURANCE TRUST FUND BALANCE

As of July 31, 2019, the preliminary Massachusetts Unemployment Insurance Trust Fund ending balance was \$1.873 billion. The preliminary private contributory account balance was at \$1.737 billion and the governmental contributory account balance was \$136 million. The private contributory account balance is \$13 million less than the projection of \$1.750 billion first released in the May 2019 Outlook Report.

The private contributory account is projected to have a balance of \$1.563 billion at the end 2019, a reserve of \$1.818 billion in 2020 and a projected balance of \$1.624 billion by the end of 2021.

The 2019 year-end private contributory account balance of \$1.563 billion is in-line with the previous estimate of \$1.572 billion published in the May to July 2019 Outlook Reports. Year-end reserves as a percent of total wages are expected to be 0.76 percent.

The year-end 2020 account balance is expected to be \$1.818 billion in-line with the previous estimate of \$1.814 billion.

The year-end 2021 private account balance is expected to be \$1.624 billion, \$151 million more than the previous estimate of \$1.473 billion. The increase is the result of fewer insured unemployment and weeks compensated generating less benefit payments. This was caused by a decrease in the annual average unemployment rate.

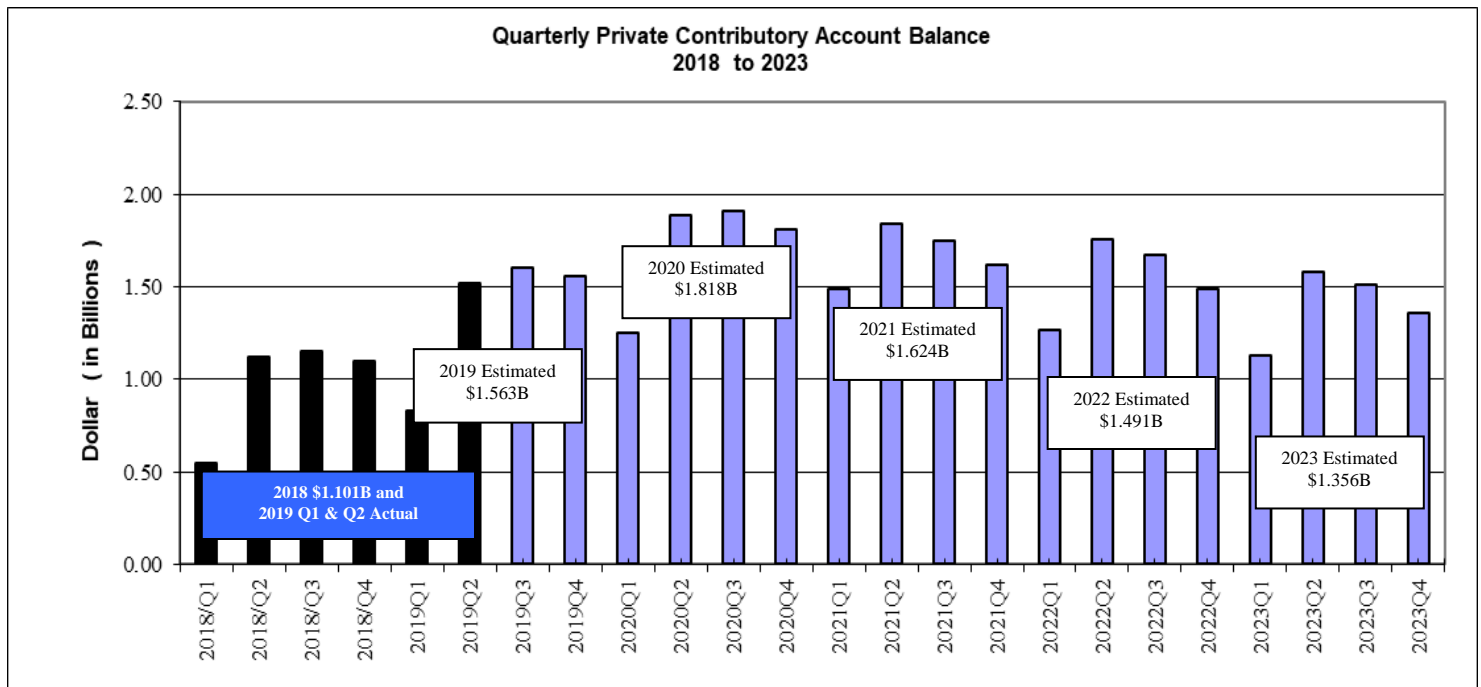
The year-end 2022 account balance is estimated to be \$1.491 billion, a \$348 million increase from the previously

released ending balance of \$1.143 billion. As in the previous year, a projected decrease in the unemployment rate resulted in less insured unemployment and weeks compensated resulting in less benefit payments. In addition, the increase was also augmented by the previous year higher ending balance.

The 2023 year-end private contributory account balance is estimated at \$1.356 billion, an increase of \$769 million from the previous estimate of \$587 million. The large increase is the result of a carryover of the previous years' higher ending balances coupled with a projected decrease in benefit payments. An improvement in the annual average unemployment rate generated fewer insured unemployment and weeks compensated.

It is anticipated that no borrowing from the federal unemployment account will be required throughout the outlook period.

The chart below shows the actual 2018 through first quarter 2019 and projected quarterly private UI Fund balance through 2023.



BENEFIT OUTLAYS

The updated simulation for the outlook period show decreases in benefit payments in 2019 to 2023.

Preliminary benefit payments through July 2019 totaled \$812 million, a \$36 million decrease from the January to July 2018 payments of \$848 million and \$40 million less than the projection of \$852 million released in the May to July 2019 Outlook Reports.

Initial claims through the first seven months of 2019 were 3.8 percent lower and weeks compensated were 6.9 percent less than in the same months in 2018.

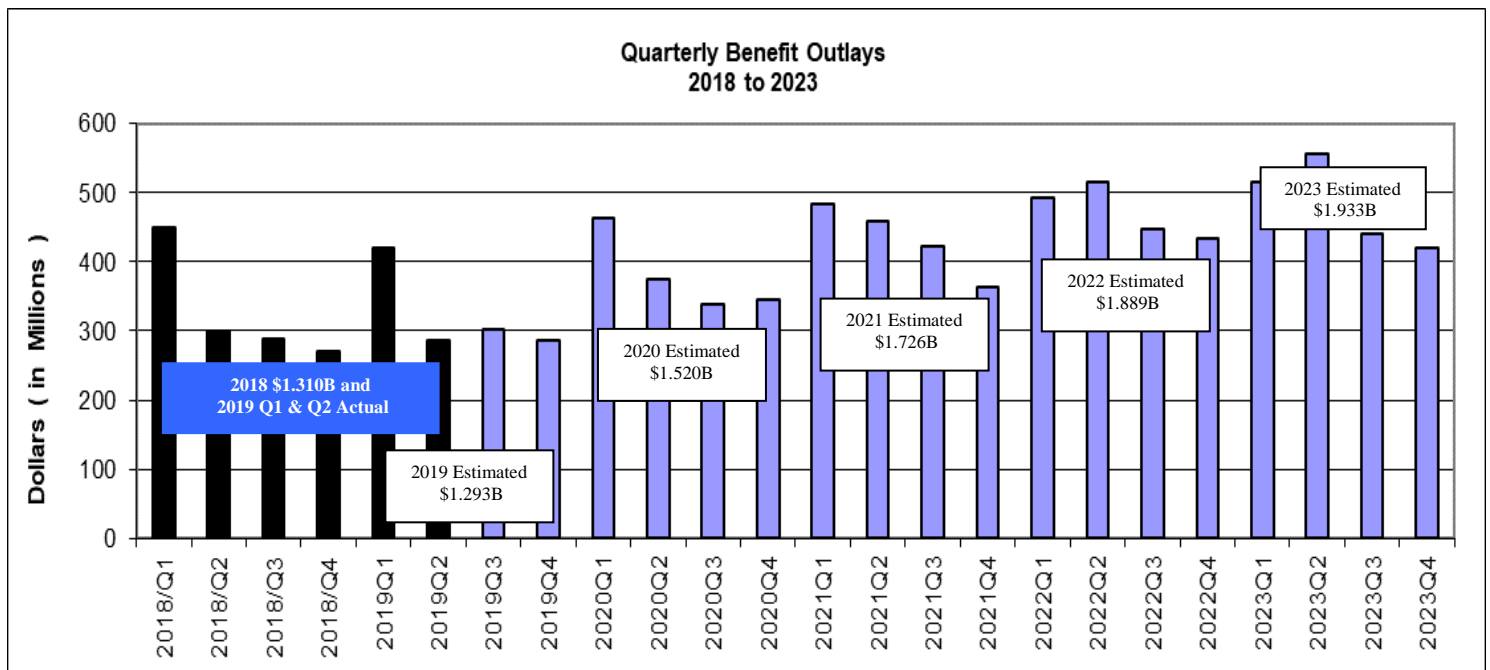
Benefit payments for 2019 estimated at \$1.293 billion are \$73 million less than the previous estimate of \$1.366 billion first released in the May 2019 Outlook Report. The decrease is the result of adjustments made to the highly projected benefit payments released in May and the difference between actual and projected benefit payments through July.

In 2020, benefit payments are projected to be \$1.520 billion, \$50 million lower than the previous estimate of \$1.570 billion.

For 2021, benefit payments are projected to be \$1.726 billion, \$148 million less than the previously released estimate of \$1.874 billion. The decrease is due to a projected three-tenths of a percentage point lower annual average unemployment rate resulting in less insured unemployment and weeks compensated.

Benefit payments are projected to be \$1.889 billion in 2022, \$143 million lower than the previous estimate of \$2.032 billion. As in previous year, the decrease is the result of expected decreases in total weeks compensated and insured unemployment generated by a better annual average unemployment rate.

In 2023, benefit payments are predicted to be \$1.933 billion, \$295 million less than the projected benefit payments first released in the May 2019 Outlook Report of \$2.228 billion. Similar to the previous years, the projected six-tenths of a percentage point improvement in the annual average unemployment rate generated decreases in insured unemployment and weeks compensated.



EMPLOYER CONTRIBUTIONS

Updated projections for employer contributions showed decreases in 2019 and 2020 but increases in 2022 and 2023.

Preliminary employer contributions through the month of July 2019 totaled \$1.434 billion, an increase of \$165 million from the January to July 2018 contributions of \$1.269 billion on a lower tax schedule and \$56 million less than projected as contributions were less than expected in the month of July.

For 2019, employer contributions on rate schedule E, as set by statute and a \$15,000 taxable wage base, are estimated at \$1.730 billion, a decrease of \$80 million from the previous estimate of \$1.810 billion. The decrease was primarily the result of the difference between actual and projected contributions through the month of July.

Rate schedule E is projected to trigger for 2020 payrolls. Employer contributions projected at \$1.749 billion is a slight increase of \$29 million from the previous estimate of \$1.778 billion. The revision is due to an increase in the average contribution rate.

Tax rate schedule D is projected to trigger for 2021 payrolls with an estimated employer contribution of \$1.507 billion in-line with the previous estimate of \$1.498 billion.

For 2022, tax rate schedule E is projected to trigger for employer payrolls generating \$1.732 billion in contributions. This is an increase of \$61 million from the previous projection first released in May 2019 of \$1.671 billion. As in previous years, the increase in contributions was caused by a higher average contribution rate.

Tax rate schedule E is again projected to trigger for 2023 employer payrolls and generate an increase of \$129 million in employer contributions now projected at \$1.778 billion. The revision was caused by a projected increase in taxable payrolls.

Table 2, on page 7, contains the experience rate table that took effect in 2015.

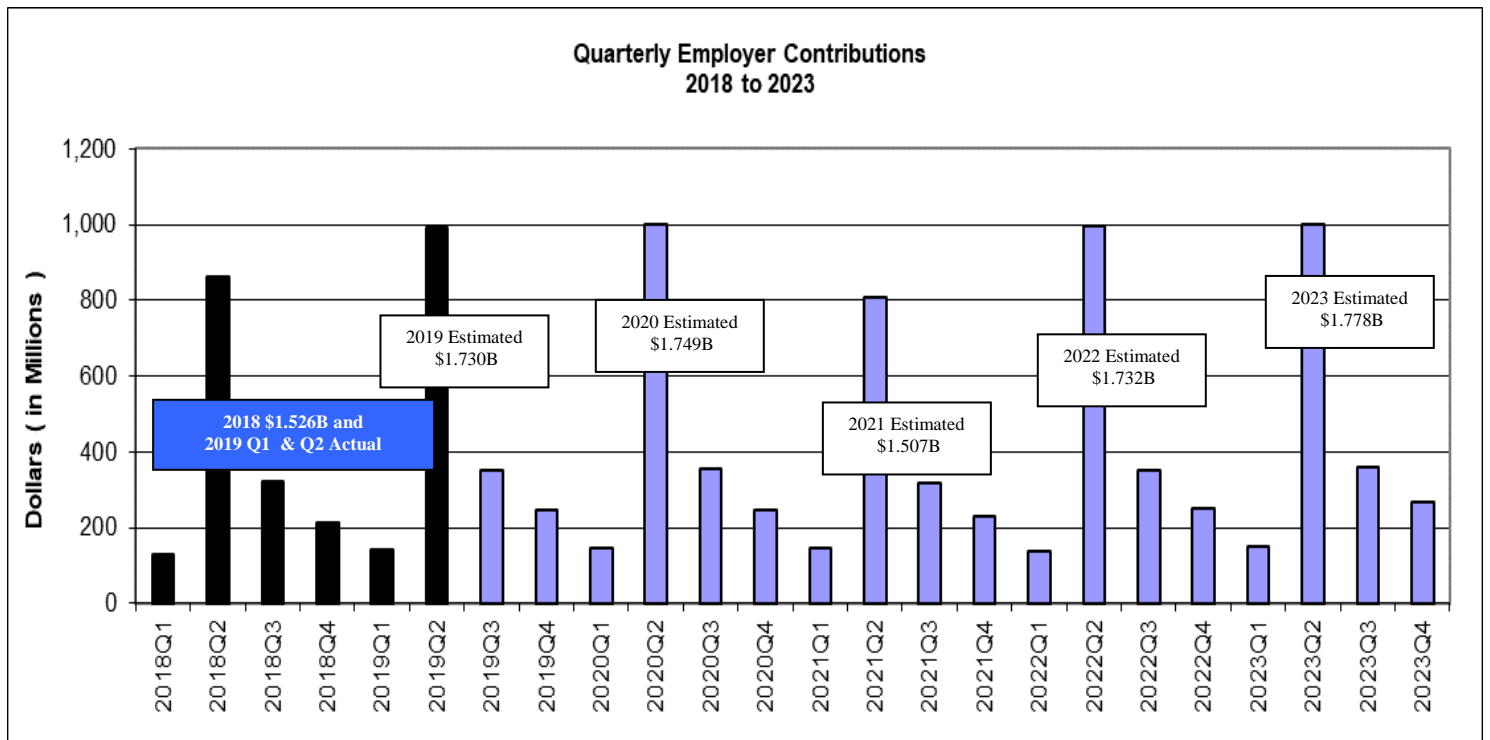


Table 2: Experience Rate Table

Employer Account Reserve Percentages	Unemployment Compensation Fund Reserve Percentage						
	A	B	C	D	E	F	G
	1.65% and over	1.5% or more less than 1.65%	1.2% or more less than 1.5%	0.9% or more less than 1.2%	0.6% or more less than 0.9%	0.3% or more less than 0.6%	less than 0.3%
Negative Percentage	Employer Contribution Rate*						
23 or more	8.62	9.79	11.13	12.65	14.37	16.33	18.55
21.0 but less than 23.0	8.25	9.37	10.65	12.11	13.76	15.63	17.76
19.0 but less than 21.0	7.88	8.96	10.18	11.57	13.15	14.94	16.97
17.0 but less than 19.0	7.52	8.54	9.71	11.03	12.53	14.24	16.18
15.0 but less than 17.0	7.15	8.13	9.24	10.49	11.93	13.55	15.39
13.0 but less than 15.0	6.78	7.71	8.76	9.95	11.31	12.85	14.60
11.0 but less than 13.0	6.42	7.29	8.29	9.42	10.70	12.16	13.81
9.0 but less than 11.0	6.05	6.87	7.81	8.88	10.09	11.46	13.02
7.0 but less than 9.0	5.68	6.46	7.34	8.34	9.48	10.77	12.23
5.0 but less than 7.0	5.32	6.04	6.86	7.80	8.86	10.07	11.44
3.0 but less than 5.0	4.95	5.63	6.39	7.27	8.26	9.38	10.66
1.0 but less than 3.0	4.58	5.21	5.92	6.72	7.64	8.68	9.86
0.0 but less than 1.0	4.22	4.79	5.45	6.19	7.03	7.99	9.08
Positive Percentage							
0.0 but less than 0.5	3.14	3.57	4.06	4.61	5.24	5.96	6.77
0.5 but less than 1.0	3.06	3.48	3.96	4.50	5.11	5.81	6.60
1.0 but less than 1.5	2.98	3.39	3.85	4.38	4.98	5.65	6.43
1.5 but less than 2.0	2.90	3.30	3.75	4.26	4.84	5.50	6.25
2.0 but less than 2.5	2.82	3.21	3.65	4.14	4.71	5.35	6.08
2.5 but less than 3.0	2.75	3.12	3.54	4.02	4.57	5.20	5.90
3.0 but less than 3.5	2.67	3.03	3.44	3.91	4.44	5.05	5.74
3.5 but less than 4.0	2.58	2.93	3.33	3.79	4.30	4.89	5.56
4.0 but less than 4.5	2.50	2.84	3.23	3.67	4.17	4.74	5.38
4.5 but less than 5.0	2.42	2.75	3.13	3.55	4.04	4.59	5.21
5.0 but less than 5.5	2.34	2.66	3.02	3.43	3.90	4.43	5.04
5.5 but less than 6.0	2.25	2.56	2.91	3.31	3.76	4.28	4.86
6.0 but less than 6.5	2.17	2.47	2.81	3.20	3.63	4.13	4.69
6.5 but less than 7.0	2.09	2.38	2.71	3.08	3.50	3.97	4.51
7.0 but less than 7.5	2.02	2.30	2.61	2.96	3.37	3.82	4.35
7.5 but less than 8.0	1.94	2.20	2.50	2.84	3.23	3.67	4.17
8.0 but less than 8.5	1.85	2.10	2.39	2.72	3.09	3.51	3.99
8.5 but less than 9.0	1.78	2.02	2.29	2.61	2.96	3.37	3.82
9.0 but less than 9.5	1.70	1.93	2.19	2.49	2.82	3.21	3.65
9.5 but less than 10.0	1.61	1.83	2.08	2.36	2.69	3.05	3.47
10.0 but less than 10.5	1.53	1.74	1.98	2.25	2.56	2.91	3.30
10.5 but less than 11.0	1.45	1.65	1.87	2.13	2.42	2.75	3.12
11.0 but less than 11.5	1.37	1.56	1.77	2.01	2.29	2.60	2.96
11.5 but less than 12.0	1.29	1.47	1.67	1.89	2.15	2.45	2.78
12.0 but less than 12.5	1.21	1.37	1.56	1.77	2.01	2.29	2.60
12.5 but less than 13.0	1.13	1.28	1.46	1.66	1.89	2.14	2.43
13.0 but less than 13.5	1.05	1.19	1.35	1.54	1.75	1.99	2.26
13.5 but less than 14.0	0.97	1.10	1.25	1.42	1.61	1.83	2.08
14.0 but less than 15.0	0.81	0.92	1.04	1.18	1.34	1.53	1.73
15.0 but less than 16.0	0.73	0.83	0.94	1.07	1.21	1.38	1.57
16.0 but less than 17.0	0.64	0.73	0.83	0.95	1.08	1.22	1.39
17.0 or more	0.56	0.64	0.73	0.83	0.94	1.07	1.21

Employer Contribution Rate is applied to the first \$15,000 of wages per employee.

The current law simulation estimates for 2019 through 2023 are displayed in Tables 3 and 4, below.

Table 3: Unemployment Trust Fund Projections for the Private Contributory Account, 2019 - 2023

(All \$ in Millions except Average Cost/Employee)

	2018	2019	2020	2021	2022	2023
Balance, January 1	\$861	\$1,101	\$1,563	\$1,818	\$1,624	\$1,491
Income	\$1,526	\$1,730	\$1,749	\$1,507	\$1,732	\$1,778
Trust Fund Interest	\$24	\$26	\$26	\$26	\$24	\$21
Benefit Outlays	\$1,310	\$1,293	\$1,520	\$1,726	\$1,889	\$1,933
Federal Loan Interests						
Balance, December 31	\$1,101	\$1,563	\$1,818	\$1,624	\$1,491	\$1,356
Schedule*	"D"	"E"	"E"	"D"	"E"	"E"
Average Cost/Employee	\$553	\$613	\$615	\$530	\$631	\$652

* 2018 to 2019 rate schedules set by Legislation, 2020 to 2023 rate schedule projected based on current statutory triggers, calculated with the previous three years average total wages. Taxable Wage Base of \$15,000 effective beginning 2015.

Source: Massachusetts Department of Unemployment Assistance UNIS-X simulation

Figures may not add up due to rounding.

Table 4: UNIS_X Simulation Output

	2018	2019	2020	2021	2022	2023
Total Covered Payroll (\$Billions)	\$198.0	\$206.9	\$218.0	\$226.5	\$235.7	\$245.5
Contributory Payroll (\$Billions)	\$44.5	\$47.0	\$48.2	\$49.2	\$50.9	\$54.6
Contributory Wage Proportion	22.5%	22.7%	22.1%	21.7%	21.6%	22.2%
Nominal Contribution Rate	3.5%	3.7%	3.6%	3.2%	3.7%	3.7%
Contributions as % of Total Payroll	0.77%	0.84%	0.80%	0.67%	0.73%	0.72%
Benefits as a % of Total Payroll	0.66%	0.63%	0.70%	0.76%	0.80%	0.79%
Trust Fund Balance as % of Total Payroll	0.56%	0.76%	0.83%	0.72%	0.63%	0.55%
Solvency Assessment	0.76%	0.69%	1.00%	1.02%	1.13%	1.21%
AHCM	0.33	0.39	0.43	0.37	0.33	0.29
Covered Employment (Thousands)	3,536	3,615	3,638	3,639	3,662	3,683
Total Unemployment Rate	3.5%	3.0%	3.3%	3.7%	4.0%	4.0%
Insured Unemployment Rate	1.9%	1.6%	1.7%	1.8%	1.9%	1.9%

Source: Economic assumptions are based on Moody's Analytics Data Services forecasts and Massachusetts UNIS-X simulation.

Figures may not add up due to rounding.

**APPENDIX
UNEMPLOYMENT INSURANCE DEFINITIONS**

AVERAGE HIGH COST RATE:

The average of the three highest calendar benefit cost rates in the last 20 years (or a period including three recessions, if longer). The benefit cost rates private UI contributory employers benefits paid (including the state's share of extended benefits when applicable) as a percent of their total wages.

AVERAGE HIGH COST MULTIPLE (AHCM):

The ratio of the year-end trust fund balance as a percent of total wages divided by the Average High Cost Rate.

BENEFITS PAID:

The unemployment insurance benefits paid to individuals funded through the state program. This includes all weeks compensated including partial payments.

CIVILIAN LABOR FORCE:

The estimated average number of Massachusetts residents who are either employed or unemployed in the week of the 12th for the three months of the quarter.

COVERED EMPLOYMENT:

The number of employees covered by Unemployment Insurance reported to the state by employers. The numbers represent the count of all employees for the payroll period that includes the 12th of the month.

HIGH-COST MULTIPLE (HCM):

The ratio of the Trust Fund balance as a percent of total wages divided by the High Cost Rate. The High Cost Rate is the highest historical ratio of benefits paid to total wages for a 12-month period.

INITIAL CLAIMS:

Any notice of unemployment filed by an individual (1) to request a new determination of entitlement to and eligibility for unemployment compensation or (2) to begin a second or subsequent period of eligibility within a benefit year or period of eligibility following an additional separation from employment.

INSURED UNEMPLOYED:

The average number of weeks claimed for the three months of the quarter.

OUTSTANDING LOAN BALANCES:

Balance, as of the end of the quarter, of advances acquired by the state under Title XII of the Social Security Act which allows states to use repayable advances from the federal UI account.

SOLVENCY ASSESSMENT:

The annual factor assessed to employer taxable payrolls to cover the net balance of charges and credits not directly assigned to individual employers.

TAXABLE WAGES:

Wages paid to covered employees that are subject to State Unemployment Insurance taxes. For Massachusetts, the first \$15,000 in wages per employee is covered by UI,

TAXABLE WAGE BASE:

For each State, the maximum amount of wages paid to an employee by an employer during a year in which their employment is subject to UI taxes. Wages above this amount are not subject to UI tax.

TOTAL UNEMPLOYED:

The estimated average number of residents, 16 years of age or older, who do not have a job but are available for work and actively seeking work in the week of the 12th for the three months of the quarter. This includes individuals on layoff and waiting to report to a new job within 30 days.

TOTAL UNEMPLOYMENT RATE (TUR):

The rate computed by dividing Total Unemployed by the Civilian Labor Force.

TOTAL WAGES:

All wages or remuneration paid to workers on all payrolls covered by Unemployment Insurance.

TRUST FUND BALANCE (TF):

The balance in the individual state account in the Unemployment Trust Fund. Outlook estimates are for the private contributory account within the Trust Fund.

TRUST FUND AS % OF TAXABLE WAGES:

Year-end Trust Fund Balance as a percent of estimated taxable wages for the most recent 12 months; also referred to as the Reserve Ratio. Estimated wages are based on the latest growth rate in the 12 month moving average (MA).

UNEMPLOYMENT TRUST FUND (UTF):

A fund established in the Treasury of United States which contains all monies deposited by state agencies to the credit of their unemployment fund accounts.

WEEKS CLAIMED:

The number of weeks claimed for UI benefits, including weeks for which a waiting period or fixed disqualification period is being served. Interstate claims are counted in the state of residence.

WEEKS COMPENSATED:

The number of weeks claimed for which UI benefits are paid. Weeks compensated for partial unemployment are included. Interstate claims are counted in the paying state.