

Unemployment Insurance Trust Fund Report

Outlook Report August 2018

HIGHLIGHTS

This Outlook Report provides the status of the Unemployment Insurance Trust Fund and updated projections for the 2018 through 2022 outlook period.

As required by MGL Chapter 151A, Section 14F, DUA publishes quarterly outlooks for the Trust Fund based on forecasts for annual average 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 higher average annual unemployment rates in 2018 and 2019, as compared to the assumptions used in the May 2018 Outlook Report. For 2018, the average annual unemployment rate is up from 3.3 percent to 3.5 percent, followed by 3.3 percent annual rate in 2019, which is a one-tenth of a percentage point increase from the previous rate used. Total labor force increases in 2018 to 2022 posting an average annual increase of 58,190. The annual wage and salary growth rates are lower in 2018, 2019 and 2022 but higher in 2020.

The outlook presented is for the regular UI program based on 2018 employer experience rates and benefit payments and employer contributions through second quarter 2018.

Chapter 63 of the Acts of 2017, enacted in August, sets tax rate schedule D for 2018 and rate schedule E for 2019 for employer contributions.

The revised 2018 year-end projections indicate employer contributions, based on rate schedule D and a \$15,000 taxable wage base, will be \$1.549 billion in-line with the previous estimate of \$1.558 billion. Estimated benefit payments of \$1.362 billion at \$5 million higher, is also in-line with the previous estimate of \$1.357 billion first released in the May 2018 Outlook Report. The projected private contributory account year-end balance of \$1.072 billion is \$12 million less than the previous estimate of \$1.084 billion but \$211 million more than last year's ending balance of \$861 million.

For 2019 contributions on rate schedule E and a \$15,000 wage base will generate an estimated \$1.735 billion in employer contributions, in-line with previous estimate of \$1.720 billion. Benefit payments are projected at \$1.494

billion, \$20 million more than the previous projection of \$1.474 billion released in the May to July Outlook Reports. A projected increase in the annual average unemployment rate resulted in additional weeks compensated and insured unemployment. As a result, the 2019 year-end private contributory account balance is now estimated at \$1.342 billion, \$16 million less than the previous projected balance of \$1.358 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 \$1.694 billion and benefit payments are estimated at \$1.802 billion. Year-end 2020 private contributory account balance is projected at \$1.266 billion \$36 million higher than the previous estimate of \$1.230 billion due to a projected increase in employer contributions.

Tax rate schedule E is again projected to trigger for 2021 employer payrolls. Employer contributions estimated at \$1.685 billion are \$34 million more while benefits payments at \$2.081 billion are in-line with the previous estimate. With the projected higher employer contributions and previous year ending balance, the year-end 2021 private contributory account balance projected at \$897 million is \$77 million than the previous estimate of \$820 million.

Tax Rate schedule F is projected to trigger for 2022 employer payrolls. Employer contributions are estimated at \$1.994 billion and benefit payments projected at \$2.162 billion with a year-end balance of \$749 million, a \$95 million increase from the previous estimate of \$654 million. The difference is due to higher employer contributions coupled with previous years larger year-end balances.

Based on the current economic assumptions and statutory provisions, no borrowing from the federal unemployment account is anticipated throughout the 2018 to 2022 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 2018 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 2018 Outlook Reports are provided in Table 1.

The July 2018 Moody's Analytics Data Services Annual Wage and Salary Growth Rates forecasts for 2018, 2019 and 2022 were revised down. The rate for 2018 showed a one percentage point decrease from 5.3 percent down to 4.3 percent, in 2019 from 6.0 percent to 5.8 percent and from 3.7 percent to 3.6 percent in 2022. The wage and salary growth rate for 2020 increased by one-tenth of a percentage point while the rate remained unchanged at 2.5 percent in 2021.

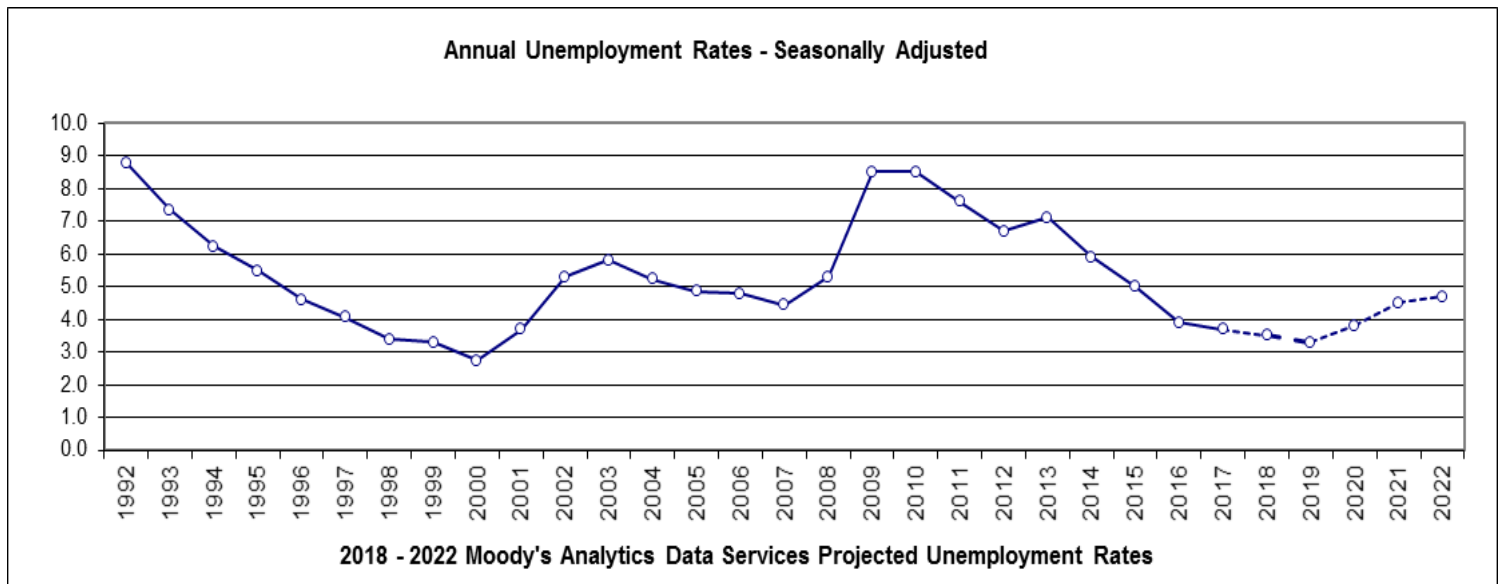
The projected annual average total unemployment rates for 2018 and 2019 are higher than the rates used in the May Outlook Report. In 2018, an increase of two-tenths of a percentage point, from 3.3 percent to 3.5 percent followed by a 3.3 percent average unemployment rate in 2019, a one-tenth of a percentage point increase from the rate used in the previous outlook. For 2020 to 2022 the projected annual average unemployment rates were unchanged.

The annual labor force projections for 2018 to 2022 showed an average annual increase of 58,190 from the Moody's Analytics Data Services projections released in May 2018. The 2018 labor force showed the smallest increase of 45,190 while in 2022 the largest increase of 61,985 and projected total of 3,824,189.

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

	Wage & Salary Growth (%)			Total Unemployment Rate (%)			Labor Force		
	18-Jan	18-May	18-Jul	18-Jan	18-May	18-Jul	18-Jan	18-May	18-Jul
2018	5.1	5.3	4.3	3.5	3.3	3.5	3,671,450	3,679,101	3,724,291
2019	5.6	6.0	5.8	3.6	3.2	3.3	3,699,065	3,705,619	3,767,296
2020	3.6	3.6	3.7	4.2	3.8	3.8	3,714,588	3,719,839	3,781,202
2021	3.3	2.5	2.5	4.4	4.5	4.5	3,731,054	3,736,791	3,797,526
2022	3.9	3.7	3.6	4.4	4.7	4.7	3,756,066	3,762,204	3,824,189

Source: Moody's Analytics Data Services



UNEMPLOYMENT INSURANCE TRUST FUND BALANCE

As of July 31, 2018, the preliminary Massachusetts Unemployment Insurance Trust Fund ending balance was \$1.404 billion. The preliminary private contributory account balance was at \$1.291 billion and the governmental contributory account balance was \$113 million. The private contributory account balance is \$11 million lower than the latest projection of \$1.302 billion at the end July.

The private contributory account is projected to have a balance of \$1.072 billion at the end 2018, a reserve of \$1.342 billion in 2019 and a projected balance of \$1.266 billion by the end of 2020.

The 2018 year-end private contributory account balance of \$1.072 billion is in-line with the previous estimate of \$1.084 billion first published in the May 2018 Outlook Report. Year-end reserves as a percent of total wages are expected to be 0.54 percent.

The year-end 2019 account balance is expected to be \$1.342 billion, a \$16 million decrease from the previous estimate of \$1.358 billion. The decrease is the result of an increase in benefit payments due to expected increases in insured unemployment and weeks compensated.

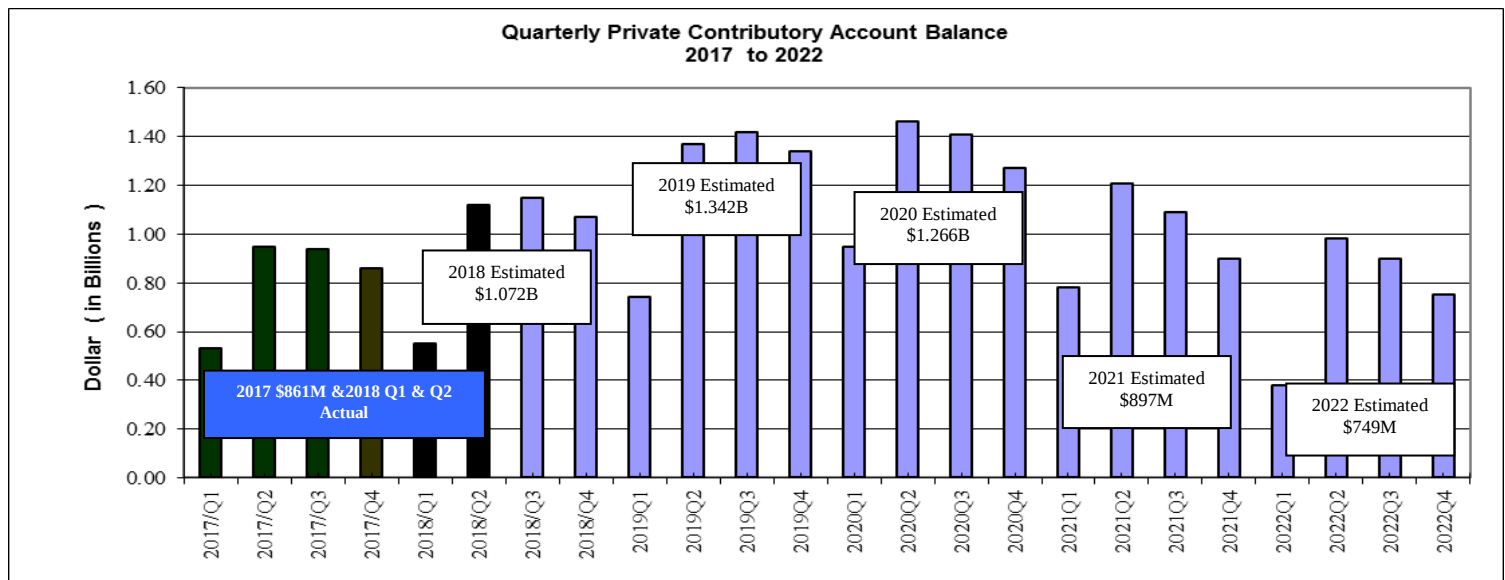
The year-end 2020 account balance is expected to be \$1.266 billion, \$36 million more than the previous projection of \$1.230 billion. The difference is due to a projected increase in employer contributions caused by higher taxable wages.

The year-end 2021 account balance is estimated to be \$897 million, a \$77 million increase from the previously released balance of \$820 million. The increase is due to higher employer contributions and a carryover of the previous year's larger ending balance.

The 2022 year-end private contributory account balance is estimated at \$749 million, \$95 million more than the previously released balance of \$654 million. As in previous years, the increased was caused by projected larger employer contributions combined with previous years' higher ending balances.

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

The chart below shows the actual 2017 through second quarter 2018 and projected quarterly private UI Fund balance through 2022.



BENEFIT OUTLAYS

The updated simulation for the outlook period shows small revisions from the projections first released in the May Outlook Report. Revised benefit payments increased in 2018, 2019 and 2022 but decreased in 2020 and 2021.

Preliminary benefit payments through July 2018 totaled \$848.1 million, \$25.9 million less than the January to July 2017 payments of \$874 million but at just \$5.9 million less is in-line with the projection of \$854 million.

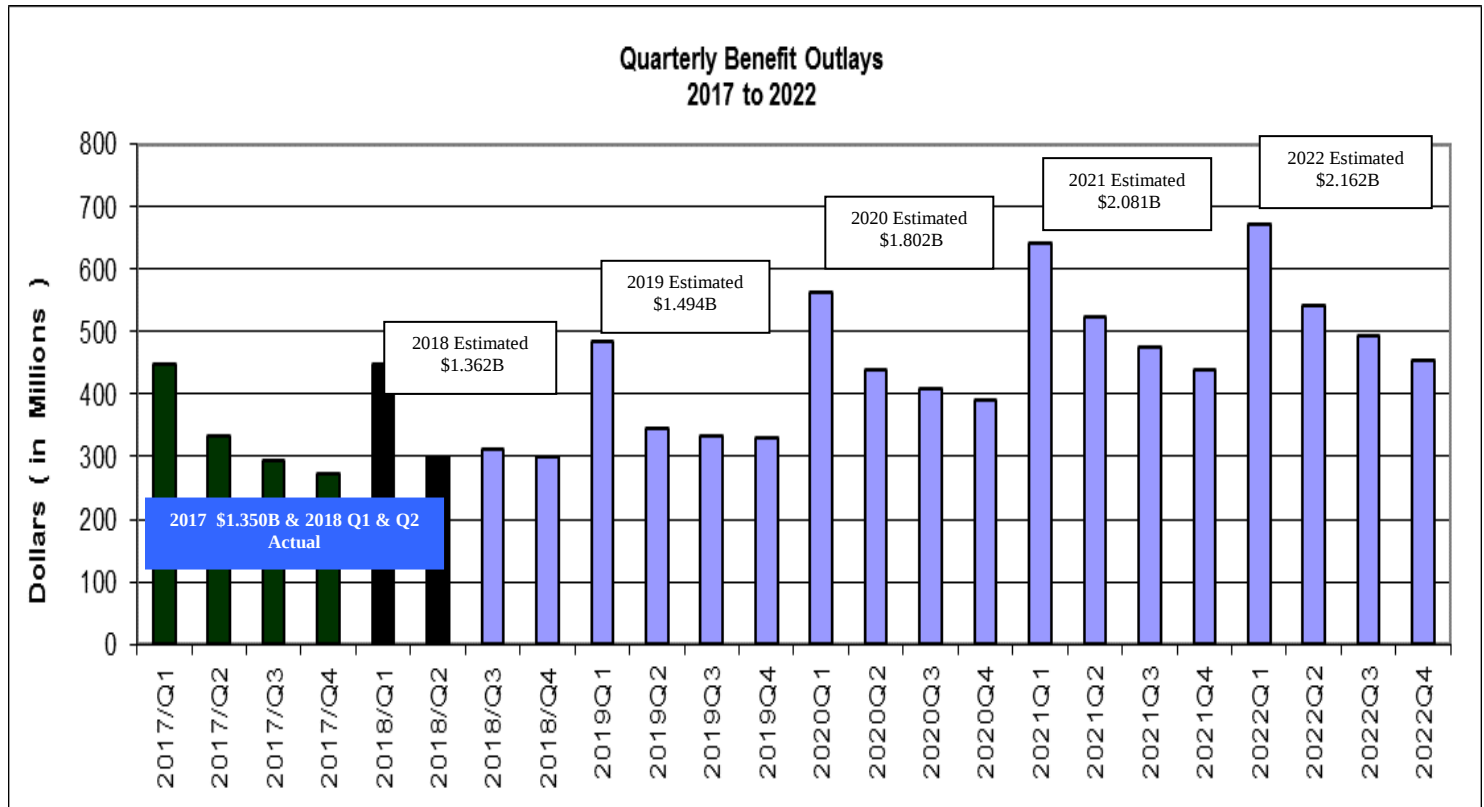
Benefit payments for 2018 are now estimated to be \$1.362 billion, in-line with the previous estimate of \$1.357 billion first released in the May 2018 Outlook Report.

In 2019, benefit payments are projected to be \$1.494 billion, \$20 million more than the previous estimate of \$1.474 billion. A one-tenth of a percentage point increase in the annual average unemployment rate generated additional insured unemployment and weeks compensated causing an increase in benefit payments.

For 2020, benefit payments are projected to be \$1.802 billion, in-line with the previous estimate of \$1.809 billion first released in May.

Benefit payments are projected to be \$2.081 billion in 2021, at \$6 million less, is in-line with the previous estimate of \$2.087 billion.

In 2022, benefit payments are predicted to be \$2.162 billion, \$26 million more than the previous estimate of \$2.136 billion. The increase was the result of expected increases in insured unemployment and weeks compensated. In addition, the average weekly benefit amount is also projected to be higher.



EMPLOYER CONTRIBUTIONS

Updated projections for employer contributions show a decrease in 2018 but increases in 2019 to 2022.

Preliminary employer contributions through July 2018 totaled \$1.269 billion, an increase of \$140 million from the January to July 2017 contributions of \$1.129 billion. The difference was due to employer payrolls in 2017 being in a lower tax rate schedule. Year-to-date employer contributions were \$17 million lower than the projection of \$1.286 billion.

For 2018, employer contributions on rate schedule D, as set by statute and a \$15,000 taxable wage base, are estimated at \$1.549 billion, at just \$9 million less are in-line with the previous estimate of \$1.558 billion.

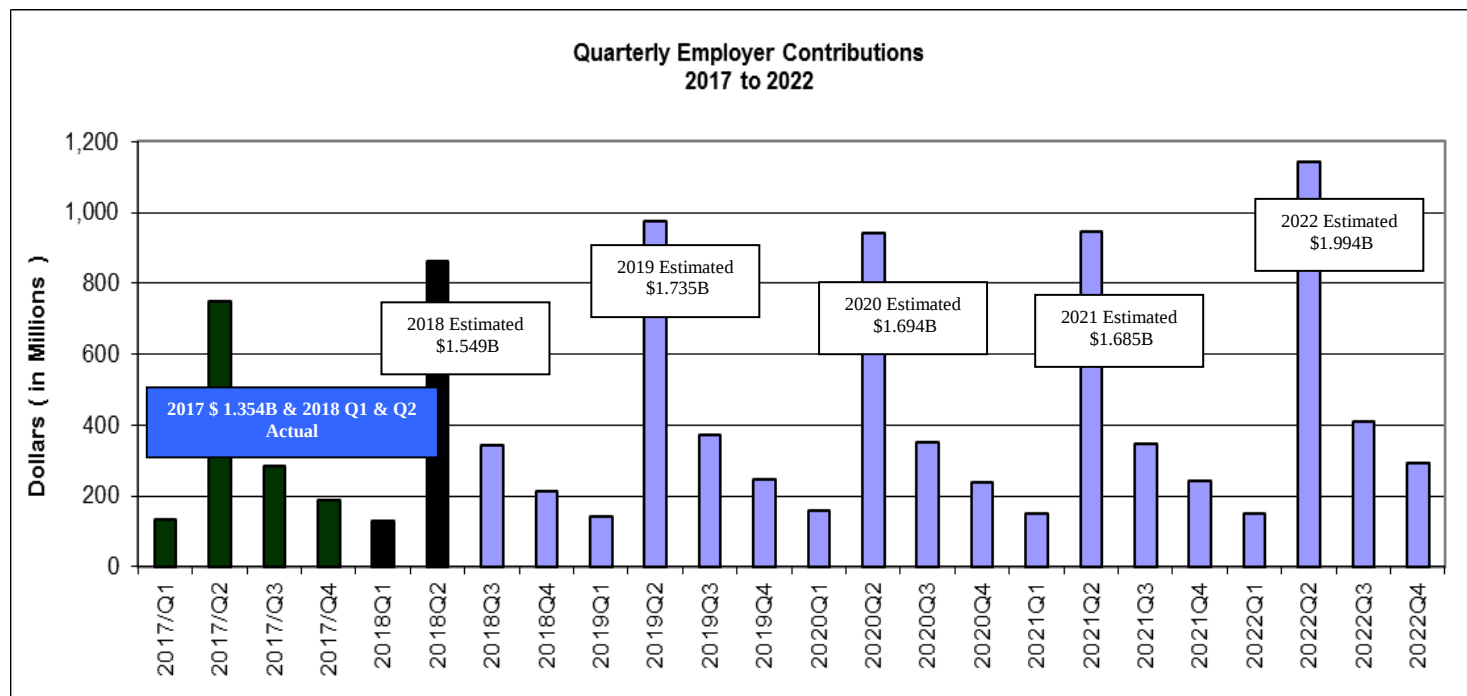
Rate schedule E was enacted for employer payrolls in 2019 generating \$1.735 billion in contributions, an increase of \$15 million from the previous estimate of \$1.720 billion due to an increase in taxable payrolls.

Rate schedule E is projected to trigger for 2020 payrolls. Employer contributions projected at \$1.694 billion is an increase of \$45 million from the previous estimate of \$1.649 billion. As in the previous year, the difference was caused by a projected increase in taxable wages. In addition, the average contribution rate was higher.

Tax rate schedule E is again projected to trigger for 2021 payrolls with an estimated employer contribution of \$1.685 billion, an increase of \$34 million from the previous estimate of \$1.651 billion due, as in the previous years, to an increase in taxable payrolls and the average contribution rate.

For 2022, tax rate schedule F is projected to trigger for employer payrolls generating \$1.994 billion in contributions, \$42 million more than the previous estimate, due, as well, to higher taxable wages and the average contribution rate.

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



TRUST FUND SOLVENCY

Federal regulations require States to meet several standards for interest free federal advances taken during the first five months of a calendar year and repaid in the fall. The first measure requires that in at least one of the five years prior to the calendar year the advances are taken, the trust fund reserves must be equal to an average high cost multiple (AHCM) solvency measure. The measure is phased in over five years from a multiple of .50 for 2014, .70 in 2016 up to 1.0 for advances in 2019. For 2018, the AHCM must be met based on 2017 performance.

The Average High Cost Multiple (AHCM) computations are based on the average benefit cost rate for the three highest years in the last twenty or the last three recessions whichever is higher.

Benefit costs are measured as a percent of the total UI wages, the total liability of the UI system, is the second measure. Using this measure indexes the benefit costs to

total wages. The measure is designed to encourage States to build sufficient reserves to finance an economic downturn similar to ones in the past. The Massachusetts measures are for the overall trust fund that includes both the private and governmental contributory accounts. The ratio of the average tax rate and the benefit costs rate over the previous five years must be at least 75 percent.

The chart below arrays the federal requirements, the actual and projected year-end all contributory account AHCMs, the ratios of average tax rate and total wages (federal standard at 80 percent of previous year) and the average tax rate and the benefit cost rate over the preceding five years (federal standard at 75 percent).

If federal advances are necessary in 2018 through 2022, Massachusetts will not meet the federal standard for AHCM and therefore be subject to federal interest for all federal loans.

**Funding Standard for Interest-Free Loans Started in 2014
All Contributory Accounts (Estimated 2018 to 2022)**

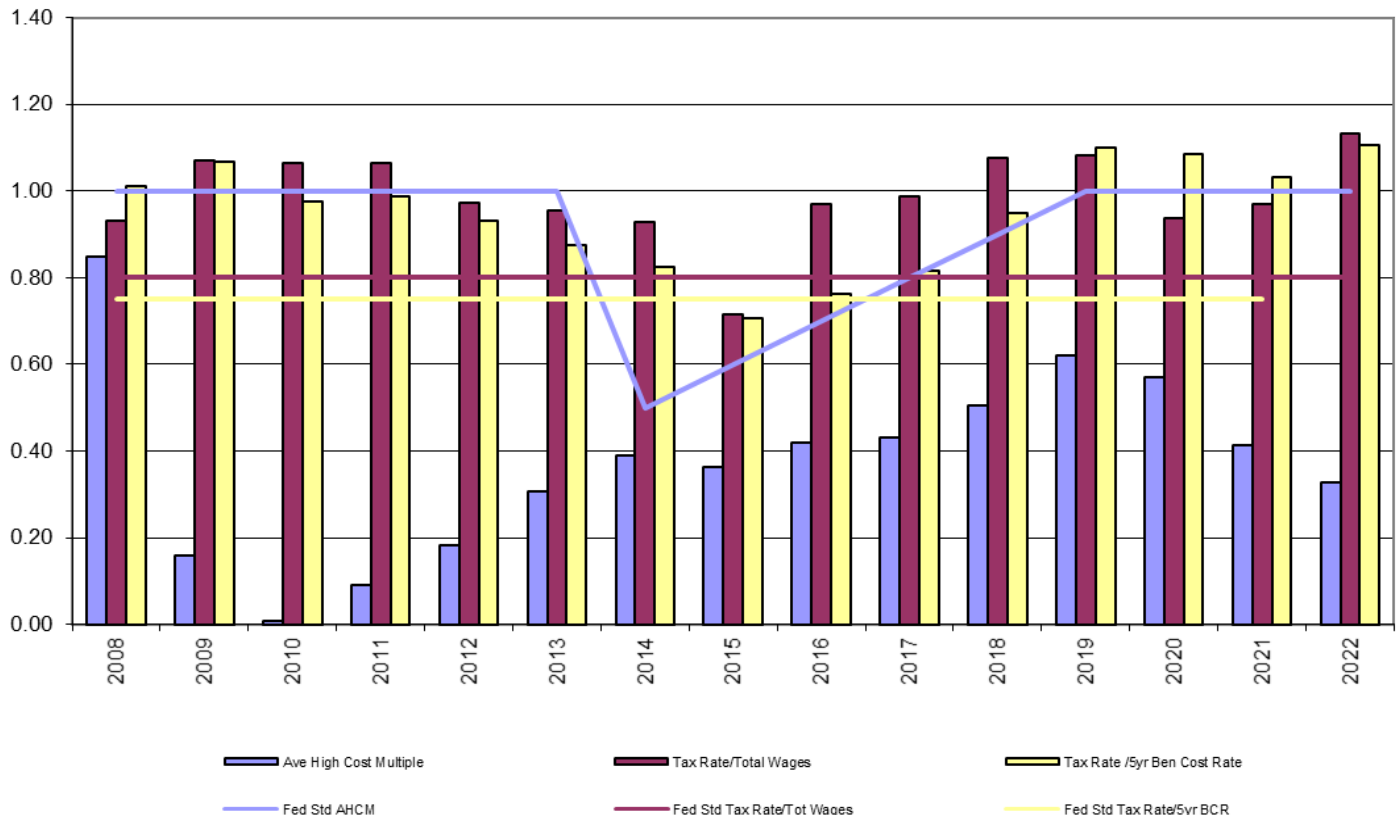


Table 2: Experience Rate Table

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 2018 through 2022 are displayed in Tables 3 and 4, below.

Table 3: Unemployment Trust Fund Projections for the Private Contributory Account, 2018 - 2022

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

	2017	2018	2019	2020	2021	2022
Balance, January 1	\$836	\$861	\$1,072	\$1,342	\$1,266	\$897
Income	\$1,354	\$1,549	\$1,735	\$1,694	\$1,685	\$1,994
Trust Fund Interest	\$20	\$24	\$29	\$32	\$27	\$20
Benefit Outlays	\$1,350	\$1,362	\$1,494	\$1,802	\$2,081	\$2,162
Federal Loan Interests						
Balance, December 31	\$861	\$1,072	\$1,342	\$1,266	\$897	\$749
Schedule*	"C"	"D"	"E"	"E"	"E"	"F"
Average Cost/Employee	\$497	\$563	\$625	\$609	\$605	\$711

* 2017 to 2019 rate schedules set by Legislation, 2020 to 2022 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 benefit financing simulation

Figures may not add up due to rounding.

Table 4: Benefit Financing Simulation Output

	2017	2018	2019	2020	2021	2022
Total Covered Payroll (\$Billions)	\$187.6	\$198.3	\$204.3	\$212.2	\$217.9	\$227.5
Contributory Payroll (\$Billions)	\$43.4	\$44.5	\$44.7	\$45.3	\$45.7	\$46.7
Contributory Wage Proportion	23.1%	22.4%	21.9%	21.3%	21.0%	20.5%
Nominal Contribution Rate	3.2%	3.5%	3.9%	3.7%	3.7%	4.3%
Contributions as % of Total Payroll	0.72%	0.78%	0.85%	0.80%	0.77%	0.88%
Benefits as a % of Total Payroll	0.72%	0.69%	0.73%	0.85%	0.96%	0.95%
Trust Fund Balance as % of Total Payroll	0.46%	0.54%	0.66%	0.60%	0.41%	0.33%
Solvency Assessment	0.73%	0.76%	0.90%	1.04%	1.21%	1.26%
AHCM	0.27	0.31	0.38	0.35	0.24	0.19
Covered Employment (Thousands)	3,490	3,524	3,555	3,559	3,566	3,592
Total Unemployment Rate	3.7%	3.5%	3.3%	3.8%	4.5%	4.7%
Insured Unemployment Rate	1.9%	1.9%	1.9%	2.2%	2.4%	2.4%

Source: Economic assumptions are based on Moody's Analytics Data Services forecasts and Massachusetts benefit financing 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.

INSURED UNEMPLOYMENT RATE (IUR):

The rate computed by dividing Insured Unemployed for the current quarter by the average Covered Employment for the first four of the last six completed quarters.

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.