

Unemployment Insurance Trust Fund Report

Outlook Report May 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 lower average annual unemployment rates in 2018 to 2020, as compared to the assumptions used in the February 2018 Outlook Report. For 2018, the average annual unemployment rate is down from 3.5 percent to 3.3 percent, followed by 3.2 percent annual rate in 2019, which is four-tenths of a percentage point lower than the previous rate used. Total labor force increases in 2018 to 2022 posting an average annual increase of 6,266. The annual wage and salary growth rates are higher in 2018 and 2019 but lower in 2021 and 2022.

The outlook presented is for the regular UI program based on 2017 employer experience rates and benefit payments and employer contributions through first 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 \$1.558 billion in-line with the previous estimate of \$1.568 billion. Estimated benefit payments of \$1.357 billion are \$24 million lower than the previous estimate of \$1.381 billion first released in the February 2018 Outlook Report. A decrease in the annual average unemployment rate generated less insured unemployment and fewer weeks compensated. The projected private contributory account year-end balance of \$1.084 billion is \$12 million higher than the previous estimate of \$1.072 billion but \$223 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 \$1.720 billion in

employer contributions, in-line with previous estimate of \$1.733 billion. Benefit payments are projected at \$1.474 billion, \$91 million less than the previous projection of \$1.565 billion released in the February to April Outlook Reports. As in the previous year, a projected improvement in the annual average unemployment rate resulted in fewer weeks compensated and insured unemployment. The 2019 year-end private contributory account balance is now estimated at \$1.358 billion, \$90 million more than the previous projected balance of \$1.268 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 \$1.649 billion and benefit payments are estimated at \$1.809 billion. Year-end 2020 private contributory account balance is projected at \$1.230 billion \$67 million higher than the previous estimate of \$1.163 billion, a carryover from the previous two years higher ending balances.

Tax rate schedule E is again projected to trigger for 2021 employer payrolls. Employer contributions estimated at \$1.651 billion are \$33 million less while benefits payments at \$2.087 billion are \$237 million higher. The difference is due to an increase in the annual average unemployment rate which reduced income and caused an increase in weeks compensated and insured unemployment. An increase in the average weekly benefit amount is also projected. As a result, the year-end 2021 private contributory account balance projected at \$820 million is \$203 million less than the previous estimate of \$1.023 billion.

Tax Rate schedule F is projected to trigger for 2022 employer payrolls. Employer contributions are estimated at \$1.952 billion and benefit payments projected at \$2.136 billion with a year-end balance of \$654 million. As in 2021, a higher average weekly benefit amount and an increase in the unemployment rate for 2022 resulted in more benefit payments and a lower year-end balance.

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 May 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 October 2017 and February 2018 Outlook Reports are provided in Table 1.

The May 2018 Moody's Analytics Data Services Annual Wage and Salary Growth Rates forecasts for 2018 and 2019 were revised up. The rate for 2018 showed a two-tenths of a percentage point increase from 5.1 percent to 5.3 percent and in 2019 from 5.6 percent to 6.0 percent. The wage and salary growth rates for 2020 remained at 3.6 percent while the rates for 2021 and 2022 were revised down. The rate in 2021 showed a large revision of eight-tenths of a percentage point from 3.3 percent down to 2.5 percent.

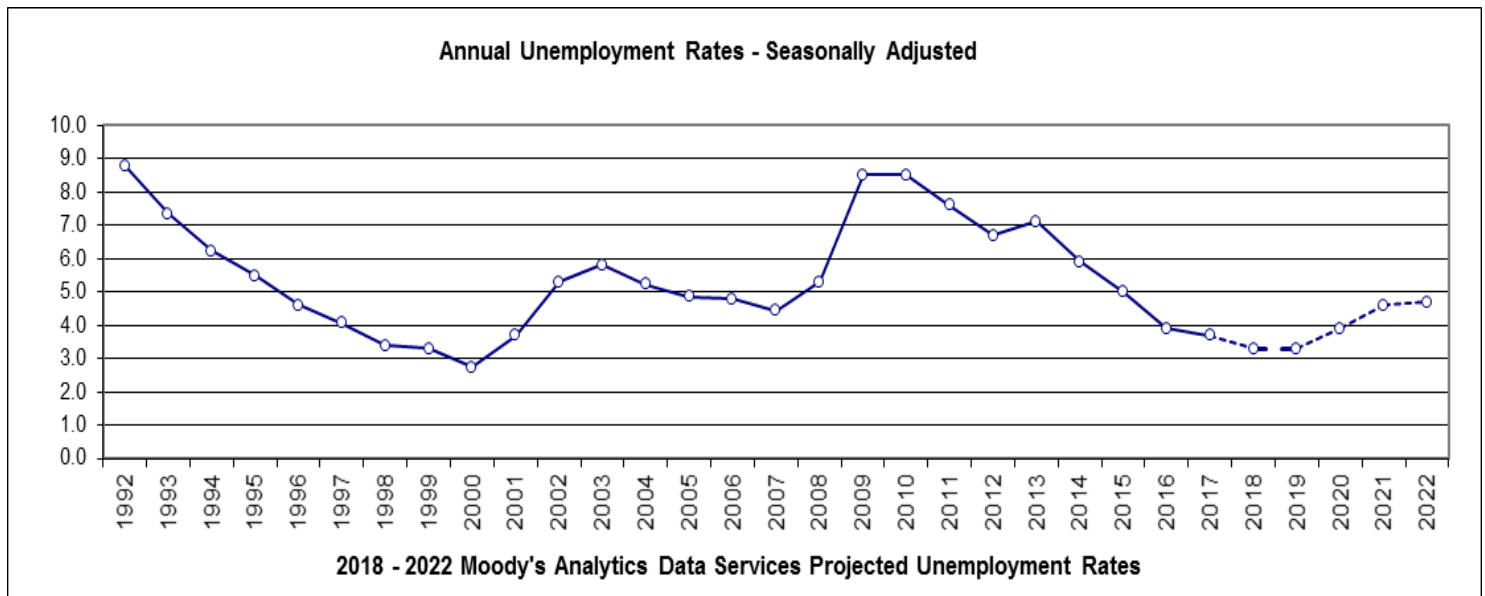
The projected annual average total unemployment rates for 2018 to 2020 are lower than the rates used in the February Outlook Report. In 2018, a decrease of two-tenths of a percentage point, from 3.5 percent to 3.3 percent followed by an improvement of four-tenths of a percentage point for both 2019 and 2020 in the annual average unemployment rate. For 2021 and 2022, the annual average unemployment rates were revised up, from 4.4 percent to 4.5 and from 4.4 percent to 4.7 percent, respectively.

The annual labor force projections for 2018 to 2022 showed an average annual increase of 6,266 from the Moody's Analytics Data Services projections released in January 2018. The 2018 labor force showed the largest increase of 7,651. The labor force is projected to be 3,762,204 in 2022.

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

	Wage & Salary Growth (%)			Total Unemployment Rate (%)			Labor Force		
	17-Sep	18-Jan	18-May	17-Sep	18-Jan	18-May	17-Sep	18-Jan	18-May
2018	5.5	5.1	5.3	4.1	3.5	3.3	3,751,898	3,671,450	3,679,101
2019	5.8	5.6	6.0	3.9	3.6	3.2	3,782,299	3,699,065	3,705,619
2020	4.2	3.6	3.6	4.3	4.2	3.8	3,797,604	3,714,588	3,719,839
2021	3.5	3.3	2.5	4.5	4.4	4.5	3,811,514	3,731,054	3,736,391
2022	NA	3.9	3.7	NA	4.4	4.7	NA	3,756,066	3,762,204

Source: Moody's Analytics Data Services



UNEMPLOYMENT INSURANCE TRUST FUND BALANCE

As of April 30, 2018, the preliminary Massachusetts Unemployment Insurance Trust Fund ending balance was \$1.318 billion. The private contributory account balance was at \$1.202 billion and the governmental contributory account balance was \$116 million. The private contributory account balance is \$18 million higher than the latest projection of \$1.184 billion for the month of April.

The private contributory account is projected to have a balance of \$1.084 billion at the end 2018, a reserve of \$1.358 billion in 2019 and a projected balance of \$1.230 billion by the end of 2020.

The 2018 year-end private contributory account balance of \$1.084 billion is in-line with the previous estimate of \$1.072 billion first published in the February 2018 Outlook Report. The small increase in the year-end balance is the result of expected decreases in benefit payments. An improvement in the annual average unemployment rate from the rate used in the previous outlook resulted in less insured unemployment and weeks compensated. Year-end reserves as a percent of total wages are expected to be 0.56 percent.

The year-end 2019 account balance is expected to be \$1.358 billion, a \$90 million increase from the previous estimate of \$1.268 billion. As in 2018, the revised annual average unemployment rate is better than the rate used in the previous outlook. Consequently, benefit payments are lower due to projected decreases in weeks compensated and insured unemployment.

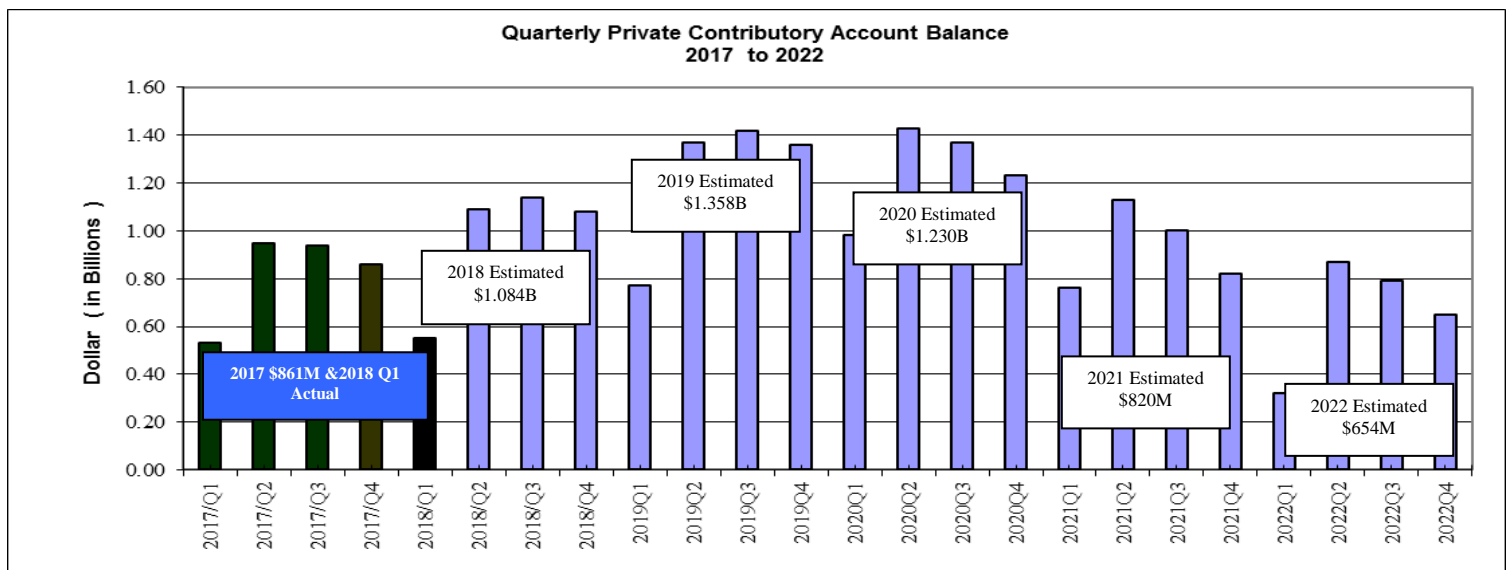
The year-end 2020 account balance is expected to be \$1.230 billion, \$67 million more than the previous projection of \$1.163 billion. The difference is primarily a carryover of the higher ending balances in the past two years.

The year-end 2021 account balance is estimated to be \$820 million, a \$203 million decrease from the previously released balance of \$1.023 billion. The decrease is due to higher benefit payments due to projected increases in weeks compensated and insured unemployment caused by an increase in the annual average unemployment rate. In addition, the average weekly benefit amount is expected to be higher.

The 2022 year-end private contributory account balance is estimated at \$654 million, \$507 million less than the previously released balance of \$1.161 billion. The revised annual average unemployment rate showed three-tenths of a percentage point increase, from 4.4 percent to 4.7 percent, causing increases in weeks compensated and insured unemployment. The average weekly benefit amount is also projected to be larger.

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

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



BENEFIT OUTLAYS

The updated simulation for the outlook period shows decreases in benefit payments in 2018 to 2020 but increases in 2021 and 2022.

Preliminary benefit payments through April 2018 totaled \$557.6 million, \$2.0 million less than January to April 2017 payments of \$559.6 million but \$10.7 million less than the projection of \$568.3 million. The difference was due to lower than expected benefit payments in the month of April as initial claims and continued weeks remain less than last year's level.

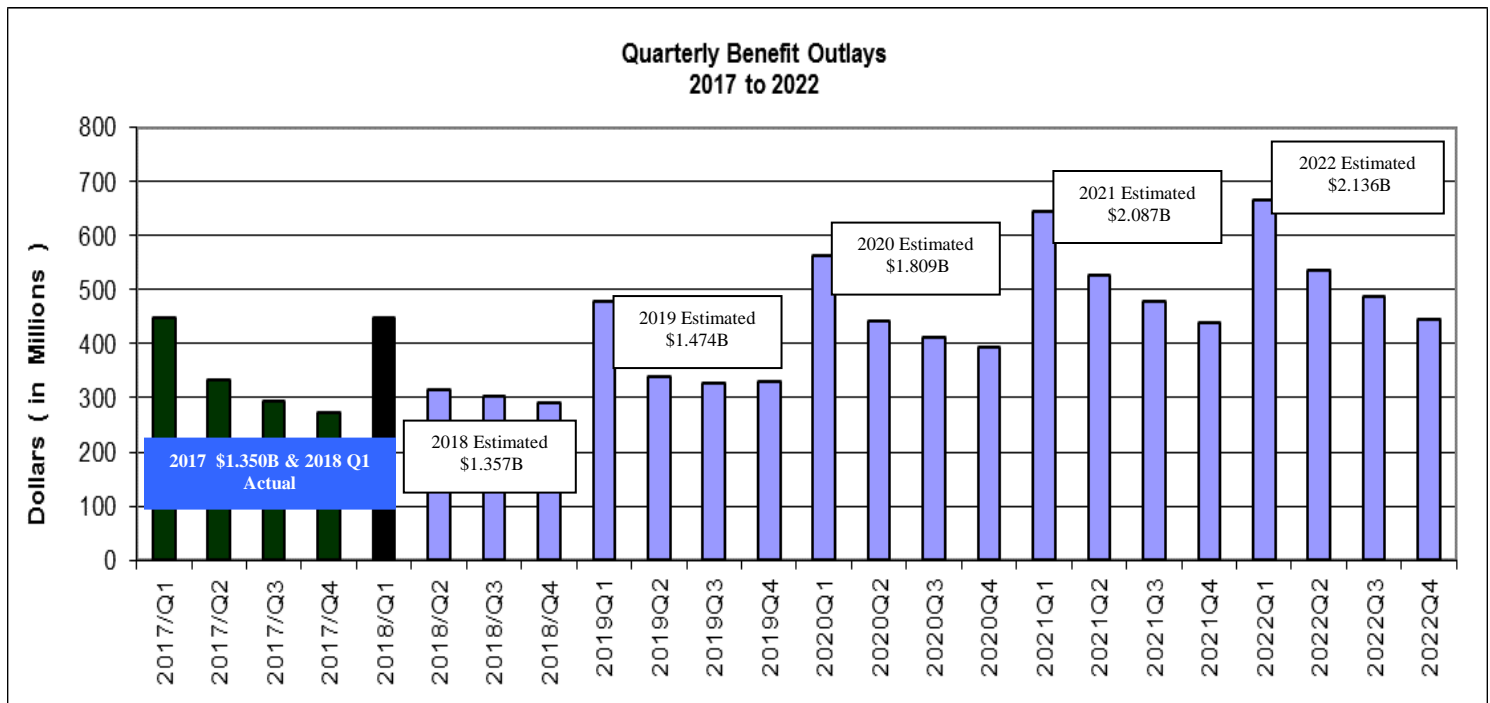
Benefit payments for 2018 are now estimated to be \$1.357 billion, \$24 million less than the previous estimate of \$1.381 billion first released in the February 2018 Outlook Report. The difference is due to projected decreases in total weeks compensated and insured unemployment generated by two-tenths of a percentage point improvement in the annual average unemployment rate, from 3.5 percent down to 3.3 percent.

In 2019, benefit payments are projected to be \$1.474 billion, \$91 million lower than the previous estimate of \$1.565 billion. As in the previous year, the revised annual average unemployment rate is lower, four-tenths of a percentage point better the rate used in the previous outlook. Hence, a decrease in insured unemployment and weeks compensated is expected.

For 2020, benefit payments are projected to be \$1.809 billion, in-line with the previous estimate of \$1.810 billion first released in February.

Benefit payments are projected to be \$2.087 billion in 2021, \$237 million higher than the previous estimate of \$1.850 billion. A slight increase in the revised annual average unemployment rate, from 4.4 percent to 4.5 percent, resulted in projected increases in total weeks compensated and insured unemployment. The average weekly benefit amount is also expected to be larger.

In 2022, benefit payments are predicted to be \$2.136 billion, \$306 million more than the previous estimate of \$1.830 billion. A three-tenths of a percentage point increase in the revised annual average unemployment rate, from 4.4 percent to 4.7 percent, generated increases in weeks compensated and insured unemployment. The average weekly benefit amount is also projected to be higher.



EMPLOYER CONTRIBUTIONS

Updated projections for employer contributions show decreases in 2018 to 2021 but an increase in 2022.

Preliminary employer contributions through April 2018 totaled \$894 million, an increase of \$556.3 million from the January to April 2017 contributions of \$337.7 million. In 2017, the due date, April 30, fell on a Sunday causing employer contributions to be lower than expected in April as portions of collections were credited in the month of May. In addition, employer payrolls in 2017 were in a lower tax rate schedule. Year-to-date employer contributions were \$7 million higher than the projection of \$887 million.

For 2018, employer contributions on rate schedule D, as set by statute and a \$15,000 taxable wage base, are estimated at \$1.558 billion, at just \$10 million less are in-line with the previous estimate of \$1.568 billion.

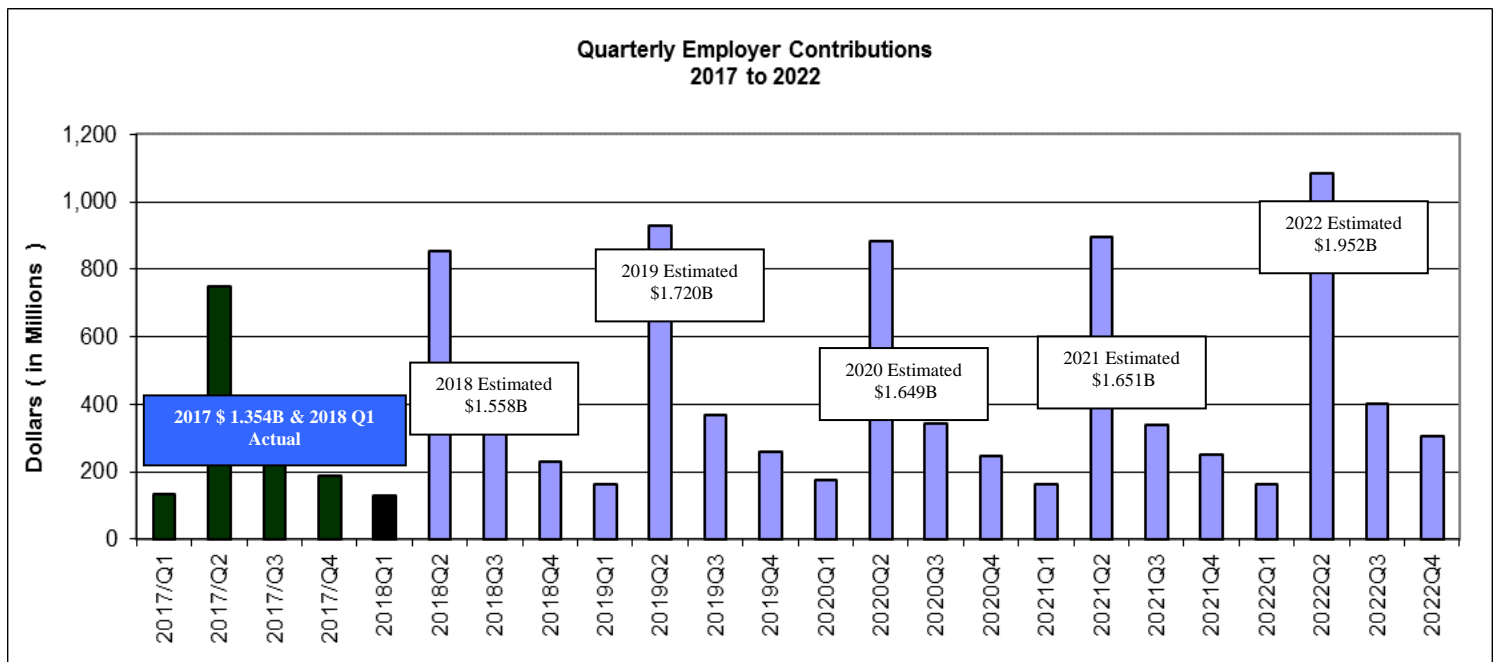
Rate schedule E was enacted for employer payrolls in 2019 generating \$1.720 billion in contributions, a small decrease of \$13 million from the previous estimate of \$1.733 billion due to lower taxable payroll.

Rate schedule E is projected to trigger for 2020 payrolls. Employer contributions projected at \$1.649 billion is a decrease of \$26 million from the previous estimate of \$1.675 billion caused by a projected decrease in taxable wages.

Tax rate schedule E is again projected to trigger for 2021 payrolls with an estimated employer contribution of \$1.651 billion, a decrease of \$33 million from the previous estimate of \$1.684 billion due, as in the previous years, to a reduction in taxable payrolls.

For 2022, tax rate schedule F is projected to trigger for employer payrolls generating \$1.952 billion in contributions, \$10 million more than the previous estimate due to a slight increase in 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)**

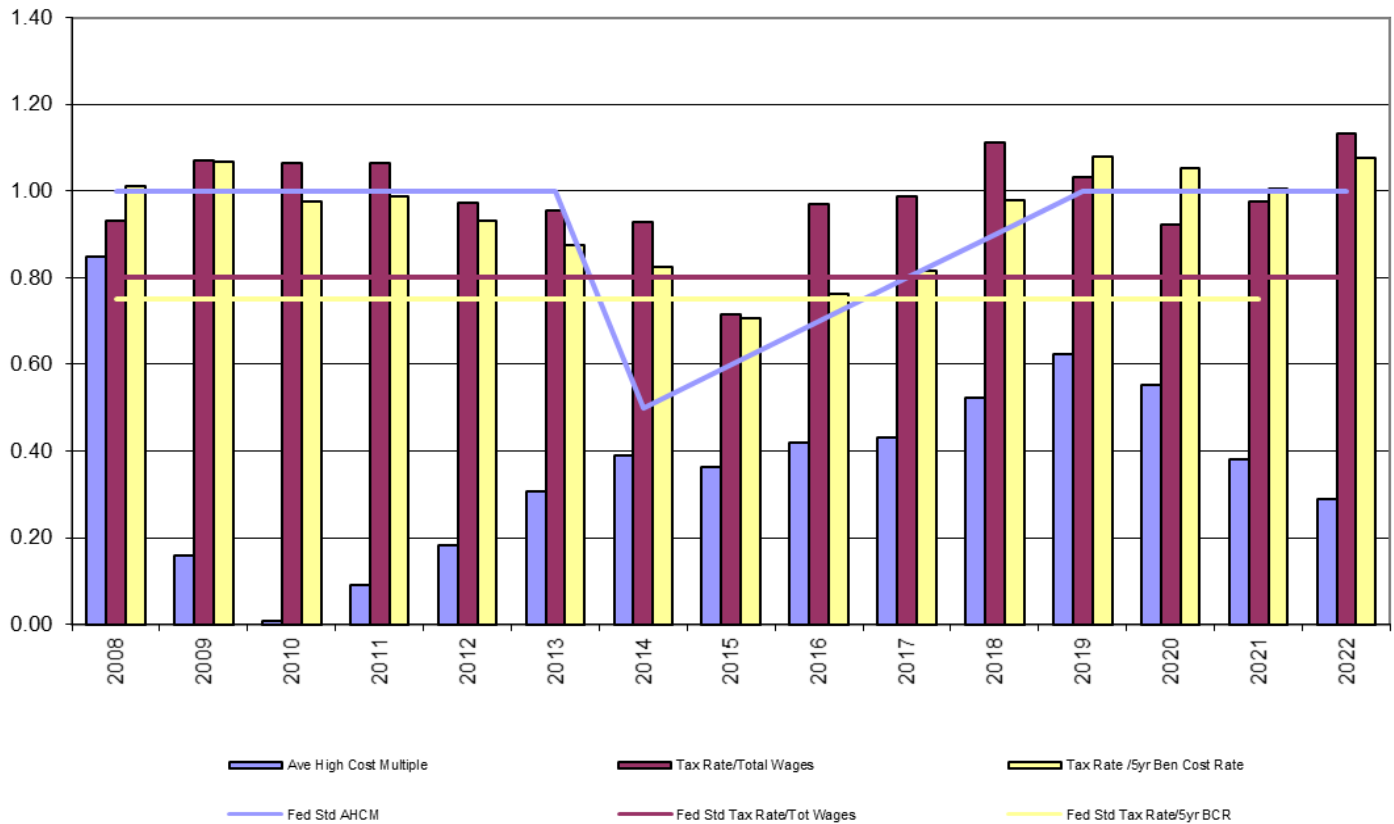


Table 2: Experience Rate Table

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	\$1,084	\$1,358	\$1,230	\$820
Income	\$1,354	\$1,558	\$1,720	\$1,649	\$1,651	\$1,952
Trust Fund Interest	\$20	\$21	\$29	\$32	\$26	\$18
Benefit Outlays	\$1,350	\$1,357	\$1,474	\$1,809	\$2,087	\$2,136
Federal Loan Interests						
Balance, December 31	\$861	\$1,084	\$1,358	\$1,230	\$820	\$654
Schedule*	"C"	"D"	"E"	"E"	"E"	"F"
Average Cost/Employee	\$497	\$569	\$623	\$597	\$596	\$700

* 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	\$192.8	\$205.5	\$213.1	\$218.9	\$228.7
Contributory Payroll (\$Billions)	\$43.4	\$43.7	\$44.3	\$44.8	\$45.3	\$46.3
Contributory Wage Proportion	23.1%	22.7%	21.6%	21.0%	20.7%	20.2%
Nominal Contribution Rate	3.2%	3.6%	3.9%	3.7%	3.7%	4.3%
Contributions as % of Total Payroll	0.72%	0.81%	0.84%	0.77%	0.75%	0.85%
Benefits as a % of Total Payroll	0.72%	0.70%	0.72%	0.85%	0.95%	0.93%
Trust Fund Balance as % of Total Payroll	0.46%	0.56%	0.66%	0.58%	0.37%	0.29%
Solvency Assessment	0.73%	0.76%	0.89%	1.05%	1.22%	1.26%
AHCM	0.27	0.33	0.38	0.34	0.22	0.17
Covered Employment (Thousands)	3,490	3,509	3,534	3,536	3,544	3,570
Total Unemployment Rate	3.7%	3.3%	3.2%	3.8%	4.5%	4.7%
Insured Unemployment Rate	1.9%	1.8%	1.9%	2.2%	2.5%	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.