



Unemployment Insurance Trust Fund Report

Outlook Report May 2020

HIGHLIGHTS

This Outlook Report provides the status of the Unemployment Insurance Trust Fund and updated projections for the 2020 through 2024 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, released in April 2020, used in these projections show significantly higher average annual unemployment rates for 2020 to 2024, as compared to the assumptions used in the February 2020 Outlook Report. Affected by the Covid-19 pandemic, the 2020 average annual unemployment rate increased from 2.9 percent to 6.3 percent followed by a 7.0 percent annual rate in 2021, which is three and seven tenths of a percentage point higher than the previous rate used. Total labor force decreased in 2020 to 2024 posting an average annual decrease of 69,951. The annual wage and salary growth rates are lower in 2020 and 2021 but higher in 2022 to 2024.

The outlook presented is for the regular UI program based on 2020 employer experience rates, and 2020 first quarter benefit payments and employer contributions through the first quarter of 2020.

The Covid-19 pandemic resulted in significant revisions to the 2020 projections. Employer contributions, based on rate schedule E and a \$15,000 taxable wage base, are projected at \$1.585 billion, \$153 million less than the previous estimate of \$1.738 billion. Estimated benefit payments of \$6.392 billion are \$5.121 billion higher than the previous estimate of \$1.271 billion first released in the February 2020 Outlook Report. The difference is due to the high volume of initial claims and weeks compensated as employers laid off workers due to shutdowns or furloughed employees to cope with the Covid-19 directives. As a result, the private contributory account year-end balance is now estimated at -\$3.194 billion.

On May 3, 2020, Massachusetts triggered on the federal/state Extended Benefit (EB) program due to the rapid increase in UI claims. EB costs will be federally funded for private contributory employers through week ending December 26, 2020.

Projections for 2021 through 2024 have also been affected by the Covid-19 pandemic.

With an insolvent trust fund, tax rate schedule G is projected to trigger for employer payrolls in 2021. Employer contributions for 2021 are projected to be \$2.151 billion, \$593 million higher than the previous estimate of \$1.558 billion on a lower rate schedule D. Benefit payments are projected to be \$5.127 billion, an increase of \$3.659 billion from the previous estimate. The projected 2021 year-end balance will be insolvent at -\$6.170 billion. Interest on federal advances will be incurred. Private contributory employer federal unemployment taxea will be increased due to negative year-end account balances in 2020 and 2021.

For 2022 rate schedule G is projected to trigger for employer contributions. With a \$15,000 taxable wage base, employer contributions are projected to be \$2.407 billion and benefit payments are estimated at \$2.849 billion. Year-end 2022 private contributory account balance will remain insolvent and projected at -\$6.613 billion.

Rate schedule G is projected to trigger for 2023 employer payrolls. Employer contributions are estimated at \$2.499 billion and benefit payments projected to be \$1.746 billion. Year-end 2023 private contributory account balance continues to be insolvent at -\$5.860 billion.

Employer payrolls are projected to remain on tax rate schedule G and generate \$2.420 billion in employer contributions in 2024. Benefit payments are projected at \$1.826 billion and a year-end balance still insolvent at -\$5.266 billion.

Based on the current economic assumptions and statutory provisions and the prolonged effects of the pandemic, advances from the federal unemployment account are anticipated throughout the 2020 to 2024 outlook period.

The Coronavirus Aid, Relief, and Economic Security Act (CARES Act) of 2020 waives interest on federal advances through December 31, 2020. Outstanding negative balances on or after January 1, 2021 will be interest bearing. Interest on advances cannot be paid from the trust fund but by additional surcharges on private contributory employers.

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 April 2020 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 2019 and February 2020 Outlook Reports are provided in Table 1.

The April 2020 Moody's Analytics Data Services Annual Wage and Salary Growth Rates forecasts for 2020 was revised down by eight and one-tenth of a percentage point from 4.0 percent down to -4.1 percent and the 2021 rate decreased from 2.9 percent to 0.8 percent. The rates for 2022 to 2024 were revised upwards.

The projected annual average total unemployment rates for 2020 to 2024 were all higher than the rates used in the

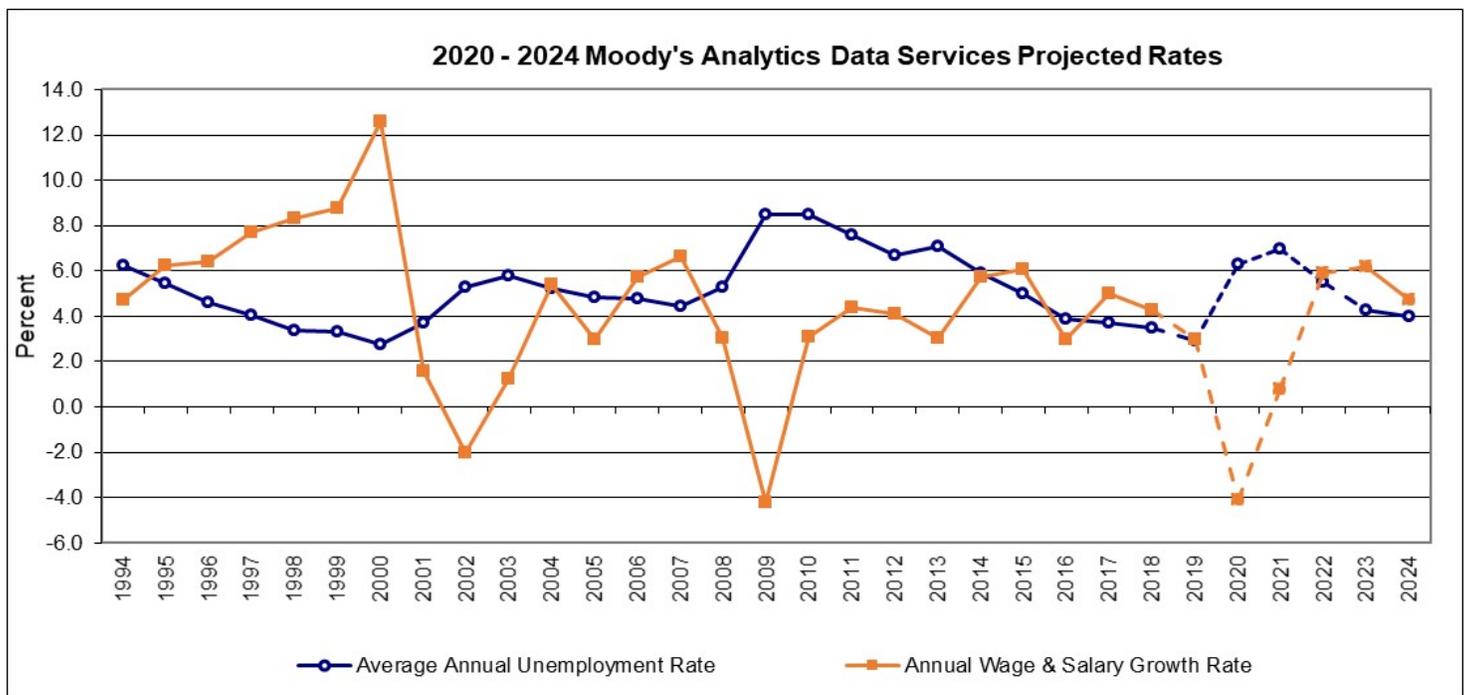
February 2020 Outlook Report. In 2020, the annual average unemployment rate showed an increase of three and four-tenths of a percentage point, from 2.9 percent to 6.3 percent followed by a rate of 7.0 percent, a three and seven-tenths percentage point increase from the previous rate used. The annual average unemployment rates for 2022 to 2024 were all revised up at 5.5 percent, 4.4 percent and 4.0 percent, respectively.

The annual labor force projections for 2020 to 2024 showed an average annual decrease of 69,951 or 1.8 percent from the Moody's Analytics Data Services projections released in January 2020. The 2020 labor force showed the smallest decrease of 56,191. The labor force is projected to be 3,836,968 in 2024.

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

	Wage & Salary Growth (%)			Total Unemployment Rate (%)			Labor Force		
	19-Sep	20-Jan	20-Apr	19-Sep	20-Jan	20-Apr	19-Sep	20-Jan	20-Apr
2020	4.4	4.0	-4.1	3.3	2.9	6.3	3,869,901	3,852,598	3,796,407
2021	2.4	2.9	0.8	3.7	3.3	7.0	3,881,134	3,860,770	3,800,730
2022	3.6	3.3	5.9	4.0	3.7	5.5	3,904,519	3,880,616	3,800,952
2023	3.8	3.6	6.2	4.0	3.9	4.3	3,924,159	3,896,972	3,813,678
2024	NA	3.7	4.8	NA	3.9	4.0	NA	3,907,533	3,836,968

Source: Moody's Analytics Data Services



UNEMPLOYMENT INSURANCE TRUST FUND BALANCE

As of April 30, 2020, the preliminary Massachusetts Unemployment Insurance Trust Fund ending balance was \$1.398 billion. The private contributory account balance was at \$1.257 billion and the governmental contributory account balance was \$141 million.

The increase in unemployment due to the Covid-19 pandemic results in an insolvent unemployment insurance private contributory account throughout the outlook period. As a result, Massachusetts will need to rely on advances from the federal unemployment insurance as early as mid-June 2020.

The 2020 year-end private contributory account balance is projected to be -\$3.194 billion. Increased job losses reduce employer contributions and a significant increase in benefit payments. Advances from the federal unemployment account will be needed as early as mid-June.

The year-end 2021 account balance is expected to be -\$6.170 billion. Projected employer contributions of 1.08 percent of total payroll are not sufficient to cover benefit payments estimated at 2.57 percent of total payroll. Advances from the federal unemployment will be required throughout the year. Private contributory employer's federal unemployment taxes will increase \$21 per employee due to outstanding advances at the end of 2020 and 2021 and not paid back by November 10, 2020. Interest on federal advances will also be required in the fall of 2021.

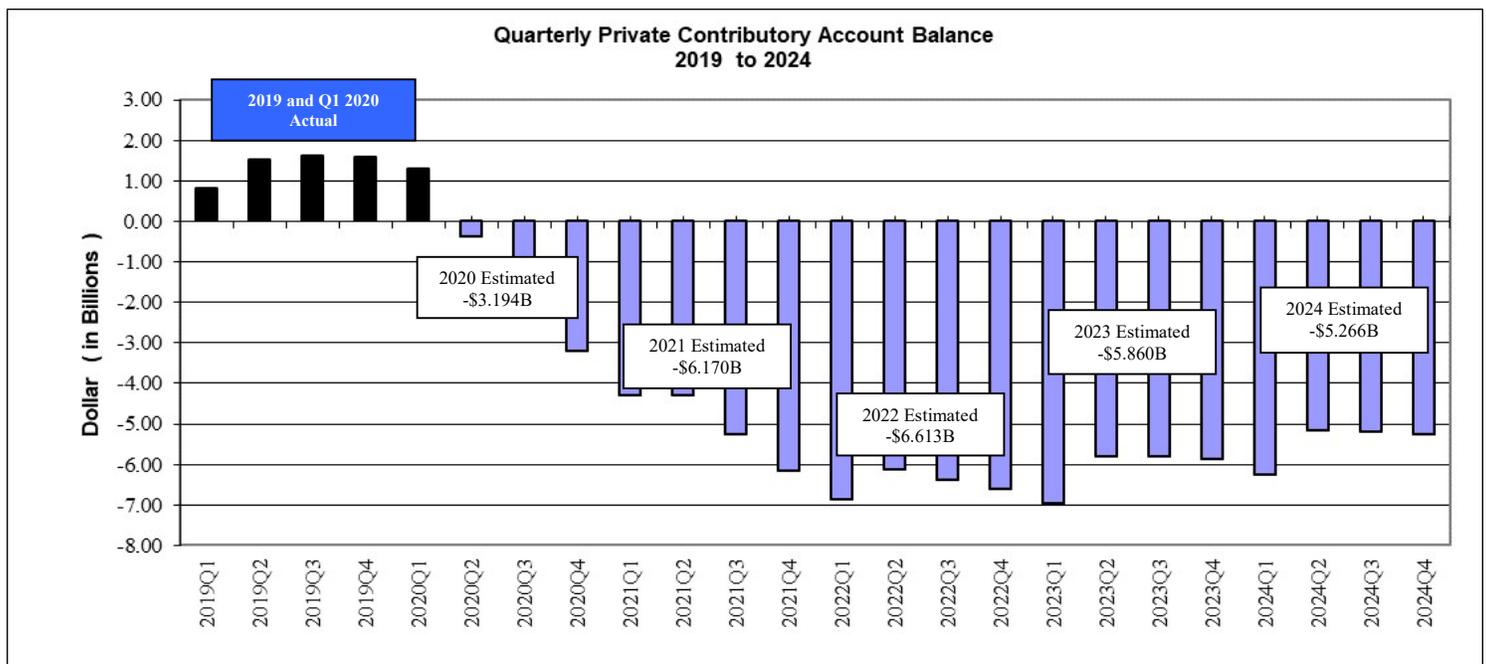
Current outlooks indicate the trust fund will remain insolvent with year-end 2022 private account balance

estimated at -\$6.613 billion as projected benefit payments continue to be higher than employer contributions.

Year-end 2023 private contributory account balance remains insolvent and is estimated to be -\$5.860 billion. A slow recovery from the prolonged effects of the pandemic as estimated employer contributions are now estimated to be higher than projected benefit payments. However, borrowing from the federal account will still be required throughout 2023.

The 2024 year-end private contributory account balance, still insolvent, is estimated at -\$5.266 billion. As in the previous year, projected employer contributions are expected to be higher than benefit payments. Loans will be needed throughout the year.

The chart below shows actual 2019 and first quarter 2020 and projected quarterly private UI Private Trust Fund balances through 2024.



BENEFIT OUTLAYS

The updated simulation for the outlook period shows increases in benefit payments as initial claims and continued weeks claimed remain high.

Preliminary benefit payments in April 2020 of \$895.6 million pushed the year-to-date payments total to \$1.374 billion, \$538 million or 155 percent more than the January to April 2019 benefit payments. Year-to-date initial claims at 816,599 and continued weeks claimed at 3,199,637 were up 723 percent and 161 percent over the same four months last year, respectively.

Benefit payments for 2020 are now estimated to be \$6.392 billion with initial claims and continued weeks expected to increase as establishments comply with federal and state directives due to the Covid-19 pandemic.

In March, the federal CARES Act of 2020 was enacted. The Act provides for new federally funded programs for relief for workers whose claims are related to the pandemic. The Act included, among other provisions, the Federal Pandemic Unemployment Compensation (FPUC) program, which provides an additional \$600 weekly benefit in addition to regular UI, PUA, PEUC and EB weekly benefits for each week claimed through July 21, 2020; Additional state benefit programs, TRA and RED, are excluded. The Pandemic Unemployment Assistance (PUA) program provides up to 39 weeks of benefits to individuals who were self-employed, gig workers, or not eligible for regular unemployment compensation; the Pandemic Emergency Unemployment Compensation (PEUC) provides up to 13 weeks of extended benefits to individuals who have exhausted or expired their regular unemployment compensation since July 2019 and are not eligible for regular UI. FPUC, PUA PEUC program costs

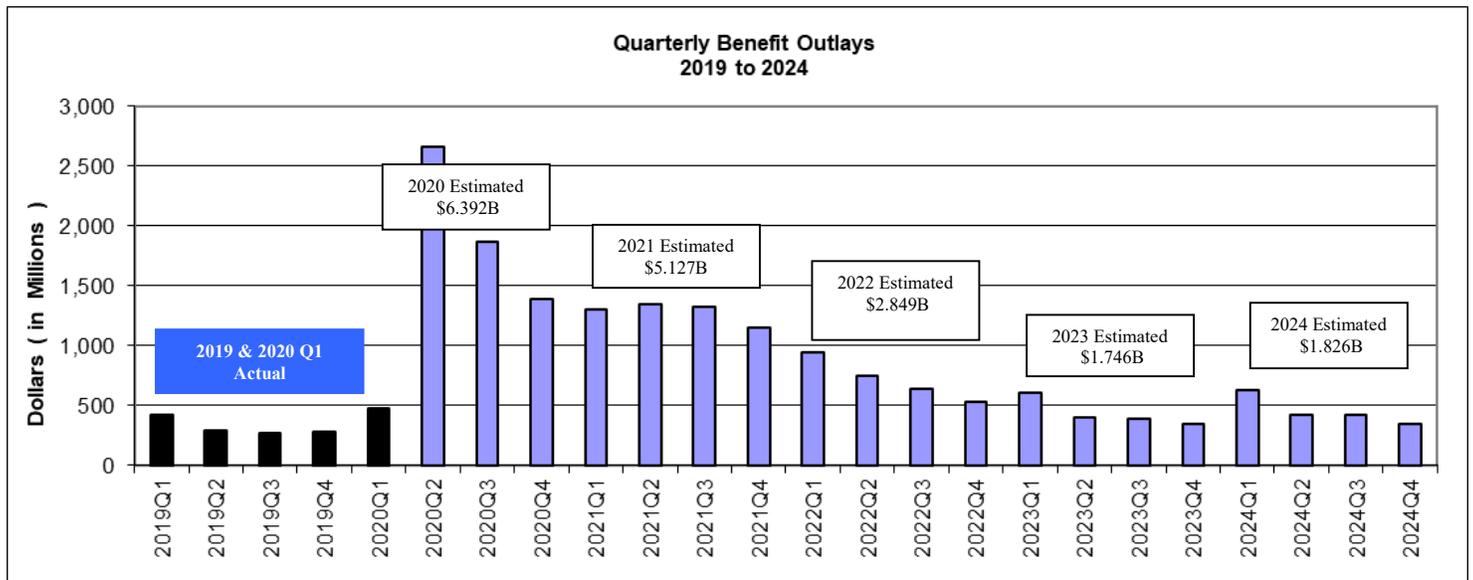
are federally funded through week ending December 26, 2020.

In 2021, benefit payments are projected to be \$5.127 billion as the surge in initial claims and continued weeks filings persists and establishments slowly recover from the effects of the pandemic.

For 2022, benefit payments are projected to be \$2.849 billion, a decrease of \$2.278 billion from the previous year. The slow path to recovery continues as the annual average unemployment and insured unemployment rates are lower than the 2021's rates. As a result, there are fewer number of insured unemployment and continued weeks compensated as compared to last year.

Benefit payments are projected to be \$1.746 billion in 2023, \$1.103 less than the previous year. As in the previous year, improvements in the annual average unemployment rate and insured unemployment rate generated decreases in weeks compensated and insured unemployment in relation to 2022.

In 2024, benefit payments are predicted to be \$1.826 billion, a small increase of \$80 million from payments projected in 2023 due primarily to a larger increase in the average weekly benefit amount.



EMPLOYER CONTRIBUTIONS

Updated 2020 projections for employer contributions decreased but increased in 2021 to 2024 due to the triggering of the highest tax rate schedule G.

Employer contributions through the month of April 2020 totaled \$1.020 billion, a decrease of \$39 million from the January to April 2019 contributions of \$1.059 billion as establishments, in compliance with federal and state directives caused by the Covid-19 pandemic, furloughed employees or temporarily shut down.

For 2020, employer contributions on rate schedule E and a \$15,000 taxable wage base, are estimated at \$1.585 billion, a decrease of \$153 million from the previous estimate of \$1.738 billion first released in the February 2020 Outlook Report.

Rate schedule G is projected to trigger for 2021 employer payrolls and generate \$2.151 billion in employer contributions. However, since projected employer contributions are just one-fourth of estimated benefit payments, loans from the federal UI account will be required throughout the year.

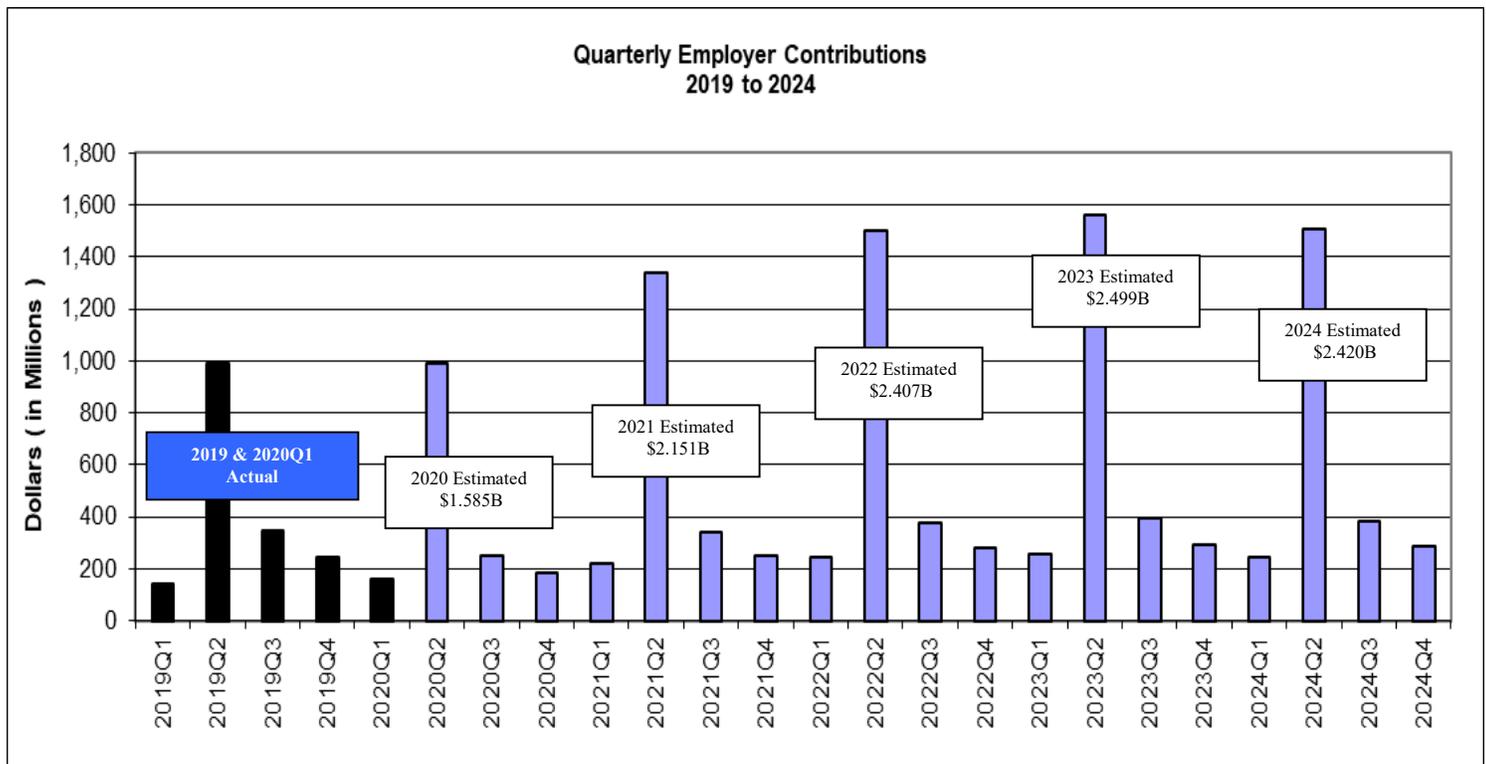
With an insolvent trust fund, 2022 employer contributions are expected to remain on rate schedule G. Employer contributions are projected to be \$2.407 billion. Federal borrowing will be needed throughout the year as projected

benefit payments are higher than the expected contributions.

For 2023, rate schedule G is still projected to trigger for employer payrolls generating \$2.499 billion in contributions. Although contributions are now projected to be higher than benefit payments, advances from the federal account will be necessary throughout the year.

Tax rate schedule G remains projected to trigger for 2024 employer payrolls and generate \$2.420 billion in employer contributions. Interest will be due annually on outstanding federal advances and federal unemployment taxes will increase to begin repayment of advances.

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 was phased in over five years from a multiple of 0.50 for 2014, 0.70 in 2016 and now at 1.0 for advances starting in 2019. For 2019, the AHCM must be met based on 2018 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. Massachusetts would have needed a trust fund balance of \$3.930 billion in 2019 to meet the AHCM solvency measure of 1.0.

Benefit costs are measured as a percent of the total UI wages, the total liability of the UI system, is the second

measure. 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).

As the chart below shows, Massachusetts will not meet the federal AHCM standard making all federal advances subject to federal interest.

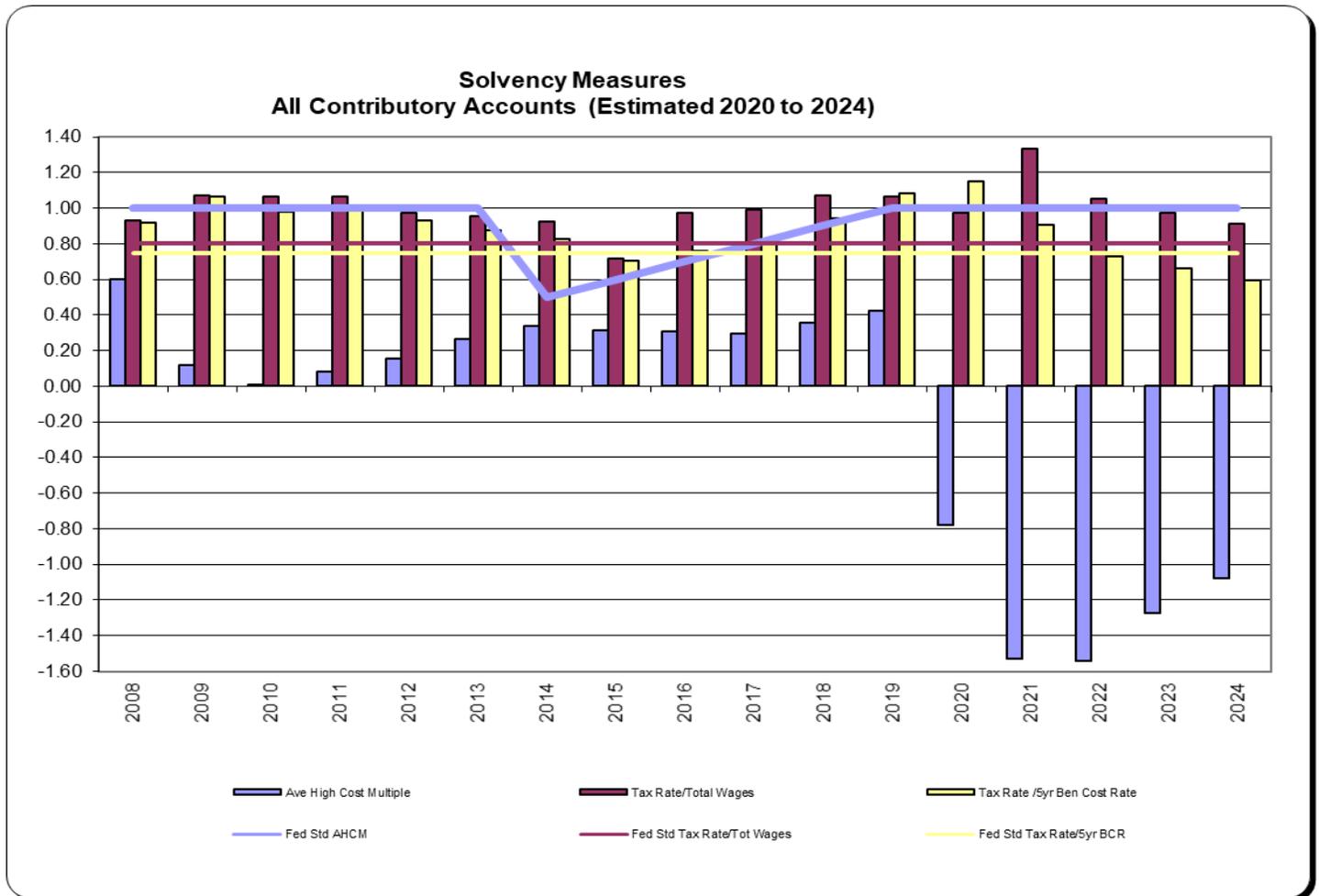


Table 2: Experience Rate Table

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 2020 through 2024 are displayed in Tables 3 and 4, below.

Table 3: Unemployment Trust Fund Projections for the Private Contributory Account, 2020 - 2024

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

	2019	2020	2021	2022	2023	2024
Balance, January 1	\$1,101	\$1,602	-\$3,194	-\$6,170	-\$6,613	-\$5,860
Income	\$1,724	\$1,585	\$2,151	\$2,407	\$2,499	\$2,420
Trust Fund Interest	\$34	\$11				
Benefit Outlays	\$1,257	\$6,392	\$5,127	\$2,849	\$1,746	\$1,826
Federal Loan Interests						
Balance, December 31	\$1,602	-\$3,194	-\$6,170	-\$6,613	-\$5,860	-\$5,266
Schedule*	"E"	"E"	"G"	"G"	"G"	"G"
Average Cost/Employee	\$617	\$562	\$759	\$880	\$922	\$890

* 2019 rate schedules set by Legislation, 2020 to 2024 rate schedule projected based on current statutory triggers, calculated with the previous three years average total wages. Taxable Wage Base of \$15,000.
 Source: Massachusetts Department of Unemployment Assistance UNIS-X model

Figures may not add up due to rounding.

Table 4: Benefit Financing Simulation Output

	2019	2020	2021	2022	2023	2024
Total Covered Payroll (\$Billions)	\$209.2	\$197.8	\$199.8	\$212.5	\$226.7	\$240.4
Contributory Payroll (\$Billions)	\$45.6	\$45.2	\$45.6	\$46.1	\$48.3	\$49.5
Contributory Wage Proportion	21.8%	22.9%	22.8%	21.7%	21.3%	20.6%
Nominal Contribution Rate	3.8%	4.3%	5.4%	5.4%	5.4%	5.1%
Contributions as % of Total Payroll	0.82%	0.80%	1.08%	1.13%	1.10%	1.01%
Benefits as a % of Total Payroll	0.60%	3.23%	2.57%	1.34%	0.77%	0.76%
Trust Fund Balance as % of Total Payroll	0.77%	-1.61%	-3.09%	-3.11%	-2.58%	-2.19%
Solvency Assessment	0.69%	0.58%	6.59%	6.96%	5.86%	5.27%
AHCM	0.40	-0.84	-1.60	-1.61	-1.34	-1.13
Covered Employment (Thousands)	3,579	3,614	3,627	3,646	3,661	3,676
Total Unemployment Rate	2.9%	6.3%	7.0%	5.5%	4.3%	4.0%
Insured Unemployment Rate	1.6%	5.2%	5.4%	4.2%	3.0%	2.7%

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

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.