

Unemployment Insurance Trust Fund Report

Outlook Report February 2017

HIGHLIGHTS

This Outlook Report provides the current status and updated projections of the Unemployment Insurance Trust Fund for the 2017 through 2021 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 current status of the Trust Fund.

New economic assumptions from Moody's economy.com used in this projections show lower average annual unemployment rates in the outlook period for all years as compared to the assumptions used in the October 2016 Outlook Report. For 2017, the average annual unemployment rate improved from 4.3 percent to 3.3 percent followed by an estimated 3.7 percent annual rate in 2018 which is six-tenths of a percentage point lower than the rate used in October. Total labor force is lower in 2017 to 2020 with an average annual decrease of 15,691. The annual wage and salary growth rates are higher in 2018 to 2020 but steady in 2017.

The outlook presented is for the regular UI program based on 2017 employer experience rates and 2016 benefit payments and employer contributions.

Estimates for the private contributory account for 2017 are based on tax rate schedule C and \$15,000 wage base enacted in June 2014.

The revised 2017 year-end projections indicate employer contributions, based on rate schedule C and a \$15,000 taxable wage base, will be \$1.363 billion or \$129 million more than the previous estimate of \$1.234 billion. This is due to an estimated increase in the average contribution rate and covered employment. Estimated benefit payments of \$1.315 billion are \$115 million lower than the previous estimate of \$1.430 billion first released in the October 2016 Outlook Report. The difference was due to a percentage point improvement in the annual average unemployment rate from 4.3 percent to 3.3 percent generating fewer insured unemployment and weeks compensated. As a result, the private contributory account year-end balance estimated at \$906 million is \$249 million higher than the previous estimate of \$657 million released in the January 2017 Outlook Report. However, the projected 2017 ending balance of \$906

million is just \$70 million more than last year's ending balance of \$836 million.

In 2018 tax rate schedule E is projected to trigger for employer contributions and with a \$15,000 wage base generate employer contributions estimated at \$1.671 billion. Employer contributions are \$136 million less than the previous estimate of \$1.807 billion on a higher tax schedule. Benefit payments are projected at \$1.591 billion. The 2018 year-end private contributory account balance is estimated at \$1.010 billion, \$38 million more than the balance of \$972 million released in January.

Tax rate schedule E is again projected to trigger for 2019 employer payrolls and also on a \$15,000 taxable wage base. Employer contributions are projected to be \$1.646 billion and benefit payments estimated at \$1.700 billion. The year-end private contributory account balance is projected at \$981 million.

Similarly, for 2020 tax rate schedule E is projected to trigger for employer contributions. With a \$15,000 taxable wage base, employer contributions are projected to be \$1.642 billion and benefit payments estimated at \$1.874 billion. Year-end 2020 private contributory account balance is projected at \$770 million.

Tax rate schedule F is projected to trigger for 2021 employer payrolls. Employer contributions are projected at \$1.853 billion with benefit payments estimated at \$2.018 billion and a year-end balance at \$621 million.

Based on the current economic assumptions and statutory provisions, no borrowing from the federal unemployment account is anticipated in 2017 through 2021.

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 Economy.com January 2017 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 August and October 2016 Outlook Trust Fund Reports are provided in Table 1.

The January 2017 Moody's Economy.com Annual Wage and Salary Growth Rate forecast for 2017 remained steady at 4.6 percent while the rates for 2018 to 2020 were all revised upwards. The 2018 wage and salary growth rate was revised up to 6.1 percent from 6.0 percent, 2019 rate from 6.0 percent to 6.5 percent and the 2020 rate increased from 4.1 percent to 5.1 percent.

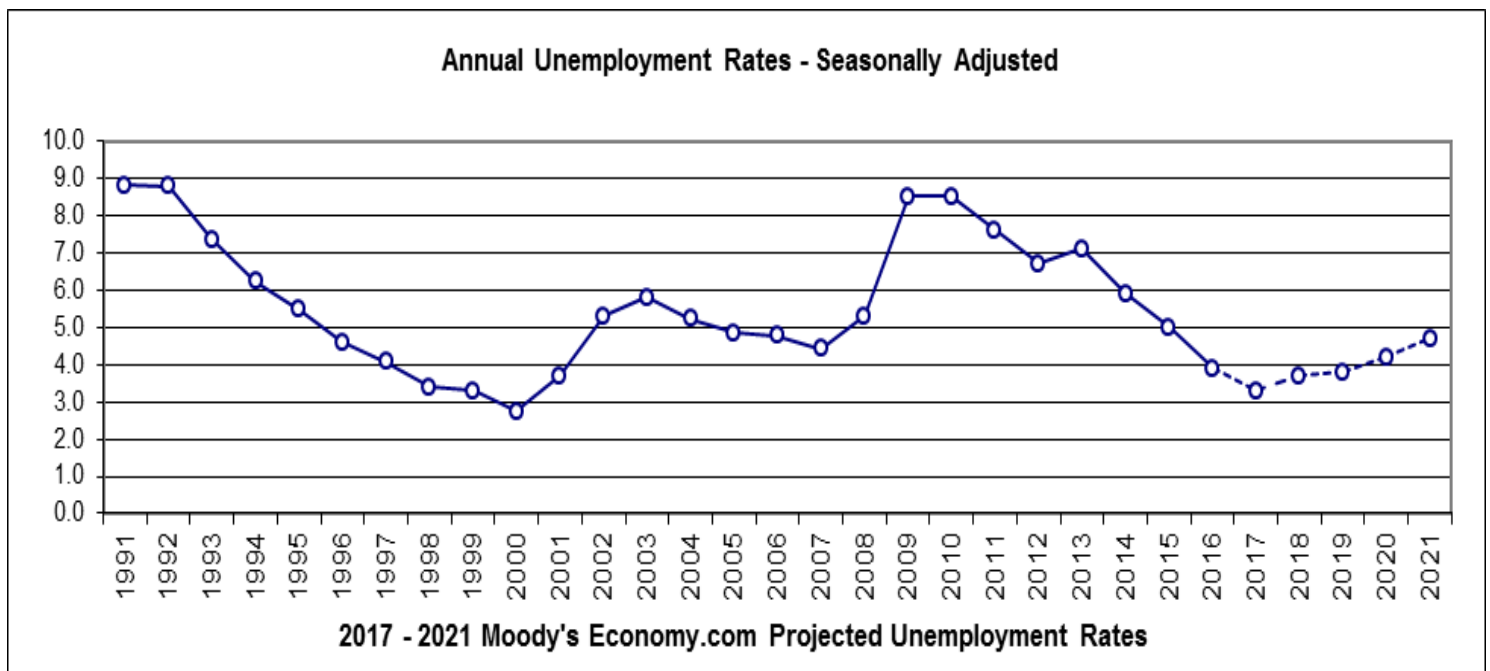
The projected annual average total unemployment rates for 2017 to 2020 showed significant improvements from the rates used in the October Outlook Report. A decrease of one percentage point revision was made in 2017, from 4.3 percent to 3.3 percent, followed by six-tenths of a percentage point reduction in 2018, from 4.3 percent to 3.7 percent. The annual average unemployment rates for 2019 and 2020 improved by five-tenths and three-tenths of a percentage point, respectively.

The annual labor force projections for 2017 to 2020 showed an average annual decrease of 15,691 from the Moody's economy.com projections released in September. The 2017 labor force showed the largest decline of 17,885. The labor force is projected to be 3,720,291 in 2021.

Table 1: Moody's Economy.com Forecasts, Three Most Recent Reports

	Wage & Salary Growth (%)			Total Unemployment Rate (%)			Labor Force		
	16-Jul	16-Sep	17-Jan	16-Jul	16-Sep	17-Jan	16-Jul	16-Sep	17-Jan
2017	4.7	4.6	4.6	4.2	4.3	3.3	3,649,434	3,648,146	3,630,261
2018	6.4	6.0	6.1	4.2	4.3	3.7	3,676,784	3,684,926	3,671,067
2019	5.6	6.0	6.5	4.3	4.3	3.8	3,697,521	3,712,920	3,698,770
2020	3.7	4.1	5.1	4.5	4.5	4.2	3,713,064	3,729,045	3,712,174
2021	NA	NA	3.4	NA	NA	4.7	NA	NA	3,720,291

Source: Moody's Economy.com



UNEMPLOYMENT INSURANCE TRUST FUND BALANCE

As of January 31, 2017, the preliminary Massachusetts Unemployment Insurance Trust Fund ending balance was \$913 million. The preliminary private contributory account balance was at \$798 million and the preliminary governmental contributory account balance was \$115 million. The private contributory account balance is \$11 million less than projected due to higher than expected benefit payments. In January 2017, initial claims and continued weeks claimed were up 3.7 percent and 1.5 percent, respectively while the average weekly benefit amount was \$32.13 more than in January 2016.

The private contributory account is projected to have a balance of \$906 million at the end 2017, a reserve of \$1.010 billion in 2018 and a projected balance of \$981 million by the end of 2019.

The 2017 year-end private contributory account balance of \$906 million is \$249 million higher than the previous estimate of \$657 million published in the January 2017 Outlook Report. The difference in the year-end balance is the result of a projected increase in contributions due to a larger estimated average contribution rate. In addition, caused by a percentage point improvement in the annual average unemployment rate, insured unemployment and weeks compensated are projected to be lower resulting in a decrease in benefit payments. Year-end reserves as a percent of total wages are expected to be at 0.49 percent.

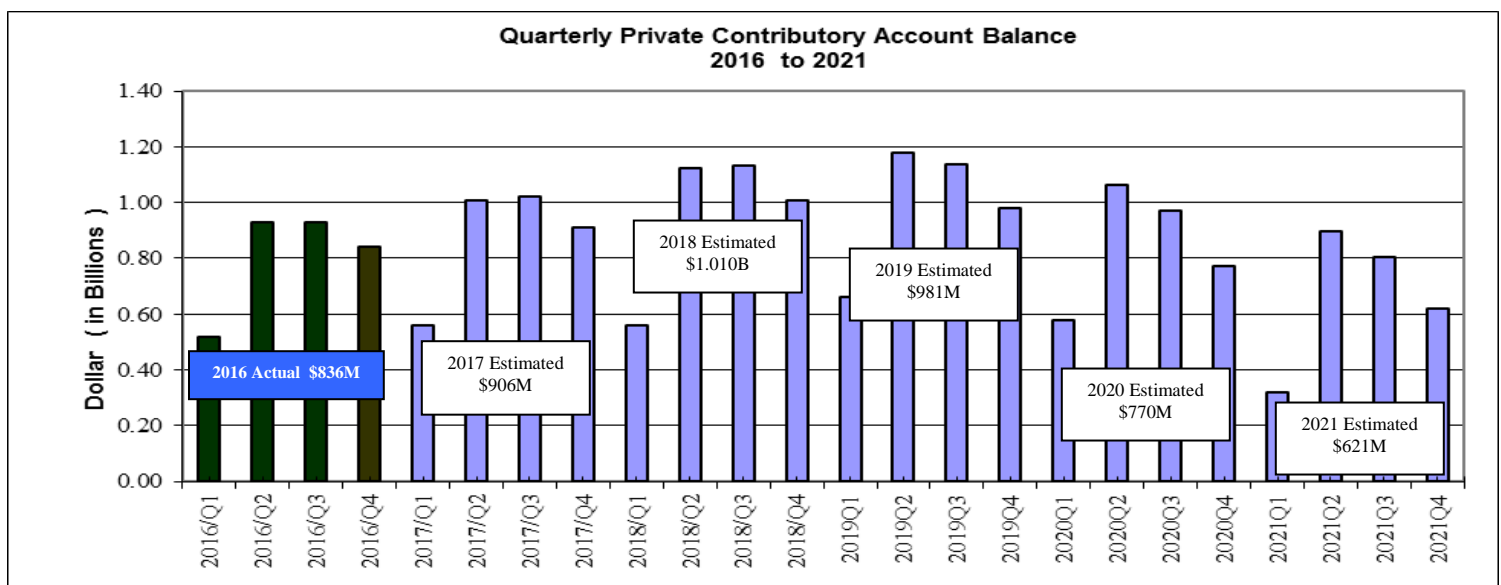
The year-end 2018 account balance is expected to be \$1.010 billion, a \$38 million increase from the previous estimate of \$972 million. The difference is a carryover of the higher 2017 year-end balance despite a projected decrease in employer contributions caused by the triggering of the lower tax schedule E instead of schedule F.

The year-end 2019 account balance is expected to be \$981 million; \$259 million lower than the previous estimate of \$1.240 billion. As in the previous year, a lower tax schedule E triggered for employer payrolls generating \$1.646 billion in employer contributions, \$159 million less than the previous estimate on a higher tax schedule F. Further, despite a decrease in the annual average unemployment rate, benefit payments are projected at \$1.700 billion, \$136 million more due to significantly higher estimated average weekly benefit amounts in 2019.

The year-end 2020 account balance is estimated at \$770 million, a \$396 million decrease from the January released balance of \$1.166 billion. The difference is a carryover from the previous year's lower ending balance coupled with projected increase in benefit payments caused by estimated increases in the average weekly benefit amounts.

The 2021 year-end private contributory account balance is projected at \$621 million. Employer contributions are estimated at \$1.853 billion and benefit payments at \$2.018 billion.

It is anticipated that no borrowing from the federal unemployment account will be required in the outlook period. The chart below shows the 2016 actual and projected quarterly private UI Fund balance through 2021.



BENEFIT OUTLAYS

The updated simulation for the outlook period resulted in a decrease in benefit payments in 2017 but increases in 2018 to 2020.

Benefit payments in January 2017 totaled \$153.5 million, a \$26.7 million increase from the January 2016 payment of \$126.8 million. The January benefit payments were \$8.9 million higher than the projection of \$144.6 million.

Initial claims in January 2017 were 3.7 percent higher than last year’s January total and weeks claimed were 1.5 percent more. The average weekly benefit amount of \$485.87 was \$32.13 more than the \$453.74 amount in January 2016. The average duration of a claim was 17.5 weeks.

Benefit payments for 2017 are now estimated to be \$1.315 billion, \$115 million less than the previous estimate of \$1.430 billion first released in the October 2016 Outlook Report. The difference is due to a projected decrease in total weeks claimed and insured unemployment caused by a percentage point decrease in the annual average unemployment rate.

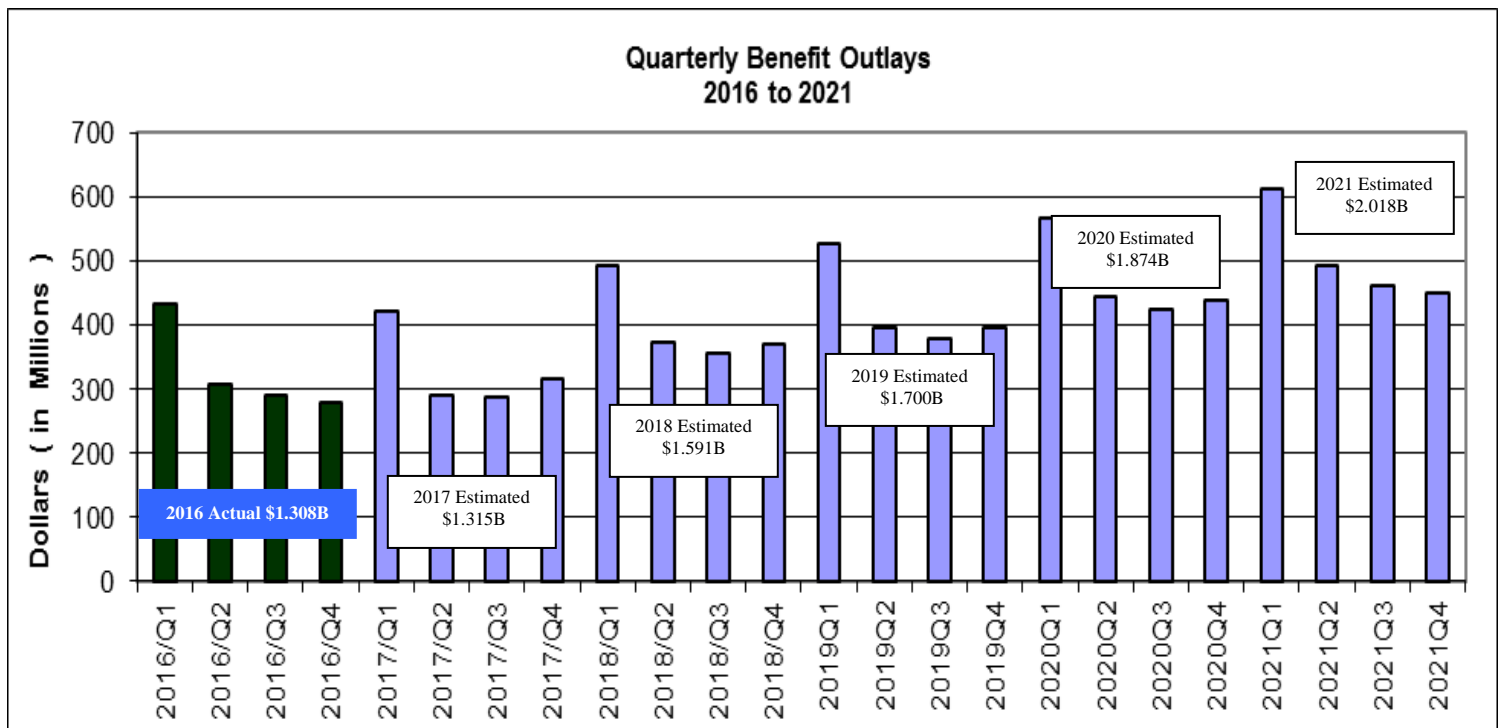
In 2018, benefit payments are projected to be \$1.591 billion, an increase of \$80 million from the previous estimate of \$1.511 billion despite a decrease in the annual average unemployment rate from the rate used in October. The increase was the result of considerably higher projected average weekly benefit amounts. The annual average unemployment rate for 2018, at 3.7 percent,

however, is four-tenths of a percentage point higher than the projected 2017 rate.

For 2019, benefit payments are projected to be \$1.700 billion or \$136 million more than the previous estimate of \$1.564 billion. As in the previous year, the revision was caused by a projected sizable increase in the average weekly benefit amounts.

For 2020, benefit payments are now projected to be \$1.874 billion, \$213 million higher than the previous estimate of \$1.661 billion. As in the previous years, the projected average weekly benefit amounts are significantly higher than those released in the October Outlook Report. In addition, total weeks compensated is expected to be higher.

In 2021, benefit payments are expected to be \$2.018 billion, as the annual average unemployment rate is projected to be five-tenths of a percentage point higher than 2020 rate.



EMPLOYER CONTRIBUTIONS

Updated projections for employer contributions showed an increase in 2017 but decreases in 2018 and 2019 caused by triggering of a lower tax schedule due to the three year averaging of wages in determining employer experience rates.

Employer contributions in January 2017 totaled \$115.6 million, a decrease of \$72.6 million from the January 2016 contributions of \$43.1 million. The January 2016 lower employer contributions was caused by the January 31 due date falling on a Sunday as shares of collections were credited in February. Employer contributions in January were \$1.8 million lower than the projection.

For 2017 employer contributions on rate schedule C and a \$15,000 taxable wage base are estimated at \$1.363 billion, a \$129 million increase from the previous estimate of \$1.234 billion. The increase was due to a projected increase in the average contribution rate.

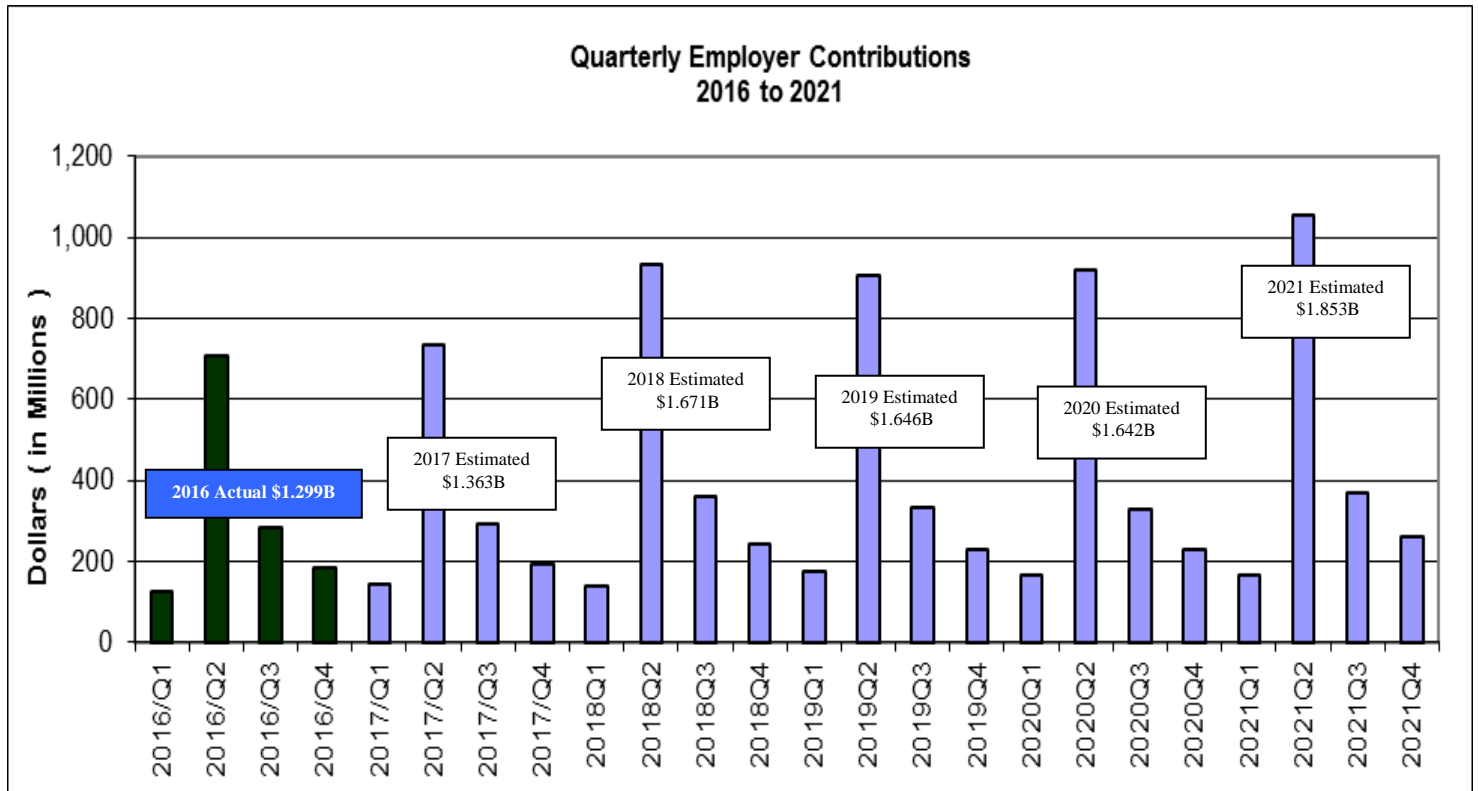
For 2018, tax rate schedule E is projected to trigger for employer contributions due to the implementation of a three year averaging of wages, generating an estimated \$1.671 billion in contributions, a decrease of \$136 million from the previous estimate of \$1.807 billion on tax rate schedule F.

As in 2018, rate schedule E is projected to trigger for 2019 employer payrolls generating \$1.646 billion in contributions, \$159 million less than the \$1.805 million, on tax schedule F, projection first released in the October 2016 Outlook Report.

Tax rate schedule E is again projected to trigger for 2020 payrolls with an estimated employer contributions of \$1.642 billion, an increase of \$84 million from the previous estimate due to an increase in the average contribution rate.

For 2021, tax rate schedule F is projected to trigger for employer payrolls generating \$1.853 billion in contributions.

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 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 2017 the AHCM must be met based on 2016 performance.

The Average High Cost Multiple (AHCM) is computed 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. For Massachusetts the measures are done for the overall trust fund and include both 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 new federal regulations, 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 2017 through 2021, Massachusetts will not meet the federal standard for AHCM and therefore be subject to federal interest for all loans.

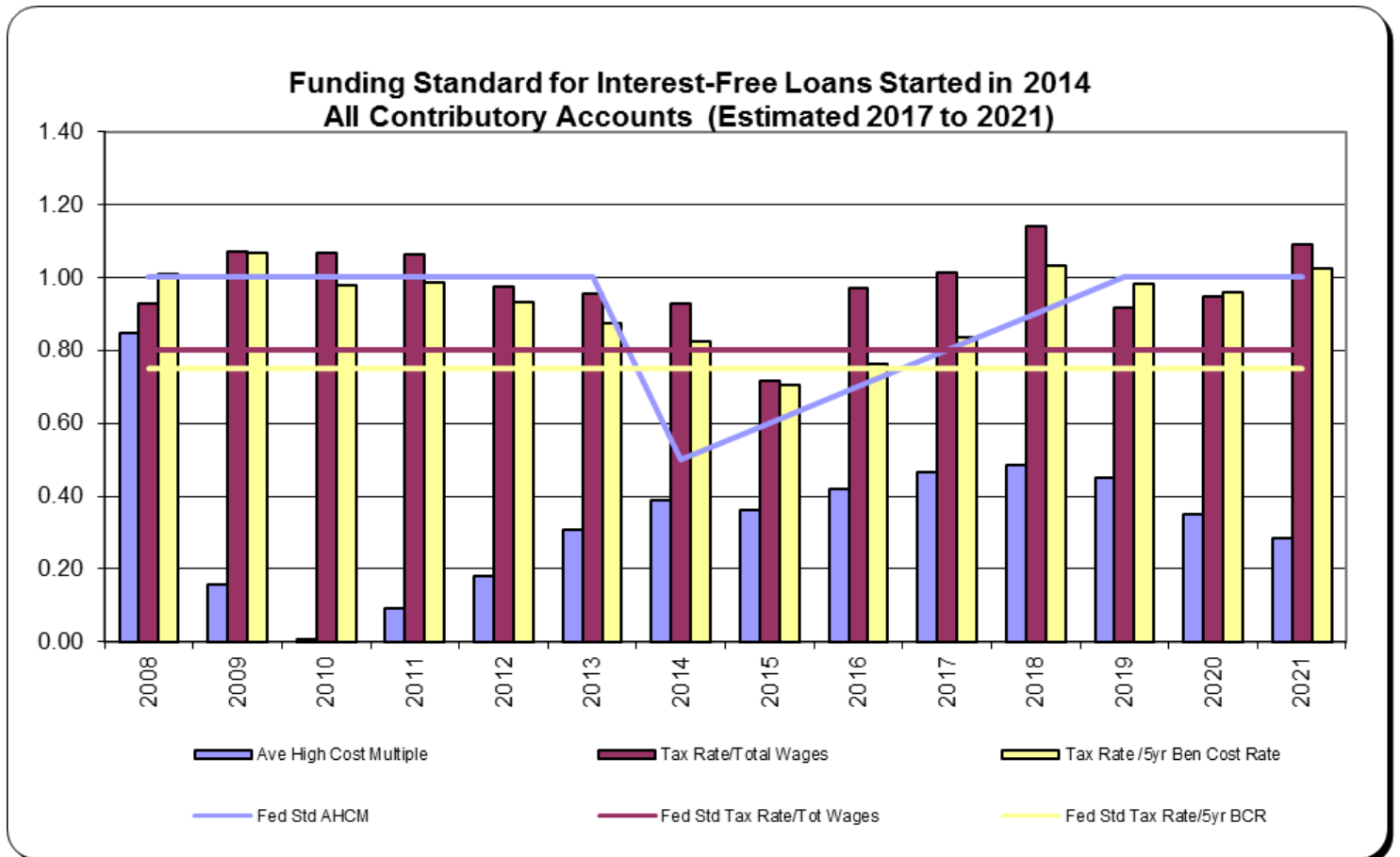


Table 2: Experience Rate Table

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 2017 through 2021 are displayed in Tables 3 and 4, below.

Table 3: Unemployment Trust Fund Projections for the Private Contributory Account, 2017 - 2021

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

	2016	2017	2018	2019	2020	2021
Balance, January 1	\$827	\$836	\$906	\$1,010	\$981	\$770
Income	\$1,299	\$1,363	\$1,671	\$1,646	\$1,642	\$1,853
Trust Fund Interest	\$19	\$22	\$23	\$24	\$21	\$16
Benefit Outlays	\$1,308	\$1,315	\$1,591	\$1,700	\$1,874	\$2,018
Federal Loan Interests						
Balance, December 31	\$836	\$906	\$1,010	\$981	\$770	\$621
Schedule*	"C"	"C"	"E"	"E"	"E"	"F"
Average Cost/Employee	\$485	\$508	\$617	\$604	\$601	\$677

* 2016 to 2017 rate schedules set by Legislation, 2018 to 2021 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

	2016	2017	2018	2019	2020	2021
Total Covered Payroll (\$Billions)	\$177.1	\$183.4	\$196.2	\$210.6	\$221.8	\$229.6
Contributory Payroll (\$Billions)	\$42.5	\$42.5	\$43.0	\$43.6	\$43.9	\$44.0
Contributory Wage Proportion	24.0%	23.2%	21.9%	20.7%	19.8%	19.2%
Nominal Contribution Rate	3.1%	3.2%	4.0%	3.8%	3.7%	4.3%
Contributions as % of Total Payroll	0.73%	0.74%	0.85%	0.78%	0.74%	0.81%
Benefits as a % of Total Payroll	0.74%	0.72%	0.81%	0.81%	0.85%	0.88%
Trust Fund Balance as % of Total Payroll	0.47%	0.49%	0.51%	0.47%	0.35%	0.27%
Solvency Assessment	0.81%	0.73%	1.00%	1.06%	1.15%	1.27%
AHCM	0.27	0.29	0.30	0.27	0.20	0.16
Covered Employment (Thousands)	3,430	3,439	3,468	3,492	3,500	3,503
Total Unemployment Rate	3.9%	3.3%	3.7%	3.8%	4.2%	4.7%
Insured Unemployment Rate	2.0%	1.9%	2.3%	2.3%	2.4%	2.6%

Source: Economic assumptions are based on Moody's Economy.com 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.