

Unemployment Insurance Trust Fund Report

Outlook Report August 2016

HIGHLIGHTS

This Outlook Report provides the current status and updated projections of the Unemployment Insurance Trust Fund for the 2016 through 2020 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 these projections show lower average annual unemployment rates in 2016 to 2020 as compared to the assumptions used in the May 2016 Outlook Report. For 2016, the average annual unemployment rate improved from 4.5 percent to 4.3 percent followed by an estimated 4.2 percent annual rate in 2017, both two-tenths of a percentage point lower than the rate used in the May Outlook Report. Total labor force is expected to be larger in all the outlook years with an average annual growth of 9,776. The annual wage and salary growth rates are higher except in 2017.

The outlook presented is for the regular UI program based on 2016 employer experience rates and benefit payments and employer contributions through the end of the second quarter 2016.

Estimates for the private contributory account are based on current law experience rate table and \$15,000 wage base. The private contributory employer contributions for 2015 through 2017 payrolls are on rate schedule C.

The revised 2016 year-end projections indicate employer contributions, based on rate schedule C and a \$15,000 taxable wage base, will be \$1.322 billion or \$12 million more than the previous estimate of \$1.310 billion. This is due to a projected increase in taxable payroll. Estimated benefit payments of \$1.329 billion are \$30 million lower than the previous estimate of \$1.359 billion first released in the May 2016 Outlook Report. As a result of slightly higher contributions, federal interest earned and lower benefit payments, the private contributory account year-end balance estimate of \$840 million is \$42 million higher than the previous estimate of \$798 million.

Employer contributions for 2017 payrolls on rate schedule C are expected to be \$1.230 billion. At 0.64 percent of

total payroll, contributions are at the lowest share of payroll and one tenth of percentage point below benefits as a percent of payroll. Benefit payments are projected to be \$1.407 billion. A year-end balance of \$681 million is \$72 million more than the published estimate of \$609 million released in the May through July 2016 Outlook Reports.

In 2018 tax rate schedule F is projected to trigger for employer contributions generating an estimated at \$1.797 billion. Employer contribution rates for 2018 that will be based on three year average taxable wages will likely be lower than the simulation estimates which are based on most recent payrolls. Benefit payments are projected at \$1.493 billion. The 2018 year-end private contributory account balance estimate of \$1.006 billion is \$91 million higher than the balance of \$915 million first released in May. The year-end balance is 0.35 percent of total payroll the lowest reserves since 2012.

Tax rate schedule F is also projected to trigger for 2019 employer payrolls. Employer contributions are projected to be \$1.786 billion and benefit payments estimated at \$1.584 billion. The year-end private contributory account balance is projected at \$1.236 billion.

With employer payrolls on rate schedule E for 2020, contributions are estimated at \$1.542 billion and benefit payments projected at \$1.675 billion. The 2020 year-end private contributory balance is estimated at \$1.132 billion.

Based on the current economic assumptions and statutory provisions, no borrowing from the federal unemployment account is anticipated in 2016 through 2020.

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 July 2016 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 2016 Outlook Trust Fund Reports are provided in Table 1.

The July 2016 Moody's Economy.com Annual Wage and Salary Growth Rate forecast for 2016 to 2020 were all revised upwards except for 2017. The 2016 wage and salary growth rate was increased from 3.7 percent to 5.3 percent and the 2017 rate reduced slightly from 4.8 percent to 4.7 percent.

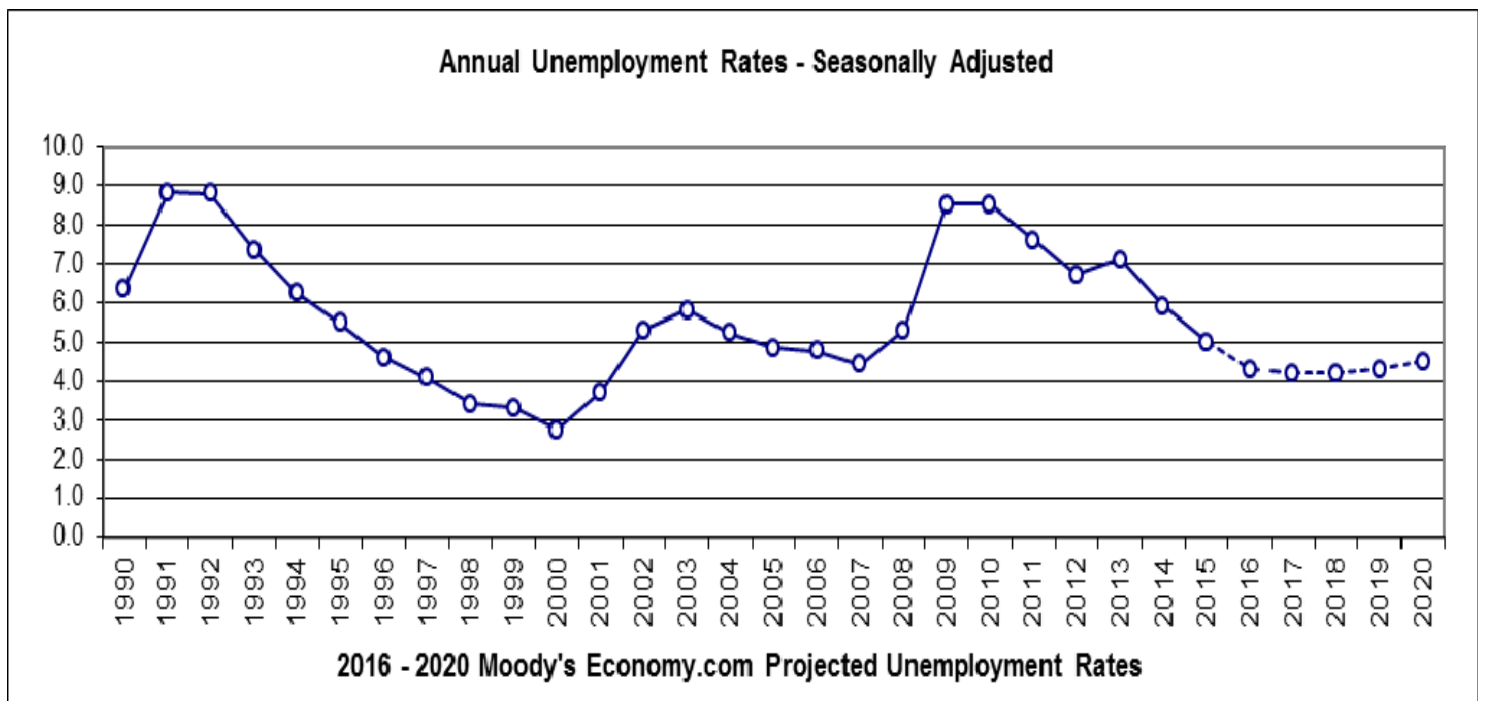
The projected annual average total unemployment rates for 2016 to 2020 all showed improvements from the forecasts used in May. A decrease of two-tenths of a percentage point were made in 2016 to 2019 and a three-tenths of a percentage point improvement in 2020.

The July Moody's Economy.com annual labor force projections for 2016 to 2020 showed an average annual increase of 9,776 from the Moody's economy.com projections released in April. The 2020 labor force showed the smallest growth of 7,069 and projected to be 3,713,064.

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

	Wage & Salary Growth (%)			Total Unemployment Rate (%)			Labor Force		
	16-Jan	16-Apr	16-Jul	16-Jan	16-Apr	16-Jul	16-Jan	16-Apr	16-Jul
2016	4.8	3.7	5.3	4.7	4.5	4.3	3,597,889	3,595,682	3,604,598
2017	5.1	4.8	4.7	4.6	4.4	4.2	3,640,585	3,637,129	3,649,434
2018	6.3	6.3	6.4	4.7	4.4	4.2	3,672,751	3,665,524	3,676,784
2019	5.4	5.3	5.6	4.6	4.5	4.3	3,697,339	3,688,189	3,697,521
2020	3.9	3.6	3.7	4.8	4.8	4.5	3,716,592	3,705,995	3,713,064

Source: Moody's Economy.com



UNEMPLOYMENT INSURANCE TRUST FUND BALANCE

As of July 31, 2016 the preliminary Massachusetts Unemployment Insurance Trust Fund ending balance was \$1.043 billion. This balance is the sum of the private contributory account balance of \$931 million and the governmental contributory account balance of \$112 million. The preliminary private contributory account is \$30 million less than projected due to lower than expected employer contributions in the month of July. With the July 31 quarterly contribution due date falling on a Sunday, a share of employer contributions will be received in the month of August rather than July.

The private contributory account is projected to have a balance of \$840 million at the end 2016, a reserve of \$681 million in 2017 and a projected balance of \$1.006 billion by the end of 2018.

The 2016 year-end private contributory account balance of \$840 million is \$42 million higher than the previous estimate of \$798 million published in the May through July 2016 Outlook Reports. The difference in the year-end balance is the result of a projected increase in contributions due to slightly larger estimated taxable payrolls coupled with a decrease in benefit payments. Year-end reserves as a percent of total wages are expected to be at 0.47 percent.

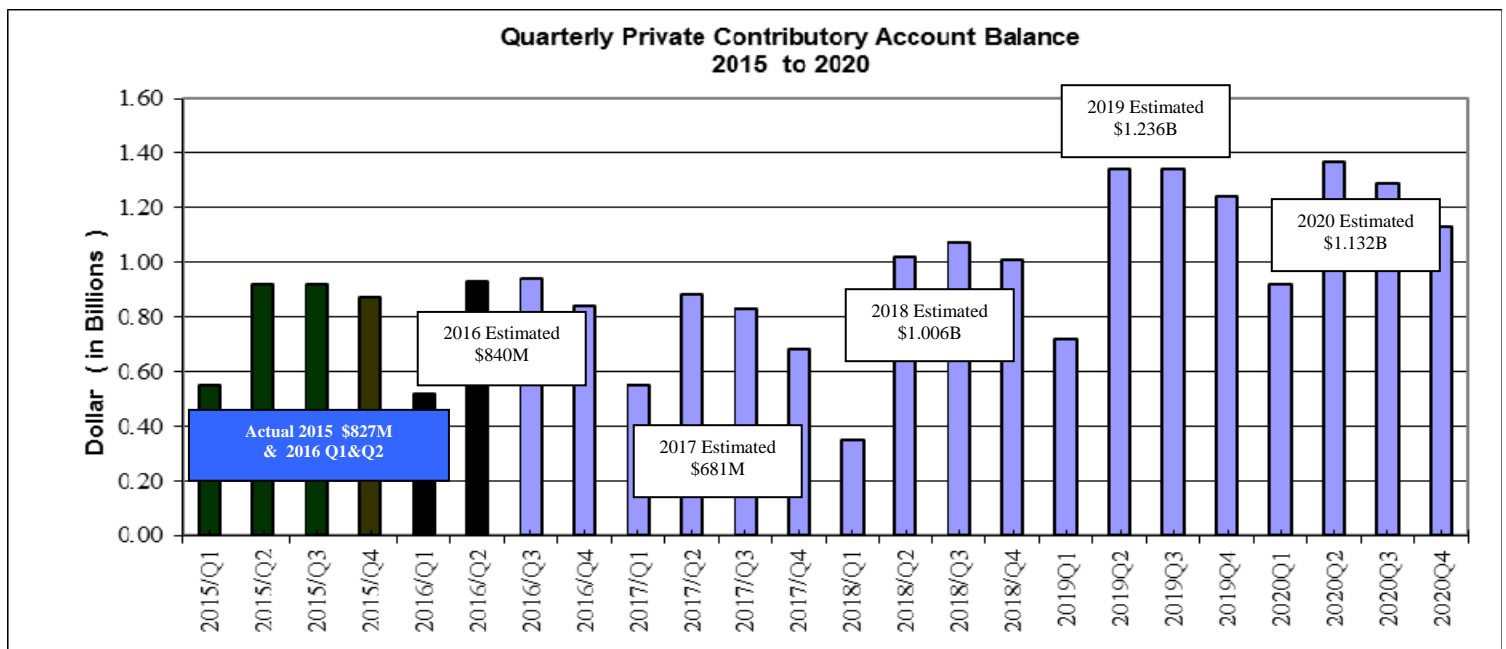
The year-end 2017 account balance is expected to be \$681 million, a \$72 million increase from the previous estimate of \$609 million. The increase is a carryover of the higher 2016 year-end balance plus projected reduction in benefit payments due to an estimated decrease in the annual average unemployment rate.

The year-end 2018 account balance is expected to be \$1.006 billion; \$91 million higher than the previous estimate of \$915 million. The difference is due to the combination of a projected decrease in benefit payments, increased employer contributions and the higher year-end balances from the previous two years. Implementation of three year averaging for determining employer experience rates may result in lower contributions than the simulation estimates.

The year-end 2019 account balance is estimated at \$1.236 billion, a \$103 million increase from the May published projected balance of \$1.133 billion. As in the previous years, the difference was the result of a projected decrease in benefit payments in addition to the higher year-end balances in in the previous years.

Similarly, the 2020 projected year-end balance of \$1.132 billion is \$100 million more than the previously released estimate of \$1.032 billion. The revision was the result of a carry-over of the previous years' higher ending balances plus a projected decrease in benefit payments.

It is anticipated that no borrowing from the federal unemployment account will be required in the outlook period. The chart below shows the 2015 actual and projected quarterly private UI Fund balance through 2020.



BENEFIT OUTLAYS

The updated simulation for the outlook period resulted in decreases in benefit payments in 2016 to 2020 primarily the result of projected improvements in the Moody's Economy.com forecasts in the annual average unemployment rates.

Year-to-date preliminary benefit payments of \$830.5 million through July 2016 were \$30.3 million lower than those paid in the same seven month period in 2015 and \$4.2 million less than projected.

Initial claims from January to July 2016 were 0.2 of a percentage point percent lower than those filed in the same months last year and continued weeks claimed were 6.2 percent less. . The average weekly benefit amount of \$463.77 was \$33.43 more than the \$430.34 amount in July 2015. The average duration of a claim was 17.8 weeks, 0.3 weeks shorter than for the same time period last year.

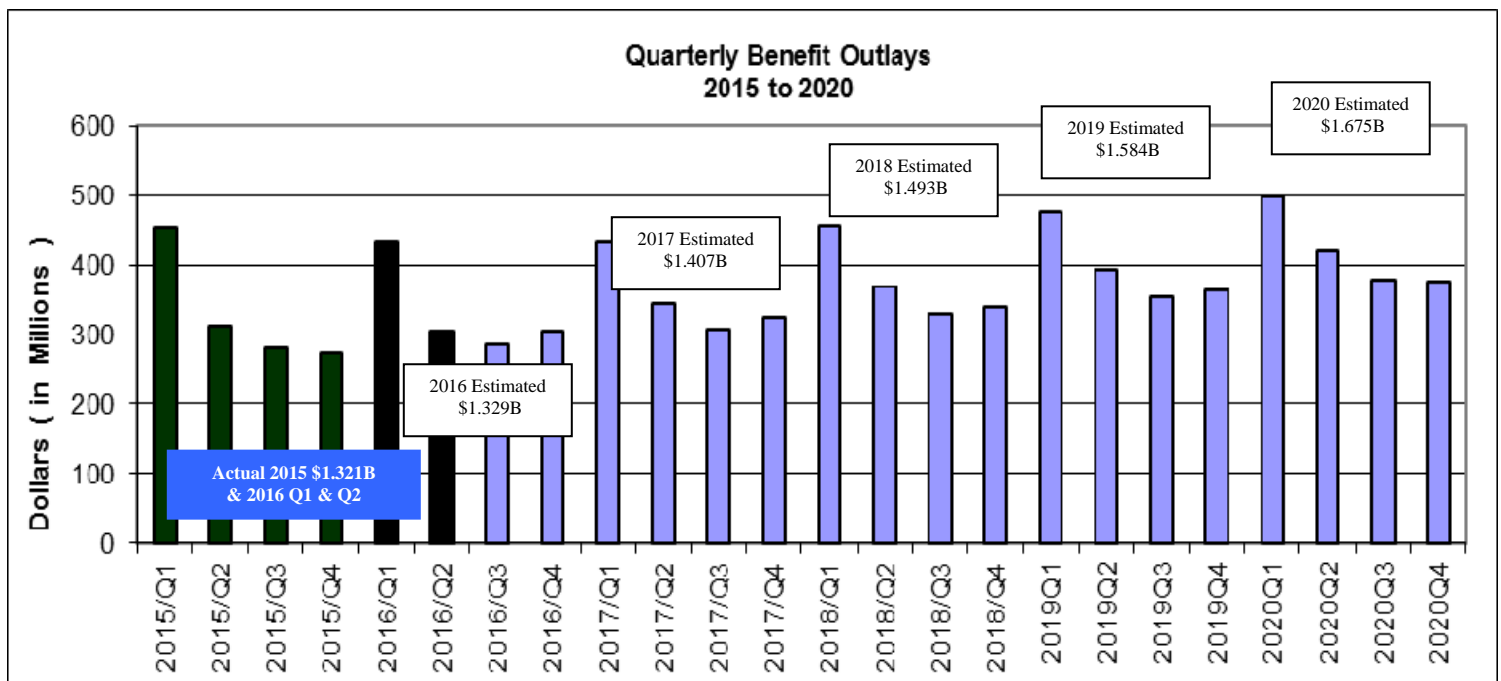
Benefit payments for 2016 are now estimated to be \$1.329 billion, \$30 million less than the previous estimate of \$1.359 billion first released in the May 2016 Outlook Report. The difference is due to projected decreases in total weeks compensated and insured unemployment caused by two-tenths of a percentage point improvement in the annual unemployment rate.

In 2017, benefit payments are projected to be \$1.407 billion, a decrease of \$28 million from the previous estimate of \$1.435 billion. As in 2016, the reduction was due to a decline in the annual unemployment rate resulting in less insured unemployment and weeks compensated.

For 2018, benefit payments are projected to be \$1.493 billion or \$12 million less than the previous estimate of \$1.505 billion. As in the previous years, the downward revision was caused by projected decreases in total weeks compensated and insured unemployment due to two-tenths of a percentage point decrease in the annual average unemployment rate.

For 2019, benefit payments which are now projected to be \$1.584 billion are \$17 million lower than the previous estimate caused by fewer insured unemployment and weeks compensated.

Similarly, in 2020, benefit payments of \$1.675 billion are \$9 million less due to projected decreases in insured unemployment and weeks compensated.



EMPLOYER CONTRIBUTIONS

Legislation enacted in 2014 increased taxable wage base to \$15,000 and set rate schedule C for employer contributions for 2015 to 2017 payrolls.

July 2016 preliminary employer contributions of \$95 million generate a year-to-date total of \$926.7 million, \$150 million lower than 2015's first seven months collections and \$33.7 million less than projected. With the July 31 due date for employer contributions for second quarter payrolls falling on a Sunday, employer contributions were lower than expected as shares of collections may be credited in the month of August rather than July.

Updated projections for employer contributions for 2016 through 2020 show small revisions from the previous projections first released in the May 2016 Outlook Report.

For 2016 employer contributions on rate schedule C and a \$15,000 taxable wage base are estimated at \$1.322 billion, a \$12 million increase from the previous estimate of \$1.310 billion. The increase was due to a projected increase in taxable payrolls.

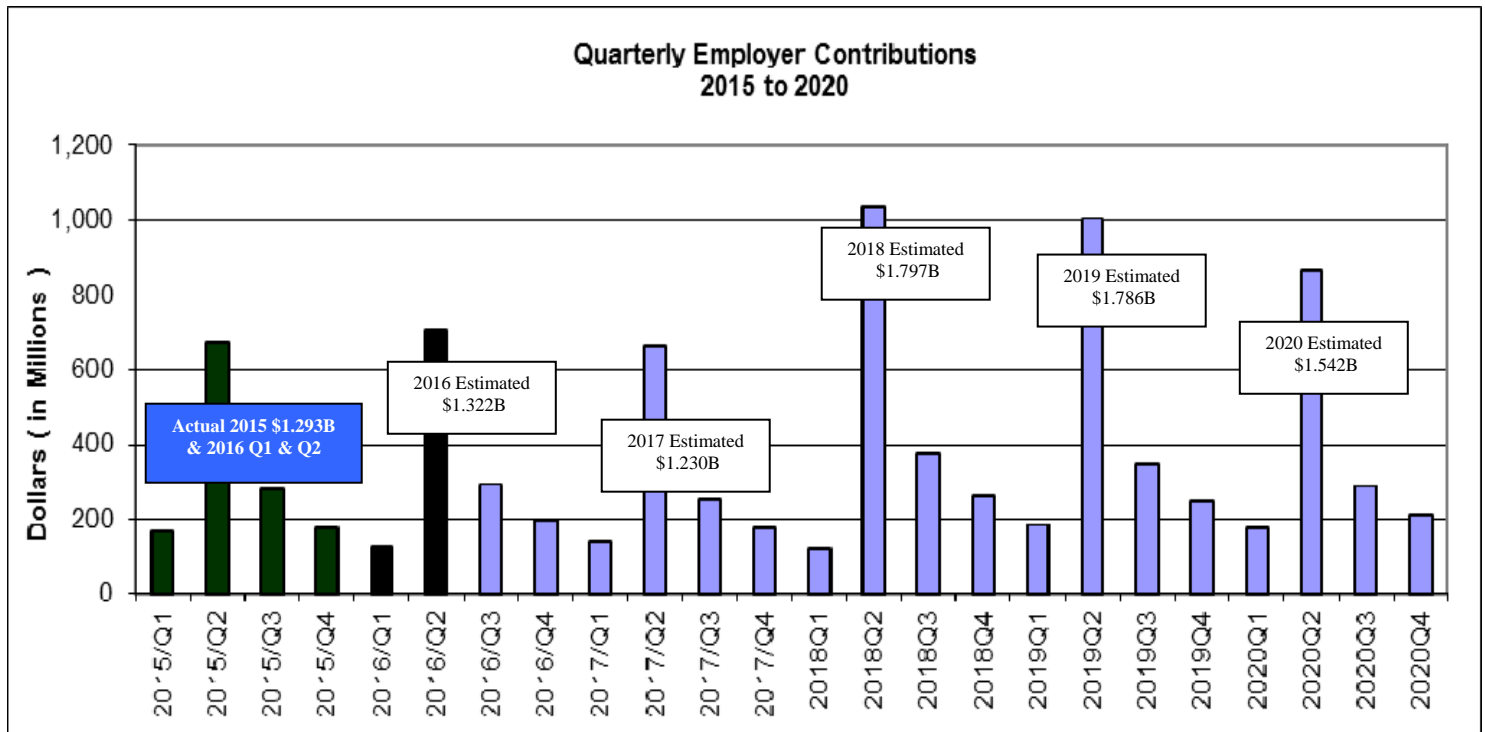
Employer contributions in 2017 on schedule C and a \$15,000 taxable wage base are estimated at \$1.230 billion, in-line with the previous estimate of \$1.229 billion.

For 2018, rate schedule F is projected to trigger for employer contributions generating an estimated \$1.797 billion in contributions just \$4 million more from the previous estimate of \$1.793 billion.

As in 2018, rate schedule F is projected to trigger for 2019 employer payrolls generating \$1.786 billion in contributions, at \$7 million less is in-line with the previous projection of \$1.793 billion first released in the May 2016 Outlook Report

Rate schedule E is projected to trigger for 2020 payrolls with an estimated employer contributions of \$1.542 billion.

Table 2, on page 7, contains the experience rate table.



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, .60 in 2015 up to 1.0 for advances in 2019. For 2016 the AHCM must be met based on 2015 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 2016 through 2020, Massachusetts will not meet the federal standard for AHCM and therefore be subject to federal interest for all loans.

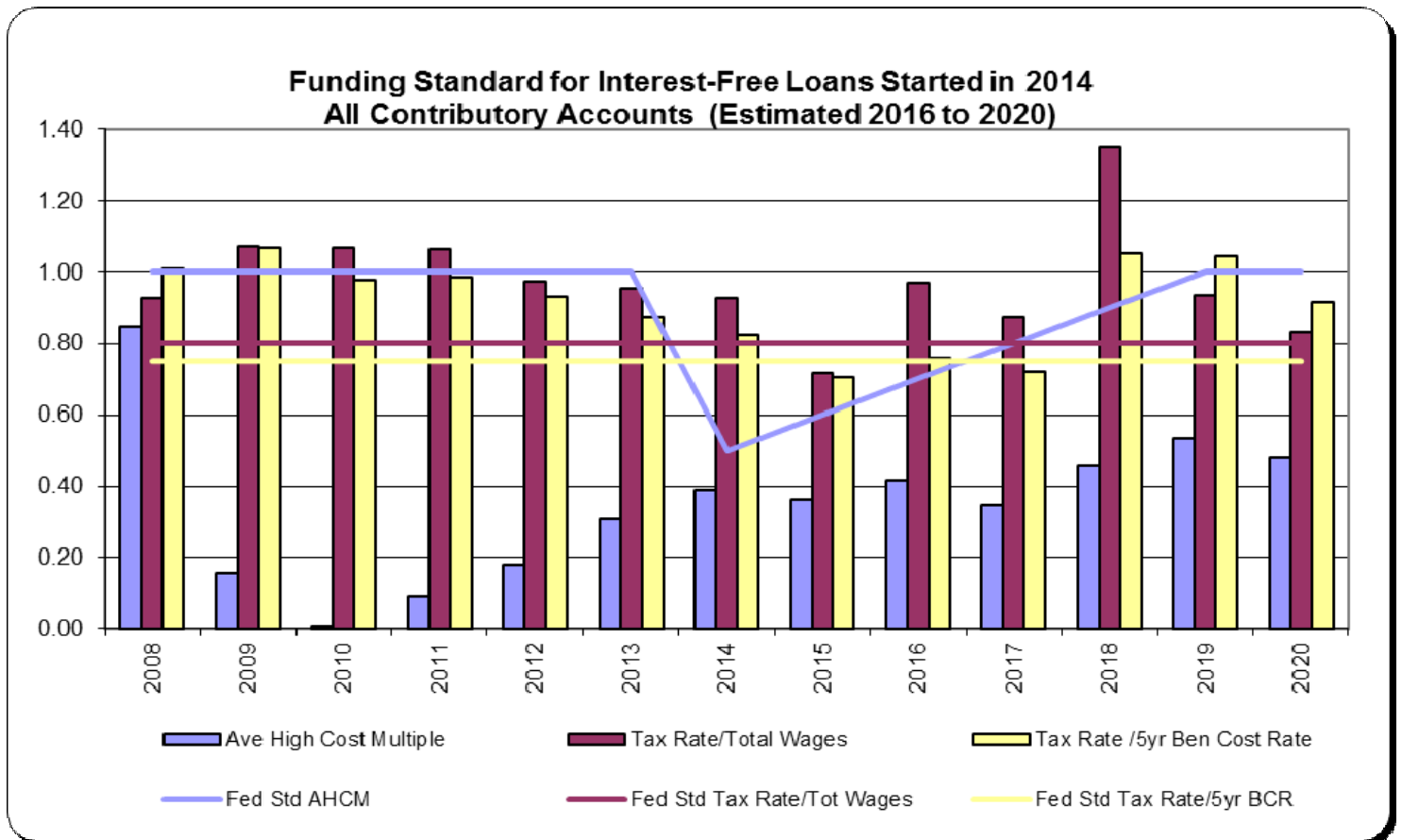


Table 2: Experience Rate Table

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 2016 through 2020 are displayed in Tables 3 and 4, below.

Table 3: Unemployment Trust Fund Projections for the Private Contributory Account, 2016 - 2020

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

	2015	2016	2017	2018	2019	2020
Balance, January 1	\$836	\$827	\$840	\$681	\$1,006	\$1,236
Income	\$1,293	\$1,322	\$1,230	\$1,797	\$1,786	\$1,542
Trust Fund Interest	\$19	\$20	\$18	\$21	\$29	\$29
Benefit Outlays	\$1,321	\$1,329	\$1,407	\$1,493	\$1,584	\$1,675
Federal Loan Interests						
Balance, December 31	\$827	\$840	\$681	\$1,006	\$1,236	\$1,132
Schedule*	"C"	"C"	"C"	"F"	"F"	"E"
Average Cost/Employee	\$491	\$499	\$459	\$666	\$659	\$567

* 2015 to 2017 rate schedules set by Legislation, 2018 to 2020 rate schedule projected based on current statutory triggers. 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

	2015	2016	2017	2018	2019	2020
Total Covered Payroll (\$Billions)	\$172.2	\$180.5	\$192.4	\$206.3	\$218.9	\$227.8
Contributory Payroll (\$Billions)	\$41.2	\$42.7	\$43.3	\$44.1	\$44.7	\$45.1
Contributory Wage Proportion	23.9%	23.7%	22.5%	21.4%	20.4%	19.8%
Nominal Contribution Rate	3.1%	3.1%	2.8%	4.2%	4.0%	3.4%
Contributions as % of Total Payroll	0.75%	0.73%	0.64%	0.87%	0.82%	0.68%
Benefits as a % of Total Payroll	0.77%	0.74%	0.73%	0.72%	0.72%	0.74%
Trust Fund Balance as % of Total Payroll	0.48%	0.47%	0.35%	0.49%	0.56%	0.50%
Solvency Assessment	1.00%	0.81%	0.92%	0.95%	0.97%	1.02%
AHCM	0.28	0.27	0.21	0.28	0.33	0.29
Covered Employment (Thousands)	3,377	3,393	3,429	3,453	3,469	3,481
Total Unemployment Rate	5.0%	4.3%	4.2%	4.2%	4.3%	4.5%
Insured Unemployment Rate	2.1%	2.2%	2.3%	2.4%	2.4%	2.5%

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.