

Massachusetts Economic Indicators

IHS Markit, Fall 2018 Forecast

Prepared by Michael Lynch, 781-301-9129

	NAME	2004Q1	2004Q2	2004Q3	2004Q4	2005Q1	2005Q2	2005Q3	2005Q4	2006Q1	2006Q2	2006Q3
CPI--BASELINE SCENARIO (1982-84=1)	CPIBASEMA	2.034	2.059	2.064	2.087	2.104	2.115	2.150	2.169	2.188	2.213	2.234
CPI--OPTIMISTIC SCENARIO (1982-84=1)	CPIOPTMA	2.034	2.059	2.064	2.087	2.104	2.115	2.150	2.169	2.188	2.213	2.234
CPI--PESSIMISTIC SCENARIO (1982-84=1)	CPIPESSMA	2.034	2.059	2.064	2.087	2.104	2.115	2.150	2.169	2.188	2.213	2.234

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	2006Q4	2007Q1	2007Q2	2007Q3	2007Q4	2008Q1	2008Q2	2008Q3	2008Q4	2009Q1	2009Q2	2009Q3	2009Q4
CPI--BASELINE SCENARIO (1982-84=1)	2.220	2.234	2.259	2.275	2.301	2.322	2.363	2.404	2.350	2.342	2.347	2.367	2.380
CPI--OPTIMISTIC SCENARIO (1982-84=1)	2.220	2.234	2.259	2.275	2.301	2.322	2.363	2.404	2.350	2.342	2.347	2.367	2.380
CPI--PESSIMISTIC SCENARIO (1982-84=1)	2.220	2.234	2.259	2.275	2.301	2.322	2.363	2.404	2.350	2.342	2.347	2.367	2.380

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	2010Q1	2010Q2	2010Q3	2010Q4	2011Q1	2011Q2	2011Q3	2011Q4	2012Q1	2012Q2	2012Q3	2012Q4	2013Q1
CPI--BASELINE SCENARIO (1982-84=1)	2.381	2.384	2.398	2.420	2.434	2.477	2.488	2.495	2.515	2.519	2.529	2.547	2.557
CPI--OPTIMISTIC SCENARIO (1982-84=1)	2.381	2.384	2.398	2.420	2.434	2.477	2.488	2.495	2.515	2.519	2.529	2.547	2.557
CPI--PESSIMISTIC SCENARIO (1982-84=1)	2.381	2.384	2.398	2.420	2.434	2.477	2.488	2.495	2.515	2.519	2.529	2.547	2.557

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	2013Q2	2013Q3	2013Q4	2014Q1	2014Q2	2014Q3	2014Q4	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2
CPI--BASELINE SCENARIO (1982-84=1)	2.554	2.573	2.587	2.598	2.608	2.614	2.614	2.613	2.623	2.619	2.624	2.624	2.643
CPI--OPTIMISTIC SCENARIO (1982-84=1)	2.554	2.573	2.587	2.598	2.608	2.614	2.614	2.613	2.623	2.619	2.624	2.624	2.643
CPI--PESSIMISTIC SCENARIO (1982-84=1)	2.554	2.573	2.587	2.598	2.608	2.614	2.614	2.613	2.623	2.619	2.624	2.624	2.643

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									FY19	FY19	FY19
	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1
CPI--BASELINE SCENARIO (1982-84=1)	2.664	2.674	2.695	2.694	2.706	2.714		2.746	2.765	2.78	2.805
CPI--OPTIMISTIC SCENARIO (1982-84=1)	2.664	2.674	2.695	2.694	2.706	2.714		2.746	2.765	2.78	2.801
CPI--PESSIMISTIC SCENARIO (1982-84=1)	2.664	2.674	2.695	2.694	2.706	2.714		2.746	2.765	2.78	2.806

Rate-to-rate CAF	CBDS & SE Rate Reviews tha			
Base period: FY20Q2				
2019Q4				
2.852				
Prospective rate period: FY20 & FY21				
2019Q3	2019Q4	2020Q1	2020Q2	
2.833	2.852	2.876	2.888	

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	FY20	FY20	FY20	FY20	FY21	FY21	FY21	FY21
	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2
CPI--BASELINE SCENARIO (1982-84=1)	2.848	2.869	2.895	2.91	2.924	2.94	2.96	2.979
CPI--OPTIMISTIC SCENARIO (1982-84=1)	2.833	2.852	2.876	2.888	2.9	2.913	2.931	2.947
CPI--PESSIMISTIC SCENARIO (1982-84=1)	2.855	2.88	2.911	2.931	2.95	2.972	2.998	3.023

it are to be promulgated July 1, 2019

			<u>Average</u>
			2.852
2020Q4	2021Q1	2021Q2	
2.913	2.931	2.947	2.893
CAF:			1.42%

Current rate runs from 1/1,
By pushing rate review bac

CAF Base period = last effective period
either CY2019Q4 or FY2020Q4

CAF Projection period = two
aka: CY2019Q3 - CY2021Q2

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	FY22	FY22	FY22	FY22	FY23	FY23	FY23	FY23			
	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	LABEL
CPI--BASELINE SCENARIO (1982-84=1)	2.999	3.017	3.034	3.051	3.07	3.088	3.106	3.122	3.14	3.158	
CPI--OPTIMISTIC SCENARIO (1982-84=1)	2.963	2.977	2.99	3.004	3.019	3.034	3.049	3.062	3.079	3.095	
CPI--PESSIMISTIC SCENARIO (1982-84=1)	3.049	3.073	3.098	3.122	3.149	3.175	3.201	3.225	3.252	3.278	

/18 - 12/31/19
k to 7/1/19 to align with a Fiscal Year:

ctive quarter of most recent rate review - this is
JQ2

o years rate is effective - this is FY20 & FY21
? or FY2020Q1 - FY2021Q4

-kara

RATE Chart			
LEVEL		Proposed Rate PER 1/4 HOUR	
Level I		\$7.75	
Level B		\$6.20	
Level C		\$4.40	
Level D		\$3.65	
Level A		\$10.93	

MASTER DATA LOOK-UP TABLE						
Benchmark Salaries		Source				
Management	\$58,864	Blended Salaries				
Direct Care	\$32,311	Blended Salaries				
Clinical, Med, Specialized	\$47,142	Benchmarked to 101 CMR 414: Bachelor Level				
Support Staff	\$32,311	Blended Salaries				
FTEs	Level	A	B	C	D	I
Management		1.65	1.00	0.80	0.50	1.00
Clinical, Med, Specialized		0.00	0.00	0.00	0.00	6.75
Direct Care		21.53	10.80	6.59	5.18	1.00
Support Staff		1.00	0.50	0.50	0.50	5.20
TOTAL FTEs		24.18	12.30	7.89	6.18	13.95
Transportation Ratio		A	B	C	D	
		100%	100%	80%	80%	100%
Capacity		20	Days	250	TOTAL UNITS	5,000
Benchmark Expenses						
Tax & Fringe	23.11%	Weighted Average FY16 UFR Data				
Occupancy	\$11.11	Rebased with applicable CAF's compounded				
Sups & Mats	\$1.27	Rebased with applicable CAF's compounded				
Direct Client Expenses (I, A & B)	\$6.00	Purchaser Recommendation				
Transportation	\$7.09	Rebased with current (2018) vehicle costs etc.				
Admin Allocation	12.65%	Weighted Average FY16 UFR Data				
PFMLA Trust Contribution	0.63%	Effective 7/1/19				
CAF	1.42%	Base 2019Q4 - Prospective FY20 & FY21				

Level I			
Service Unit: Per Client Per Day	Total Units:	5,000	
	Salary	FTE	Expense
Management	\$58,864	1.00	\$58,864
Direct Care	\$32,311	6.75	\$218,097
Support Staff	\$32,311	1.00	\$32,311
Clinical, Med, Specialized	\$47,142	5.20	\$245,138
Total Staffing		13.95	\$554,410
Tax & Fringe	23.11%		\$128,102
Total Compensation			\$682,511
Unit Cost			
Occupancy	\$11.11		\$55,550
Sups & Mats	\$1.27		\$6,350
Direct Client Expenses	\$6.00		\$30,000
Transportation	\$7.09		\$35,449
	\$25.47		\$127,349
Total reimb excl M&G			\$809,860
PFMLA Trust Contribution	0.63%		\$3,542
Admin Allocation	12.65%		\$102,430
TOTAL			\$915,833
RATE:			\$183.17
Hourly Rate			\$24.47
Per 15 min			\$7.63
FY18 Rate Review CAF	1.42%		\$7.75

Level C			
Service Unit: Per Client Per Day	Total Units:	5,000	
	Salary	FTE	Expense
Direct Mgmt Staffing	\$58,864	0.80	\$47,091
Direct Care Staffing	\$32,311	6.59	\$212,927
Support Staff	\$32,311	0.50	\$16,155
Total Staffing		7.89	\$276,173
Taxes & Fringe	23.11%		\$63,813
Total Compensation			\$339,986
Unit Cost			
Occupancy	\$11.11		\$55,550
Sups & Mats	\$1.27		\$6,350
Direct Client Expenses	\$6.00		\$30,000
Transportation	\$7.09		\$28,359
	\$25.47		\$120,259
Total reimb excl M&G			\$460,245
PFMLA Trust Contribution	0.63%		\$1,765
Admin. Alloc.	12.65%		\$58,221
TOTAL			\$520,231
RATE:			\$104.05
Hourly Rate			\$17.34
Per 15 min			\$4.34
FY18 Rate Review CAF	1.42%		\$4.40

Level B			
Service Unit: Per Client Per Day	Total Units:	5,000	
	Salary	FTE	Expense
Direct Mgmt Staffing	\$58,864	1.00	\$58,864
Direct Care Staffing	\$32,311	10.80	\$348,955
Support Staff	\$32,311	0.50	\$16,155
Total Staffing		12.30	\$423,974
Taxes & Fringe	23.11%		\$97,963
Total Compensation			\$521,937
Unit Cost			
Occupancy	\$11.11		\$55,550
Sups & Mats	\$1.27		\$6,350
Direct Client Expenses	\$6.00		\$30,000
Transportation	\$7.09		\$35,449
	\$25.47		\$127,349
Total reimb excl M&G			\$649,286
PFMLA Trust Contribution	0.63%		\$2,709
Admin. Alloc.	12.65%		\$82,121
TOTAL			\$734,116
RATE:			\$146.82
Hourly Rate			\$24.47
Per 15 min			\$6.12
FY18 Rate Review CAF	1.42%		\$6.20

Level D			
Service Unit: Per Client Per Day	Total Units:	5,000	
	Salary	FTE	Expense
Management	\$58,864	0.50	\$29,432
Direct Care	\$32,311	5.18	\$167,369
Support Staff	\$32,311	0.50	\$16,155
Total Staffing		6.18	\$212,956
Tax & Fringe	23.11%		\$49,206
Total Compensation			\$262,162
Unit Cost			
Occupancy	\$11.11		\$55,550
Sups & Mats	\$1.27		\$6,350
Direct Client Expenses	\$6.00		\$30,000
Transportation	\$7.09		\$28,359
	\$25.47		\$120,259
Total reimb excl M&G			\$382,421
PFMLA Trust Contribution	0.63%		\$1,361
Admin Allocation	12.65%		\$48,368
TOTAL			\$432,150
RATE:			\$86.43
Hourly Rate			\$14.41
Per 15 min			\$3.60
FY18 Rate Review CAF	1.42%		\$3.65

Level A			
Service Unit: Per Client Per Day	Total Units:	5,000	
	Salary	FTE	Expense
Direct Mgmt Staffing	\$58,864	1.65	\$97,125
Direct Care Staffing	\$32,311	21.53	\$695,649
Support Staff	\$32,311	1.00	\$32,311
Total Staffing		24.18	\$825,084
Taxes & Fringe	23.11%		\$190,644
Total Compensation			\$1,015,728
Unit Cost			
Occupancy	\$11.11		\$55,550
Sups & Mats	\$1.27		\$6,350
Direct Client Expenses	\$6.00		\$30,000
Transportation	\$7.09		\$35,449
	\$25.47		\$127,349
Total reimb excl M&G			\$1,143,077
PFMLA Trust Contribution	0.63%		\$5,272
Admin. Alloc.	12.65%		\$144,575
TOTAL			\$1,292,924
RATE:			\$258.58
Hourly Rate			\$43.10
Per 15 min			\$10.77
FY18 Rate Review CAF	1.42%		\$10.93

Master Data Look-Up Data			
Benchmark Salaries		Source	
Management	\$ 58,389	Rebased with original model CAF	
Medical	\$ 58,389	Rebased with original model CAF	
Direct Care Blend	\$ 30,745	\$15 per hour with CAF	
Benchmark FTEs			
Management	0.25	Average from FY14 UFR Data (Weighted)	
Medical	1.10	Average from FY14 UFR Data (Weighted)	
Direct Care Blend	3.35	Average from FY14 UFR Data (Weighted)	
Benchmark Expenses			
Taxes & Fringe	20.84%	Average from FY14 UFR Data (Straight)	
Program Supplies (Per FTE)	\$1,156	Per FTE - Rebased with original model CAF	
Client Transportation (Per FTE)	\$1,719	Per FTE - Rebased with original model CAF	
Admin. Allocation	12.88%	Average from FY14 UFR Data (Weighted)	
PFMLA Contribution to Trust Fund	0.63%	Effective 7/1/19	
CAF Rate	1.42%	Base 2019Q4 - Prospective FY20 & FY21	
Total Service Units	5,000		

Level III - Pediatric Nursing Facility Active Treatment 3777 - Community Integration Model			
Service Unit - Hour	Total Hours		5,000
Position	Salary	FTE	Expense
Management	\$ 58,389	0.25	\$ 14,483
Medical	\$ 58,389	1.10	\$ 64,035
Direct Care Blend	\$ 30,745	3.35	\$ 102,879
Total Program Staff		4.70	181,397
Tax and Fringe	20.84%		\$ 37,803
Total Compensation			\$ 219,200
Program Supplies (Per FTE)			\$ 5,433
Client Transportation (Per FTE)			\$ 8,082
Total Reimb excl M&G			\$ 232,714
Admin. Allocation	12.88%		\$ 29,963
TOTAL			\$ 262,677
CAF:	1.42%		\$ 266,407
PFMLA Contribution to Trust Fund	0.63%		\$ 1,159
Total			\$ 267,566
			Rate with CAF
			\$ 53.52
	1/4 hour		\$ 13.38

Master Data Look-Up Data			
Benchmark Salaries		Source	
Management	\$ 58,389	Rebased with original model CAF	
Medical	\$ 58,389	Rebased with original model CAF	
Direct Care Blend	\$ 30,745	\$15 per hour with CAF	
Benchmark FTEs			
Management	0.25	Average from FY14 UFR Data (Weighted)	
Medical	1.10	Average from FY14 UFR Data (Weighted)	
Direct Care Blend	3.35	Average from FY14 UFR Data (Weighted)	
Benchmark Expenses			
Taxes & Fringe	20.84%	Average from FY14 UFR Data (Straight)	
Program Supplies (Per FTE)	\$ 1,156	Per FTE - Rebased with original model CAF	
Admin. Allocation	12.88%	Average from FY14 UFR Data (Weighted)	
PFMLA Contribution to Trust Fund	0.63%	Effective 7/1/19	
CAF Rate	1.42%	Base 2019Q4 - Prospective FY20 & FY21	
Total Service Units	5,000		

Level II - Pediatric Nursing Facility Active Treatment 3777 - Facility Based Model			
Service Unit - Hour	Total Hours		5,000
Position	Salary	FTE	Expense
Management	\$ 58,389	0.25	\$ 14,483
Medical	\$ 58,389	1.10	\$ 64,035
Direct Care Blend	\$ 30,745	3.35	\$ 102,879
Total Program Staff		4.70	181,397
Taxes & Fringe	20.84%		\$ 37,803
Total Compensation			\$ 219,200
Program Supplies	\$	1,156	\$ 5,433
Total Reimb excl M&G			\$ 224,632
Admin. Allocation	12.88%		\$ 28,922
TOTAL			\$ 253,555
CAF:	1.42%		\$ 257,156
PFMLA Contribution to Trust Fund	0.63%		\$ 1,159
Total			\$ 258,315
			Rate with CAF
			\$ 51.68
	1/4 hour		\$ 12.92

Master Data Look-Up Data			
Benchmark Salaries		Source	
Management	\$ 58,389	Rebased with original model CAF	
Medical	\$ 58,389	Rebased with original model CAF	
Clinical	\$ 55,948	Rebased with original model CAF	
Direct Care Blend	\$ 30,745	\$15 per hour with CAF	
Support	\$ 30,745	\$15 per hour with CAF	
Benchmark FTEs			
Management	0.15	Average from FY14 UFR Data (Weighted)	
Medical	0.35	Average from FY14 UFR Data (Weighted)	
Clinical	0.05	Average from FY14 UFR Data (Weighted)	
Direct Care Blend	0.60	Average from FY14 UFR Data (Weighted)	
Support	0.05	Average from FY14 UFR Data (Weighted)	
Benchmark Expenses			
Taxes & Fringe	20.84%	Average from FY14 UFR Data (Straight)	
Occupancy (Per FTE)	\$ 2,617	101 CMR 421: Rates for Adult Housing and Community Support Services	
Other Program Expense (Per FTE)	\$ 1,279	Per FTE - Rebased with original model CAF	
Admin. Allocation	12.88%	Weighted Average from FY14 UFR Data	
PFMLA Contribution to Trust Fund	0.63%	Effective 7/1/19	
CAF Rate	1.42%	Base 2019Q4 - Prospective FY20 & FY21	

Billable Hours	Weeks	Hours	Total
Maximum Available DC Hours	52	40	2,080
Non-direct service hours			
Vacation/Sick/Personal	3	40	120
Holidays (10 Days)	2	40	80
Admin/Supervision/Misc	47	1	47
Training	1	8	8
Travel	47	1	47
Subtotal non-direct hours			302
Total Available Hours per DC FTE			1,778
Total DC FTEs			1.00
TOTAL PRODUCTIVE HOURS			1,778

Level I - Nursing Facility Active Treatment 3777			
Service Unit - Hour	Total Hours		1,778
Position	Salary	FTE	Expense
Management	\$ 58,389	0.15	\$ 8,758
Medical	\$ 58,389	0.35	\$ 20,436
Clinical	\$ 55,948	0.05	\$ 2,797
Direct Care Blend	\$ 30,745	0.60	\$ 18,447
Support	\$ 30,745	0.05	\$ 1,537
Total Program Staff		1.20	51,976
Taxes & Fringe	20.84%		\$ 10,832
Total Compensation			\$ 62,808
Occupancy (Per FTE)	\$	2,617	\$ 3,140
Other Program Expense (Per FTE)	\$	1,279	\$ 1,535
Total Reimb excl M&G			\$ 67,483
Admin. Allocation	12.88%		\$ 8,689
TOTAL			\$ 76,171
CAF:	1.42%		\$ 77,253
PFMLA Contribution to Trust Fund	0.63%		\$ 332
Total			\$ 77,585
			Rate with CAF
			\$ 43.66
	1/4 hour		\$ 10.91

Gas Price \$ 2.90 8/7/18 Weekly MA Average
Mileage Assumption 30,000
Depreciable Life 4
Maintenance Factor 8%
Usage Adjustment 50%

Vehicle Mix		Annual Cost
Sedan	0	\$ -
Minivan	1	\$ 18,650.26
Van	2	\$ 45,110.31
WC Van	0.25	\$ 7,137.50
Total	3.25	\$ 70,898.07
Per Unit		\$ 7.09

Sedans	2018 MSRP	MPG (City)	Maint	Depreciation	Gas	Insurance	Total Annual
Honda Civic	\$ 18,840.00		32 \$ 1,507.20	\$ 4,710.00	\$ 2,718.75	\$ 4,000.00	\$ 12,935.95
Toyota Corolla	\$ 18,600.00		30 \$ 1,488.00	\$ 4,650.00	\$ 2,900.00	\$ 4,000.00	\$ 13,038.00
Nissan Altima	\$ 23,260.00		27 \$ 1,860.80	\$ 5,815.00	\$ 3,222.22	\$ 4,000.00	\$ 14,898.02
Chevy Cruze	\$ 16,975.00		31 \$ 1,358.00	\$ 4,243.75	\$ 2,806.45	\$ 4,000.00	\$ 12,408.20
Average	\$ 19,418.75	30.00	\$ 1,553.50	\$ 4,854.69	\$ 2,900.00	\$ 4,000.00	\$ 13,308.19

Minivans	2018 MSRP	MPG (City)	Maint	Depreciation	Gas	Insurance	Total Annual
Toyota Sienna	\$ 30,750.00		19 \$ 2,460.00	\$ 7,687.50	\$ 4,578.95	\$ 4,500.00	\$ 19,226.45
Honda Odyssey	\$ 29,990.00		19 \$ 2,399.20	\$ 7,497.50	\$ 4,578.95	\$ 4,500.00	\$ 18,975.65
Dodge Grand Caravan	\$ 25,995.00		17 \$ 2,079.60	\$ 6,498.75	\$ 5,117.65	\$ 4,500.00	\$ 18,196.00
Kia Sedona	\$ 27,000.00		18 \$ 2,160.00	\$ 6,750.00	\$ 4,833.33	\$ 4,500.00	\$ 18,243.33
Average	\$ 28,433.75	18.25	\$ 2,274.70	\$ 7,108.44	\$ 4,767.12	\$ 4,500.00	\$ 18,650.26

Vans	2018 MSRP	MPG (City)	Maint	Depreciation	Gas	Insurance	Total Annual
Chevy Express	\$ 31,295.00		11 \$ 2,503.60	\$ 7,823.75	\$ 7,909.09	\$ 4,500.00	\$ 22,736.44
Ford Transit Wagon	\$ 35,005.00		15 \$ 2,800.40	\$ 8,751.25	\$ 5,800.00	\$ 4,500.00	\$ 21,851.65
Nissan NV Passenger	\$ 35,170.00		12 \$ 2,813.60	\$ 8,792.50	\$ 7,250.00	\$ 4,500.00	\$ 23,356.10
GMC Savana	\$ 31,295.00		11 \$ 2,503.60	\$ 7,823.75	\$ 7,909.09	\$ 4,500.00	\$ 22,736.44
Average	\$ 33,191.25	12.25	\$ 2,655.30	\$ 8,297.81	\$ 7,102.04	\$ 4,500.00	\$ 22,555.15

Wheelchair Van	\$ 45,000.00	10	\$ 3,600.00	\$ 11,250.00	\$ 8,700.00	\$ 5,000.00	\$ 28,550.00
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