

**Exhibit R - Estimate of Federal Medicaid Assistance Percentage (FMAP)**

Calendar Year	FMAP Forecast														
	United States			Colorado			Colorado 3-year Average Per Capita	U.S. 3-year Average Per Capita	FMAP <sup>(1)</sup> Calculation	eFMAP <sup>(2)</sup> Calculation	FFY/SFY	FFY FMAP <sup>(3)</sup>	FFY eFMAP <sup>(3)</sup>	SFY FMAP <sup>(4)</sup>	SFY eFMAP <sup>(4)</sup>
	Personal Income	Population	Per Capita Personal Income	Personal Income	Population	Per Capita Personal Income									
2000	\$8,634,847,000,000	282,162,411	\$30,602.40	\$148,128,340,000	4,326,921	\$34,234.12	-	-	-	-	2000-01	50.00%	65.00%	50.00%	65.00%
2001	\$8,987,890,000,000	284,968,955	\$31,539.89	\$155,992,188,000	4,425,687	\$35,247.00	-	-	-	-	2001-02	50.00%	65.00%	50.00%	65.00%
2002	\$9,150,761,000,000	287,625,193	\$31,814.88	\$157,172,883,000	4,490,406	\$35,001.93	\$34,827.68	\$31,319.06	50.00%	65.00%	2002-03	50.00%	65.00%	50.00%	65.00%
2003	\$9,484,225,000,000	290,107,933	\$32,692.06	\$160,369,195,000	4,528,732	\$35,411.50	\$35,220.14	\$32,015.61	50.00%	65.00%	2003-04	50.00%	65.00%	50.00%	65.00%
2004	\$10,047,876,000,000	292,805,298	\$34,315.90	\$167,793,881,000	4,575,013	\$36,676.15	\$35,696.53	\$32,940.95	50.00%	65.00%	2004-05	50.00%	65.00%	50.00%	65.00%
2005	\$10,610,320,000,000	295,516,599	\$35,904.31	\$179,089,828,000	4,631,888	\$38,664.54	\$36,917.40	\$34,304.09	50.00%	65.00%	2005-06	50.00%	65.00%	50.00%	65.00%
2006	\$11,381,350,000,000	298,379,912	\$38,143.82	\$192,161,658,000	4,720,423	\$40,708.57	\$38,683.09	\$36,121.34	50.00%	65.00%	2006-07	50.00%	65.00%	50.00%	65.00%
2007	\$11,995,419,000,000	301,231,207	\$39,821.30	\$203,034,950,000	4,803,868	\$42,264.89	\$40,546.00	\$37,956.48	50.00%	65.00%	2007-08	50.00%	65.00%	50.00%	65.00%
2008	\$12,492,705,000,000	304,093,966	\$41,081.73	\$213,342,148,000	4,889,730	\$43,630.66	\$42,201.37	\$39,682.28	50.00%	65.00%	2008-09	50.00%	65.00%	50.00%	65.00%
2009	\$12,079,444,000,000	306,771,529	\$39,376.03	\$206,385,419,000	4,972,195	\$41,507.91	\$42,467.82	\$40,093.02	50.00%	65.00%	2009-10	50.00%	65.00%	50.00%	65.00%
2010	\$12,459,613,000,000	309,347,057	\$40,277.13	\$211,419,677,000	5,048,575	\$41,877.10	\$42,338.56	\$40,244.96	50.20%	65.14%	2010-11	50.00%	65.00%	50.00%	65.00%
2011	\$13,233,436,000,000	311,721,632	\$42,452.74	\$227,052,222,000	5,119,661	\$44,349.07	\$42,578.03	\$40,701.97	50.76%	65.53%	2011-12	50.00%	65.00%	50.00%	65.00%
2012	\$13,904,485,000,000	314,112,078	\$44,266.00	\$240,905,431,000	5,191,709	\$46,401.95	\$44,209.37	\$42,331.96	50.92%	65.64%	2012-13	50.00%	65.00%	50.00%	65.00%
2013	\$14,064,468,000,000	316,497,531	\$44,437.84	\$246,447,709,000	5,272,086	\$46,745.77	\$45,832.26	\$43,718.86	50.54%	65.38%	2013-14	50.00%	65.00%	50.00%	65.00%
2014	\$14,683,147,000,000	318,857,056	\$46,049.31	\$261,735,447,000	5,355,866	\$48,868.93	\$47,338.88	\$44,917.72	50.02%	65.01%	2014-15	51.01%	65.71%	50.76%	65.53%
2015	\$15,324,108,725,000	321,467,160	\$47,669.28	\$275,107,294,000	5,457,432	\$50,409.66	\$48,674.79	\$46,052.14	50.00%	65.00%	2015-16	50.72%	65.50%	50.79%	65.55%
2016	\$15,967,721,291,450	324,103,191	\$49,267.40	\$288,587,551,406	5,538,580	\$52,104.97	\$50,461.19	\$47,662.00	50.00%	65.00%	2016-17	50.02%	65.01%	<b>50.20%</b>	<b>65.13%</b>
2017	\$16,702,236,470,857	326,760,837	\$51,114.56	\$302,728,341,425	5,635,874	\$53,714.53	\$52,076.39	\$49,350.41	50.00%	65.00%	2017-18	50.00%	65.00%	<b>50.00%</b>	<b>65.00%</b>
2018	\$17,487,241,584,987	329,407,600	\$53,086.94	\$317,864,758,496	5,735,248	\$55,423.02	\$53,747.51	\$51,156.30	50.32%	65.22%	2018-19	50.00%	65.00%	<b>50.00%</b>	<b>65.00%</b>

*Definitions:* FMAP: Federal medical assistance percentage eFMAP: Enhanced FMAP SFY: State fiscal year FFY: Federal fiscal year

(1) FMAP is calculated with the following formula:  $FMAP_{state} = 1 - ((Per\ capita\ income_{state})^2 / (Per\ capita\ income_{U.S.})^2 * 0.45)$ , where per capita incomes are based on a rolling three-year average. (Source: <http://aspe.hhs.gov/health/reports/2014/FMAP2015/fmap15.cfm>)

(2) eFMAP is calculated by lowering the State share under the regular FMAP rate by 30% (Source: <http://aspe.hhs.gov/health/reports/2014/FMAP2015/fmap15.cfm>)

(3) There is a lag between the time period that an FMAP is calculated in, and the time period it goes into effect. For example, the FFY 2014-15 FMAP of 51.01% was calculated based on data from CY 2012.

(4) The SFY FMAP and eFMAP are calculated as one quarter of the previous FFY FMAP/eFMAP and three quarters of the current FFY FMAP/eFMAP. This is due to FMAP changes going into effect on the FFY on October 1, which is one quarter through the SFY.

(5) FY 2017-18 and FY 2018-19 estimated FMAP is calculated based on historical actuals from the Bureau of Economic Analysis (BEA), and will only change if the BEA restates these actuals. FY 2018-19 estimated FMAP is calculated based on forecasts of Personal Income from [www.leg.state.co.us](http://www.leg.state.co.us) and Population from [www.census.gov](http://www.census.gov).