

# Department of Health Care Policy & Financing

Department of Health Care Policy and Financing Medicaid Caseload FY 2020-21 Budget Request

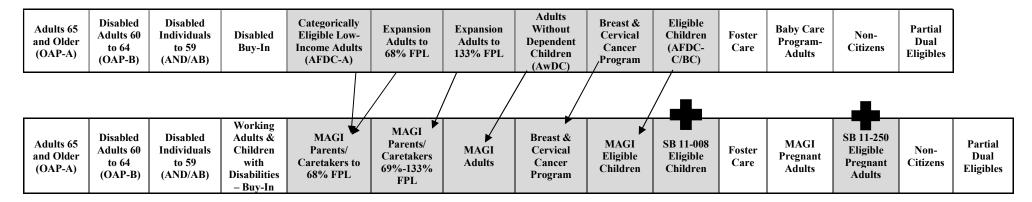
# **TABLE OF CONTENTS**

CHANGES TO THE ELIGIBILITY CATEGORIES	3
MEDICAID CASELOAD	4
INTRODUCTION	4
RECENT CASELOAD HISTORY	6
FORECAST MODELS	18
CATEGORICAL PROJECTIONS	20
ADULTS OVER 65 (OAP-A)	21
ADULTS 60 TO 64 WITH DISABILITIES (OAP-B)	26
INDIVIDUALS TO 59 WITH DISABILITIES (AND/AB)	31
WORKING ADULTS AND CHILDREN WITH DISABILITIES – BUY-IN	44
MAGI PARENTS/CARETAKERS TO 68% FPL	56
MAGI PARENTS/CARETAKERS 69% TO 133% FPL	62
MAGI ADULTS	67
BREAST AND CERVICAL CANCER PROGRAM	79
MAGI ELIGIBLE CHILDREN	
SB 11-008 ELIGIBLE CHILDREN	101
FOSTER CARE	106
MAGI ELIGIBLE PREGNANT ADULTS	
SB 11-250 ELIGIBLE PREGNANT ADULTS	
NON-CITIZENS – EMERGENCY SERVICES ONLY	
PARTIAL DUAL ELIGIBLES	133
TOTAL MEDICAID SUMMARY	138

### CHANGES TO THE ELIGIBILITY CATEGORIES

The Department of Health Care Policy and Financing ("the Department") previously altered the eligibility categories to reflect the different Federal Medical Assistance Percentage (FMAP) that is applied to different categories. Several steps in Medicaid expansion (described below) introduced new categories with an enhanced FMAP. Forecasting caseload by eligibility and FMAP categories allows for a more accurate expenditure estimate for each funding source. Beginning with the August 2014 JBC Monthly Report, caseload was restated to align with the eligibility categories described below.

- "Categorically Eligible Low-Income Adults" and "Expansion Adults to 68%" were combined into one category called "MAGI Parents/Caretakers to 68% FPL."
- "Expansion Adults to 133% FPL" is now titled "MAGI Parents/Caretakers 69%-133% FPL."
- On January 1, 2013, Colorado implemented SB 11-008 and SB 11-250 which expanded Medicaid Eligible Children to 133% FPL (142% FPL with MAGI disregards after October 2013) for all ages and expanded Baby-Care Adults to 185% FPL (195% FPL with MAGI disregards after October 2013). The incremental increase in eligibility receives an enhanced match equal to the CHP+ FMAP, for clients who would have otherwise been in the CHP+ program. Eligible Children and Baby-Care Adults are now separated into two categories each; MAGI Eligible Children and SB 11-008 Eligible Children, and MAGI Pregnant Adults and SB 11-250 Eligible Pregnant Adults.



### **MEDICAID CASELOAD**

#### INTRODUCTION

Biannually, the Department submits its estimated funding need for the Medical Services Premiums line item. The first step in generating the November and February submissions is to project the Medicaid caseload. Medicaid caseload does not represent the number of uninsured individuals in Colorado, nor does it represent the number of Colorado residents living in poverty. Caseload figures only represent individuals that the Department expects will enroll in Medicaid because they meet specific eligibility requirements in one of three groups: 1) Families, Pregnant Women, and Children; 2) Aged and Disabled; or 3) Other.

Federal Medicaid statute defines over 50 groups of individuals that may qualify for Medicaid. Some groups are mandatory while others are optional, and each state decides which of the optional groups it will cover. From the inception of Medicaid in 1965 (Public Law 89-97) to the 1980s, the program was targeted at low-income families, the elderly, and individuals with disabilities. During the 1980s, Medicaid expanded to include pregnant women and children with greater income levels, as well as some optional elderly and disabled groups. In 2000, Medicaid coverage was extended to women with breast and cervical cancer. From the 1990s to the present, other Medicaid categories have been added through State-initiated waivers. All eligibility categories have specific income limits, and some have additional criteria such as age, resources, or disability status. For budgetary purposes, the Department groups together clients with similar characteristics and costs. For example, clients grouped in the MAGI Eligible Children category have similar characteristics and costs but might have gained Medicaid eligibility through different criteria. Since each category of eligibility is affected by unique factors, the Department projects each category separately. Projecting an aggregate caseload would be easier, but less precise.

Historic caseload data are used in conjunction with economic data to project caseload in each category. To make a projection, the Department uses several different statistical techniques (as described in the Forecast Models section) and chooses the projection that best fits the data. After projections are chosen for each category, the Department presents its recommendations to the Office of State Planning and Budgeting (OSPB). The Department then meets with OSPB and the two agencies agree on an Executive caseload proposal. It is important to note that the methodology the Department used to generate its projections is not wholly reflected by the Executive caseload proposal presented in this document, since those figures are often the result of compromises with OSPB.

In 2003, the process of projecting the Medicaid caseload was drastically affected by SB 03-196, which mandated that the Department transition from accrual to cash-based accounting. From that point forward, caseload numbers no longer incorporated retroactivity. Retroactivity caused historical adjustments to caseload to account for clients who were found to be eligible for Medicaid for past months, thus increasing the count of persons eligible for Medicaid. Since most clients are eligible back to the date of their application, retroactivity adjustments assured that all months were accounted for. However, this caused variability in the caseload reports, as monthly caseload was adjusted for months, even years, after the month had ended. It also required special manually run reports to make these adjustments. Under the cash accounting system, a monthly caseload report is created from the Medicaid Management Information System (MMIS) and that caseload is considered final.

In addition to estimating the funding need for the Medical Services Premiums line item, Medicaid caseload is used to determine the funding need for the Medicaid Behavioral Health Community Programs. Comprehensive behavioral health services are available to eligible Medicaid clients. Thus, the Medicaid Behavioral Health caseload is the Medicaid caseload less Partial Dual Eligibles and Non-Citizens-Emergency Services, which are not eligible

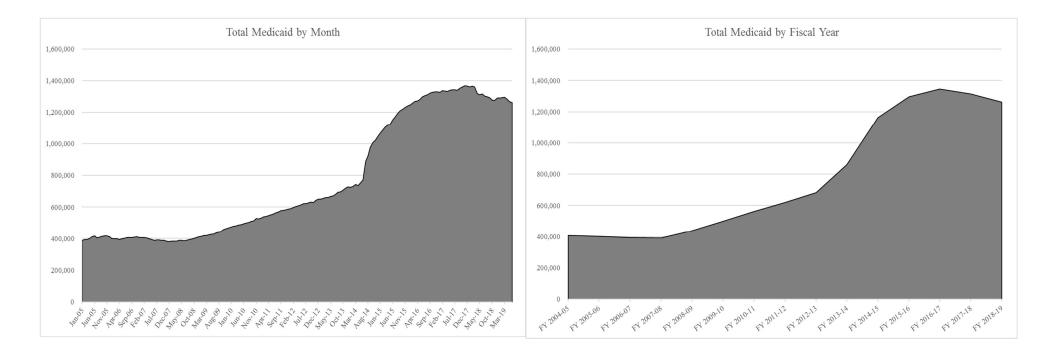
FY 2020-21 BUDGET REQUEST: CASELOAD NARRATIVE
for full Medicaid benefits. The following table displays a comparison of historical caseloads in Medicaid Medical Services Premiums and Behavioral Health.

Fiscal Year	Medical Services Premiums Caseload	Less: Behavioral Health Ineligible Categories	Behavioral Health Caseload
FY 2003-04	367,559	(14,635)	352,924
FY 2004-05	406,024	(14,755)	391,269
FY 2005-06	402,218	(17,304)	384,914
FY 2006-07	392,228	(18,109)	374,119
FY 2007-08	391,962	(18,405)	373,557
FY 2008-09	436,812	(19,062)	417,750
FY 2009-10	498,797	(19,612)	479,185
FY 2010-11	560,759	(20,303)	540,456
FY 2011-12	619,963	(21,641)	598,322
FY 2012-13	682,994	(23,890)	659,104
FY 2013-14	860,957	(25,859)	835,098
FY 2014-15	1,161,206	(30,767)	1,130,439
FY 2015-16	1,296,986	(35,234)	1,261,752
FY 2016-17	1,346,174	(36,449)	1,309,725
FY 2017-18	1,315,217	(37,637)	1,277,580
FY 2018-19	1,261,752	(37,341)	1,224,024

### **Recent Caseload History**

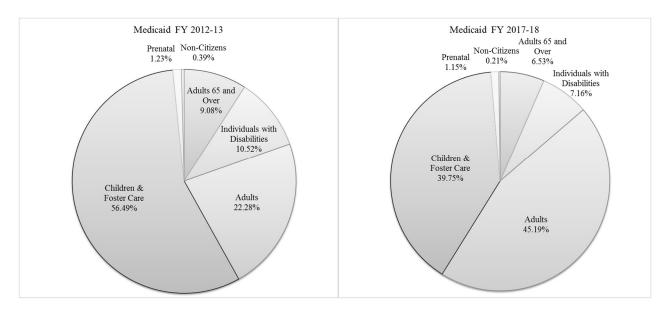
#### Total Medicaid Caseload

Exhibit B tabulates actual caseload figures and growth rates by eligibility category from FY 1997-98 to FY 2018-19. Projections for FY 2019-20 through FY 2021-22 are also presented in the table and will be discussed in the Categorical Projections section of this document. A graphical representation of aggregate Medicaid caseload history from FY 2006-07 is shown below. Total Medicaid caseload had an average yearly growth of 11.76% over the 5 years preceding FY 2013-14. As can be seen in the graph below, Medicaid expansion began in January 2014. The average monthly caseload for total Medicaid in FY 2013-14 increased by 26.06% from FY 2012-13. Overall, the caseload growth that is attributable to Medicaid expansion has been slowing over time. Over the past two years, Medicaid caseload has decreased with an improving state economy.



### Composition of Medicaid Caseload

Medicaid Expansion resulted in significant changes in the composition of Medicaid caseload, mainly for Medicaid Adults. The following charts show a side-by-side comparison of the Medicaid caseload by category as a percentage of the overall caseload for FY 2012-13 (pre-expansion) and FY 2018-19 (post-expansion). Medicaid adults have increased their share of caseload by approximately 23 percentage points, an increase attributable to lifting the enrollment cap in MAGI Adults and expanding eligibility for adults to 133% FPL. Children and Foster Care has lost more than fifteen percentage points and is now less than half of the composition of Medicaid. Adults ages 65 and Over and Individuals with Disabilities have also lost a portion of their share. These declines in the proportion of caseload are not due to declines in the individual eligibilities themselves, rather they are due to the large increase in Medicaid Adults.

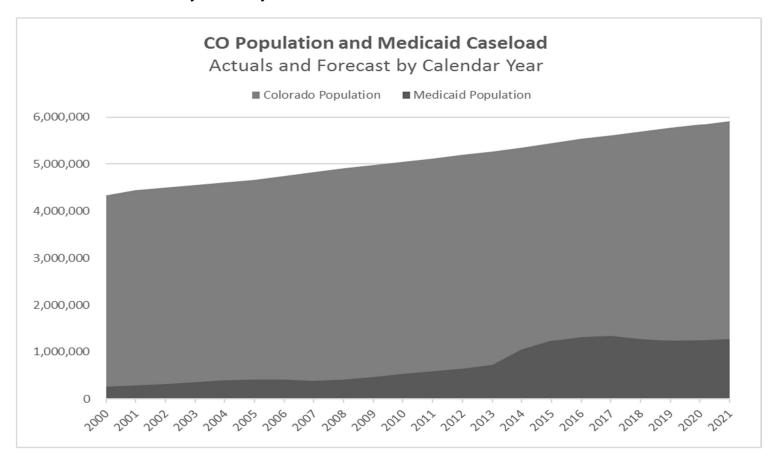


A number of factors influence Medicaid caseload trends, including population trends, in-state migration, age of the population, length of stay, economic conditions, and State and federal policy changes. Projecting annual caseload is complicated by the fact that each of these factors can contribute to categorical changes, some of which may be contradictory. For example, the State may enact legislation that removes clients from a Medicaid category who are aged 65 and older, while the population of adults aged 65 and older is increasing. Therefore, projections represent the *net effect* of what the Department expects will happen. Each factor and its expected impact on the Medicaid caseload are discussed below.

Population - Colorado's total population is estimated to have increased 10.01% from 2010 to 2016, while the population increase for the total US was 4.7%. The Department of Local Affairs' State Demography Office forecasts that Colorado's population will increase a further 4.84% from 2018 to

 $<sup>^1\</sup> http://www.census.gov/quickfacts/table/PST045215/00$ 

2021<sup>2</sup>. As the overall population has grown, so too has Medicaid caseload. This positive correlation implies that if population is projected to grow in the future, Medicaid caseload may also increase. The graph below shows the Department of Local Affairs' forecast for Colorado's population with the Department's Medicaid Caseload forecast by calendar year.



When using population data to project caseload, the Department marries population subgroups to their appropriate Medicaid category. For example, when projecting caseload for MAGI Eligible Children, the Department uses population statistics for Colorado residents aged 0 to 18. By using subgroups instead of total population figures, the Department is able to capture subgroup specific trends.

In-State Migration - Like population, in-state migration is positively correlated with Medicaid caseload. As discussed above, Colorado's population from 2010 to 2016 grew at a faster rate than the population of the U.S. As more individuals move to Colorado from other states, Medicaid caseload is likely to increase. During economic downturns, people usually move from states with worse economic conditions to states with better conditions in

https://demography.dola.colorado.gov/births-deaths-migration/data/components-change/#components-of-change, select Colorado, years 2010-202, and no grouping

<sup>&</sup>lt;sup>2</sup> Source: Department of Local Affairs, Demography Division;

search of jobs. Although Colorado experienced economic conditions in line with the overall conditions in the United States during the recent recession, net migration remained positive in 2010 at approximately 70,000<sup>3</sup>. An increase of 70,000 persons in a population of over 5.1 million may not be significant, but a positive migration rate means more people who could be eligible for Medicaid. According to 2010 estimates from the Census Bureau, Colorado experienced the sixth highest migration rate in the United States.<sup>4</sup> Conversely, as the economy recovers, in-state migration is expected to increase. Net migration grew to an estimated 52,346 in 2006, overtaking natural increase (births minus deaths) as the major component of population growth. Though in-state migration is projected to decrease over the forecast period, the number of individuals moving into the State is expected to remain positive, buoyed by rates of unemployment that are lower than the national average.

Age - The age of the population can provide some insight as to why Medicaid caseloads have been increasing. As the population ages, the demand for medical care increases. Generally, as individuals age, their health becomes more fragile and they are more likely to seek health care. From 2005 to 2015, Colorado's median age increased by 1.7 years, a 4.9% increase<sup>5</sup>. This may be the result of retirees moving to the State, increased longevity, or fewer births. Regardless of the reason, an aging population has a direct effect on the demand for medical services, though not necessarily Medicaid. According to data from the United States Census Bureau, Colorado had the 10<sup>th</sup> lowest median age in 2010 and the 4<sup>th</sup> lowest old-age dependency ratio in 2009 (defined as the population 65 and older as a percent of population 18 to 64) in the nation.<sup>6</sup> The population over 60 in Colorado has increased by 59.55% between 2002 and 2013, which is expected to cause an increase in the State's median age. Additionally, Colorado's old-age dependency ratio is projected to increase from 15.6 in 2000 to 24.6 in 2020, a 57.2% increase.<sup>7</sup> This growth is significantly higher than the national average, which is projected to increase by 34.8% over the same timeframe. This suggests that Colorado will be aging faster than the average state over the forecast period. Since 2009, Colorado has experienced increases in the eligibility categories that include older individuals, though the growth was not as high as population growth in the general population aged 60 and over. This may be the result of a healthier aging population and demographic factors, such as the elderly population working longer and some of the baby-boom generation not yet reaching retirement age. Below is a chart comparing population by age group for Colorado and the United States. The next page shows the population pyramid from the 2010 Census Summary.

	Population by Age Group: 2010									
	Total	Total Under 18 years		18 to 44 Years 45 to 64 Y		Years	65 Years and Over		Median	
	Population	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Age
<b>United States</b>	308,745,538	74,181,467	24.0%	112,806,642	36.5%	81,489,445	26.4%	40,267,984	13.0%	37.2
Colorado	5,029,196	1,225,609	24.4%	1,913,620	38.1%	1,340,342	26.7%	549,625	10.9%	36.1

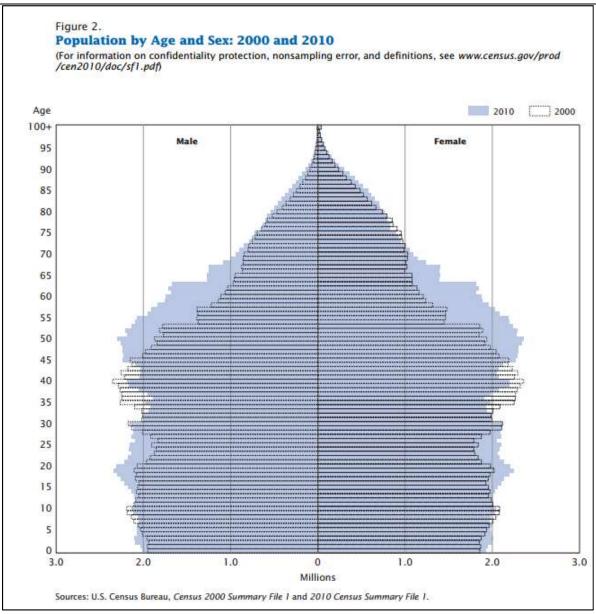
<sup>&</sup>lt;sup>3</sup> Source: Department of Local Affairs, Demography Division

<sup>&</sup>lt;sup>4</sup> Source: 2010 American Community Survey <a href="http://www.census.gov/acs/www/">http://www.census.gov/acs/www/</a>

<sup>&</sup>lt;sup>5</sup> Source: Department of Local Affairs, Demography Division

<sup>&</sup>lt;sup>6</sup> Source: 2010 American Community Survey <a href="http://www.census.gov/acs/www/">http://www.census.gov/acs/www/</a>

<sup>&</sup>lt;sup>7</sup> Source: U.S. Census Bureau, Population Division, Interim State Population Projections, 2005 <a href="http://www.census.gov/population/www/projections/index.html">http://www.census.gov/population/www/projections/index.html</a>



Length of Stay - Medicaid caseload is not only affected by the number of individuals served but also the length of time they remain in the program. The calculation used in the past for length of stay only considered enrollment in a given year in isolation, and did not account for clients that have eligibility that overlaps multiple fiscal years due to the timing of their eligibility determination. The Department has refined this analysis to account for the clients with a length of stay lasting longer than a fiscal year to provide a more accurate picture of the amount of time that individuals are enrolled in Medicaid. The table below shows the average length of stay in months, as well as the percent of clients that stay on Medicaid for longer than one year. The calculation for FY 2016-17 (shaded) may not be complete due to run-out and these averages could increase as more data is accrued.

	Average Length of Stay in Months by Eligibility												
		Adults 65 and Older	Disabled Adults 60 to 64	Disabled Individuals to 59	Disabled Buy-In	MAGI Parents/ Caretakers to 68% FPL	Expansion Adults <sup>1</sup>	Breast and Cervical Cancer Program	Eligible Children <sup>2</sup>	Foster Care	Eligible Pregnan t Adults <sup>3</sup>	Non- Citizen s	Partial Dual- Eligibles
2012-13	Avg LOS Mo's	43.32	35.46	55.11	12.78	13.90	11.65	25.99	16.62	37.29	9.07	5.84	34.46
FY 20	% > 12 Mo's	86.05%	86.40%	90.21%	30.65%	53.55%	44.72%	70.65%	68.90%	90.21%	16.16%	0.92%	78.52%
2013-14	Avg LOS Mo's	35.28	33.14	45.31	15.94	15.78	9.80	29.02	17.84	35.91	10.29	5.74	32.28
FY 20	% > 12 Mo's	85.48%	86.30%	90.68%	47.09%	63.63%	19.30%	75.08%	72.47%	88.48%	24.44%	0.76%	82.42%
2014-15	Avg LOS Mo's	19.57	21.15	21.72	14.3	16.73	16.29	17.17	18.26	38.64	11.06	5.59	17.95
FY 20	% > 12 Mo's	80.04%	87.19%	90.65%	60.76%	73.80%	70.60%	72.77%	82.61%	92.98%	35.86%	1.59%	80.50%
2015-16	Avg LOS Mo's	20.60	21.63	22.54	13.16	15.92	15.64	19.01	17.92	32.42	12.36	5.48	17.00
FY 20	% > 12 Mo's	86.81%	91.18%	94.70%	60.78%	79.42%	78.66%	84.53%	88.74%	94.32%	45.69%	0.80%	83.28%
2016-17	Avg LOS Mo's	28.38	28.51	29.17	13.70	16.87	20.66	20.66	23.13	47.26	11.13	5.76	24.70
FY 20	% > 12 Mo's	88.52%	91.97%	93.72%	56.88%	67.33%	78.13%	77.11%	84.70%	97.33%	31.55%	2.37%	86.27%

<sup>1–</sup> This category includes both MAGI Parents/Caretakers 69-133% FPL and MAGI Adults.

<sup>2 –</sup> This category includes both MAGI Eligible Children and SB 11-008 Eligible Children

<sup>3 –</sup> This category includes both MAGI Pregnant Adults and SB 11-250 Pregnant Adults

Economic Conditions - Economic indicators partially explain why some Medicaid caseload trends occur. Since Medicaid is a needs-based program where clients must meet income limits, it follows that caseload for families and children should be countercyclical to economic conditions. For example, as the State experiences recessionary conditions, Medicaid caseload will increase. After the recession that ended in the early 1990s, Colorado enjoyed almost ten years of economic expansion. The terror attacks on the United States in 2001 combined with the bursting of the stock market bubble in late 2000 brought that expansion to a halt. For the first time in more than a decade, Colorado experienced significant job losses coupled with falling wages. In mid-2003, the Colorado economy hit bottom after the decline that started in early 2001. Due to seasonal fluctuations and wide confidence intervals for over-the-month changes, employment data is best analyzed by comparing the same month for different years. The first post-recession over-the-year gain in non-agricultural employment occurred in March of 2004. The State officially entered an expansionary period in early 2006, as employment surpassed the late 2000 peak. The recovery period lasted 30 months, one of the longest on record. Employment began to soften in October 2008, when 4,600 jobs were shed over the year. The State experienced over-the-year job losses for two years and the annual contractions appear to have peaked in September 2009, when job losses numbered 128,400 (5.5%) over the year. The State has seen very moderate over-the-year employment increases as of September 2010. As of June 2017, the over-the-year jobs gain was estimated to be 52,700, or 2.03%. The unemployment rate for the US in 2016 was estimated at 4.9% while Colorado's unemployment rate for the same year was 3.3%.

The table that follows shows historical and projected (shaded) wage and salary income, non-agricultural employment, and unemployment rates for Colorado. 10

Year	Wage and Salary Income (billions)	Non-Agricultural Employment	Unemployment Rate
2012	\$125.00	2,313,000	7.90%
2013	\$129.60	2,381,900	6.80%
2014	\$138.70	2,464,900	5.00%
2015	\$146.60	2,541,900	3.90%
2016	\$153.30	2,598,300	3.30%
2017	\$159.90	2,658,600	2.80%
2018	\$168.80	2,725,400	2.80%
2019	\$177.60	2,774,500	1.80%
2020	\$186.50	2,818,800	1.60%
2021	\$195.60	2,858,300	1.40%

<sup>&</sup>lt;sup>8</sup> Source: United States Department of Labor, Bureau of Labor Statistics, Current Employment Statistics <a href="http://www.bls.gov/data/">http://www.bls.gov/data/</a>

<sup>&</sup>lt;sup>9</sup> Source: <a href="http://www.bls.gov/cps/">http://www.bls.gov/cps/</a>

<sup>&</sup>lt;sup>10</sup> Source: Office of State Planning and Budgeting, June 19, 2019 Economic and Fiscal Outlook, page 25

The timing of an economic cycle is important in estimating the impact on the Medicaid caseload, excluding elderly eligibilities and clients with disabilities. As the economy recovers from a downturn, workers need to find jobs in order to withdraw from the Medicaid rolls. Jobs that primarily affect family and children Medicaid populations are hourly and concentrated in the service industry. These employment types are often the last to benefit from improving economic conditions. Therefore, any economic impact on the Medicaid caseload will have a lagged effect. Second, as workers find jobs they do not instantaneously lose their Medicaid eligibility. Since 1990, states have been federally required to provide Transitional Medical Assistance (known as Transitional Medicaid) benefits for up to one year to families who lost eligibility because of increased income due to employment. This policy was directed at clients who potentially might turn down employment for fear of losing their Medicaid benefits. To be eligible for Transitional Medicaid, a client must have been eligible in at least three of the preceding six months, though states may elect to reduce this requirement to fewer than three months. Clients may receive Transitional Medicaid as long as their income is below 185% of the federal poverty level, provided that the proper income reporting requirements are followed. Another small group of clients are eligible for Transitional Medicaid services that would otherwise lose their Medicaid benefits due to child or spousal support payments. Families in this group receive a four-month extension. In the past, this program has been set to expire many times. With the passage of H.R.2 "Medicare Access and CHIP Reauthorization Act of 2015" on April 16, 2015, transitional Medicaid was made permanent. As illustrated in the following table, the average number of adults and children on Transitional Medicaid increased dramatically in FY 2004-05. The Department suspects that the high growth in FY 2004-05 and FY 2005-06 may be partially related to large monthly increases that occurred around the implementation of the Colorado Benefits Management System. Monthly caseload declined between December 2005 and June 2008, but caseload increased throughout FY 2008-09 and FY 2009-10. Transitional Medicaid increased again in FY 2013-14 and FY 2014-15 for adults, which is likely due to both expansion and an improving economy.

Fiscal Year	Average Number of Eligible Children on Transitional Medicaid	Average Number of Parents/ Caretakers on Transitional Medicaid
FY 2002-03	7,645	4,689
FY 2003-04	7,349	4,709
FY 2004-05	10,776	6,586
FY 2005-06	16,749	10,745
FY 2006-07	16,065	9,968
FY 2007-08	13,000	7,778
FY 2008-09	13,489	7,905
FY 2009-10	13,582	8,099
FY 2010-11	11,042	6,173
FY 2011-12	21,311	11,171
FY 2012-13	16,544	8,643
FY 2013-14	16,335	16,668
FY 2014-15	4,969	34,001
FY 2015-16	12,451	29,329
FY 2016-17	28,219	40,955
FY 2017-18	29,870	52,555
FY 2018-19	39,717	68,018

Policy Changes - State and federal policy decisions can alter the Medicaid caseload. The following list briefly describes major State and federal policy changes that have affected Medicaid eligibility and, therefore, caseload. This list is not meant to be comprehensive in nature but a summary of major changes affecting eligibility since 2000.

- Breast and Cervical Cancer Prevention and Treatment Act of 2000, Public Law 106-354: Established a new group of eligibility for women under 65 who have been screened under the Centers for Disease Control and Prevention Board and need treatment for either diagnosis. Colorado implemented this optional eligibility group in July 2002 pursuant to SB 01S2-012.
- Medicare Prescription Drug, Improvement, and Modernization Act of 2003: This act causes more potential beneficiaries to be screened for Medicaid when they apply for this Medicare benefit.
- Presumptive eligibility for Medicaid pregnant women was discontinued on September 1, 2004. It was re-established by HB 05-1262 on July 1, 2005.
- HB 05-1262, the Tobacco Tax bill: This bill provided funding for the removal of the Medicaid asset test, the expansion of the income guideline used to establish eligibility for parents of children eligible for either Medicaid or the Children's Basic Health Plan to 60% of the federal poverty level (known as Expansion Adults to 60% FPL), and to expand the number of children enrolled in the Home- and Community-Based Services and the Children's Extensive Support Waiver.

- Deficit Reduction Act of 2005: This Act contained provisions related to premiums and cost sharing, benefits, and asset transfers that will have implications for Medicaid beneficiaries. In addition, the Deficit Reduction Act contained a provision requiring States to obtain satisfactory documentary evidence of citizenship and identity for all Medicaid applicants who have declared that they are citizens or nationals of the United States, with exemptions for individuals that are eligible for Medicaid and entitled to or enrolled in Medicare and those eligible for Medicaid by virtue of receiving Supplemental Security Income benefits.
- SB 07-211: Established presumptive eligibility for Medicaid children.
- HB 09-1293: The Colorado Health Care Affordability Act of 2009, authorizes the Department to collect hospital provider fees for the purpose of obtaining federal financial participation for the State's medical assistance programs and using the combined funds to: 1) increase reimbursement to hospitals for providing medical care under the medical assistance program and the Colorado Indigent Care Program; 2) increase the number of persons covered by public medical assistance; and 3) pay the administrative costs to the Department in implementing and administering the program. Populations that receive Hospital Provider Fee funding are disabled buy-in, adults without dependent children, and expansion adults 60%-133%. HB 09-1293 also established continuous eligibility for twelve months for children in Medicaid.
- HB 09-1353: Expands Medicaid eligibility to pregnant women who are legal permanent residents that have been in the country for less than 5 years.
- SB 11-008: Increases Medicaid eligibility for children from 6 through 18 years of age to 133% FPL beginning in January 2013 (142% FPL after MAGI disregards in October 2013). These clients are identified separately in the JBC monthly report and in the caseload forecast. They are the clients that are Medicaid eligible children between the ages of 6 and 18, FPL within 108% and 142%, and have no other insurance. These clients receive the CHP+ enhanced Federal match.
- SB 11-250: Increases Medicaid eligibility for pregnant women from 142% FPL to 185% FPL beginning in January 2013 (195% FPL after MAGI disregards in October 2013). These clients are identified separately in the JBC monthly report and in the caseload forecast. They are the clients that are Medicaid eligible pregnant adults that are within 142% FPL and 195% FPL and have no other insurance. These clients receive the CHP+ enhanced Federal match.
- SB 13-200: Increases Medicaid eligibility for expansion adults from 100% FPL to 133% FPL and lifts the enrollment cap on MAGI Adults.
- The transition to MAGI resulted in standardization of the definition and measurement of income, both across states and programs, resulting in streamlined eligibility determinations that are based solely on national tax filing standards rather than disparate methodologies.
- Continuous eligibility for Medicaid Eligible Children and CHP+ Children was implemented March 2014. Clients on Medicaid or CHP+ that are determined over the income threshold will have an additional 12 months of eligibility before losing benefits. This reduces churn between Medicaid and CHP+ as well as the client's ability to maintain continuous medical coverage as they churn from Medicaid or CHP+ into the Marketplace. This change results in an increased length of stay for MAGI Eligible Children and SB 11-008 Eligible Children.
- HB 14-1045: Extends funding for the Breast and Cervical Cancer Program through FY 2018-19.
- HB 14-1252: Increases the system capacity for home- and community-based intellectual and developmental disabilities programs, services, and supports.
- Annualization of income began July 1, 2016 and allows individuals with seasonal fluctuations in income to remain eligible throughout the year so long as their income, annualized throughout the year, meets Medicaid qualification requirements.
- The age range for screening and treatment of cervical cancer under the Breast and Cervical Cancer Program will expand to 21 through 64, from 40 through 64, in January 2017, based on the Department of Public Health and Environment's FY 2016-17 R-04 "Cervical Cancer Eligibility Expansion" request.
- HB 16-1321: Allows for a Medicaid Buy-In option for Supported Living Services waiver (under the Office of Community Living) and the Spinal Cord Injury and Brain Injury waivers under Medical Services Premiums, beginning in FY 2017-18.

Oftentimes, a forecast cannot instantaneously incorporate policy changes even with the use of dummy or indicator variables. When this occurs, adjustments are made to the forecast off-line. Detailed accountings of off-line adjustments are in Exhibit B, page EB-2.

Caseload decreased from FY 2004-05 through FY 2007-08, resulting in a decline of 14,062, or 3.46%, between these fiscal years. The Department believes that improving economic conditions were the driving factor in this decrease, as consistent monthly declines occurred in MAGI Parents/Caretakers and MAGI Eligible Children, which are expected to be most affected by the economy. This trend reversed as of the second half of FY 2007-08, when the Eligible Children caseload started to show significant monthly increases. Strong increases continued in Medicaid in FY 2008-09, FY 2009-10, FY 2010-11, FY 2011-12, and FY 2012-13, with annual growth of 11.44%, 14.19%, 12.42%, 10.56%, and 10.17% respectively. With Medicaid expansion beginning in January 2014, the second half of FY 2013-14, caseload increased by 26.06% between FY 2012-13 and FY 2013-14 and 34.87% between FY 2013-14 and FY 2014-15. The increase continued in FY 2015-16, but at a lower rate, at 11.70%. The growth rate continued to decrease in FY 2016-17 and was negative in FY 2017-18. Due to a system change that improves the process for verifying income for Medicaid eligibility purposes that occurred in October 2017, every quarter the Department saw a decrease in caseload. Due to a communication issue between the CBMS and interChange regarding retroactive updates to enrollment spans that was fixed in June 2018, there was a substantial increase in Medicaid caseload that the Department treated as a level shift. In addition, there was a systems issue around guaranteed coverage for children, that inappropriately placed children in an incorrect category when the system redetermined their eligibility instead of maintaining guaranteed coverage in their original categories. This system issue was resolved in the beginning of FY 2018-19. The forecast for the Medicaid population is lower than the November 2018 forecast, especially on and after October 2018, where a quarterly system update identifies client who should not be on Medicaid. The Department is forecasting Medicaid caseload to continue to decrease by 1.52% in FY 2019-20 to 1,242,237. In FY 2020-21 and FY 2021-22, the trends are projected to be 2.11% and 2.13% respectively. The following table shows actual and projected aggregate Medicaid caseload from FY 2006-07 through FY 2021-20.

	Medicaid		
Fiscal Year	Caseload	Growth Rate	Level Growth
FY 2006-07	392,228	-2.48%	(9,990)
FY 2007-08	391,962	-0.07%	(266)
FY 2008-09	436,812	11.44%	44,850
FY 2009-10	498,797	14.19%	61,985
FY 2010-11	560,759	12.42%	61,962
FY 2011-12	619,963	10.56%	59,204
FY 2012-13	682,994	10.17%	63,031
FY 2013-14	860,957	26.06%	177,963
FY 2014-15	1,161,206	34.87%	300,249
FY 2015-16	1,296,986	11.70%	135,829
FY 2016-17	1,346,174	3.79%	49,188
FY 2017-18	1,315,167	-2.30%	(30,947)
FY 2018-19	1,261,365	-4.09%	(52,852)
FY 2019-20 Projection	1,242,237	-1.52%	(19,128)
FY 2020-21 Projection	1,268,487	2.11%	26,250
FY 2021-22 Projection	1,295,518	2.13%	27,031

#### FORECAST MODELS

The Department's caseload projections utilize statistical forecasting methodologies to predict Medicaid caseload by eligibility category. Historical monthly caseload data from July 1993 to June 2018 and historical and forecasted economic data (revised in June 2018) and demographic data (revised in June 2018) are used. The following forecasting models are used in this forecast: trend and monthly seasonal dummy variables, ARIMA models, trend stationary, difference stationary, regression analysis with explanatory variables, and vector auto regression models. In the past, the software used by the Department for developing trend and regression forecasts was *Forecast Pro XE*. The Department is now using *EViews* 9.

Trend and Seasonality Model

Medicaid caseload is a non-stationary series with a positive trend and many of the categories experience some level of seasonality. One of the models used incorporates a time trend and monthly seasonal dummy variables.

#### ARIMA Model

ARIMA models, also referred to as Box-Jenkins models, rely on the past behavior of the series being forecasted. Relying on the past behavior of a series mandates that a series be stationary. Most of the eligibilities in Medicaid caseload have a positive growth trend (non-stationary) and require differencing to be made stationary.

### Trend Stationary and Difference Stationary

Series that are stationary have a constant mean; caseload series frequently do not have this characteristic and often have a trending mean. Two popular models used for non-stationary series with a trending mean are trend stationary and difference stationary. The trend stationary model serves as an effective model if the series has a deterministic trend. The difference stationary model is useful when the trend is stochastic. Differencing the dependent variable gives a stationary series. The basic forms of the two models are listed below, where y is the dependent variable. Lags of the dependent variable are added to clear up serial correlation within the series.

- Trend Stationary:  $log(y) = c + trend + \varepsilon$
- Difference Stationary: differenced(log(y)) =  $c + \varepsilon$

### Regression Models

Regression analysis, unlike trend analysis, incorporates independent variables when making projections. For example, a regression equation may include the unemployment rate if the forecaster expects it to have an effect on the caseload for MAGI Parents/Caretakers. Statistically, the forecaster can test whether or not there is a relationship between independent variables and the caseload by constructing a correlation matrix. Variables that are highly correlated with the caseload are more likely to be predictive. Regression equations are useful in that they provide some insight into why the trend projection is increasing, decreasing, or static. Although regression equations help explain why trends occur, their value depends on the quality of the independent variables used. In order to project caseload, historical and forecasted values of the independent variables must be used. Therefore, the accuracy of the caseload forecast depends on the accuracy of the forecasted independent variables. The Department accessed the Colorado Department of Local Affairs' Demography Division's actual and forecasted values of different populations by age and the unemployment rate in January 2018 and used this information in the regression models.

### Vector Auto Regression Models (VARs)

The Department has frequently used regression analysis to forecast caseload. Regression analysis, as described above, incorporates independent variables when making projections. Regression analysis has the unfortunate requirement that the independent variables be exogenous to the dependent variable, or only allows the independent variable on the right-hand side of the equation to have an effect on the dependent variable on the left-hand side of the equation. This is unlikely in reality as most factors are interrelated and may affect each other simultaneously. Vector Auto Regression (VAR) models are simultaneous equations, allowing the different variables to affect each other equally. In other words, both variables are dependent and are able to change over time together in the forecast. The simultaneous process is better able to capture a long-term relationship between multiple variables

and does not restrict one variable to the right hand side of the equation.<sup>11</sup> This can serve as a better reflection of reality than forcing the assumption that a variable is exogenous to Medicaid caseload.

### Exponential Smoothing

For over 30 years, Exponential Smoothing models have been used to forecast data within a variety of applications. Considered simplistic, Exponential Smoothing models extract trend and seasonal patterns from a time-series to predict a future stream of values. There are two types of Exponential Smoothing models that address trend and seasonality in time-series data: Holt and Winters. The Holt Exponential Smoothing model adjusts for long-term linear trend in data, while the Winters Exponential Smoothing model adjusts for both trend and seasonal components of data. Both Holt and Winters use recursive equations to determine the estimated parameters of the model, giving more weight to recent observations and exponentially smaller weight to historically distant observations. One advantage of this model is that it produces robust results with limited data sets. This is very useful Medicaid eligibility categories that have not been in existence for very long. While the Department has used this model in the past, the February 2018 forecast does not use exponential smoothing.

### **Model Selection**

After several different forecasts are produced, the Department normally chooses one for each category. Several statistics are produced to grade and compare the forecast models. The three statistics provided in the narrative are the Schwartz Info Criterion (SIC), Akaike Info Criterion (AIC), and the adjusted R<sup>2</sup>. The SIC and the AIC provide a means for model selection. Both statistics include a trade-off between the goodness of fit of the model and the complexity of the model by applying a penalty for using up degrees of freedom (adding independent variables). These measures encourage the use of simpler models. The closer the SIC or AIC are to negative infinity, the better the model. The adjusted R<sup>2</sup> measures the goodness of fit of the model in-sample; the closer the R<sup>2</sup> statistic is to one the better the goodness of fit. The calculation of the adjusted R<sup>2</sup> contains the most lenient penalty for using up the degrees of freedom in the model. It is important to note that this measure is not reliable when forecasting the differences of a series. When differencing a series to make it stationary, fitting a model becomes incredibly difficult and the R<sup>2</sup> value drops. This does not indicate a poor model; it is simply a result of differencing a series. For models where the dependent variable is differenced, the AIC and SIC prove much more useful for comparing different models than the R<sup>2</sup>. When selecting a model, the Department closely analyzes the historical data, possible future impacts like the predicted state of the economy, and the above-mentioned statistics.

#### **CATEGORICAL PROJECTIONS**

This next section details the caseload projections by eligibility category. For each category, the following are presented: a discussion of the category, statutory authority, model results, rationale for the forecast, and historical caseload and forecasts. FY 2019-20 projections are included for informational purposes.

 $<sup>^{11}</sup>$  Sims, Chris "Macroeconomics and Reality." Econometrica. Volume. 48 No.1 (1980) Page MC-20

### Adults Over 65 (OAP-A)

Colorado automatically provides Medicaid coverage to individuals who receive Supplemental Security Income. Supplemental Security Income, authorized under Title XVI of the Social Security Act of 1965, is a federal cash assistance program for persons aged 65 and older, blind, or disabled. An individual must have income below the federal monthly maximum Supplemental Security Income limit and limited resources. The Supplemental Security Income adults aged 65 and older are included in this category. Also included are individuals aged 65 and older who meet the Medicaid resource and income requirements, but are not receiving Supplemental Security Income. In addition, states may extend coverage to individuals with incomes above the Supplemental Security Income limit and who meet the nursing home level of care. Referred to as 'Three-Hundred Percenters', these clients have incomes no more than three times the Supplemental Security Income maximum limit, and they meet the level of care to be in a nursing home.

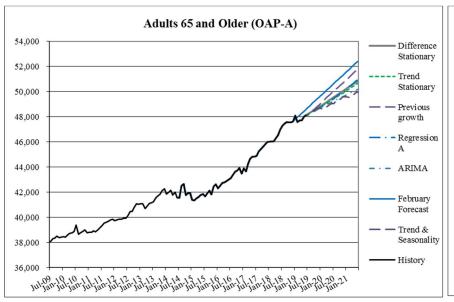
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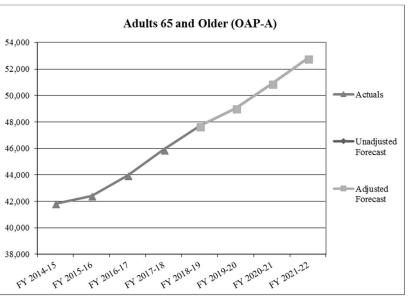
- (f) Individuals receiving supplemental security income;
- (g) Individuals receiving mandatory state supplement, including but not limited to individuals receiving old age pensions;
- (h) Institutionalized individuals who were eligible for medical assistance in December 1973;
- (i) Individuals who would be eligible except for the increase in old-age, survivors, and disability insurance under P.L. 92-336;
- (j) Individuals who become ineligible for cash assistance as a result of old-age, survivors, and disability insurance cost-of-living increases after April 1977:

### 25.5-5-201 (1), C.R.S.

- (b) Individuals who would be eligible for cash assistance except for their institutionalized status;
- (c) Individuals receiving home-and community-based services as specified in part 6 of this article;
- (f) Individuals receiving only optional state supplement;
- (g) Individuals in institutions who are eligible under a special income level. Colorado's program for citizens sixty-five years of age or older or physically disabled or blind, whose gross income does not exceed three hundred percent of the current federal supplemental security income benefit level, qualifies for federal funding under this provision;
- (j) Individuals who are qualified aliens and were or would have been eligible for supplemental security income as a result of a disability but are not eligible for such supplemental security income as a result of the passage of the federal "Personal Responsibility and Work Opportunity Reconciliation Act of 1996", Public Law 104-193;

# Adults 65 and Older (OAP-A): Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	OAP-A	Constant, Trend, Seasonal Dummy Variables	16.42	16.14	0.9442
ARIMA	D(OAP-A)	Constant, AR variables, MA variables	13.97	13.84	0.9948
Trend Stationary	LOG(OAP-A)	Constant, Trend, 1 lag of the dependent variable	-7.74	-7.85	0.9913
Difference Stationary	DLOG(OAP- A)	Constant, 2 lags of the dependent variable	-7.48	-7.55	0.9945
Regression A	OAP-A	Constant, CO population over 65, 4 lags of the dependent variable	13.84	13.69	0.9898
VAR			NA	NA	NA

~	Adults 65 and Older: Model Results1							
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change		
Trend & Seasonality	45,907	47,686	1.98%	48,630	944	76		
ARIMA	45,907	47,686	2.10%	48,687	1,001	87		
Trend Stationary	45,907	47,686	2.27%	48,768	1,082	101		
Difference Stationary	45,907	47,686	2.41%	48,835	1,149	110		
Regression A	45,907	47,686	2.19%	48,730	1,044	101		
Previous growth	45,907	47,686	2.80%	49,021	1,335	146		
February Forecast	45,907	47,686	4.05%	49,617	1,931	157		
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change		
Trend & Seasonality	47,686	48,630	1.88%	49,544	914	76		
ARIMA	47,686	48,687	2.09%	49,705	1,018	82		
Trend Stationary	47,686	48,768	2.60%	50,036	1,268	110		
Difference Stationary	47,686	48,835	2.76%	50,183	1,348	114		
Regression A	47,686	48,730	2.99%	50,187	1,457	133		
Previous growth	47,686	49,021	3.83%	50,899	1,878	157		
February Forecast	47,686	49,617	3.82%	51,512	1,895	158		
FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change		
Trend & Seasonality	48,630	49,544	1.85%	50,461	917	76		
ARIMA	48,687	49,705	1.91%	50,654	949	76		
Trend Stationary	48,768	50,036	2.71%	51,392	1,356	116		
Difference Stationary	48,835	50,183	2.80%	51,588	1,405	119		
Regression A	48,730	50,187	3.38%	51,883	1,696	147		
Previous growth	49,021	50,899	3.76%	52,813	1,914	162		

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

### Adults 65 and Older (OAP-A): Trend Selections

FY 2019-20: 2.80% FY 2020-21: 3.83% FY 2021-22: 3.76%

### Adults 65 and Older (OAP-A): Justifications

- Average Monthly Caseload for Adults 65 and Older in FY 2018-19 was 47,686, which is 3.87% increase from FY 2017-18. The average monthly change in FY 2018-19 was 95, which is slightly lower that what was forecasted in the February forecast, as this population had lower growth from February 2019 to April 2019. The Department expects strong growth to maintain, as individuals continue to age into this group.
- This population will be affected by the aging of the "baby boomers," defined by the U.S. Census Bureau as the generation born between 1946 and 1964. The Department believes this population is beginning to see this increase and has selected strong growth trends to account for the expected baby boomers. A population pyramid is available for review on page MC-10.
- The graph above shows that growth has been strong since FY 2011-12. Historical growth rates are stable and tend to fluctuate between 1% and 3%. The Department has seen strong growth in the Home- and Community-Based Services for the Elderly, Blind, and Disabled waiver.

	Actuals	Monthly Change	% Change
Jun-17	44,814	1	-
Jul-17	44,896	82	0.18%
Aug-17	45,233	337	0.75%
Sep-17	45,431	198	0.44%
Oct-17	45,606	175	0.39%
Nov-17	45,824	218	0.48%
Dec-17	45,985	161	0.35%
Jan-18	46,005	20	0.04%
Feb-18	46,038	33	0.07%
Mar-18	46,038	0	0.00%
Apr-18	46,302	264	0.57%
May-18	46,534	232	0.50%
Jun-18	46,991	457	0.98%
Jul-18	47,275	284	0.60%
Aug-18	47,463	188	0.40%
Sep-18	47,564	101	0.21%
Oct-18	47,546	(18)	-0.04%
Nov-18	47,544	(2)	0.00%
Dec-18	47,622	78	0.16%
Jan-19	48,091	469	0.98%
Feb-19	47,571	(520)	-1.08%
Mar-19	47,704	133	0.28%
Apr-19	47,704	0	0.00%
May-19	48,018	314	0.66%
Jun-19	48,125	107	0.22%

February 2019 Forecast	
Forecasted June 2019 Level	48,595

Base trend from June 2019 level						
FY 2019-20	48,125	0.92%	439			

		Adults 65 a	nd Older: H	listorical Caseload an	d Projection	S
	Caseload	% Change	Level Change			
FY 2006-07	35,888	-	-			
FY 2007-08	36,284	1.10%	396			
FY 2008-09	37,619	3.68%	1,335			
FY 2009-10	38,487	2.31%	868			
FY 2010-11	38,921	1.13%	434			
FY 2011-12	39,740	2.10%	819			
FY 2012-13	40,827	2.74%	1,087			
FY 2013-14	41,836	2.47%	1,009			
FY 2014-15	41,817	-0.05%	(19)			
FY 2015-16	42,403	1.40%	586			
FY 2016-17	43,941	3.63%	1,538	Fe	bruary 2019	) I
FY 2017-18	45,907	4.47%	1,966	FY 2017-18	45,907	
FY 2018-19	47,686	3.87%	1,779	FY 2018-19	47,849	
FY 2019-20	49,021	2.80%	1,335	FY 2019-20	49,615	
FY 2020-21	50,899	3.83%	1,878	FY 2020-21	51,510	
FY 2021-22	52,813	3.76%	1,914			

Actuals				
	Monthly Change	% Change		
6-month average	84	0.18%		
12-month average	95	0.20%		
18-month average	119	0.25%		
24-month average	138	0.30%		

The most recent months have seen relatively flat growth from this population. The 24 month average is 138, which is slightly dampened by the recent 6 months. The Department believes positive growth will continue, with the trend increasing to historical actuals. The Department forecasts the average monthly growth in the of FY 2019-20 approximately 146 per month, increasing over the request and out years due to an aging population, and expects this growth to continue.

February 2019 Projection					
FY 2017-18	45,907	4.47%	1,966		
FY 2018-19	47,849	4.23%	1,942		
FY 2019-20	49,615	3.69%	1,766		
FY 2020-21	51,510	3.82%	1,895		

Monthly Average Growth Actuals					
FY 2013-14 1st Half	185	0.45%			
FY 2013-14 2nd Half	(117)	-0.28%			
FY 2013-14	34	0.08%			
FY 2014-15 1st Half	61	0.15%			
FY 2014-15 2nd Half	(13)	-0.03%			
FY 2014-15	24	0.06%			
FY 2015-16 1st Half	130	0.31%			
FY 2015-16 2nd Half	65	0.15%			
FY 2015-16	97	0.23%			
FY 2016-17 1st Half	78	0.18%			
FY 2016-17 2nd Half	222	0.51%			
FY 2016-17	150	0.34%			
FY 2017-18 1st Half	195	0.43%			
FY 2017-18 2nd Half	168	0.36%			
FY 2017-18	181	0.40%			
FY 2018-19 1st Half	105	0.22%			
FY 2018-19 2nd Half	84	0.18%			
FY 2018-19	95	0.20%			

Monthly Average Growth Comparisons					
Request	Monthly	Monthly Change Percent Cha			
Request	S-1	R-1	S-1	R-1	
FY 2019-20 1st Half	157	136	0.32%	0.28%	
FY 2019-20 2nd Half	158	156	0.32%	0.32%	
FY 2019-20	157	146	0.32%	0.30%	
FY 2020-21 1st Half	158	157	0.31%	0.31%	
FY 2020-21 2nd Half	158	157	0.31%	0.31%	
FY 2020-21	158	157	0.31%	0.31%	
FY 2021-22 1st Half	0	162	0.00%	0.31%	
FY 2021-22 2nd Half	0	163	0.00%	0.31%	
FY 2021-22	0	162	0.00%	0.31%	

### Adults 60 to 64 with Disabilities (OAP-B)

Colorado automatically provides Medicaid coverage to individuals who receive Supplemental Security Income. Supplemental Security Income, authorized under Title XVI of the Social Security Act of 1965, is a federal cash assistance program for persons aged 65 and older, blind, or disabled. An individual must have income below the federal monthly maximum Supplemental Security Income limit and limited resources. Disabled adults aged 60 to 64 who are eligible for Supplemental Security Income are included in this category. In addition, states may extend coverage to individuals with incomes above the Supplemental Security Income limit, and who meet the nursing home level of care. Referred to as 'Three-Hundred Percenters', these clients have incomes no more than three times the Supplemental Security Income maximum limit, and they meet the level of care to be in a nursing home.

Quality control checks are completed from time to time to look for eligibility coding errors that commonly result in clients being misclassified between this Medicaid category and the State-only Old Age Pension Health and Medical Care program (non-Medicaid). Historical miscoding can make it difficult to forecast this Medicaid category as groups of individuals identified through this process may be abruptly moved in and out of this category.

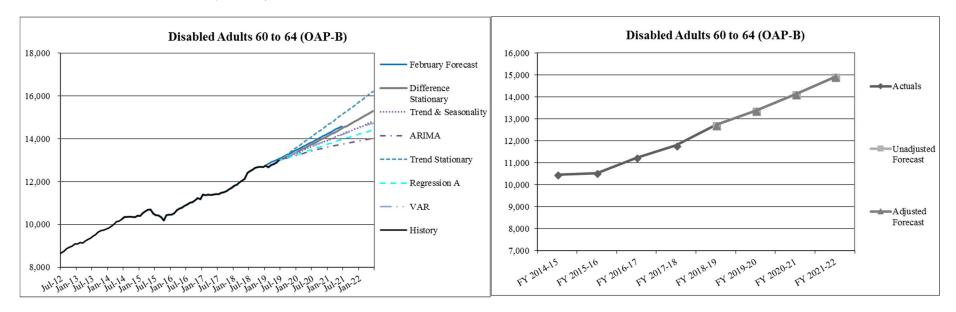
### 25.5-5-101 (1), C.R.S.

- (f) Individuals receiving supplemental security income;
- (g) Individuals receiving mandatory state supplement, including but not limited to individuals receiving old age pensions;
- (h) Institutionalized individuals who were eligible for medical assistance in December 1973;
- (i) Individuals who would be eligible except for the increase in old-age, survivors, and disability insurance under P.L. 92-336;
- (j) Individuals who become ineligible for cash assistance as a result of old-age, survivors, and disability insurance cost-of-living increases after April 1977;

### 25.5-5-201 (1), C.R.S.

- (b) Individuals who would be eligible for cash assistance except for their institutionalized status;
- (c) Individuals receiving home-and community-based services as specified in part 6 of this article;
- (f) Individuals receiving only optional state supplement;
- (g) Individuals in institutions who are eligible under a special income level. Colorado's program for citizens sixty-five years of age or older or physically disabled or blind, whose gross income does not exceed three hundred percent of the current federal supplemental security income benefit level, qualifies for federal funding under this provision;
- (j) Individuals who are qualified aliens and were or would have been eligible for supplemental security income as a result of a disability but are not eligible for such supplemental security income as a result of the passage of the federal "Personal Responsibility and Work Opportunity Reconciliation Act of 1996", Public Law 104-193;

# Adults 60 to 64 with Disabilities (OAP-B): Model Results



Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	OAP-B	Constant, trend, and monthly seasonal variables	13.71	13.45	0.9908
ARIMA	dlog(OAP-B)	Constant, AR variables	12.67	12.58	0.997
Trend Stationary	log(OAP-B)	Constant, trend, and 3 lags on the dependent variable	-7.37	-7.47	0.9995
Difference Stationary	dlog(OAP-B)	Constant and 2 lags on the dependent variable	-5.19	-5.24	0.1443
Regression A	OAP-B	Constant, 3 lags on dependent variable, population age 60-64	12.49	12.4	0.9971
VAR			NA	NA	NA

	D	isabled Adults	60 to 64: Mod	el Results <sup>1</sup>		
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change
Trend & Seasonality	11,797	12,721	4.70%	13,319	598	50
ARIMA	11,797	12,721	3.96%	13,225	504	35
Trend Stationary	11,797	12,721	6.69%	13,572	851	88
Difference Stationary	11,797	12,721	5.09%	13,368	647	59
Regression A	11,797	12,721	4.13%	13,246	525	40
VAR	11,797	12,721	4.95%	13,351	630	52
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change
Trend & Seasonality	12,721	13,319	4.56%	13,926	607	51
ARIMA	12,721	13,225	2.85%	13,602	377	29
Trend Stationary	12,721	13,572	7.78%	14,628	1,056	88
Difference Stationary	12,721	13,368	5.60%	14,117	749	64
Regression A	12,721	13,246	3.74%	13,741	495	40
VAR	12,721	13,351	4.34%	13,930	579	47
FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change
Trend & Seasonality	13,319	13,926	4.37%	14,535	609	51
ARIMA	13,225	13,602	2.21%	13,903	301	22
Trend Stationary	13,572	14,628	7.34%	15,702	1,074	91
Difference Stationary	13,368	14,117	5.62%	14,910	793	68
Regression A	13,246	13,741	3.39%	14,207	466	37
VAR	13,351	13,930	3.99%	14,486	556	46

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

### Adults 60 to 64 with Disabilities (OAP-B): Trend Selections

FY 2019-20: 5.09% FY 2020-21: 5.60% FY 2021-22: 5.62%

### Adults 60 to 64 with Disabilities (OAP-B): Justifications

- Average monthly caseload in the first half of FY 2018-19 for Adults 60 to 64 with Disabilities was 12,721. The June 2019 caseload was 12,994, 51 over the predicted June caseload in the February 2019 request. After analyzing the most recent monthly data and the 2010 population pyramid from the 2010 Census (see page MC-10), the Department anticipates continued growth in the coming years for this population. The Department has selected a trend on par with the average monthly growth of the past 2 years.
- This category began to be affected by the baby-boom generation, defined by the U.S. Census Bureau as the generation born between 1946 and 1964, in calendar year 2006, which may have resulted in higher growth. Population growth in this age group was 10.8% in 2009 and 7.1% in 2010. The Department has seen strong growth in the Home-and Community-Based Services (HCBS) for the Elderly, Blind, and Disabled waiver over the last four years.

	Actuals	Monthly Change	% Change
Jun-17	11,420	-	-
Jul-17	11,410	(10)	-0.09%
Aug-17	11,486	76	0.67%
Sep-17	11,509	23	0.20%
Oct-17	11,558	49	0.43%
Nov-17	11,643	85	0.74%
Dec-17	11,718	75	0.64%
Jan-18	11,812	94	0.80%
Feb-18	11,860	48	0.41%
Mar-18	11,968	108	0.91%
Apr-18	12,054	86	0.72%
May-18	12,138	84	0.70%
Jun-18	12,411	273	2.25%
Jul-18	12,499	88	0.71%
Aug-18	12,559	60	0.48%
Sep-18	12,647	88	0.70%
Oct-18	12,681	34	0.27%
Nov-18	12,696	15	0.12%
Dec-18	12,683	(13)	-0.10%
Jan-19	12,746	63	0.50%
Feb-19	12,675	(71)	-0.56%
Mar-19	12,773	98	0.77%
Apr-19	12,818	45	0.35%
May-19	12,880	62	0.48%
Jun-19	12,994	114	0.89%

February 2019 Forecast		
Forecasted June 2019 Level	13,073	

Base trend from June 2019 level					
FY 2019-20	12,994	2.15%	273		

	]	Disabled Adı	ılts 60 to 64	: Historical Caselo	ad and Proje	ections
	Caseload	% Change	Level Change			
FY 2006-07	6,059	-	-			
FY 2007-08	6,146	1.44%	87			
FY 2008-09	6,447	4.90%	301			
FY 2009-10	7,049	9.34%	602			
FY 2010-11	7,767	10.19%	718			
FY 2011-12	8,383	7.93%	616			
FY 2012-13	9,051	7.97%	668			
FY 2013-14	9,853	8.86%	802			
FY 2014-15	10,466	6.22%	613			
FY 2015-16	10,529	0.60%	63			
FY 2016-17	11,241	6.76%	712	F	ebruary 201	9 Proje
FY 2017-18	11,797	4.95%	556	FY 2017-18	11,797	4.9
FY 2018-19	12,721	7.83%	924	FY 2018-19	12,775	8.2
FY 2019-20	13,368	5.09%	647	FY 2019-20	13,467	5.4
FY 2020-21	14,117	5.60%	749	FY 2020-21	14,231	5.6
FY 2021-22	14,910	5.62%	793			

Actuals				
	Monthly Change	% Change		
6-month average	52	0.41%		
12-month average	49	0.38%		
18-month average	71	0.58%		
24-month average	66	0.54%		

The average monthly growth for OAP-B for the last 6 months is 52 per month. This population has seen strong growth in recent year that the Department expects to continue. The Department's selected trend predicts that average monthly growth will continue in FY 2019-20 on par with previous 24 month growth.

F	ebruary 201	19 Projectio	n
FY 2017-18	11,797	4.95%	556
FY 2018-19	12,775	8.29%	978
FY 2019-20	13,467	5.42%	692
FY 2020-21	14,231	5.67%	764

Monthly Average	Growth Act	uals
FY 2013-14 1st Half	73	0.77%
FY 2013-14 2nd Half	78	0.78%
FY 2013-14	75	0.77%
FY 2014-15 1st Half	24	0.23%
FY 2014-15 2nd Half	17	0.16%
FY 2014-15	20	0.20%
FY 2015-16 1st Half	(9)	-0.08%
FY 2015-16 2nd Half	71	0.67%
FY 2015-16	31	0.30%
FY 2016-17 1st Half	51	0.46%
FY 2016-17 2nd Half	40	0.36%
FY 2016-17	45	0.41%
FY 2017-18 1st Half	50	0.43%
FY 2017-18 2nd Half	116	0.96%
FY 2017-18	83	0.70%
FY 2018-19 1st Half	45	0.36%
FY 2018-19 2nd Half	52	0.41%
FY 2018-19	49	0.38%

Monthl	y Average G	rowth Compa	risons		
Paguast	Monthly	Change	Percent Change		
Request	S-1	R-1	S-1	R-1	
FY 2019-20 1st Half	60	57	0.46%	0.43%	
FY 2019-20 2nd Half	63	62	0.46%	0.46%	
FY 2019-20	61	59	0.46%	0.45%	
FY 2020-21 1st Half	64	63	0.46%	0.46%	
FY 2020-21 2nd Half	66	65	0.46%	0.46%	
FY 2020-21	65	64	0.46%	0.46%	
FY 2021-22 1st Half	0	67	0.00%	0.46%	
FY 2021-22 2nd Half	0	69	0.00%	0.46%	
FY 2021-22	0	68	0.00%	0.46%	

### **Individuals to 59 with Disabilities (AND/AB)**

Colorado automatically provides Medicaid coverage to individuals who receive Supplemental Security Income. Supplemental Security Income, authorized under Title XVI of the Social Security Act of 1965, is a federal cash assistance program for persons aged 65 and older, blind, or disabled. An individual must have income below the federal monthly maximum Supplemental Security Income limit and limited resources. This category includes the disabled portion of this group through age 59. These individuals: are blind, have a physical or mental impairment that keeps them from performing substantial work expected to last 12 months or result in death, or are children who have a marked and severe functional limitation expected to last 12 months or until death. Children were added to the Title XVI Act in 1972. In addition, states may extend coverage to individuals with incomes too high for Supplemental Security Income, and who meet the nursing facility level of care. Referred to as 'Three-Hundred Percenters', these clients have incomes no more than three times the Supplemental Security Income maximum limit, and they meet the level of care to be in a nursing home. Often, 'Three-Hundred Percenters' are enrolled in a Home- and Community-Based waiver program.

The 1990 outcome of the *Zebley v. Sullivan* lawsuit found that children could not be held to a higher standard of disability than adults. Zebley required that children's disability be measured using child-appropriate activities. As a result, the number of children determined to be disabled significantly increased until 1996. Welfare reform in 1996 tightened the disability criteria for children. An Individual Evaluation Plan from the public school system was no longer sufficient to verify disability, and children were required to have a physician document their level of functional impairment. However, any child receiving Supplemental Security Income before 1996 who lost his/her Supplemental Security Income benefits due to the new rules is still eligible for Medicaid. This category also includes disabled adult children age 18 and older who lost their Supplemental Security Income eligibility due to their parents receiving Social Security Administration benefits and disabled widows and widowers aged 50 to 64 who lost Supplemental Security Income due to the receipt of Social Security Administration benefits.

In July 2001, the Med-9 disability determination application process was disbanded due to federal requirements. This process let individuals under 65 who were seeking Medicaid coverage because of a disability experience an expeditious application process as compared to other applicants. By discontinuing the Med-9, clients underwent a more rigorous eligibility determination and caseload fell slightly.

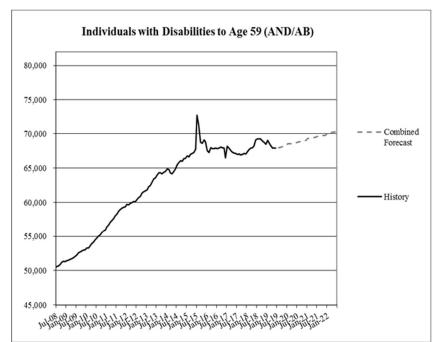
### 25.5-5-101 (1), C.R.S.

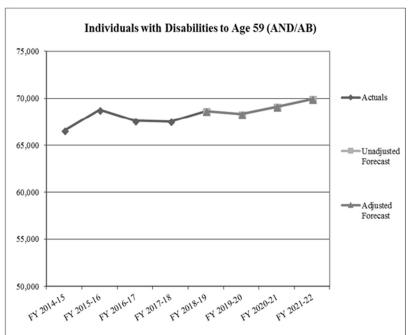
- (f) Individuals receiving supplemental security income;
- (g) Individuals receiving mandatory state supplement, including but not limited to individuals receiving old age pensions;
- (h) Institutionalized individuals who were eligible for medical assistance in December 1973;
- (i) Individuals who would be eligible except for the increase in old-age, survivors, and disability insurance under P.L. 92-336;
- (j) Individuals who become ineligible for cash assistance as a result of old-age, survivors, and disability insurance cost-of-living increases after April 1977;
- (k) Disabled widows or widowers fifty through sixty years of age who have become ineligible for federal supplemental security income or state supplementation as a result of becoming eligible for federal social security survivor's benefits, in accordance with the social security act, 42 U.S.C. sec. 1383c;

### 25.5-5-201 (1), C.R.S.

- (b) Individuals who would be eligible for cash assistance except for their institutionalized status;
- (c) Individuals receiving home-and community-based services as specified in part 6 of this article;
- (f) Individuals receiving only optional state supplement;
- (g) Individuals in institutions who are eligible under a special income level. Colorado's program for citizens sixty-five years of age or older or physically disabled or blind, whose gross income does not exceed three hundred percent of the current federal supplemental security income benefit level, qualifies for federal funding under this provision;
- (j) Individuals who are qualified aliens and were or would have been eligible for supplemental security income as a result of a disability but are not eligible for such supplemental security income as a result of the passage of the federal "Personal Responsibility and Work Opportunity Reconciliation Act of 1996", Public Law 104-193;

## Individuals to 59 with Disabilities (AND/AB): Model Results





	Ind	ividuals with Disabili	ties to Age 59: M	odel Results <sup>1</sup>		
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change
Combined Forecast	67,619	67,531	2.10%	68,950	1,419	5
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change
Combined Forecast	67,531	68,950	1.36%	69,889	939	108
FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change
Combined Forecast	68,950	69,889	1.86%	71,186	1,297	109

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

### Individuals to 59 with Disabilities (AND/AB): Trend Selections

FY 2019-20: -0.30% FY 2020-21: 1.40% FY 2021-22: 1.39%

### Individuals to 59 with Disabilities (AND/AB): Justifications

- Average monthly caseload in FY 2018-19 for AND/AB was 68,639. The June 2019 data point was 67,901, which is 247 less than the predicted June caseload in the November 2018 request, largely driven by significant decreases in the most recent quarter. The Department has selected models separately for the age group 0-18 and the age group 19-59. See those sections below for more details.
- HB 16-1321 allows for a Medicaid Buy-In option for Supported Living Services waiver (under the Office of Community Living) and the Spinal Cord Injury and Brain Injury waivers under Medical Services Premiums. A negative bottom-line impact has been added to this category to account for clients transitioning from this category to Medicaid Buy-In, with the expanded option for increased employment. The effect of this bottom line impact has been fully absorbed as of the June 2018 data point and is no longer needed.
- This population has historically been stable, having increased by approximately 5,000 clients between FY 1998-99 and FY 2007-08, or an average of 0.8% per year. However, growth rates in this population have increased significantly in the last four fiscal years, with caseload in HCBS waivers showing strong growth. In addition, over the last four years, the number of individuals eligible for Medicaid due to receipt of SSI has represented most of the growth in this eligibility group. The Department believes that this may be related to economic conditions in that individuals with work-limiting disabilities who were employed prior to the recession and have exhausted their federally-extended unemployment benefits may now be applying for Supplemental Security Income (SSI) if they cannot find work.

### FY 2020-21 BUDGET REQUEST: CASELOAD NARRATIVE

	Actuals	Monthly Change	% Change
Jun-17	54,535	-	
Jul-17	54,476	(59)	-0.11%
Aug-17	54,518	42	0.08%
Sep-17	54,403	(115)	-0.21%
Oct-17	54,388	(15)	-0.03%
Nov-17	54,485	97	0.18%
Dec-17	54,414	(71)	-0.13%
Jan-18	54,628	214	0.39%
Feb-18	54,836	208	0.38%
Mar-18	54,981	145	0.26%
Apr-18	55,058	77	0.14%
May-18	55,232	174	0.32%
Jun-18	56,013	781	1.41%
Jul-18	56,138	125	0.22%
Aug-18	56,109	(29)	-0.05%
Sep-18	56,107	(2)	0.00%
Oct-18	55,829	(278)	-0.50%
Nov-18	55,658	(171)	-0.31%
Dec-18	55,453	(205)	-0.37%
Jan-19	55,609	156	0.28%
Feb-19	55,337	(272)	-0.49%
Mar-19	54,922	(415)	-0.75%
Apr-19	54,600	(322)	-0.59%
May-19	54,587	(13)	-0.02%
Jun-19	54,584	(3)	-0.01%

February 2019 Forecast	
Forecasted June 2019 Level	55,912

Base	trend from	June 2019 l	evel
FY 2019-20	54,584	-1.49%	(827)

		Individual	s with Disal	bilities ages 19 to 59:	Historical C	Cas eload and	Projections
	Caseload	% Change	Level Change	Average monthly		1 1	
FY 2010-11	45,977	-	1	strong decreases		1	
FY 2011-12	48,586	5.67%	2,609	have seen negati	_		1 1
FY 2012-13	50,484	3.91%	1,898	with strong grow		C	
FY 2013-14	52,405	3.81%	1,921	historically. The preserve funding	1		2
FY 2014-15	54,469	3.94%	2,064	preserve funding	ш аписіра	ation of a	iuiure rece
FY 2015-16	55,168	1.28%	699				
FY 2016-17	55,057	-0.20%	(111)	February 20	19 Projectio	n Before Adj	ustments
FY 2017-18	54,786	-0.49%	(271)	FY 2017-18	54,786	-0.49%	(271)
FY 2018-19	55,411	1.14%	625	FY 2018-19	55,800	1.85%	1,014
FY 2019-20	54,901	-0.92%	(510)	FY 2019-20	56,414	1.10%	614
FY 2020-21	55,456	1.01%	555	FY 2020-21	57,350	1.66%	936
FY 2021-22	56,016	1.01%	560				

histo	strong grov rically. The erve funding	Departme	ng in the 2 ent is main
•	February 20	19 Projectio	on Before A
	FY 2017-18	54,786	-0.49%
	FY 2018-19	55,800	1.85%
	FY 2019-20	56,414	1.10%
	FY 2020-21	57,350	1.66%

Actuals		
	Monthly Change	% Change
6-month average	(145)	-0.26%
12-month average	(119)	-0.21%
18-month average	9	0.02%
24-month average	2	0.00%

Average monthly growth for this population has been negative, with
strong decreases in the most recent quarter. The previous 2 fiscal years
have seen negative growth on average. This population has seasonality
with strong growth occurring in the 2nd half of the fiscal year,
historically. The Department is maintaing it's forecast from February to
preserve funding in anticipation of a future recession.

-0.49%	(271)
	(2,1)
1.85%	1,014
1.10%	614
1.66%	936

	FY 2018-19		(105)	-0.19%			
Monthly Average Growth Comparisons							
Request	Monthly Change		Percent Change				
	S-1	R-1	S-1	R-1			
FY 2019-20 1st Half	77	49	0.14%	0.09%			
FY 2019-20 2nd Half	78	46	0.14%	0.08%			
FY 2019-20	78	48	0.14%	0.09%			
FY 2020-21 1st Half	77	46	0.13%	0.08%			
FY 2020-21 2nd Half	81	47	0.14%	0.08%			
FY 2020-21	79	46	0.14%	0.08%			
FY 2021-22 1st Half	0	45	0.00%	0.08%			
FY 2021-22 2nd Half	0	49	0.00%	0.09%			
FY 2021-22	0	47	0.00%	0.08%			

Monthly Average Growth Actuals

144

101

122

238

120

179

44

(35)

4

(159)

40

(59)

(20)

267

123

(93)

(117)

0.28%

0.19%

0.23%

0.44%

0.22%

0.33%

0.08%

-0.06%

0.01%

-0.29%

0.08%

-0.10%

-0.04%

0.48%

0.22%

-0.17%

-0.21%

FY 2013-14 1st Half

FY 2013-14 2nd Half

FY 2014-15 1st Half

FY 2014-15 2nd Half

FY 2015-16 1st Half

FY 2015-16 2nd Half

FY 2016-17 1st Half

FY 2016-17 2nd Half

FY 2017-18 1st Half

FY 2017-18 2nd Half

FY 2018-19 1st Half

FY 2018-19 2nd Half

FY 2013-14

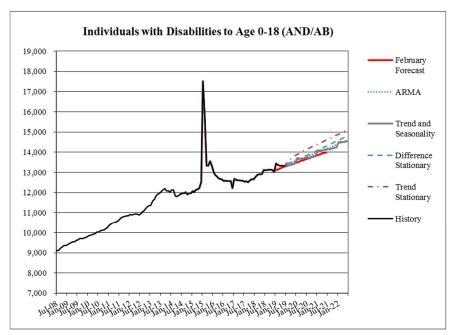
FY 2014-15

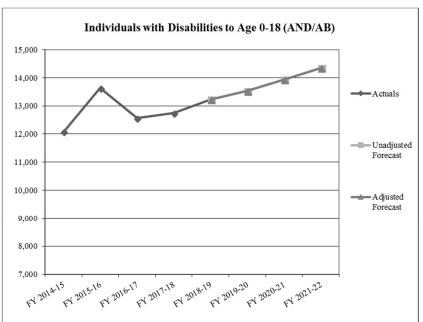
FY 2015-16

FY 2016-17

FY 2017-18

# Individuals to 59 with Disabilities (AND/AB), Age 0 to 18: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend and Seasonality	AND/AB 0-18	Constant, trend, and monthly seasonal variables	13.02	12.47	0.8914
ARMA	d(AND/AB 0-18)	Constant, MA variables	-5.95	-6.22	0.274
Trend Stationary	log(AND/AB 0-18)	Constant, trend, dummy for SSI issue, and 3 lags on the dependent variable	-3.97	-4.09	0.9445
Difference Stationary	dlog(AND/AB 0-18)	Constant, dummy for SSI issue, and 2 lags on the dependent variable	-3.82	-3.93	0.1272
Adjusted Forecast			N/A	N/A	N/A

	Individuals with Disabilities to Age 18: Model Results <sup>1</sup>								
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change			
Trend and Seasonality	12,745	13,228	2.31%	13,534	306	34			
ARIMA	12,745	13,228	2.64%	13,577	349	37			
Trend Stationary	12,745	13,228	4.52%	13,826	598	66			
Difference Stationary	12,745	13,228	2.82%	13,601	373	42			
Adjusted Forecast	12,745	13,228	3.67%	13,713	485	61			
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change			
Trend and Seasonality	13,228	13,534	3.00%	13,940	406	34			
ARMA	13,228	13,577	3.00%	13,984	407	34			
Trend Stationary	13,228	13,826	3.98%	14,376	550	41			
Difference Stationary	13,228	13,601	3.50%	14,077	476	40			
Adjusted Forecast	13,228	13,713	3.58%	14,204	491	24			
FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change 2			
Trend and Seasonality	13,534	13,940	2.92%	14,347	407	34			
ARMA	13,577	13,984	2.95%	14,397	413	35			
Trend Stationary	13,826	14,376	3.39%	14,863	487	41			
Difference Stationary	13,601	14,077	3.50%	14,570	493	42			
Adjusted Forecast	13,713	14,204	2.03%	14,492	288	24			

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

### Individuals to 59 with Disabilities (AND/AB), Age 0 to 18: Trend Selections

FY 2019-20: 2.31% FY 2020-21: 3.00% FY 2021-22: 2.92%

#### Individuals to 59 with Disabilities (AND/AB), Age 0 to 18: Justifications

Beginning with the November 2015 forecast, the Department estimates this eligibility category with two age group sub-categories, to increase forecast accuracy.

The Department identified a data error for July 2015 through December 2015 that incorrectly assigned children to eligibility categories for individuals with disabilities, based on their parents' disability status. This error incorrectly moved clients from Eligible Children and Children's Basic Health Plan (CHP) to Individuals to 59 with Disabilities (AND/AB) and Children with Disabilities - Buy-In. This data issue has falsely inflated the FY 2015-16 actuals, resulting in the spike in clients that can be seen in the graph on page MC-36.

The June 2019 data point was 80 clients below the February 2019 forecast. Most of the growth of the past 6 months is driven by a large increase in January 2019. Given that there is evidence of seasonality in this group, the Department is keeping a similar trend to February 2019 forecast to align with the most recent actuals for the current year and out years.

	Actuals	Monthly Change	% Change
Jun-17	12,574	- Change	Change
Jul-17	12,533	(41)	-0.33%
Aug-17	12,561	28	0.22%
Sep-17	12,515	(46)	-0.37%
Oct-17	12,597	82	0.66%
Nov-17	12,657	60	0.48%
Dec-17	12,652	(5)	-0.04%
Jan-18	12,737	85	0.67%
Feb-18	12,852	115	0.90%
Mar-18	12,894	42	0.33%
Apr-18	12,905	11	0.09%
May-18	12,920	15	0.12%
Jun-18	13,114	194	1.50%
Jul-18	13,105	(9)	-0.07%
Aug-18	13,112	7	0.05%
Sep-18	13,128	16	0.12%
Oct-18	13,134	6	0.05%
Nov-18	13,118	(16)	-0.12%
Dec-18	13,015	(103)	-0.79%
Jan-19	13,444	429	3.30%
Feb-19	13,374	(70)	-0.52%
Mar-19	13,337	(37)	-0.28%
Apr-19	13,327	(10)	-0.07%
May-19	13,326	(1)	-0.01%
Jun-19	13,317	(9)	-0.07%

February 2019 Forecast	
Forecasted June 2019 Level	13,274

Base trend from June 2019 level					
FY 2019-20	13,317	0.67%	89		

		Individu	uals with Dis	abilities to age 18: H	istorical Cas	eload and Pro	ojections
	Caseload	%	Level				
	Castidau	Change	Change				
FY 2010-11	10,308	-	-				
FY 2011-12	10,848	5.24%	540				
FY 2012-13	11,436	5.42%	588	•			
FY 2013-14	12,019	5.10%	583	•			
FY 2014-15	12,079	0.50%	60	•			
FY 2015-16	13,632	12.86%	1,553	•			
FY 2016-17	12,562	-7.85%	(1,070)	Fe	bruary 2019	Projection	
FY 2017-18	12,745	1.46%	183	FY 2017-18	12,745	1.46%	183
FY 2018-19	13,228	3.79%	483	FY 2018-19	13,150	3.18%	405
FY 2019-20	13,534	2.31%	306	FY 2019-20	13,475	2.47%	325
FY 2020-21	13,940	3.00%	406	FY 2020-21	13,836	2.68%	361
FY 2021-22	14,347	2.92%	407				

Actuals						
	Monthly Change	% Change				
6-month average	50	0.39%				
12-month average	17	0.13%				
32	37	0.29%				
24-month average	31	0.24%				

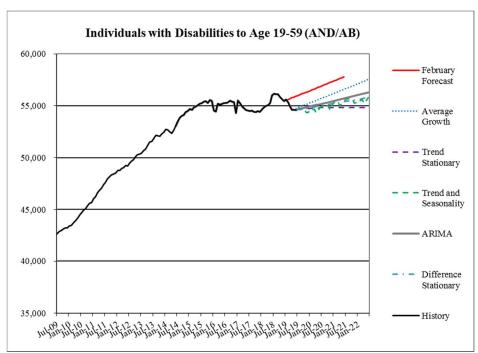
Individuals in AND/AB that are ages 18 and under have had an
average monthly growth of 32 over the last 6 months, skewed by the
unusually high January datapoint. The forecast predicts that the
average monthly growth for FY 2019-20 will be approximately 30 per
month, which is on track with most recent actuals.

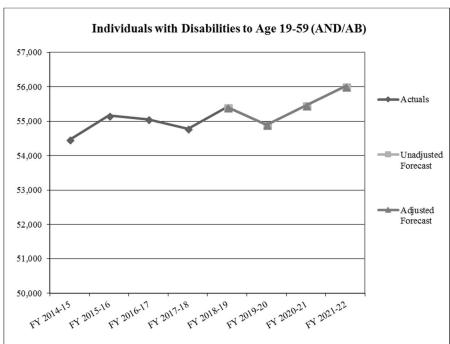
February 2019 Projection						
FY 2017-18	12,745	1.46%	183			
FY 2018-19	13,150	3.18%	405			
FY 2019-20	13,475	2.47%	325			
FY 2020-21	13,836	2.68%	361			
<u> </u>						

Monthly Average Growth Actuals							
FY 2013-14 1st Half	13	0.11%					
FY 2013-14 2nd Half	(19)	-0.16%					
FY 2013-14	(3)	-0.02%					
FY 2014-15 1st Half	8	0.07%					
FY 2014-15 2nd Half	94	0.78%					
FY 2014-15	51	0.42%					
FY 2015-16 1st Half	137	2.42%					
FY 2015-16 2nd Half	(118)	-0.90%					
FY 2015-16	9	0.76%					
FY 2016-17 1st Half	(72)	-0.57%					
FY 2016-17 2nd Half	60	0.50%					
FY 2016-17	(6)	-0.04%					
FY 2017-18 1st Half	13	0.10%					
FY 2017-18 2nd Half	77	0.60%					
FY 2017-18	45	0.35%					
FY 2018-19 1st Half	(17)	-0.13%					
FY 2018-19 2nd Half	50	0.39%					
FY 2018-19	17	0.13%					

Monthly Average Growth Comparisons						
Request	Monthly	Change	Percent	Percent Change		
Request	S-1	R-1	S-1	R-1		
FY 2019-20 1st Half	31	20	0.23%	0.15%		
FY 2019-20 2nd Half	30	48	0.22%	0.35%		
FY 2019-20	31	34	0.23%	0.25%		
FY 2020-21 1st Half	30	20	0.22%	0.15%		
FY 2020-21 2nd Half	30	48	0.22%	0.34%		
FY 2020-21	30	34	0.22%	0.24%		
FY 2021-22 1st Half	0	20	0.00%	0.14%		
FY 2021-22 2nd Half	0	48	0.00%	0.33%		
FY 2021-22	0	34	0.00%	0.24%		

## Individuals to 59 with Disabilities (AND/AB), Age 19 to 59: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend and Seasonality	AND/AB 19+	Constant, trend, and monthly seasonal variables	16.45	16.05	0.174
ARIMA	d(AND/AB 19+)	Constant, MA variables	-6.99	-7.18	-0.027
Trend Stationary	log(AND/AB 19+)	Constant, trend, and 1 lag on the dependent variable	-7.27	-7.41	0.8794
Difference Stationary	dlog(AND/AB 19+)	Constant and 1 lag on the dependent variable	-7.33	-7.4	-0.0145
Average Growth			N/A	N/A	N/A
Adjusted Forecast			N/A	N/A	N/A

	Individuals	with Disabilitie	es Ages 19 to 59	: Model Result	$s^1$	
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change
Trend and Seasonality	54,786	55,411	-1.47%	54,597	(814)	21
ARIMA	54,786	55,411	-0.92%	54,901	(510)	48
Trend Stationary	54,786	55,411	-1.23%	54,730	(681)	18
Difference Stationary	54,786	55,411	-1.10%	54,802	(609)	33
Average Growth	54,786	55,411	-0.31%	55,239	(172)	76
Adjusted Forecast	54,786	55,411	0.18%	55,511	100	128
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change 2
Trend and Seasonality	55,411	54,597	0.91%	55,094	497	56
ARIMA	55,411	54,901	1.01%	55,456	555	46
Trend Stationary	55,411	54,730	0.17%	54,823	93	2
Difference Stationary	55,411	54,802	0.73%	55,202	400	34
Average Growth	55,411	55,239	1.66%	56,156	917	77
Adjusted Forecast	55,411	55,511	1.91%	56,571	1,060	55
FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change 2
Trend and Seasonality	54,597	55,094	0.77%	55,518	424	21
ARIMA	54,901	55,456	1.01%	56,016	560	47
Trend Stationary	54,730	54,823	-0.02%	54,812	(11)	(2)
Difference Stationary	54,802	55,202	0.73%	55,605	403	34
Average Growth	55,239	56,156	1.66%	57,088	932	78
Adjusted Forecast	55,511	56,571	1.17%	57,233	662	55

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

## Individuals to 59 with Disabilities (AND/AB), Age 19 to 59: Trend Selections

FY 2019-20: -0.92% FY 2020-21: 1.01% FY 2021-22: 1.01%

### Individuals to 59 with Disabilities (AND/AB), Age 19 to 59: Justifications

Beginning with the November 2015 forecast, the Department estimates this eligibility category with two age group sub-categories, to increase forecast accuracy. Average monthly caseload growth for FY 2017-18 was 123 and FY 2018-19 was -119. The June 2019 data point is 166 below what was expected in the February 2019 forecast. The Department has selected trends for FY 2019-20 at the same level as forecasted in February 2019 in anticipation of future recessions. The Department will continue to monitor this population. For the request and out years, the Department assumes this population will grow on par with overall population growth in Colorado.

	Actuals	Monthly	%
		Change	Change
Jun-17	54,535	-	
Jul-17	54,476	(59)	-0.11%
Aug-17	54,518	42	0.08%
Sep-17	54,403	(115)	-0.21%
Oct-17	54,388	(15)	-0.03%
Nov-17	54,485	97	0.18%
Dec-17	54,414	(71)	-0.13%
Jan-18	54,628	214	0.39%
Feb-18	54,836	208	0.38%
Mar-18	54,981	145	0.26%
Apr-18	55,058	77	0.14%
May-18	55,232	174	0.32%
Jun-18	56,013	781	1.41%
Jul-18	56,138	125	0.22%
Aug-18	56,109	(29)	-0.05%
Sep-18	56,107	(2)	0.00%
Oct-18	55,829	(278)	-0.50%
Nov-18	55,658	(171)	-0.31%
Dec-18	55,453	(205)	-0.37%
Jan-19	55,609	156	0.28%
Feb-19	55,337	(272)	-0.49%
Mar-19	54,922	(415)	-0.75%
Apr-19	54,600	(322)	-0.59%
May-19	54,587	(13)	-0.02%
Jun-19	54,584	(3)	-0.01%

February 2019 Forecast			
Forecasted June 2019 Level	55,912		

Base trend from June 2019 level				
FY 2019-20	54,584	-1.49%	(827)	

	Individuals with Disabilities ages 19 to 59: Historical Caseload and Projections						
	Caseload	%	Level	Average monthly	z growth f	or this non	ulation has
FY 2010-11	45,977	Change	Change	Average monthly growth for this population I strong decreases in the most recent quarter. Thave seen negative growth on average. This p			
FY 2011-12	48,586	5.67%	2,609				
FY 2012-13	50,484	3.91%	1,898	with strong grow		_	
FY 2013-14	52,405	3.81%	1,921	historically. The preserve funding	1		
FY 2014-15	54,469	3.94%	2,064	preserve funding	ш ашсіра	uion oran	uture rece
FY 2015-16	55,168	1.28%	699				
FY 2016-17	55,057	-0.20%	(111)	February 20	19 Projectio	n Before Adj	ustments
FY 2017-18	54,786	-0.49%	(271)	FY 2017-18	54,786	-0.49%	(271)
FY 2018-19	55,411	1.14%	625	FY 2018-19	55,800	1.85%	1,014
FY 2019-20	54,901	-0.92%	(510)	FY 2019-20	56,414	1.10%	614
FY 2020-21	55,456	1.01%	555	FY 2020-21	57,350	1.66%	936
FY 2021-22	56,016	1.01%	560				

Actuals						
	Monthly Change	% Change				
6-month average	(145)	-0.26%				
12-month average	(119)	-0.21%				
18-month average	9	0.02%				
24-month average	2	0.00%				

Average monthly growth for this population has been negative, with strong decreases in the most recent quarter. The previous 2 fiscal years have seen negative growth on average. This population has seasonality with strong growth occuring in the 2nd half of the fiscal year, historically. The Department is maintaing it's forecast from February to preserve funding in anticipation of a future recession.

February 2019 Projection Before Adjustments					
FY 2017-18	54,786	-0.49%	(271)		
FY 2018-19	55,800	1.85%	1,014		
FY 2019-20	56,414	1.10%	614		
FY 2020-21	57,350	1.66%	936		

Monthly Average Growth Actuals						
FY 2013-14 1st Half	144	0.28%				
FY 2013-14 2nd Half	101	0.19%				
FY 2013-14	122	0.23%				
FY 2014-15 1st Half	238	0.44%				
FY 2014-15 2nd Half	120	0.22%				
FY 2014-15	179	0.33%				
FY 2015-16 1st Half	44	0.08%				
FY 2015-16 2nd Half	(35)	-0.06%				
FY 2015-16	4	0.01%				
FY 2016-17 1st Half	(159)	-0.29%				
FY 2016-17 2nd Half	40	0.08%				
FY 2016-17	(59)	-0.10%				
FY 2017-18 1st Half	(20)	-0.04%				
FY 2017-18 2nd Half	267	0.48%				
FY 2017-18	123	0.22%				
FY 2018-19 1st Half	(93)	-0.17%				
FY 2018-19 2nd Half	(117)	-0.21%				
FY 2018-19	(105)	-0.19%				

Monthly Average Growth Comparisons					
Request	Monthly	Change	Percent Change		
	S-1	R-1	S-1	R-1	
FY 2019-20 1st Half	77	49	0.14%	0.09%	
FY 2019-20 2nd Half	78	46	0.14%	0.08%	
FY 2019-20	78	48	0.14%	0.09%	
FY 2020-21 1st Half	77	46	0.13%	0.08%	
FY 2020-21 2nd Half	81	47	0.14%	0.08%	
FY 2020-21	79	46	0.14%	0.08%	
FY 2021-22 1st Half	0	45	0.00%	0.08%	
FY 2021-22 2nd Half	0	49	0.00%	0.09%	
FY 2021-22	0	47	0.00%	0.08%	

### Working Adults and Children with Disabilities - Buy-In

HB 09-1293 (Colorado Health Care Affordability Act) establishes the Buy-In Program for Individuals with Disabilities, which will allow individuals to pay a premium to purchase Medicaid coverage if they are over income or are otherwise ineligible for Medicaid. The Buy-In Program for Working Adults with Disabilities was implemented on March 1, 2012 and allows eligible clients age 16 to 65 with income up to 450% of the federal poverty level that have a qualifying disability and are working to receive Medicaid by paying a monthly premium based on their income. The Buy-In Program for Disabled Children was implemented on July 1, 2012. This program allows children under age 19 with a qualifying disability and family income up to 300% of the federal poverty level to receive Medicaid by paying a monthly premium based on their family income.

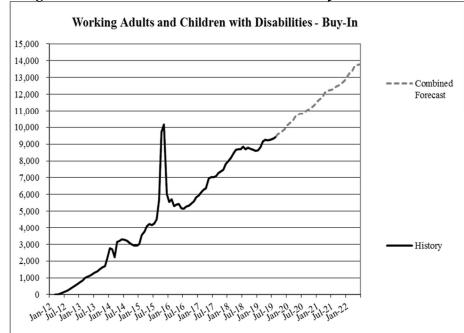
### 25.5-5-206 (1), C.R.S.

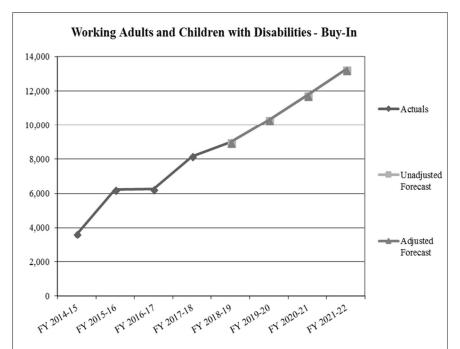
- (a) Subject to available appropriations, the state department is authorized to seek federal authorization to and to establish a Medicaid buy-in program or programs for:
  - (I) Disabled children; or
  - (II) Disabled adults who do not qualify for the Medicaid buy-in program established pursuant to part 14 of article 6 of this title.
- (b) The Medicaid buy-in program or programs established pursuant to paragraph (a) of this subsection (1) may provide for premium and cost-sharing charges on a sliding fee scale based upon a family's income.

#### 25.5-5-206 (2), C.R.S.

The state board shall promulgate rules consistent with any federal authorization to implement and administer the Medicaid buy-in program or programs established pursuant to paragraph (a) of subsection (1) of this section.

## Working Adults and Children with Disabilities - Buy-In: Model Results





	Working	Adults and Children	with Disabilities -	Buy-In: Model Resul	ts <sup>1</sup>	
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change
Combined Forecast	8,175	8,987	14.70%	10,308	1,321	128
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change
Combined Forecast	8,987	10,308	13.97%	11,748	1,440	120
FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change
Combined Forecast	10,308	11,748	12.77%	13,248	1,500	129

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

# Working Adults and Children with Disabilities – Buy-In: Trend Selections

FY 2019-20: 14.70% FY 2019-20: 13.97% FY 2020-21: 12.77%

### Working Adults and Children with Disabilities - Buy-In: Justifications

- Average monthly caseload in FY 2018-19 for Working Adults and Children with Disabilities Buy-In was 8,987. The Department has selected models separately for working adults and children. See the selections below for more details. Growth rates for the Buy-In programs tend to be volatile. The previous forecast has been fairly accurate and therefore the Department is maintaining those levels.
- HB 09-1293 established the Buy-In Program for Working Adults with Disabilities beginning March 1, 2012 and for Disabled Children July 1, 2012. This program allows individuals to pay a premium to purchase Medicaid coverage if they are over income or are otherwise ineligible for Medicaid.
- HB 16-1321 allows for a Medicaid Buy-In option for Supported Living Services waiver (under the Office of Community Living) and the Spinal Cord Injury and Brain Injury waivers under Medical Services Premiums.

	Actuals	Monthly Change	% Change
Jun-17	628	-	-
Jul-17	661	33	5.25%
Aug-17	687	26	3.93%
Sep-17	698	11	1.60%
Oct-17	720	22	3.15%
Nov-17	755	35	4.86%
Dec-17	796	41	5.43%
Jan-18	828	32	4.02%
Feb-18	866	38	4.59%
Mar-18	891	25	2.89%
Apr-18	884	(7)	-0.79%
May-18	919	35	3.96%
Jun-18	898	(21)	-2.29%
Jul-18	909	11	1.22%
Aug-18	933	24	2.64%
Sep-18	962	29	3.11%
Oct-18	975	13	1.35%
Nov-18	994	19	1.95%
Dec-18	997	3	0.30%
Jan-19	1,001	4	0.40%
Feb-19	1,018	17	1.70%
Mar-19	1,013	(5)	-0.49%
Apr-19	1,038	25	2.47%
May-19	1,055	17	1.64%
Jun-19	1,091	36	3.41%

February 2019 Forecast	
Forecasted June 2019 Level	1,111

Base	trend from J	June 2019 lo	evel
FY 2019-20	1,091	9.21%	92

	Children with Disabilities - Buy-In: Historical Caseload and Projections					
	Caseload	% Change	Level Change			
FY 2014-15	438	-	-			
FY 2015-16	1,872	327.40%	1,434			
FY 2016-17	594	-68.27%	(1,278)	February 2019 Projection		
FY 2017-18	800	34.68%	206	FY 2017-18 800 34.68%		
FY 2018-19	999	24.88%	199	FY 2018-19 1,007 25.88%		
FY 2019-20	1,216	21.72%	217	FY 2019-20 1,211 20.26%		
FY 2020-21	1,427	17.35%	211	FY 2020-21 1,419 17.18%		
FY 2021-22	1,638	14.79%	211			

Actuals				
	Monthly Change	% Change		
6-month average	16	1.52%		
12-month average	16	1.64%		
18-month average	16	1.78%		
24-month average	19	2.35%		

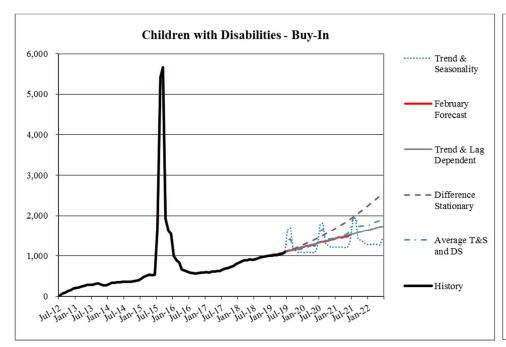
February 2019 Projection					
FY 2017-18	800	34.68%	206		
FY 2018-19	1,007	25.88%	207		
FY 2019-20	1,211	20.26%	204		
FY 2020-21	1,419	17.18%	208		

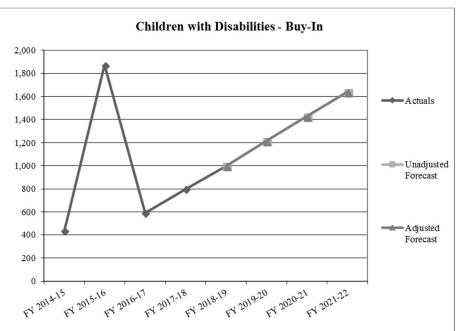
The Children with Disabilities Buy-In Program has seen steady increases over the last 6 months, compared to historic monthly growth. The Department predicts this growth will continue in line with actuals.

Monthly Average Growth Actuals					
FY 2013-14 1st Half	(1)	-0.08%			
FY 2013-14 2nd Half	14	4.67%			
FY 2013-14	7	2.29%			
FY 2014-15 1st Half	6	1.70%			
FY 2014-15 2nd Half	23	5.06%			
FY 2014-15	14	3.38%			
FY 2015-16 1st Half	167	58.95%			
FY 2015-16 2nd Half	(155)	-13.45%			
FY 2015-16	6	22.75%			
FY 2016-17 1st Half	(4)	-0.67%			
FY 2016-17 2nd Half	7	1.14%			
FY 2016-17	1	0.24%			
FY 2017-18 1st Half	28	4.04%			
FY 2017-18 2nd Half	17	2.06%			
FY 2017-18	23	3.05%			
FY 2018-19 1st Half	17	1.76%			
FY 2018-19 2nd Half	16	1.52%			
FY 2018-19	16	1.64%			

Monthly Average Growth Comparisons						
Dagwast	Monthly	Change	Percent	Percent Change		
Request	S-1	R-1	S-1	R-1		
FY 2019-20 1st Half	16	20	1.36%	1.74%		
FY 2019-20 2nd Half	19	17	1.53%	1.38%		
FY 2019-20	17	19	1.45%	1.56%		
FY 2020-21 1st Half	16	17	1.15%	1.28%		
FY 2020-21 2nd Half	19	18	1.31%	1.20%		
FY 2020-21	17	18	1.23%	1.24%		
FY 2021-22 1st Half	0	18		1.12%		
FY 2021-22 2nd Half	0	18		1.05%		
FY 2021-22	0	18		1.09%		

## Working Adults with Disabilities – Buy-In: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend and Seasonality	DBI-Children	Constant, trend, and monthly seasonal variables	16.75	16.40	0.0308
Trend & Lag Dependent	DBI-Children	Constant, dummy for SSI issue, trend, and 4 lags on the dependent variable	15.46	15.24	0.7095
Difference Stationary	dlog(DBI-Children)	Constant, dummy for SSI issue, and 3 lags on the dependent variable	-2.34	-2.52	0.4658
Weighted Avg T&S and DS			N/A	N/A	N/A

Children with Disabilities	- Buy-In: Model Result	s1				
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change
Trend and Seasonality	7,375	7,988	13.82%	9,092	1,104	109
Trend & Lag Dependent	7,375	7,988	16.10%	9,274	1,286	134
Difference Stationary	7,375	7,988	16.10%	9,274	1,286	134
Weighted Avg T&S and DS	7,375	7,988	14.39%	9,137	1,149	116
Avg TL & DS	7,375	7,988	16.10%	9,274	1,286	134
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change 2
Trend and Seasonality	7,988	9,092	13.52%	10,321	1,229	102
Trend & Lag Dependent	7,988	9,274	14.35%	10,605	1,331	103
Difference Stationary	7,988	9,274	14.35%	10,605	1,331	103
Weighted Avg T&S and DS	7,988	9,137	13.74%	10,392	1,255	103
Avg TL & DS	7,988	9,274	14.35%	10,605	1,331	103
FY 2021-22	Projected FY 2019- 20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change 2
Trend and Seasonality	9,092	10,321	12.49%	11,610	1,289	111
Trend & Lag Dependent	9,274	10,605	11.60%	11,835	1,230	102
Difference Stationary	9,274	10,605	11.60%	11,835	1,230	102
Weighted Avg T&S and DS	9,137	10,392	12.26%	11,666	1,274	109
Avg TL & DS	9,274	10,605	11.60%	11,835	1,230	102

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

## Working Adults with Disabilities – Buy-In: Trend Selections

FY 2019-20:13.82% FY 2020-21: 13.52% FY 2021-22: 12.49%

### Working Adults with Disabilities – Buy-In: Justifications

The Department estimates this eligibility category with sub-categories, to increase forecast accuracy. In FY 2018-19 average monthly caseload was 7,988. The June 2019 data point was 5 clients higher than the February 2019 forecast. Given the accuracy of the previous forecast, the Department is maintaining the previous forecast.

	Actuals	Monthly Change	% Change
Jun-17	6,474	-	-
Jul-17	6,613	139	2.15%
Aug-17	6,679	66	1.00%
Sep-17	6,764	85	1.27%
Oct-17	7,077	313	4.63%
Nov-17	7,225	148	2.09%
Dec-17	7,408	183	2.53%
Jan-18	7,610	202	2.73%
Feb-18	7,797	187	2.46%
Mar-18	7,798	1	0.01%
Apr-18	7,814	16	0.21%
May-18	7,923	109	1.39%
Jun-18	7,792	(131)	-1.65%
Jul-18	7,882	90	1.16%
Aug-18	7,801	(81)	-1.03%
Sep-18	7,705	(96)	-1.23%
Oct-18	7,631	(74)	-0.96%
Nov-18	7,647	16	0.21%
Dec-18	7,822	175	2.29%
Jan-19	8,146	324	4.14%
Feb-19	8,231	85	1.04%
Mar-19	8,200	(31)	-0.38%
Apr-19	8,217	17	0.21%
May-19	8,250	33	0.40%
Jun-19	8,324	74	0.90%

February 2019 Forecast	
Forecasted June 2019 Level	8,354

Base	trend from .	June 2019 le	vel
FY 2019-20	8,324	4.21%	336

	Working Adults with Disabilities - Buy-In: Historical Caseload and Projections						
	Caseload	% Change	Level Change				
FY 2014-15	3,189	-	-				
FY 2015-16	4,345	36.25%	1,156				
FY 2016-17	5,657	30.20%	1,312	February 20	19 Projectio	on Before Ad	jus tments
FY 2017-18	7,375	30.37%	1,718	FY 2017-18	7,375	30.37%	1,718
FY 2018-19	7,988	8.31%	613	FY 2018-19	7,968	8.04%	593
FY 2019-20	9,092	13.82%	1,104	FY 2019-20	9,073	13.87%	1,105
FY 2020-21	10,321	13.52%	1,229	FY 2020-21	10,327	13.82%	1,254
FY 2021-22	11,610	12.49%	1,289				

February 2019 Projection Before Adjustments					
7,375	30.37%	1,718			
7,968	8.04%	593			
9,073	13.87%	1,105			
10,327	13.82%	1,254			
	7,375 7,968 9,073	7,375 30.37% 7,968 8.04% 9,073 13.87%			

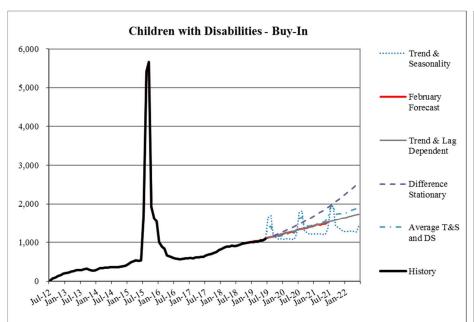
Actuals				
	Monthly Change	% Change		
6-month average	84	1.05%		
12-month average	44	0.56%		
18-month average	51	0.66%		
24-month average	77	1.07%		

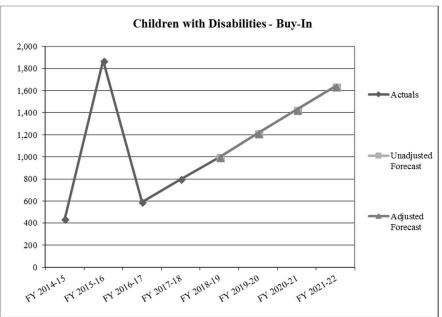
Most recent forecast has been very accurate and the Department sees no reason to adjust the assumptions on growth for this population.

Monthly Average (	Monthly Average Growth Actuals					
FY 2013-14 1st Half	221	15.09%				
FY 2013-14 2nd Half	68	4.45%				
FY 2013-14	145	9.77%				
FY 2014-15 1st Half	55	2.17%				
FY 2014-15 2nd Half	136	3.97%				
FY 2014-15	96	3.07%				
FY 2015-16 1st Half	34	1.03%				
FY 2015-16 2nd Half	79	1.83%				
FY 2015-16	57	1.43%				
FY 2016-17 1st Half	146	2.92%				
FY 2016-17 2nd Half	158	2.72%				
FY 2016-17	152	2.82%				
FY 2017-18 1st Half	156	2.28%				
FY 2017-18 2nd Half	64	0.86%				
FY 2017-18	110	1.57%				
FY 2018-19 1st Half	5	0.07%				
FY 2018-19 2nd Half	84	1.05%				
FY 2018-19	44	0.56%				

Monthl	y Average Gi	rowth Compa	risons	·
ъ.	Monthly	Change	e Percent Change	
Request	S-1	R-1	S-1	R-1
FY 2019-20 1st Half	120	121	1.39%	1.41%
FY 2019-20 2nd Half	89	98	0.96%	1.05%
FY 2019-20	104	109	1.18%	1.23%
FY 2020-21 1st Half	120	107	1.22%	1.09%
FY 2020-21 2nd Half	89	98	0.85%	0.93%
FY 2020-21	104	102	1.03%	1.01%
FY 2021-22 1st Half	0	124	0.00%	1.11%
FY 2021-22 2nd Half	0	98	0.00%	0.83%
FY 2021-22	0	111	0.00%	0.97%

## Children with Disabilities – Buy-In: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend and Seasonality	DBI-Children	Constant, trend, and monthly seasonal variables	16.75	16.40	0.0308
Trend & Lag Dependent	DBI-Children	Constant, dummy for SSI issue, trend, and 4 lags on the dependent variable	15.46	15.24	0.7095
Difference Stationary	dlog(DBI-Children)	Constant, dummy for SSI issue, and 3 lags on the dependent variable	-2.34	-2.52	0.4658

	Children with Disabilities - Buy-In: Model Results <sup>1</sup>					
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change
Trend & Seasonality	800	999	20.32%	1,202	203	11
Trend & Lag Dependent	800	999	21.72%	1,216	217	19
Difference Stationary	800	999	27.13%	1,270	271	29
Average T&S and DS	800	999	23.72%	1,236	237	20
Average Monthly Growth	800	999	29.43%	1,293	294	33
Average T&L AMG	800	999	25.63%	1,255	256	26
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change
Trend & Seasonality	999	1,202	10.65%	1,330	128	11
Trend & Lag Dependent	999	1,216	17.35%	1,427	211	18
Difference Stationary	999	1,270	32.44%	1,682	412	40
Average T&S and DS	999	1,236	21.84%	1,506	270	25
Average Monthly Growth	999	1,293	35.96%	1,758	465	44
Average T&L AMG	999	1,255	26.93%	1,593	338	31
FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change
Trend & Seasonality	1,202	1,330	6.84%	1,421	91	5
Trend & Lag Dependent	1,216	1,427	14.79%	1,638	211	18
Difference Stationary	1,270	1,682	33.47%	2,245	563	54
Average T&S and DS	1,236	1,506	21.71%	1,833	327	30
Average Monthly Growth	1,293	1,758	35.95%	2,390	632	60
Average T&L AMG	1,255	1,593	26.43%	2,014	421	39

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

#### Children with Disabilities – Buy-In: Trend Selections

FY 2019-20: 21.72% FY 2020-21: 17.35% FY 2021-22: 14.79%

### Children with Disabilities – Buy-In: Justifications

The Department estimates this eligibility category with sub-categories, to increase forecast accuracy. The Department identified a data error for July 2015 through December 2015 that incorrectly assigned children to eligibility categories for individuals with disabilities, based on their parents' disability status. This error incorrectly moved clients from Eligible Children and Children's Basic Health Plan (CHP) to Individuals to 59 with Disabilities and Children with Disabilities – Buy-In. Due to the small caseload level for this population, Children with Disabilities – Buy-In was disproportionately affected by this data issue, which falsely inflated the FY 2015-16 actuals, resulting in the spike in clients that can be seen in the graph on page MC-52. The predicted June 2019 data point was 6 clients lower than the actual June 2019 data point. Because of the accuracy of this forecast the Department is maintaining the previous forecast.

	Actuals	Monthly Change	% Change
Jun-17	628	-	-
Jul-17	661	33	5.25%
Aug-17	687	26	3.93%
Sep-17	698	11	1.60%
Oct-17	720	22	3.15%
Nov-17	755	35	4.86%
Dec-17	796	41	5.43%
Jan-18	828	32	4.02%
Feb-18	866	38	4.59%
Mar-18	891	25	2.89%
Apr-18	884	(7)	-0.79%
May-18	919	35	3.96%
Jun-18	898	(21)	-2.29%
Jul-18	909	11	1.22%
Aug-18	933	24	2.64%
Sep-18	962	29	3.11%
Oct-18	975	13	1.35%
Nov-18	994	19	1.95%
Dec-18	997	3	0.30%
Jan-19	1,001	4	0.40%
Feb-19	1,018	17	1.70%
Mar-19	1,013	(5)	-0.49%
Apr-19	1,038	25	2.47%
May-19	1,055	17	1.64%
Jun-19	1,091	36	3.41%

February 2019 Forecast	
Forecasted June 2019 Level	1,111

Base	trend from .	June 2019 lo	evel
FY 2019-20	1,091	9.21%	92

	Children with Disabilities - Buy-In: Historical Caseload and Projections						
	Caseload	% Change	Level Change				
FY 2014-15	438	-	-				
FY 2015-16	1,872	327.40%	1,434				
FY 2016-17	594	-68.27%	(1,278)	F	ebruary 2019	Projection	
FY 2017-18	800	34.68%	206	FY 2017-18	800	34.68%	
FY 2018-19	999	24.88%	199	FY 2018-19	1,007	25.88%	
FY 2019-20	1,216	21.72%	217	FY 2019-20	1,211	20.26%	
FY 2020-21	1,427	17.35%	211	FY 2020-21	1,419	17.18%	
FY 2021-22	1,638	14.79%	211				

Actuals				
	Monthly Change	% Change		
6-month average	16	1.52%		
12-month average	16	1.64%		
18-month average	16	1.78%		
24-month average	19	2.35%		

February 2019 Projection				
FY 2017-18	800	34.68%	206	
FY 2018-19	1,007	25.88%	207	
FY 2019-20	1,211	20.26%	204	
FY 2020-21	1,419	17.18%	208	

The Children with Disabilities Buy-In Program has seen steady increases over the last 6 months, compared to historic monthly growth. The Department predicts this growth will continue in line with actuals.

Monthly Average Growth Actuals						
FY 2013-14 1st Half	(1)	-0.08%				
FY 2013-14 2nd Half	14	4.67%				
FY 2013-14	7	2.29%				
FY 2014-15 1st Half	6	1.70%				
FY 2014-15 2nd Half	23	5.06%				
FY 2014-15	14	3.38%				
FY 2015-16 1st Half	167	58.95%				
FY 2015-16 2nd Half	(155)	-13.45%				
FY 2015-16	6	22.75%				
FY 2016-17 1st Half	(4)	-0.67%				
FY 2016-17 2nd Half	7	1.14%				
FY 2016-17	1	0.24%				
FY 2017-18 1st Half	28	4.04%				
FY 2017-18 2nd Half	17	2.06%				
FY 2017-18	23	3.05%				
FY 2018-19 1st Half	17	1.76%				
FY 2018-19 2nd Half	16	1.52%				
FY 2018-19	16	1.64%				

Г					
Monthly Average Growth Comparisons					
Danuart	Monthly Change		Percent	Change	
Request	S-1	R-1	S-1	R-1	
FY 2019-20 1st Half	16	20	1.36%	1.74%	
FY 2019-20 2nd Half	19	17	1.53%	1.38%	
FY 2019-20	17	19	1.45%	1.56%	
FY 2020-21 1st Half	16	17	1.15%	1.28%	
FY 2020-21 2nd Half	19	18	1.31%	1.20%	
FY 2020-21	17	18	1.23%	1.24%	
FY 2021-22 1st Half	0	18	0.00%	1.12%	
FY 2021-22 2nd Half	0	18	0.00%	1.05%	
FY 2021-22	0	18	0.00%	1.09%	

### MAGI Parents/Caretakers to 68% FPL

One of the primary ways that adults have historically qualified for Medicaid is through Section 1931 of the federal Medicaid statute. Under Section 1931, families who were eligible for cash welfare assistance under the Aid to Families with Dependent Children program are still eligible for Medicaid even after the Aid to Families with Dependent Children was replaced by the Temporary Assistance for Needy Families program (referred to as Colorado Works) on July 16, 1996. Clients enrolled in the Temporary Assistance for Needy Families program are no longer automatically eligible for Medicaid. Therefore, the MAGI Parents/Caretakers to 68% FPL category includes adults who receive Medicaid under Section 1931 and those families who receive Temporary Aid to Needy Families financial assistance coupled with Medicaid. Also included in this category are adults receiving Transitional Medicaid. Transitional Medicaid is available to adults in families who have received 1931 Medicaid in three of the past six months and become ineligible due to an increase in earned income. Adults may receive Transitional Medicaid benefits for one year. In FY 2016-17, there were an average of 40,955 adults in this program. Although this program has been set to expire many times, it has been renewed regularly, though most recently it was made permanent.

Before 1999, caseload in this category was falling. Decreases in caseload can be attributed to economic expansion and effects of the Personal Responsibility Work and Opportunity Reconciliation Act, known as welfare reform. When welfare reform was instituted in Colorado in 1997, the link between cash assistance for welfare and Medicaid was broken. When the Department implemented this change into the Client Oriented Information Network eligibility data system, it was estimated that  $46,006^{12}$  clients had their cases closed in error. In reaction, the Tatum lawsuit was brought against the State. Starting in May 2001, the Department began to reinstate clients who inadvertently lost their Medicaid eligibility. This may help to explain why from 1997 to 1999 caseload fell, and may have contributed to a spike in caseload in FY 2001-02. For a complete explanation of the Tatum lawsuit, see the November 1, 2001 Budget Request, pages A-37 to A-38.

HB 05-1262 (Tobacco Tax bill) allows for expanding Medicaid eligibility to parents of children enrolled in either Medicaid or the Children's Basic Health Plan up to 60% of the federal poverty level (FPL). The increase in the percentage of allowable federal poverty level was implemented on July 1, 2006.

Page MC-56

<sup>&</sup>lt;sup>12</sup> Source: November 1, 2001 Budget Request, page A-37

#### 25.5-5-101 (1), C.R.S.

- (a) Individuals who meet the eligibility criteria for the aid to families with dependent children program pursuant to rules that were in effect on July 16, 1996;
- (b) Families who meet the eligibility criteria for the aid to families with dependent children program established in rules that were in effect on July 16, 1996, and who subsequently would have become ineligible under such eligibility criteria because of increased earnings or increased hours of employment whose eligibility is specified for a period of time by the federal government;
- (c) Qualified pregnant women . . . who meet the income resource requirements of the state's aid to families with dependent children program pursuant to rules that were in effect on July 16, 1996;

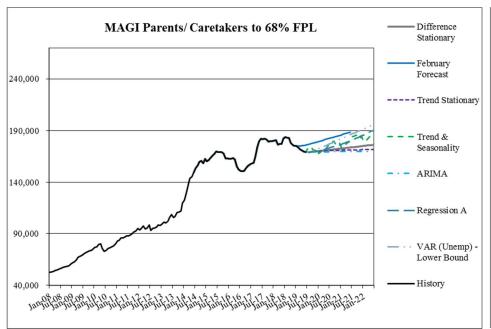
#### 25.5-5-201 (1), C.R.S.

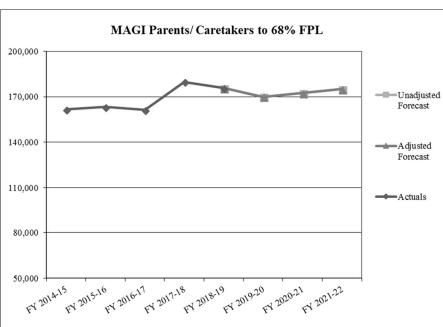
- (a) Individuals who would be eligible for but are not receiving cash assistance;
- (d) Individuals who would be eligible for aid to families with dependent children if child care were paid from earnings;
- (h) Persons who are eligible for cash assistance under the works program pursuant to section 26-2-706;

#### 25.5-5-201 (1), C.R.S.

(m) (I)(A) Parents of children who are eligible for the medical assistance program or the children's basic health plan, article 8 of this title, whose family income does not exceed a specified percent of the federal poverty level, adjusted for family size, as set by the state board by rule, which percentage shall be not less than one hundred percent;

### MAGI Parents/Caretakers to 68% FPL: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	PC to 68%	Constant, dummy for October 2013, dummy for January 2014, dummy for July 2015, trend, seasonal dummy variables	21.56	21.08	0.9008
ARIMA	d(PC to 68%)	Constant, AR variables	-4.64	-4.75	0.9919
Trend Stationary	log(PC to 68%)	Constant, 4 lags on the dependent variable	-5.28	-5.39	0.9270
Difference Stationary	dlog(PC to 68%)	Constant, 1 lag on the dependent variable	-5.34	-5.43	0.0292
Regression A	dlog(PC to 68%)	Constant, unemployment, AR variables, MA variables	-4.77	-4.88	0.0747

	MAGI Parents/ Caretakers to 68% FPL: Model Results <sup>1</sup>							
FY 2019-20	FY 2017- 18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change		
Trend & Seasonality	179,853	175,827	-2.33%	171,730	(4,097)	484		
ARIMA	179,853	175,827	-3.68%	169,357	(6,470)	38		
Trend Stationary	179,853	175,827	-3.38%	169,884	(5,943)	113		
Difference Stationary	179,853	175,827	-3.27%	170,079	(5,748)	175		
Regression A	179,853	175,827	-2.99%	170,570	(5,257)	318		
Adjusted Forecast	179,853	175,827	-3.45%	169,761	(6,066)	102		
VAR (Unemp) - Lower Bound	179,853	175,827	-2.01%	172,293	(3,534)	617		
FY 2020-21	FY 2018- 19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change		
Trend & Seasonality	175,827	171,730	3.39%	177,552	5,822	484		
ARIMA	175,827	169,357	0.19%	169,679	322	20		
Trend Stationary	175,827	169,884	0.60%	170,903	1,019	65		
Difference Stationary	175,827	170,079	1.45%	172,539	2,460	207		
Regression A	175,827	170,570	3.51%	176,557	5,987	617		
Adjusted Forecast	175,827	169,761	0.72%	170,983	1,222	102		
VAR (Unemp) - Lower Bound	175,827	172,293	5.46%	181,700	9,407	800		
FY 2021-22	Projected FY 2019- 20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change		
Trend & Seasonality	171,730	177,552	3.27%	183,358	5,806	484		
ARIMA	169,357	169,679	0.10%	169,849	170	11		
Trend Stationary	169,884	170,903	0.34%	171,484	581	37		
Difference Stationary	170,079	172,539	1.45%	175,041	2,502	210		
Regression A	170,570	176,557	5.06%	185,491	8,934	819		
Adjusted Forecast	169,761	170,983	0.72%	172,214	1,231	102		
VAR (Unemp) - Lower Bound	172,293	181,700	5.28%	191,294	9,594	800		

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

#### MAGI Parents/Caretakers to 68% FPL: Trend Selections

FY 2019-20: -3.27% FY 2020-21: 1.45% FY 2021-22: 1.45%

### MAGI Parents/Caretakers to 68% FPL: Justifications

- Average monthly caseload in FY 2016-17 for MAGI Parents/Caretakers to 68% FPL was 160,991, with negative caseload growth for the year. However, the Department identified a systems issue that inadvertently moved clients out of this category and into expansion categories. This issue was resolved in March 2017, and clients moved from MAGI Parents/Caretakers 69-133% FPL to this category through the end of the fiscal year. The effect of this system fix was previously accounted for as a bottom line impact, but because it is now baked into the end point for caseload, the bottom line impact was removed. Average monthly caseload in the first half of FY 2018-19 was 177,605.
- Recent data indicate that economic conditions began improving towards the end of 2012 and current forecasts indicate that this trend should continue. This economic recovery, however, is not projected to have a negative impact on caseload. SB 13-200 Medicaid Expansion was implemented January 2014 and the MAGI conversion was implemented in October 2013. These two factors have changed the population considerably. The Department believes it will see low growth continue in FY 2019-20, which will grow in the out-years based on the State Demographer's Office's forecast of increasing unemployment rates in Colorado during this time period.
- Every quarter this population will be affected by a systems update that will better identify clients who are no longer eligible for Medicaid, therefore there will be downward pressure on this population.

	Actuals	Monthly	%
		Change	Change
Jun-17	182,132	-	-
Jul-17	181,640	(492)	-0.27%
Aug-17	182,123	483	0.27%
Sep-17	181,352	(771)	-0.42%
Oct-17	179,385	(1,967)	-1.08%
Nov-17	179,750	365	0.20%
Dec-17	179,877	127	0.07%
Jan-18	180,335	458	0.25%
Feb-18	180,744	409	0.23%
Mar-18	176,469	(4,275)	-2.37%
Apr-18	177,031	562	0.32%
May-18	177,139	108	0.06%
Jun-18	182,397	5,258	2.97%
Jul-18	183,930	1,533	0.84%
Aug-18	183,083	(847)	-0.46%
Sep-18	182,792	(291)	-0.16%
Oct-18	178,102	(4,690)	-2.57%
Nov-18	176,139	(1,963)	-1.10%
Dec-18	175,299	(840)	-0.48%
Jan-19	175,180	(119)	-0.07%
Feb-19	173,809	(1,371)	-0.78%
Mar-19	171,958	(1,851)	-1.06%
Apr-19	170,750	(1,208)	-0.70%
May-19	169,791	(959)	-0.56%
Jun-19	169,089	(702)	-0.41%

February 2019 Forecast		
Forecasted June 2019 Level	176,127	

Base trend from June 2019 level					
FY 2019-20	169,089	-3.83%	(6,738)		

	MAGI Parents/ C				
	Caseload	%	Level		
	Cascidau	Change	Change		
FY 2006-07	55,850	-	-		
FY 2007-08	53,473	-4.26%	(2,377)		
FY 2008-09	61,874	15.71%	8,401		
FY 2009-10	74,839	20.95%	12,965		
FY 2010-11	81,114	8.38%	6,275		
FY 2011-12	93,224	14.93%	12,110		
FY 2012-13	99,392	6.62%	6,168		
FY 2013-14	124,680	25.44%	25,288		
FY 2014-15	161,682	29.68%	37,002		
FY 2015-16	163,342	1.03%	1,660		
FY 2016-17	161,422	-1.18%	(1,920)		
FY 2017-18	179,853	11.42%	18,431		
FY 2018-19	175,827	-2.24%	(4,026)		
FY 2019-20	170,079	-3.27%	(5,748)		
FY 2020-21	172,539	1.45%	2,460		
FY 2021-22	175,041	1.45%	2,502		

aretakers to 68% FPL: Historical Caseload and Projections

Actuals				
	Monthly Change	% Change		
6-month average	(1,035)	-0.60%		
12-month average	(1,109)	-0.63%		
18-month average	(599)	-0.34%		
24-month average	(543)	-0.30%		

Reductions in FY 2015-16 are primarily attributable to the Transitional Medicaid issue. The selected trend slightly predicts slightly reduced growth in FY 2019-20, and increasing gowth in the out years. The decreases in the recent months are due to improving economic conditions in Colorado. The graph shows this past year has seen alomst constant decreases..

February 2019 Projection				
FY 2017-18	179,853	11.42%	18,431	
FY 2018-19	177,605	-1.25%	(2,248)	
FY 2019-20	179,310	0.96%	1,705	
FY 2020-21	185,568	3.49%	6,258	
			-	

Monthly Average Growth Actuals					
FY 2013-14 1st Half	1,844	1.67%			
FY 2013-14 2nd Half	4,952	3.78%			
FY 2013-14	3,398	2.73%			
FY 2014-15 1st Half	2,197	1.43%			
FY 2014-15 2nd Half	1,198	0.73%			
FY 2014-15	1,697	1.08%			
FY 2015-16 1st Half	(1,137)	-0.68%			
FY 2015-16 2nd Half	(1,735)	-1.08%			
FY 2015-16	(1,436)	-0.88%			
FY 2016-17 1st Half	746	0.49%			
FY 2016-17 2nd Half	4,163	2.51%			
FY 2016-17	2,454	1.50%			
FY 2017-18 1st Half	(376)	-0.21%			
FY 2017-18 2nd Half	420	0.24%			
FY 2017-18	22	0.02%			
FY 2018-19 1st Half	(1,183)	-0.65%			
FY 2018-19 2nd Half	(630)	-0.36%			
FY 2018-19	(907)	-0.51%			

Monthly Average Growth Comparisons					
Request	Monthly	Change	Percent Chang		
Request	S-1	R-1	S-1	R-1	
FY 2019-20 1st Half	485	146	0.27%	0.09%	
FY 2019-20 2nd Half	517	207	0.29%	0.12%	
FY 2019-20	501	176	0.28%	0.10%	
FY 2020-21 1st Half	527	205	0.29%	0.12%	
FY 2020-21 2nd Half	536	208	0.29%	0.12%	
FY 2020-21	532	206	0.29%	0.12%	
FY 2021-22 1st Half	0	210	0.00%	0.12%	
FY 2021-22 2nd Half	0	211	0.00%	0.12%	
FY 2021-22	0	210	0.00%	0.12%	

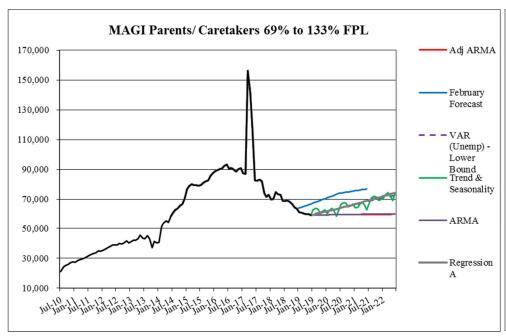
## MAGI Parents/Caretakers 69% to 133% FPL

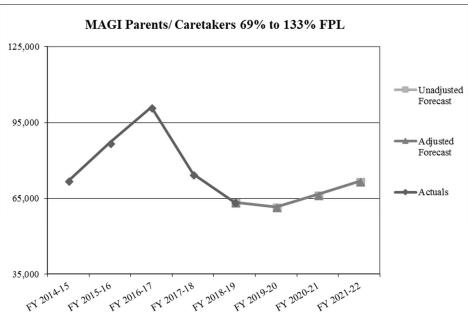
HB 09-1293 (Colorado Health Care Affordability Act) allowed for expanding Medicaid eligibility to parents of children enrolled in either Medicaid or the Children's Basic Health Plan up to 100% of the federal poverty level (FPL). The increase in the percentage of allowable federal poverty level was implemented on May 1, 2010. Medicaid Expansion SB 13-200 further expanded this population to 133% and the Department has changed the category Expansion Adults to 100% FPL to MAGI Parents/Caretakers 69% to 133% FPL to track these clients.

### 25.5-5-201 (1), C.R.S.

(m) Parents and caretaker relatives of children who are eligible for the medical assistance program whose family income does not exceed one hundred thirty-three percent of the federal poverty line, adjusted for family size;

### MAGI Parents/Caretakers 69% to 133% FPL: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	PC 69-133%	Constant, dummy for Parent Indicator issue, trend, and seasonal dummy variables	22.79	22.37	0.4266
ARMA	d(PC 69-133%)	Constant, dummy for Parent Indicator issue, MA variables	-2.01	-2.16	0.0185
Regression A	dlog(PC 69- 133%)	Constant, dummy for Parent Indicator issue, dlog(unemployment), 4 lags on unemployment, and 1 lag on the dependent variable	-1.74	-1.8	-0.0106

CLS1. CABLEOND 1		GI Parents/ Caretake	rs 69% to 133%	FPL: Model Results <sup>1</sup>		
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change
Trend & Seasonality	74,610	63,563	-2.18%	62,177	(1,386)	321
ARMA	74,610	63,563	-6.50%	59,431	(4,132)	28
Regression A	74,610	63,563	-2.96%	61,682	(1,881)	383
Adj ARMA	74,610	63,563	-6.50%	59,431	(4,132)	28
Adj Adj ARMA	74,610	63,563	-10.14%	57,118	(6,445)	(327)
VAR (Unemp) - Lower Bound	74,610	63,563	-2.49%	61,980	(1,583)	393
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change
Trend & Seasonality	63,563	62,177	6.04%	65,932	3,755	(16)
ARMA	63,563	59,431	0.53%	59,746	315	25
Regression A	63,563	61,682	7.88%	66,543	4,861	419
Adj ARMA	63,563	59,431	0.37%	59,651	220	11
Adj Adj ARMA	63,563	57,118	-6.88%	53,188	(3,930)	(327)
VAR (Unemp) - Lower Bound	63,563	61,980	6.97%	66,300	4,320	359
FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change
Trend & Seasonality	62,177	65,932	7.89%	71,134	5,202	889
ARMA	59,431	59,746	0.46%	60,021	275	22
Regression A	61,682	66,543	7.88%	71,787	5,244	452
Adj ARMA	59,431	59,651	0.21%	59,776	125	11
Adj Adj ARMA	57,118	53,188	-7.39%	49,257	(3,931)	(327)
VAR (Unemp) - Lower Bound	61,980	66,300	6.49%	70,603	4,303	359

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

### MAGI Parents/Caretakers 69% to 133% FPL: Trend Selections

FY 2019-20: -2.96% FY 2020-21: 7.88% FY 2021-22: 7.88%

### MAGI Parents/Caretakers 69% to 133% FPL: Justifications and Monthly Projections

- Average monthly caseload in FY 2018-19 for MAGI Parents/Caretakers 69% to 133% FPL was 63,563. The June 2019 data point was 59,246, approximately 1,713 under the June 2019 estimate in the February forecast. This population has seen substantial decreases over the past 6 months; despite this, however, the Department expects that the declines in caseload will not be permanent and is maintaining a positive trend in the forecast.
- Every quarter, starting October 2017, there have been large decreases in caseload for most adult, income-based populations due to a system improvement for the process of verifying income for Medicaid eligibility purposes. The Department believes this represents a level-shift downward and has treated these caseload decreases as such.

	Actuals	Monthly	%
	Actuals	Change	Change
Jun-17	82,613	-	-
Jul-17	82,329	(284)	-0.34%
Aug-17	83,011	682	0.83%
Sep-17	82,088	(923)	-1.11%
Oct-17	73,998	(8,090)	-9.86%
Nov-17	71,489	(2,509)	-3.39%
Dec-17	72,942	1,453	2.03%
Jan-18	69,709	(3,233)	-4.43%
Feb-18	70,071	362	0.52%
Mar-18	74,829	4,758	6.79%
Apr-18	73,217	(1,612)	-2.15%
May-18	72,831	(386)	-0.53%
Jun-18	68,816	(4,015)	-5.51%
Jul-18	68,773	(43)	-0.06%
Aug-18	69,297	524	0.76%
Sep-18	68,226	(1,071)	-1.55%
Oct-18	66,710	(1,516)	-2.22%
Nov-18	64,480	(2,230)	-3.34%
Dec-18	63,665	(815)	-1.26%
Jan-19	61,152	(2,513)	-3.95%
Feb-19	61,050	(102)	-0.17%
Mar-19	60,326	(724)	-1.19%
Apr-19	59,944	(382)	-0.63%
May-19	59,887	(57)	-0.10%
Jun-19	59,246	(641)	-1.07%

February 2019 Forecast	
Forecasted June 2019 Level	66,819

Base trend from June 2019 level						
FY 2019-20	59,246	-6,79%	(4.317)			

	MAGI Parents/ Caretakers 69% to 133% FPL: Historical Caseload and Projections							
	Caseload	% Change	Level Change					
FY 2012-13	41,545	-	-					
FY 2013-14	47,082	13.33%	5,537					
FY 2014-15	71,989	52.90%	24,907					
FY 2015-16	86,964	20.80%	14,975					
FY 2016-17	101,059	16.21%	14,095	February 201	19 Projectio	on Before Adj	ustments	
FY 2017-18	74,610	-26.17%	(26,449)	FY 2017-18	74,610	-26.17%	(26,449)	
FY 2018-19	63,563	-14.81%	(11,047)	FY 2018-19	66,149	-11.34%	(8,461)	
FY 2019-20	61,682	-2.96%	(1,881)	FY 2019-20	70,601	6.73%	4,452	
FY 2020-21	66,543	7.88%	4,861	FY 2020-21	75,515	6.96%	4,914	
FY 2021-22	71,787	7.88%	5,244					

February 2019 Projection Before Adjustments					
FY 2017-18	74,610	-26.17%	(26,449)		
FY 2018-19	66,149	-11.34%	(8,461)		
FY 2019-20	70,601	6.73%	4,452		
FY 2020-21	75,515	6.96%	4,914		

FY 2016-17 average monthly caseload is inflated due to a system error with the Parent Indicator (used to identy Expansion Parents from Expansion Adults), which was fixed by the end of the fiscal year. This population is also sensitive to the good economic conditions in Colorado. The growth rate is positive to reflect that the improving economic conditions will be temporary.

Actuals				
	Monthly Change	% Change		
6-month average	(737)	-1.18%		
12-month average	(798)	-1.23%		
18-month average	(761)	-1.12%		
24-month average	(974)	-1.33%		

Monthly Average Growth Actuals					
FY 2013-14 1st Half	(562)	-1.01%			
FY 2013-14 2nd Half	3,054	6.82%			
FY 2013-14	1,246	2.90%			
FY 2014-15 1st Half	1,957	3.10%			
FY 2014-15 2nd Half	1,458	2.03%			
FY 2014-15	1,707	2.57%			
FY 2015-16 1st Half	1,419	1.72%			
FY 2015-16 2nd Half	960	1.07%			
FY 2015-16	1,189	1.40%			
FY 2016-17 1st Half	(430)	-0.45%			
FY 2016-17 2nd Half	(1,353)	3.22%			
FY 2016-17	(891)	1.38%			
FY 2017-18 1st Half	(1,612)	-1.97%			
FY 2017-18 2nd Half	(688)	-0.89%			
FY 2017-18	(1,150)	-1.43%			
FY 2018-19 1st Half	(859)	-1.28%			
FY 2018-19 2nd Half	(451)	-0.71%			
FY 2018-19	(655)	-0.99%			

Monthly Average Growth Comparisons							
Request	Monthly	Change	Percent	Percent Change			
Request	S-1	R-1	S-1	R-1			
FY 2019-20 1st Half	575	371	0.84%	0.62%			
FY 2019-20 2nd Half	605	396	0.84%	0.63%			
FY 2019-20	590	383	0.84%	0.63%			
FY 2020-21 1st Half	247	411	0.33%	0.63%			
FY 2020-21 2nd Half	247	427	0.33%	0.63%			
FY 2020-21	247	419	0.33%	0.63%			
FY 2021-22 1st Half		444		0.63%			
FY 2021-22 2nd Half		461		0.63%			
FY 2021-22		452		0.63%			

	PL						
Jun-17	37,874						
Jul-17	37,840						
Aug-17	38,390						
Sep-17	39,024						
Oct-17	34,769						
Nov-17	32,791						
Dec-17	34,163						
Jan-18	31,712						
Feb-18	31,940						
Mar-18	34,227						
Apr-18	32,698						
May-18	32,236						
Jun-18	31,917						
Jul-18	31,753						
Aug-18	31,766						
Sep-18	31,761						
Oct-18	31,567						
Nov-18	31,474						
Dec-18	31,412						
Jan-19	31,370						
Feb-19	31,339						
Mar-19	31,303						
Apr-19	31,266						
May-19	31,241						
Jun-19	31,221						

#### **MAGI Adults**

HB 09-1293 (Colorado Health Care Affordability Act) authorizes the Department to expand Medicaid eligibility to Adults without Dependent Children (AwDC), now referred to as MAGI Adults, age 19 to 65 who are not eligible for Medicaid or Medicare with income up to 100% of the federal poverty level (FPL). The Department implemented the first stage of this expansion in May 2012, in which enrollment initially opened to individuals with income up to 10% FPL and enrollment was limited to 10,000.

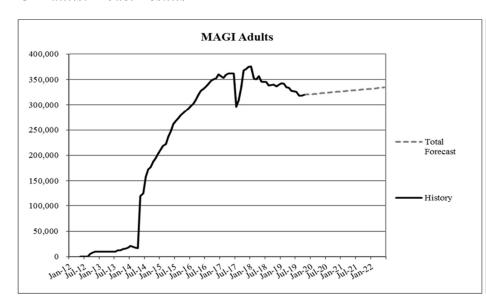
Due to the availability of funding in the FFY 2012-13 Hospital Provider Fee model, the Department planned to gradually increase the number of MAGI Adults served under 10% FPL in FY 2012-13 and FY 2013-14. The Department intended to enroll an additional 3,000 individuals from the wait list in April 2013, followed by 1,250 additional individuals per month from May through September 2013, setting the enrollment cap at 19,250 clients.

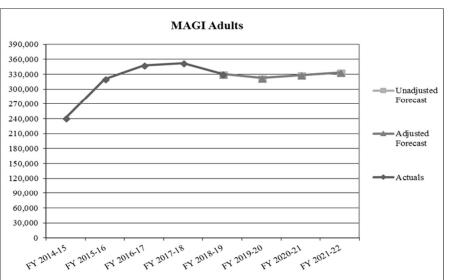
Beginning in January 2014, this enrollment cap was lifted under SB 13-200 Medicaid expansion, and the FPL for this category was extended through 133%. Aggressive growth has been seen for this eligibility since the implementation of Medicaid expansion.

25.5-5-201 (1), C.R.S.

(p) Subject to federal approval, adults who are childless or without a dependent child in the home, as described in section 1902 (a) (10) (A) (i) (VIII) of the social security act, 42 U.S.C. sec. 1396a, who have attained nineteen years of age but have not attained sixty-five years of age, and whose family income does not exceed one hundred thirty-three percent of the federal poverty line, adjusted for family size;

### MAGI Adults: Model Results





	MAGI Adults: Model Results <sup>1</sup>							
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change		
Combined Forecast	352,607	330,525	-2.35%	322,747	(7,778)	418		
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change		
Combined Forecast	330,525	322,747	1.68%	328,175	5,428	456		
FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change		
Combined Forecast	322,747	328,175	1.67%	333,667	5,492	459		

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

#### MAGI Adults: Trend Selections

FY 2019-20: -2.35% FY 2020-21: 1.68% FY 2021-22: 1.67%

#### MAGI Adults: Justifications and Monthly Projections

- Average monthly caseload in FY 2018-19 for MAGI Adults was 330,525. The June caseload was 320,219, which was 926 clients higher than the June caseload amount forecasted in the February forecast. In line with overall economic trends, the Department expects this population to eventually increase as economic conditions change.
- The Department selects models separately for the age group 19-44 and the age group 45-64. See below for more details.
- Beginning March 2017, a system error caused clients in this population to move to the MAGI Parents/Caretakers 69-133% FPL population. This issue was resolved by June 2017 and can be seen clearly in the dip on the graph on page MC-68.
- In October 2017 and every quarter thereafter, the Department has observed large decreases in caseload for most adult, income-based populations due to a system improvement for the process of verifying income for Medicaid eligibility purposes. This puts downward pressure on the forecast for this population group.

	Actuals	Monthly Change	% Change
Jun-17	368,291	-	-
Jul-17	370,674	2,383	0.65%
Aug-17	374,722	4,048	1.09%
Sep-17	376,011	1,289	0.34%
Oct-17	350,968	(25,043)	-6.66%
Nov-17	350,249	(719)	-0.20%
Dec-17	356,175	5,926	1.69%
Jan-18	345,699	(10,476)	-2.94%
Feb-18	345,064	(635)	-0.18%
Mar-18	344,991	(73)	-0.02%
Apr-18	337,958	(7,033)	-2.04%
May-18	338,829	871	0.26%
Jun-18	339,937	1,108	0.33%
Jul-18	336,317	(3,620)	-1.06%
Aug-18	340,105	3,788	1.13%
Sep-18	342,428	2,323	0.68%
Oct-18	341,696	(732)	-0.21%
Nov-18	334,945	(6,751)	-1.98%
Dec-18	333,858	(1,087)	-0.32%
Jan-19	327,637	(6,221)	-1.86%
Feb-19	327,212	(425)	-0.13%
Mar-19	325,645	(1,567)	-0.48%
Apr-19	317,866	(7,779)	-2.39%
May-19	318,368	502	0.16%
Jun-19	320,219	1,851	0.58%

February 2019 Forecas	t
Forecasted June 2019 Level	338,322

Base trend from June 2019 level						
FY 2019-20	320,219	-3.12%	(10,306)			

MAGI Adults: Historical Caseload and Projection							
	Caseload	% Change	Level Change				
FY 2014-15	241,392	-	-				
FY 2015-16	320,374	32.72%	78,982				
FY 2016-17	347,848	8.58%	27,474		F	ebruary 20	19 Projection
FY 2017-18	352,607	1.37%	4,759		FY 2017-18	352,607	1.37%
FY 2018-19	330,525	-6.26%	(22,082)		FY 2018-19	337,338	-4.33%
FY 2019-20	322,747	-2.35%	(7,778)		FY 2019-20	343,167	1.73%
FY 2020-21	328,175	1.68%	5,428		FY 2020-21	352,359	2.68%
FY 2021-22	333,667	1.67%	5,492		•		•

February 2019 Projection					
FY 2017-18	352,607	1.37%	4,759		
FY 2018-19	337,338	-4.33%	(15,269)		
FY 2019-20	343,167	1.73%	5,829		
FY 2020-21	352,359	2.68%	9,192		

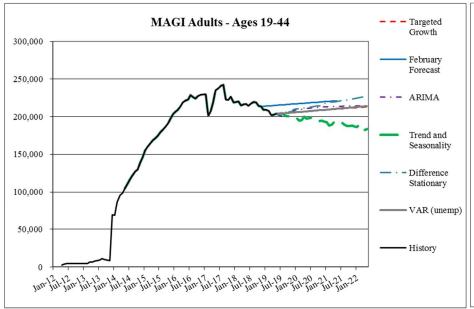
MAGI Adults increased aggressively with the expansion in January 2014. The growth appears to be slowing over time, and is overall negative in the past 24 months, due primarily to a system fix that puts downward pressure on caseload on a quarterly basis and an improving economy. the Department forecast low growth as the unemployment rate is expected to increase and this population to stabalize.

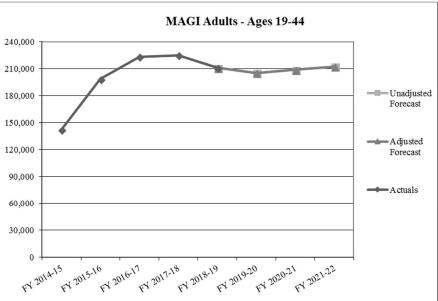
Actuals				
	Monthly Change	% Change		
6-month average	(2,273)	-0.69%		
12-month average	(1,643)	-0.49%		
18-month average	(1,998)	-0.58%		
24-month average	(2,003)	-0.57%		

Monthly Average Growth Actuals						
387	2.97%					
28,329	108.64%					
14,358	55.81%					
8,374	4.06%					
7,644	3.00%					
8,009	3.53%					
6,197	2.08%					
5,051	1.52%					
5,624	1.80%					
1,966	0.56%					
1,016	0.74%					
1,491	0.65%					
(2,019)	-0.52%					
(2,706)	-0.77%					
(2,363)	-0.64%					
(1,013)	-0.29%					
(2,273)	-0.69%					
(1,643)	-0.49%					
	387 28,329 14,358 8,374 7,644 8,009 6,197 5,051 5,624 1,966 1,016 1,491 (2,019) (2,706) (2,363) (1,013) (2,273)					

Monthly Average Growth Comparisons						
ъ .	Monthly	Change	Percent Change			
Request	S-1	R-1	S-1	R-1		
FY 2019-20 1st Half	740	379	0.07%	0.12%		
FY 2019-20 2nd Half	766	457	0.07%	0.14%		
FY 2019-20	753	418	0.07%	0.13%		
FY 2020-21 1st Half	764	452	0.07%	0.14%		
FY 2020-21 2nd Half	790	460	0.07%	0.14%		
FY 2020-21	777	456	0.07%	0.14%		
FY 2021-22 1st Half	0	457	0.00%	0.14%		
FY 2021-22 2nd Half	0	461	0.00%	0.14%		
FY 2021-22	0	459	0.00%	0.14%		

## MAGI Adults, Age 19 to 44: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend and Seasonality	Adults 19-44	Constant, dummy for Parent Indicator issue, trend, seasonal dummy variables	20.21	19.58	0.8175
ARIMA	d(Adults 19-44)	9-44) Constant, dummy for Parent Indicator issue, AR variables, MA variables		-4.59	0.8210
Difference Stationary	log(Adults 19- 44)	Constant, dummy for Parent Indicator issue, dlog(unemployment), 1 lag on the dependent variable	-3.75	-3.92	-0.0437
VAR (unemp)	dlog(Adults 19- 44)	Constant, 2 lags on the dependent variable	20.57	20.16	0.0600

	MAGI Adults Age 19-44: Model Results <sup>1</sup>								
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change			
Adj Targeted Growth	224,997	211,148	-5.41%	199,725	(11,423)	(666)			
Trend and Seasonality	224,997	211,148	-5.25%	200,063	(11,085)	(529)			
ARIMA	224,997	211,148	-1.95%	207,031	(4,117)	584			
Difference Stationary	224,997	211,148	-1.34%	208,319	(2,829)	677			
VAR (unemp)	224,997	211,148	-2.66%	205,531	(5,617)	256			
Targeted Growth	224,997	211,148	-2.59%	205,673	(5,475)	251			
Avg Growth	224,997	211,148	-5.00%	200,591	(10,557)	(527)			
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change 2			
Adj Targeted Growth	211,148	199,725	-4.00%	191,736	(7,989)	(666)			
Trend and Seasonality	211,148	200,063	-3.17%	193,721	(6,342)	(529)			
ARIMA	211,148	207,031	2.79%	212,807	5,776	229			
Difference Stationary	211,148	208,319	3.91%	216,464	8,145	682			
VAR (unemp)	211,148	205,531	1.68%	208,984	3,453	290			
Targeted Growth	211,148	205,673	1.46%	208,676	3,003	251			
Avg Growth	211,148	200,591	-3.10%	194,373	(6,218)	(511)			
FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change 2			
Adj Targeted Growth	199,725	191,736	-4.17%	183,741	(7,995)	(666)			
Trend and Seasonality	200,063	193,721	-3.00%	187,909	(5,812)	(637)			
ARIMA	207,031	212,807	0.68%	214,254	1,447	59			
Difference Stationary	208,319	216,464	3.43%	223,889	7,425	553			
VAR (unemp)	205,531	208,984	1.67%	212,474	3,490	290			
Targeted Growth	205,673	208,676	1.44%	211,681	3,005	251			
Avg Growth	200,591	194,373	-3.10%	188,347	(6,026)	(495)			

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

### MAGI Adults, Age 19 to 44: Trend Selections

FY 2019-20: -2.66% FY 2020-21: 1.68% FY 2021-22: 1.67%

#### MAGI Adults, Age 19 to 44: Justifications and Monthly Projections

The Department estimates this eligibility category with two age group sub-categories, to increase forecast accuracy. For FY 2018-19, caseload experienced steep decreases, with average monthly reductions around 1,104, primarily driven by a system fix that began to affect eligibility on October 2018. The Department has adjusted its forecast downward from the February forecasted level accordingly, expecting slow growth in FY 2019-20 and FY 2020-21.

• In October 2017, January 2018, and April 2018 there were large decreases in caseload for most adult, income-based populations due to a system improvement for the process of verifying income for Medicaid eligibility purposes. This puts downward pressure on the forecast for this population group.

	Actuals	Monthly Change	% Change
Jun-17	235,141	-	-
Jul-17	237,814	2,673	1.14%
Aug-17	241,035	3,221	1.35%
Sep-17	242,117	1,082	0.45%
Oct-17	222,827	(19,290)	-7.97%
Nov-17	222,346	(481)	-0.22%
Dec-17	226,664	4,318	1.94%
Jan-18	218,942	(7,722)	-3.41%
Feb-18	219,523	581	0.27%
Mar-18	220,235	712	0.32%
Apr-18	215,075	(5,160)	-2.34%
May-18	216,092	1,017	0.47%
Jun-18	217,289	1,197	0.55%
Jul-18	214,659	(2,630)	-1.21%
Aug-18	217,769	3,110	1.45%
Sep-18	219,681	1,912	0.88%
Oct-18	219,239	(442)	-0.20%
Nov-18	214,335	(4,904)	-2.24%
Dec-18	213,677	(658)	-0.31%
Jan-19	209,072	(4,605)	-2.16%
Feb-19	208,871	(201)	-0.10%
Mar-19	207,755	(1,116)	-0.53%
Apr-19	202,027	(5,728)	-2.76%
May-19	202,647	620	0.31%
Jun-19	204,043	1,396	0.69%

February 2019 Forecast			
Forecasted June 2019 Level	215,181		

Base trend from June 2019 level					
FY 2019-20	204,043	-3.36%	(7,105)		

	MAGI Adults Ages 19-44: Historical Caseload and Projections						
	Caseload	%	Level				
	Cascidad	Change	Change				
FY 2014-15	142,485	-	-				
FY 2015-16	198,654	39.42%	56,169				
FY 2016-17	223,349	12.43%	24,695	February 20	19 Projectio	n Before Adj	ustme
FY 2017-18	224,997	0.74%	1,648	FY 2017-18	224,997	0.74%	1,
FY 2018-19	211,148	-6.16%	(13,849)	FY 2018-19	215,547	-4.20%	(9,
FY 2019-20	205,531	-2.66%	(5,617)	FY 2019-20	216,797	0.58%	1,
FY 2020-21	208,984	1.68%	3,453	FY 2020-21	219,810	1.39%	3,
FY 2021-22	212,474	1.67%	3,490				

February 2019 Projection Before Adjustments					
FY 2017-18	224,997	0.74%	1,648		
FY 2018-19	215,547	-4.20%	(9,450)		
FY 2019-20	216,797	0.58%	1,250		
FY 2020-21	219,810	1.39%	3,013		

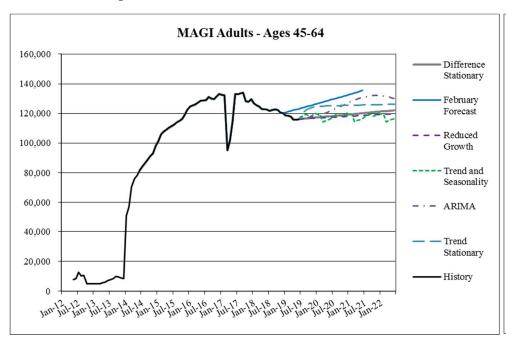
MAGI Adults Age 19 to 44 increased aggressively with the expansion in January 2014. However, a system fix resulted in a large decrease in October 2017, and quarterly thereafter, and this population was artificially deflated from March through June 2017 due to a different sysem issue. Not all growth was negative over the past 12 months. The Department expects growth in the future, and is being conservative considering economic projections.

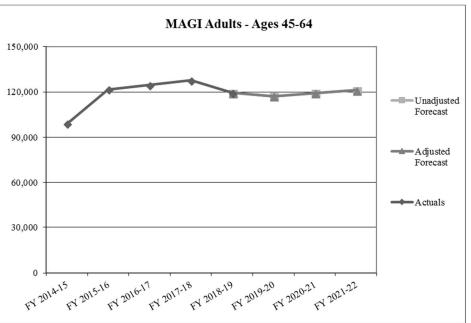
Actuals				
	Monthly Change	% Change		
6-month average	(1,606)	-0.76%		
12-month average	(1,104)	-0.51%		
18-month average	(1,257)	-0.57%		
24-month average	(1,296)	-0.57%		

Monthly Average Growth Actuals							
FY 2013-14 1st Half	155	2.53%					
FY 2013-14 2nd Half	16,098	124.83%					
FY 2013-14	8,127	63.68%					
FY 2014-15 1st Half	5,603	4.74%					
FY 2014-15 2nd Half	5,455	3.60%					
FY 2014-15	5,529	4.17%					
FY 2015-16 1st Half	4,335	2.38%					
FY 2015-16 2nd Half	4,012	1.94%					
FY 2015-16	4,173	2.16%					
FY 2016-17 1st Half	1,239	0.56%					
FY 2016-17 2nd Half	1,012	0.65%					
FY 2016-17	1,126	0.61%					
FY 2017-18 1st Half	(1,413)	-0.55%					
FY 2017-18 2nd Half	(1,563)	-0.69%					
FY 2017-18	(1,488)	-0.62%					
FY 2018-19 1st Half	(602)	-0.27%					
FY 2018-19 2nd Half	(1,606)	-0.76%					
FY 2018-19	(1,104)	-0.51%					

Monthly Average Growth Comparisons						
Request	Monthly	Change	Percent Change			
Request	S-1	R-1	S-1	R-1		
FY 2019-20 1st Half	249	219	0.12%	0.11%		
FY 2019-20 2nd Half	252	293	0.12%	0.14%		
FY 2019-20	251	256	0.12%	0.12%		
FY 2020-21 1st Half	249	287	0.11%	0.14%		
FY 2020-21 2nd Half	252	293	0.11%	0.14%		
FY 2020-21	251	290	0.11%	0.14%		
FY 2021-22 1st Half		290		0.14%		
FY 2021-22 2nd Half		290		0.14%		
FY 2021-22		290		0.14%		

# MAGI Adults, Age 45 to 64: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Reduced Growth			NA	NA	NA
Trend and Seasonality	Adults 45+	Constant, dummy for Parent Indicator issue, trend, seasonal dummy variables	21.46	20.92	0.1673
ARIMA	d(Adults 45+)	Constant, dummy for Parent Indicator issue, MA variables	-3.85	-4.18	0.8655
Trend Stationary	log(Adults 45+)	Constant, dummy for Parent Indicator issue, trend, 1 lag on the dependent variable	-3.02	-3.17	0.6592
Difference Stationary	dlog(Adults 45+)	Constant, dummy for Parent Indicator issue, 1 lag on the dependent variable	-2.40	-2.53	-0.0108

	MAGI Adults Age 45-64: Model Results <sup>1</sup>						
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change	
Reduced Growth	127,610	119,377	-2.14%	116,822	(2,555)	100	
Trend and Seasonality	127,610	119,377	-1.39%	117,717	(1,660)	9	
ARIMA	127,610	119,377	-0.51%	118,768	(609)	470	
Trend Stationary	127,610	119,377	3.62%	123,693	4,316	746	
Difference Stationary	127,610	119,377	-1.81%	117,216	(2,161)	162	
Average TS & Reduced	127,610	119,377	0.74%	120,260	883	423	
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change	
Reduced Growth	119,377	116,822	1.03%	118,025	1,203	100	
Trend and Seasonality	119,377	117,717	0.09%	117,823	106	9	
ARIMA	119,377	118,768	6.90%	126,963	8,195	746	
Trend Stationary	119,377	123,693	1.41%	125,437	1,744	46	
Difference Stationary	119,377	117,216	1.68%	119,191	1,975	166	
Average TS & Reduced	119,377	120,260	1.22%	121,727	1,467	73	
FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change	
Reduced Growth	116,822	118,025	1.02%	119,229	1,204	100	
Trend and Seasonality	117,717	117,823	0.09%	117,929	106	9	
ARIMA	118,768	126,963	3.51%	131,419	4,456	(72)	
Trend Stationary	123,693	125,437	0.41%	125,951	514	43	
Difference Stationary	117,216	119,191	1.68%	121,193	2,002	169	
Average TS & Reduced	120,260	121,727	0.71%	122,591	864	71	

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

## MAGI Adults, Age 45-64: Trend Selections

FY 2019-20: -1.81% FY 2020-21: 1.68% FY 2021-22: 1.68%

## MAGI Adults, Age 45-64: Justifications and Monthly Projections

The Department estimates this eligibility category with two age group sub-categories, to increase forecast accuracy. Average monthly caseload in FY 2018-19 was 119,377 clients. Average monthly caseload fell by 539 clients each month, as a result of the eligibility systems update and strong economic conditions. The June 2019 caseload was approximately 589 clients less than the predicted caseload number in the February 2019 request. The decreases of the last year seem to be lessening in the most recent months. The Department is forecasting modest growth in line with the State Demographers unemployment projections.

Beginning October 2017 there were large quarterly decreases in caseload for most adult, income-based populations due to a system improvement for the process of verifying income for Medicaid eligibility purposes. In October 2017, January 2018, and April 2018 there were large decreases in caseload for most adult, income-based populations due to a system improvement for the process of verifying income for Medicaid eligibility purposes. This puts downward pressure on the forecast for this population group.

	Actuals	Monthly	% Change
		Change	
Jun-17	133,150	-	-
Jul-17	132,860	(290)	-0.22%
Aug-17	133,687	827	0.62%
Sep-17	133,894	207	0.15%
Oct-17	128,141	(5,753)	-4.30%
Nov-17	127,903	(238)	-0.19%
Dec-17	129,511	1,608	1.26%
Jan-18	126,757	(2,754)	-2.13%
Feb-18	125,541	(1,216)	-0.96%
Mar-18	124,756	(785)	-0.63%
Apr-18	122,883	(1,873)	-1.50%
May-18	122,737	(146)	-0.12%
Jun-18	122,648	(89)	-0.07%
Jul-18	121,658	(990)	-0.81%
Aug-18	122,336	678	0.56%
Sep-18	122,747	411	0.34%
Oct-18	122,457	(290)	-0.24%
Nov-18	120,610	(1,847)	-1.51%
Dec-18	120,181	(429)	-0.36%
Jan-19	118,565	(1,616)	-1.34%
Feb-19	118,341	(224)	-0.19%
Mar-19	117,890	(451)	-0.38%
Apr-19	115,839	(2,051)	-1.74%
May-19	115,721	(118)	-0.10%
Jun-19	116,176	455	0.39%

February 2019 Forecast			
Forecasted June 2019 Level	123,141		

Bas	e trend from	June 2019	level
FY 2019-20	116,176	-2.68%	(3,201)

		N	IAGI Adults	Ages 45-64: Histo	orical Caselo	ad and Projec	tions
	Caseload	% Change	Level Change				
FY 2014-15	98,907	-	-				
FY 2015-16	121,720	23.07%	22,813				
FY 2016-17	124,499	2.28%	2,779	February 2	019 Projecti	on Before Adj	ustme
FY 2017-18	127,610	2.50%	3,111	FY 2017-18	127,610	2.50%	3,
FY 2018-19	119,377	-6.45%	(8,233)	FY 2018-19	121,791	-4.56%	(5,
FY 2019-20	117,216	-1.81%	(2,161)	FY 2019-20	126,370	3.76%	4,
FY 2020-21	119,191	1.68%	1,975	FY 2020-21	132,549	4.89%	6,
FY 2021-22	121,193	1.68%	2,002			•	

February 2019 Projection Before Adjustments				
FY 2017-18	127,610	2.50%	3,111	
FY 2018-19	121,791	-4.56%	(5,819)	
FY 2019-20	126,370	3.76%	4,579	
FY 2020-21	132,549	4.89%	6,179	

A system fix resulted in downward pressure in October 2017 and quarterly thereafter. The Department selected a trend reduced from the previous forecast, with upward pressure in the request and out years due to the State Demographer's Office's estimates of unemployment rates, though the forecast is overall reduced due to the low starting point. Overall this population represents nearly 1/3 of Magi adults overall. Therefore the effect on the population is muted somewhat.

Actuals				
	Monthly Change	% Change		
6-month average	(668)	-0.56%		
12-month average	(539)	-0.45%		
18-month average	(741)	-0.60%		
24-month average	(707)	-0.56%		

Monthly Average	Growth Actu	ials
FY 2013-14 1st Half	232	3.46%
FY 2013-14 2nd Half	12,188	91.75%
FY 2013-14	6,210	47.60%
FY 2014-15 1st Half	2,769	3.15%
FY 2014-15 2nd Half	2,189	2.12%
FY 2014-15	2,479	2.63%
FY 2015-16 1st Half	1,863	1.61%
FY 2015-16 2nd Half	1,039	0.83%
FY 2015-16	1,451	1.22%
FY 2016-17 1st Half	727	0.56%
FY 2016-17 2nd Half	4	1.17%
FY 2016-17	366	0.86%
FY 2017-18 1st Half	(607)	-0.44%
FY 2017-18 2nd Half	(1,144)	-0.90%
FY 2017-18	(875)	-0.67%
FY 2018-19 1st Half	(411)	-0.34%
FY 2018-19 2nd Half	(668)	-0.56%
FY 2018-19	(539)	-0.45%

Monthly Average Growth Comparisons					
Request	Monthly	Change	Percent Change		
Request	S-1	R-1	S-1	R-1	
FY 2019-20 1st Half	494	160	0.40%	0.14%	
FY 2019-20 2nd Half	510	164	0.40%	0.14%	
FY 2019-20	502	162	0.40%	0.14%	
FY 2020-21 1st Half	519	165	0.40%	0.14%	
FY 2020-21 2nd Half	535	167	0.40%	0.14%	
FY 2020-21	527	166	0.40%	0.14%	
FY 2021-22 1st Half		166		0.14%	
FY 2021-22 2nd Half		171		0.14%	
FY 2021-22		169		0.14%	

#### **Breast and Cervical Cancer Program**

The Breast and Cervical Cancer Treatment Program (BCCP) was authorized under SB 01S2-012 and began enrolling eligible women in July 2002. Women under this optional coverage group were screened using the Centers for Disease Control's national breast and cervical cancer early detection and prevention guidelines, and found to have breast or cervical cancer. These women are between the ages of 40 and 64, uninsured, and otherwise not eligible for Medicaid. The Colorado Department of Public Health and Environment (CDPHE) administers the screening program as a grantee of the Centers of Disease Control. Regulations for the nationwide screening program indicate that the program is for low-income women, which CDPHE has interpreted to be less than 250% of the federal poverty level. To date, all 50 states have approved the option of covering these women under Medicaid.

HB 14-1045 most recently extended State authorization of this program. With the approval of CDPHE's FY 2016-17 R-4 in the FY 2016-17 Long Bill (HB 16-1405), the age range for cervical cancer screenings and treatment was extended to include women ages 21 to 39.

25.5-5-308 (1), C.R.S.

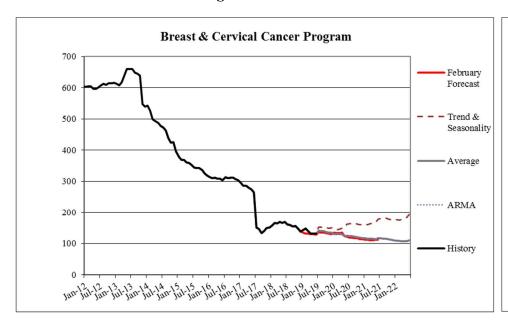
The general assembly hereby finds and declares that breast and cervical cancer are significant health problems for women in this state. The general assembly further finds and declares that these cancers can and should be prevented and treated whenever possible. It is therefore the intent of the general assembly to enact this section to provide for the prevention and treatment of breast and cervical cancer to women where it is not otherwise available for reasons of cost.

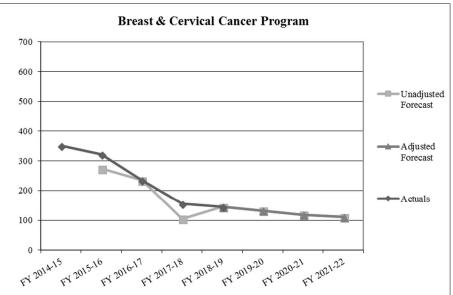
25.5-5-308 (2), C.R.S.

As used in this section, unless the context otherwise requires:

- (a) "Eligible person" means a person who:
- (I)(A) Has been screened for breast or cervical cancer under the centers for disease control and prevention's national breast and cervical cancer early detection program established under Title XV of the federal "Public Health Service Act", 42 U.S.C. sec. 300k et seq., in accordance with the requirements of section 1504 of such act, 42 U.S.C. sec. 300n, on or after July 1, 2002, unless the centers for Medicare and Medicaid services approves the state department's amendment to the medical assistance plan and the state department is able to implement the breast and cervical cancer prevention and treatment program before such date, then the person must be screened on or after the implementation date of such program; or
- (B) Has been screened for breast or cervical cancer by a provider who does not receive funds through the centers for disease control and prevention's national breast and cervical cancer early detection program but whose screening activities are recognized by the department of public health and environment as part of screening activities under the centers for disease control and prevention's national breast and cervical cancer early detection program. This sub-subparagraph (B) shall apply only if the state department receives authority to receive federal financial participation for such persons. The state department shall request authority for federal financial participation when the state department determines that the amount of moneys accumulated in the eligibility expansion account created in paragraph (c) of subsection (8) of this section, including any amounts pledged or promised through a gift, grant, or donation, is sufficient to sustain the projected number of additional persons who would be eligible for the program under this sub-subparagraph (B).
- (II) Has been diagnosed with breast or cervical cancer and is in need of breast or cervical cancer treatment;
- (III) Has not yet attained sixty-five years of age; and
- (IV) Does not have any creditable coverage as defined under federal law pursuant to 42 U.S.C. sec. 300gg (c).

# Breast and Cervical Cancer Program: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Fiscal Note HB 14-1045					
Trend & Seasonality	ВССР	Constant, Trend, Seasonal Dummy Variables	13.45	13.26	0.0396
ARMA	dlog(BCCP)	Constant	-2.94	-3.12	-0.0282

	Breast and Cervical Cancer Program: Model Results <sup>1</sup>					
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change <sup>2</sup>
Fiscal Note HB 14-1045	155	145	-75.81%	35	(110)	(11)
Trend & Seasonality	155	145	3.00%	149	4	2
ARMA	155	145	-18.43%	118	(27)	(2)
Average	155	145	-8.76%	132	(13)	(1)

FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change <sup>2</sup>
Fiscal Note HB 14-1045	145	35	-100.00%	0	(35)	0
Trend & Seasonality	145	149	10.07%	164	15	1
ARMA	145	118	-19.49%	95	(23)	(2)
Average	145	132	-10.61%	118	(14)	(1)

FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change <sup>2</sup>
Fiscal Note HB 14-1045	35	0	0.00%	0	0	0
Trend & Seasonality	149	164	9.15%	179	15	1
ARMA	118	95	-20.00%	76	(19)	(1)
Average	132	118	-5.93%	111	(7)	(1)

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

### Breast and Cervical Cancer Program:

FY 2019-20: -8.76% FY 2020-21: -10.61% FY 2021-22: -5.93%

### Breast and Cervical Cancer Program: Justifications

- Average monthly caseload growth in FY 2018-19 for BCCP was -3. The decreases previously seen in this population appear to have stabilized somewhat.
- The expansion in MAGI Adults on January 2014 resulted in clients who were already on BCCP to move to the MAGI Adults category. Following guidance from CMS, the Department manually moved clients from MAGI Adults to BCCP based on clients being in the BCCP program on December 2013 and clients not having a break in their Medicaid eligibility. The Department did not account for breaks in cancer treatment, the third criteria for a client to no longer be eligible for this manual adjustment. In June 2017, the Department performed analysis on the base list of BCCP clients who were on Medicaid in December 2013 and found that all clients in the list had a break in treatment of at least one month. Based on this analysis, the Department is no longer performing this manual adjustment, effective July 1, 2017, and the forecast has been adjusted accordingly.
- There is one adjustment for this population:
  - o The estimated population of clients in this category with higher than 133% FPL. This adjustment has been discontinued in the present forecast after the Department researched these clients. However, the adjustment is still included in the below Exhibit to compare the Departments current forecast to the previous November one.

	Actuals	Monthly Change	% Change
Jun-17	264	-	-
Jul-17	150	(114)	-43.18%
Aug-17	145	(5)	-3.33%
Sep-17	132	(13)	-8.97%
Oct-17	139	7	5.30%
Nov-17	149	10	7.19%
Dec-17	151	2	1.34%
Jan-18	157	6	3.97%
Feb-18	165	8	5.10%
Mar-18	163	(2)	-1.21%
Apr-18	169	6	3.68%
May-18	165	(4)	-2.37%
Jun-18	169	4	2.42%
Jul-18	160	(9)	-5.33%
Aug-18	158	(2)	-1.25%
Sep-18	154	(4)	-2.53%
Oct-18	155	1	0.65%
Nov-18	148	(7)	-4.52%
Dec-18	138	(10)	-6.76%
Jan-19	142	4	2.90%
Feb-19	148	6	4.23%
Mar-19	140	(8)	-5.41%
Apr-19	131	(9)	-6.43%
May-19	131	0	0.00%
Jun-19	131	0	0.00%

FY 2010-11	531	24.94%
FY 2011-12	597	12.43%
FY 2012-13	623	4.36%
FY 2013-14	559	-10.27%
FY 2014-15	351	-37.21%
FY 2015-16	322	-8.26%
FY 2016-17	235	-27.02%
FY 2017-18	155	-34.04%
FY 2018-19	145	-6.67%
FY 2019-20	132	-8.76%
FY 2020-21	118	-10.61%
FY 2021-22	111	-5.93%

Caseload

FY 2006-07

FY 2007-08

FY 2008-09

FY 2009-10

228

270

317

425

% Change

18.42%

17.41%

34.07%

With the expansion of MAGI Adults in January 2014, clients that would have been eligible for BCCP are now eligible for MAGI Adults. Consequently, there is an expected decline in BCCP caseload - the Department has learned that this will not be the case and has revised the methodology to no longer forecast clients over 133% FPL separately. Given most recent actuals the Department is expecting this population to.

Breast and Cervical Cancer Program: Historical Caseload and Projections

Level

Change

47

108

106

66

26

(208) (29) (87) (80) (10) (13) (14)

February 2019 Projection After Adjustments					
155	-34.04%	(80)			
141	-9.03%	(14)			
131	-7.09%	(10)			
113	-13.74%	(18)			
	155 141 131	155 -34.04% 141 -9.03% 131 -7.09%			

Monthly Average Growth Actuals				
FY 2013-14 1st Half	(20)	-3.12%		
FY 2013-14 2nd Half	(11)	-2.03%		
FY 2013-14	(15)	-2.58%		
FY 2014-15 1st Half	(14)	-3.02%		
FY 2014-15 2nd Half	(7)	-1.93%		
FY 2014-15	(10)	-2.48%		
FY 2015-16 1st Half	(6)	-1.67%		
FY 2015-16 2nd Half	(2)	-0.75%		
FY 2015-16	(4)	-1.21%		
FY 2016-17 1st Half	(0)	-0.04%		
FY 2016-17 2nd Half	(7)	-2.26%		
FY 2016-17	(3)	-1.15%		
FY 2017-18 1st Half	(19)	-6.94%		
FY 2017-18 2nd Half	3	1.93%		
FY 2017-18	(8)	-2.50%		
FY 2018-19 1st Half	(5)	-3.29%		
FY 2018-19 2nd Half	(1)	-0.79%		
FY 2018-19	(3)	-2.04%		

	ts Over 6 FPL
Jun-17	56
Jul-17	50
Aug-17	46
Sep-17	47
Oct-17	46
Nov-17	48
Dec-17	51
Jan-18	50
Feb-18	50
Mar-18	50
Apr-18	55
May-18	56
Jun-18	51
Jul-18	46
Aug-18	48
Sep-18	43
Oct-18	47
Nov-18	44
Dec-18	42
Jan-19	0
Feb-19	0
Mar-19	0
Apr-19	0
May-19	0
Jun-19	0

February 2019 Forecast	
Forecasted June 2019 Level	128

Base trend from June 2019 level					
FY 2019-20	131	-9.66%	(14)		

Actuals					
	Monthly Change	% Change			
6-month average	(1)	-0.79%			
12-month average	(3)	-2.04%			
18-month average	(1)	-0.71%			
24-month average	(6)	-2.27%			

Monthly Average Growth Comparisons					
D	Monthly (	Change	Percent C	Percent Change	
Request	S-1	R-1	S-1	R-1	
FY 2019-20 1st Half	0	0	0.32%	0.39%	
FY 2019-20 2nd Half	(1)	(1)	-0.99%	-1.04%	
FY 2019-20	(0)	(0)	-0.33%	-0.33%	
FY 2020-21 1st Half	(1)	(1)	-1.26%	-1.16%	
FY 2020-21 2nd Half	(0)	0	-0.28%	0.06%	
FY 2020-21	(1)	(1)	-0.77%	-0.55%	
FY 2021-22 1st Half	0	(1)	0.00%	-1.15%	
FY 2021-22 2nd Half	0	0	0.00%	0.25%	
FY 2021-22	0	(1)	0.00%	-0.45%	

## **MAGI Eligible Children**

One of the primary ways that children qualify for Medicaid is through Section 1931 of the federal Medicaid statute. Under Section 1931, families who were eligible for cash welfare assistance under the Aid to Families with Dependent Children program are still eligible for Medicaid even after the Aid to Families with Dependent Children was replaced by the Temporary Assistance for Needy Families welfare program (referred to as Colorado Works) on July 16, 1996, and clients under the Temporary Assistance for Needy Families program were no longer automatically eligible for Medicaid. Per HB 09-1293 children enrolled in Medicaid will receive continuous eligibility for twelve months.

This category also includes children on Transitional Medicaid. Transitional Medicaid is available to children in families who have received 1931 Medicaid three of the past six months and become ineligible due to an increase in earned income. Children receive Transitional Medicaid benefits for one year. In FY 2016-17, there were an average of 28,219 children on Transitional Medicaid. Although this program has been set to expire many times, it was most recently made permanent.

Children who are born to women enrolled in the Baby and Kid Care program (MAGI Eligible Pregnant Adults) are also included in this category. Between 1986 and 1991, Congress extended Medicaid to new groups of pregnant women and children. Referred to as Baby and Kid Care in Colorado, this program was authorized through the Medicare Catastrophic Coverage Act of 1988. The program enrolls Baby Care women (see the MAGI Eligible Pregnant Adults section of this document for information on these women) and Kid Care children. Kid Care children are born to women with incomes up to 142% of the federal poverty level. The Baby and Kid Care Program serves a much higher income level than the 1931 Families program, and pregnant mothers are not subject to resource or asset limitations to qualify for the program. Moreover, the Baby and Kid Care Program has never had a cash-assistance component and was unaffected by welfare reform in 1996.

In previous years, this caseload was adjusted to include Ribicoff children. Ribicoff children were children aged six to 19, with incomes up to 100% of the federal poverty level with resources limited to \$1,000 who were born after September 30, 1983. Beginning with age six, a new age cohort was phased-in each year. Caseload was adjusted upwards to include these children. However, the final cohort of children was phased-in during FY 2002-03, so no further caseload adjustments are needed. Therefore, the MAGI Eligible Children category includes: children in families who receive Medicaid under Section 1931, children in families who receive Temporary Aid to Needy Families financial assistance coupled with Medicaid, children who are eligible for Kid Care, Ribicoff children, and children who receive Transitional Medicaid.

SB 11-008 expanded Medicaid eligibility to children of all ages with incomes up to 133% FPL (142% FPL after October 2013 due to income disregards for MAGI) in January 2013. Children ages 6 and up with incomes from 108% FPL to 142% FPL with no other insurance are considered SB 11-008 eligible children and receive the enhanced CHP+ federal match, since these children would have otherwise been eligible for CHP+. There are, however, children that do not receive the enhanced CHP+ federal match that are over age 6 with incomes from 108% FPL to 142% FPL; these are the children with other insurance that would not have otherwise qualified for CHP+.

#### 25.5-5-101 (1), C.R.S.

- (a) Individuals who meet the eligibility criteria for the aid to families with dependent children program pursuant to rules that were in effect on July 16, 1996;
- (b) Families who meet the eligibility criteria for the aid to families with dependent children program established in rules that were in effect on July 16, 1996, and who subsequently would have become ineligible under such eligibility criteria because of increased earnings or increased hours of employment whose eligibility is specified for a period of time by the federal government;
- (c) Qualified pregnant women, and children under the age of seven, who meet the income resource requirements of the state's aid to families with dependent children program pursuant to rules that were in effect on July 16, 1996;
- (d) A newborn child born of a woman who is categorically needy. Such child is deemed Medicaid-eligible on the date of birth and remains eligible for one year so long as the woman remains categorically needy and the child is a member of her household;
- (m) Low-income pregnant women, and children through the age of six, whose income is at or below a certain percentage of the federal poverty level as determined by the federal government;

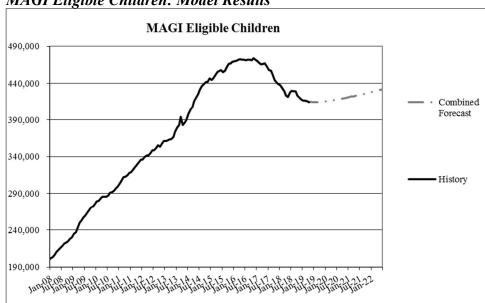
#### 25.5-5-201 (1), C.R.S.

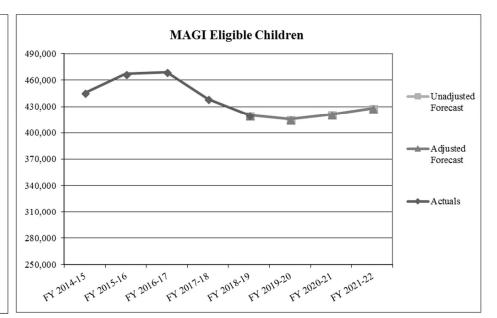
- (a) Individuals who would be eligible for but are not receiving cash assistance;
- (d) Individuals who would be eligible for aid to families with dependent children if child care were paid from earnings;
- (e) Individuals under the age of twenty-one who would be eligible for aid to families with dependent children but do not qualify as dependent children;
- (h) Persons who are eligible for cash assistance under the works program pursuant to section 26-2-706, C.R.S.;

## 25.5-5-205 (3), C.R.S.

- (a) On and after April 1, 1990, children under the age of six years and pregnant women shall be eligible for benefits under the baby and kid care program... (b) The percentage level of the federal poverty line, as defined pursuant to 42 U.S.C. sec. 9902 (2), used to determine eligibility under this subsection (3) shall be one hundred thirty-three percent...;
- (c) (I) On and after September 1, 2011, children born after September 30, 1983, who have attained six years of age but have not attained nineteen years of age shall be eligible for benefits under the baby and kid care program. For the purpose of eligibility under this paragraph (c) only, such individual's family income shall exceed the eligibility threshold used in determining eligibility for aid to families with dependent children assistance pursuant to rules in effect on July 16, 1996, and the method adopted by the state board pursuant to sections 25.5-5-101 (4) (c) and 25.5-5-201 (5) (c), but shall not exceed the equivalent of the percentage level of the federal poverty line that is specified pursuant to subparagraph (II) of this paragraph (c).
- (II) The percentage level of the federal poverty line, as defined pursuant to 42 U.S.C. sec. 9902 (2), used to determine eligibility under this paragraph (c) shall be equivalent to the family income eligibility threshold applied to children under six years of age pursuant to paragraph (b) of this subsection (3).

MAGI Eligible Children: Model Results





		MAGI Eligible	Children: Mode	l Results <sup>1</sup>		
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change <sup>2</sup>
Combined Forecast	438,772	420,253	-0.76%	417,069	(3,184)	461
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change <sup>2</sup>
Combined Forecast	420,253	417,069	1.48%	423,246	6,177	523
FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change <sup>2</sup>
Combined Forecast	417,069	423,246	1.49%	429,549	6,303	531

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

## MAGI Eligible Children: Trend Selections

FY 2019-20: -0.76% FY 2020-21: 1.48% FY 2021-22: 1.50%

#### MAGI Eligible Children: Justifications

- Average monthly caseload in FY 2018-19 for MAGI Eligible Children was 420,253. The June 2019 caseload was approximately 436 below the February 2019 request. The Department is projecting slight growth in FY 2019-20 and future years based on the State Demographer's Office's projections of increasing unemployment rate over time.
- The Department selects models separately for the age group 0-1, the age group 2-5, and the age group 6-18, based on the age groups for CHP+ rates. See below for more details.
- The Department identified a data error for July 2015 through December 2015 that incorrectly assigned children to eligibility categories for individuals with disabilities, based on their parents' disability status. This error incorrectly moved clients from Eligible Children and Children's Basic Health Plan (CHP) to Individuals to 59 with Disabilities and Children with Disabilities Buy-In.
- Beginning October 2017, there have been large quarterly decrease in caseload for most adult, income-based populations due to a system improvement for the process of verifying income for Medicaid eligibility purposes. The Department has applied downward pressure to the trends of the affected populations. While the Department does not anticipate a large impact on children's caseload for this system fix, it did impact children in October 2018.

#### FY 2020-21 BUDGET REQUEST: CASELOAD NARRATIVE

	Actuals	Monthly Change	% Change
Jun-17	462,931	-	-
Jul-17	457,780	(5,151)	-1.11%
Aug-17	457,326	(454)	-0.10%
Sep-17	452,116	(5,210)	-1.14%
Oct-17	444,507	(7,609)	-1.68%
Nov-17	441,219	(3,288)	-0.74%
Dec-17	439,244	(1,975)	-0.45%
Jan-18	437,341	(1,903)	-0.43%
Feb-18	433,460	(3,881)	-0.89%
Mar-18	429,162	(4,298)	-0.99%
Apr-18	423,241	(5,921)	-1.38%
May-18	421,753	(1,488)	-0.35%
Jun-18	428,112	6,359	1.51%
Jul-18	429,606	1,494	0.35%
Aug-18	429,302	(304)	-0.07%
Sep-18	429,176	(126)	-0.03%
Oct-18	423,792	(5,384)	-1.25%
Nov-18	420,434	(3,358)	-0.79%
Dec-18	417,916	(2,518)	-0.60%
Jan-19	416,568	(1,348)	-0.32%
Feb-19	416,362	(206)	-0.05%
Mar-19	415,610	(752)	-0.18%
Apr-19	414,766	(844)	-0.20%
May-19	415,174	408	0.10%
Jun-19	414,330	(844)	-0.20%

February 2019 Forecast	
Forecasted June 2019 Level	417,916

Base trend from June 2019 level					
FY 2019-20	414,330	-1.41%	(5,923)		

MAGI Eligible Children: Historical Caseload and Projections						
	Caseload	% Change	Level Change			
FY 2006-07	205,390	-	-			
FY 2007-08	204,022	-0.67%	(1,368)			
FY 2008-09	235,129	15.25%	31,107			
FY 2009-10	275,672	17.24%	40,543			
FY 2010-11	302,410	9.70%	26,738			
FY 2011-12	334,633	10.66%	32,223			
FY 2012-13	359,843	7.53%	25,210			
FY 2013-14	399,032	10.89%	39,189			
FY 2014-15	445,723	11.70%	46,691			
FY 2015-16	467,193	4.82%	21,470			
FY 2016-17	469,297	0.45%	2,104	February 20	19 Projectio	on Before Adj
FY 2017-18	438,772	-6.50%	(30,525)	FY 2017-18	438,772	-6.50%
FY 2018-19	420,253	-4.22%	(18,519)	FY 2018-19	421,460	-3.95%
FY 2019-20	417,048	-0.76%	(3,205)	FY 2019-20	418,640	-0.67%
FY 2020-21	423,239	1.48%	6,191	FY 2020-21	424,716	1.45%
FY 2021-22	429,567	1.50%	6,328			

February 2019 Projection Before Adjustments						
FY 2017-18	438,772	-6.50%	(30,525)			
FY 2018-19	421,460	-3.95%	(17,312)			
FY 2019-20	418,640	-0.67%	(2,820)			
FY 2020-21	424,716	1.45%	6,076			

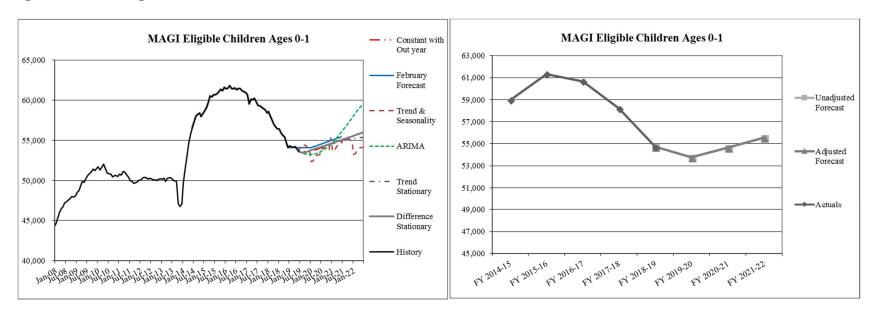
The Department has decided to keep the forecast flat for FY 2019-20, based on the strong negative growth of the past year. For theout year, the Department is reintroducing positive growth based on the State Demographer's Office's projections of increasing unemployment rate over time.

Actuals				
	Monthly Change	% Change		
6-month average	(598)	-0.14%		
12-month average	(1,149)	-0.27%		
18-month average	(1,384)	-0.32%		
24-month average	(2,025)	-0.46%		

Monthly Average	Growth Act	uals
FY 2013-14 1st Half	2,716	0.73%
FY 2013-14 2nd Half	6,009	1.49%
FY 2013-14	4,362	1.11%
FY 2014-15 1st Half	3,400	0.80%
FY 2014-15 2nd Half	1,917	0.44%
FY 2014-15	2,659	0.62%
FY 2015-16 1st Half	1,859	0.41%
FY 2015-16 2nd Half	507	0.11%
FY 2015-16	1,183	0.26%
FY 2016-17 1st Half	1	0.00%
FY 2016-17 2nd Half	(1,521)	-0.33%
FY 2016-17	(760)	-0.16%
FY 2017-18 1st Half	(3,948)	-0.89%
FY 2017-18 2nd Half	(1,855)	-0.43%
FY 2017-18	(2,902)	-0.66%
FY 2018-19 1st Half	(1,699)	-0.40%
FY 2018-19 2nd Half	(457)	-0.11%
FY 2018-19	(1,078)	-0.25%

W 41 4 G 4 G 4							
Monthly Average Growth Comparisons							
Paguast	Monthly	nly Change Percent C		Change			
Request	S-1	R-1	S-1	R-1			
FY 2019-20 1st Half	0	405	0.00%	0.10%			
FY 2019-20 2nd Half	592	517	0.12%	0.12%			
FY 2019-20	296	461	0.06%	0.11%			
FY 2020-21 1st Half	588	519	0.14%	0.12%			
FY 2020-21 2nd Half	595	527	0.14%	0.12%			
FY 2020-21	592	523	0.14%	0.12%			
FY 2021-22 1st Half		526		0.12%			
FY 2021-22 2nd Half		536		0.12%			
FY 2021-22		531		0.12%			

# MAGI Eligible Children, Ages 0-1: Model Results



Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	MAGI Children 0-1	Constant, trend, seasonal dummy variables	19.49	19.06	-0.1056
ARIMA	log(MAGI Children 0-1)	Constant, AR variables, MA variables	-7.19	-7.45	0.9877
Trend Stationary	log(MAGI Children 0-1)	Constant and 1 lag on the dependent variable	-7.38	-7.56	0.9857
Difference Stationary	dlog(MAGI Children 0-1)	Constant and 1 lag on the dependent variable	-7.48	-7.56	-0.0182
Average TS and Constant			NA	NA	NA
Constant			NA	NA	NA
Constant with Out Year Growth			NA	NA	NA

	N	MAGI Eligible Childr	en Ages 0-1: Mod	del Results <sup>1</sup>		
FY 2019-20	FY 2017- 18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	58,194	54,728	-2.09%	53,584	(1,144)	(32)
ARIMA	58,194	54,728	-2.47%	53,376	(1,352)	(7)
Trend Stationary	58,194	54,728	-1.75%	53,770	(958)	45
Difference Stationary	58,194	54,728	-1.74%	53,776	(952)	43
Average TS and Constant	58,194	54,728	-1.87%	53,705	(1,023)	23
Constant	58,194	54,728	-1.99%	53,639	(1,089)	0
Constant with Out Year Growth	58,194	54,728	-1.81%	53,737	(991)	33
FY 2020-21	FY 2018- 19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	54,728	53,584	1.10%	54,173	589	107
ARIMA	54,728	53,376	2.52%	54,721	1,345	206
Trend Stationary	54,728	53,770	1.53%	54,593	823	60
Difference Stationary	54,728	53,776	1.61%	54,642	866	76
Average TS and Constant	54,728	53,705	0.77%	54,119	414	30
Constant	54,728	53,639	0.00%	53,639	0	0
Constant with Out Year Growth	54,728	53,737	1.50%	54,543	806	79
FY 2021-22	Projected FY 2019- 20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	53,584	54,173	0.58%	54,487	314	(32)
ARIMA	53,376	54,721	5.86%	57,928	3,207	290
Trend Stationary	53,770	54,593	1.08%	55,183	590	41
Difference Stationary	53,776	54,642	1.67%	55,555	913	77
Average TS and Constant	53,705	54,119	0.55%	54,417	298	21
Constant	53,639	53,639	0.00%	53,639	0	0
Constant with Out Year Growth	53,737	54,543	1.73%	55,487	944	79

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

## MAGI Eligible Children, Ages 0-1: Trend Selections

FY 2019-20: -1.74% FY 2020-21: 1.61% FY 2021-22: 1.67%

## MAGI Eligible Children, Ages 0-1: Justifications

The Department estimates this eligibility category with three age group sub-categories, to increase forecast accuracy. Average monthly caseload for FY 2018-19 was 54,724. The June 2019 data point was 585 below what was forecast in February 2019. The Department has observed that the magnitude of the decrease has been smaller in most recent months, which provides justification for the Department's strategy to forecast flat growth which will eventually increase. The Department expects growth to return around January 2020.

	Actuals	Monthly Change	% Change
Jun-17	59,839	-	-
Jul-17	59,341	(498)	-0.83%
Aug-17	59,317	(24)	-0.04%
Sep-17	59,145	(172)	-0.29%
Oct-17	58,974	(171)	-0.29%
Nov-17	58,842	(132)	-0.22%
Dec-17	58,426	(416)	-0.71%
Jan-18	58,600	174	0.30%
Feb-18	58,048	(552)	-0.94%
Mar-18	57,523	(525)	-0.90%
Apr-18	56,988	(535)	-0.93%
May-18	56,677	(311)	-0.55%
Jun-18	56,441	(236)	-0.42%
Jul-18	56,427	(14)	-0.02%
Aug-18	55,923	(504)	-0.89%
Sep-18	55,627	(296)	-0.53%
Oct-18	55,424	(203)	-0.36%
Nov-18	54,770	(654)	-1.18%
Dec-18	54,119	(651)	-1.19%
Jan-19	54,322	203	0.38%
Feb-19	54,172	(150)	-0.28%
Mar-19	54,137	(35)	-0.06%
Apr-19	54,226	89	0.16%
May-19	53,952	(274)	-0.51%
Jun-19	53,641	(311)	-0.58%

February 2019 Forecast	
Forecasted June 2019 Level	54,119

Bas	e trend from J	une 2019 le	vel
FY 2019-20	53,641	-1.99%	(1,087)

		MAGI Elig	gible Childr	en Ages 0-1: Histori	cal Caseload	and Projecti	ons
	Caseload	% Change	Level Change				
FY 2010-11	50,713	-	-				
FY 2011-12	50,069	-1.27%	(644)				
32	50,186	0.23%	117				
FY 2013-14	51,005	1.63%	819				
FY 2014-15	58,968	15.61%	7,963				
FY 2015-16	61,323	3.99%	2,355				
FY 2016-17	60,668	-1.07%	(655)	February 20	19 Projection	n Before Adj	ustme
FY 2017-18	58,194	-4.08%	(2,474)	FY 2017-18	58,194	-4.08%	(2,
FY 2018-19	54,728	-5.96%	(3,466)	FY 2018-19	54,749	-5.92%	(3,
FY 2019-20	53,776	-1.74%	(952)	FY 2019-20	54,218	-0.97%	(
FY 2020-21	54,642	1.61%	866	FY 2020-21	55,020	1.48%	
FY 2021-22	55,555	1.67%	913				

February 2019 Projection Before Adjustments					
FY 2017-18	58,194	-4.08%	(2,474)		
FY 2018-19	54,749	-5.92%	(3,445)		
FY 2019-20	54,218	-0.97%	(531)		
FY 2020-21	55,020	1.48%	802		

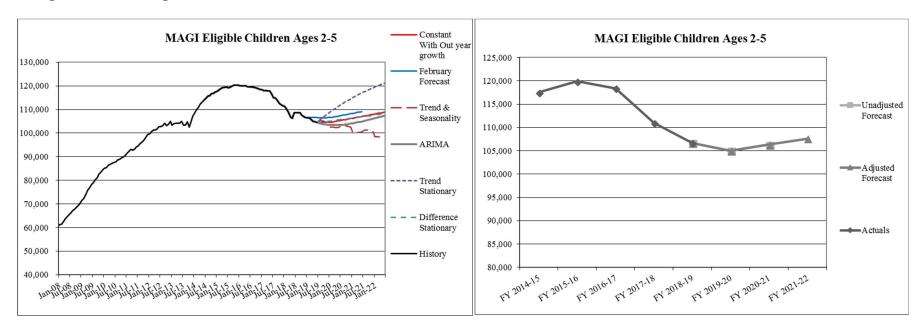
MAGI Eligible Children Ages 0-1 saw an unexpected increase in January 2014. Prior to that increase, this age group had relatively low growth in FY 2012-13 and FY 2013-14. Negative growth has been increasing over time. This populaton has experienced some positive growth in a couple recent months, which provides justification of the Departments strategy to forecast flat growth for

Actuals				
	Monthly Change	% Change		
6-month average	(80)	-0.15%		
12-month average	(233)	-0.42%		
18-month average	(266)	-0.47%		
24-month average	(258)	-0.45%		

Monthly Average Growth Actuals						
FY 2013-14 1st Half	(544)	-1.09%				
FY 2013-14 2nd Half	1,588	3.13%				
FY 2013-14	522	1.02%				
FY 2014-15 1st Half	292	0.51%				
FY 2014-15 2nd Half	389	0.66%				
FY 2014-15	340	0.58%				
FY 2015-16 1st Half	153	0.25%				
FY 2015-16 2nd Half	(16)	-0.02%				
FY 2015-16	69	0.11%				
FY 2016-17 1st Half	(92)	-0.15%				
FY 2016-17 2nd Half	(188)	-0.31%				
FY 2016-17	(140)	-0.23%				
FY 2017-18 1st Half	(236)	-0.40%				
FY 2017-18 2nd Half	(331)	-0.57%				
FY 2017-18	(283)	-0.49%				
FY 2018-19 1st Half	(387)	-0.70%				
FY 2018-19 2nd Half	(80)	-0.15%				
FY 2018-19	(233)	-0.42%				

Monthl	y Average G	rowth Comp	arisons			
Daguage	Monthly	Change	Percent (	Percent Change		
Request	S-1	R-1	S-1	R-1		
FY 2019-20 1st Half	0	12	0.00%	0.02%		
FY 2019-20 2nd Half	65	74	0.12%	0.14%		
FY 2019-20	33	43	0.06%	0.08%		
FY 2020-21 1st Half	79	75	0.14%	0.14%		
FY 2020-21 2nd Half	79	76	0.14%	0.14%		
FY 2020-21	79	76	0.14%	0.14%		
FY 2021-22 1st Half		75		0.14%		
FY 2021-22 2nd Half		79		0.14%		
FY 2021-22		77		0.14%		

# MAGI Eligible Children, Ages 2-5: Model Results



Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	MAGI Children 2-5	Constant, trend, seasonal dummy variables	20.26	19.83	0.2572
ARIMA	log(MAGI Children 2-5)	Constant, AR variables, MA variables	-6.31	-6.54	0.9846
Trend Stationary	log(MAGI Children 2-5)	Constant, trend, 2 lags on the dependent variable	-7.68	-7.82	0.9895
Difference Stationary	dlog(MAGI Children 2-5)	Constant and 1 lag on the dependent variable	-3.23	-3.30	0.0085
Constant			NA	NA	NA
Constant with Out Year Growth			NA	NA	NA

	MAGI Eligible Children Ages 2-5: Model Results <sup>1</sup>					
FY 2019-20	FY 2017- 18	FY 2018-19	Projected Growth Rate	Projected FY 2019- 20 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	110,979	106,672	-2.80%	103,685	(2,987)	(166)
ARIMA	110,979	106,672	-2.85%	103,632	(3,040)	(90)
Trend Stationary	110,979	106,672	1.73%	108,517	1,845	592
Difference Stationary	110,979	106,672	-1.53%	105,040	(1,632)	93
Constant	110,979	106,672	-2.04%	104,496	(2,176)	0
Constant With Out year growth	110,979	106,672	-1.86%	104,688	(1,984)	62
Reduced Growth Estimate	110,979	106,672	-1.95%	104,592	(2,080)	31

FY 2020-21	FY 2018- 19	Projected FY 2019- 20 Caseload	Projected Growth Rate	Projected FY 2020- 21 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	106,672	103,685	-1.92%	101,694	(1,991)	(166)
ARIMA	106,672	103,632	0.47%	104,119	487	129
Trend Stationary	106,672	108,517	5.65%	114,648	6,131	448
Difference Stationary	106,672	105,040	1.21%	106,311	1,271	107
Constant	106,672	104,496	0.00%	104,496	0	0
Constant With Out year growth	106,672	104,688	1.46%	106,216	1,528	150
Reduced Growth Estimate	106,672	104,592	0.73%	105,356	764	75

FY 2021-22	Projected FY 2019- 20 Caseload	Projected FY 2020- 21 Caseload	Projected Growth Rate	Projected FY 2021- 22 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	103,685	101,694	-1.95%	99,711	(1,983)	(166)
ARIMA	103,632	104,119	2.04%	106,243	2,124	195
Trend Stationary	108,517	114,648	4.07%	119,314	4,666	344
Difference Stationary	105,040	106,311	1.22%	107,608	1,297	108
Constant	104,496	104,496	0.00%	104,496	0	0
Constant With Out year growth	104,688	106,216	1.69%	108,011	1,795	150
Reduced Growth Estimate	104,592	105,356	0.85%	106,252	896	75

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

## MAGI Eligible Children, Ages 2-5: Trend Selections

FY 2019-20: -1.53% FY 2020-21: 1.21% FY 2021-22: 1.22%

#### MAGI Eligible Children, Ages 2-5: Justifications

The Department estimates this eligibility category with three age group sub-categories, to increase forecast accuracy. Average monthly caseload for FY 2018-19 was 106,672 clients, and the June 2019 data point was 489 lower than previously anticipated in the February 2019 forecast. The selected trend adjusts for the low starting point in June 2019 with no growth in the first part of FY 2019-20, but expects this category to stabilize and slowly grow again starting January 2020.

	Actuals	Monthly Change	% Change
Jun-17	116,465	-	-
Jul-17	114,994	(1,471)	-1.26%
Aug-17	114,888	(106)	-0.09%
Sep-17	113,805	(1,083)	-0.94%
Oct-17	112,575	(1,230)	-1.08%
Nov-17	111,952	(623)	-0.55%
Dec-17	111,620	(332)	-0.30%
Jan-18	111,274	(346)	-0.31%
Feb-18	110,145	(1,129)	-1.01%
Mar-18	108,778	(1,367)	-1.24%
Apr-18	106,776	(2,002)	-1.84%
May-18	106,295	(481)	-0.45%
Jun-18	108,646	2,351	2.21%
Jul-18	108,647	1	0.00%
Aug-18	108,591	(56)	-0.05%
Sep-18	108,645	54	0.05%
Oct-18	107,558	(1,087)	-1.00%
Nov-18	107,126	(432)	-0.40%
Dec-18	106,545	(581)	-0.54%
Jan-19	106,474	(71)	-0.07%
Feb-19	106,343	(131)	-0.12%
Mar-19	105,765	(578)	-0.54%
Apr-19	104,989	(776)	-0.73%
May-19	104,879	(110)	-0.10%
Jun-19	104,500	(379)	-0.36%

February 2019 Forecast	
Forecasted June 2019 Level	106,545

Base trend from June 2019 level						
FY 2019-20	104,500	-2.04%	(2,172)			

		MAGI Elig	gible Childr	en Ages 2-5:	Histor	ical Caseloa	d and Project	tions
	Caseload	% Change	Level Change					
FY 2010-11	91,035	-	-					
FY 2011-12	99,043	8.80%	8,008					
FY 2012-13	103,886	4.89%	4,843					
FY 2013-14	107,876	3.84%	3,990					
FY 2014-15	117,520	8.94%	9,644					
FY 2015-16	119,917	2.04%	2,397					
FY 2016-17	118,410	-1.26%	(1,507)	Febru	ıary 20	19 Projectio	on Before Ad	ljustm
FY 2017-18	110,979	-6.28%	(7,431)	FY 20	17-18	110,979	-6.28%	(7
FY 2018-19	106,672	-3.88%	(4,307)	FY 20	18-19	107,195	-3.41%	(3
FY 2019-20	105,040	-1.53%	(1,632)	FY 20	19-20	106,723	-0.44%	
FY 2020-21	106,311	1.21%	1,271	FY 20:	20-21	108,260	1.44%	1
FY 2021-22	107,608	1.22%	1,297					

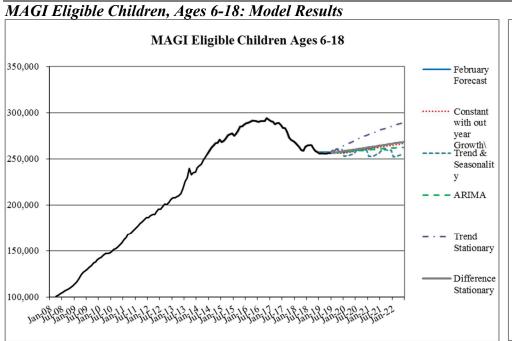
February 2019 Projection Before Adjustments					
FY 2017-18	110,979	-6.28%	(7,431)		
FY 2018-19	107,195	-3.41%	(3,784)		
FY 2019-20	106,723	-0.44%	(472)		
FY 2020-21	108,260	1.44%	1,537		

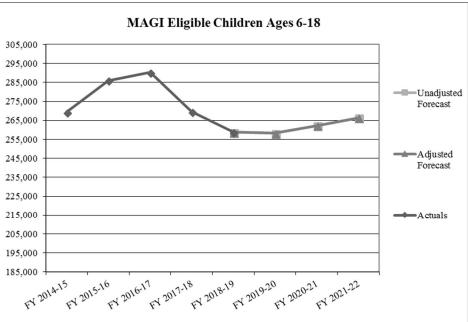
The averge monthly growth for MAGI Eligble Children Ages 2-5 over the last 24 months was negative. However, the growth is flattening out. The Department expects the growth to remain flat for much of FY 2019-20 but to pick up in the out years.

Actuals				
	Monthly Change	% Change		
6-month average	(341)	-0.32%		
12-month average	(346)	-0.32%		
18-month average	(396)	-0.36%		
24-month average	(499)	-0.45%		

Monthly Average Growth Actuals						
FY 2013-14 1st Half	354	0.35%				
FY 2013-14 2nd Half	1,158	1.05%				
FY 2013-14	756	0.70%				
FY 2014-15 1st Half	556	0.48%				
FY 2014-15 2nd Half	368	0.31%				
FY 2014-15	462	0.40%				
FY 2015-16 1st Half	113	0.09%				
FY 2015-16 2nd Half	(114)	-0.09%				
FY 2015-16	(1)	0.00%				
FY 2016-17 1st Half	(191)	-0.16%				
FY 2016-17 2nd Half	(328)	-0.28%				
FY 2016-17	(260)	-0.22%				
FY 2017-18 1st Half	(808)	-0.70%				
FY 2017-18 2nd Half	(496)	-0.44%				
FY 2017-18	(652)	-0.57%				
FY 2018-19 1st Half	(350)	-0.32%				
FY 2018-19 2nd Half	(341)	-0.32%				
FY 2018-19	(346)	-0.32%				

Monthly Average Growth Comparisons					
D	Monthly	Change	Percent C	hange	
Request	S-1	R-1	S-1	R-1	
FY 2019-20 1st Half	0	81	0.00%	0.08%	
FY 2019-20 2nd Half	150	106	0.12%	0.10%	
FY 2019-20	75	93	0.06%	0.09%	
FY 2020-21 1st Half	150	105	0.14%	0.10%	
FY 2020-21 2nd Half	150	109	0.14%	0.10%	
FY 2020-21	150	107	0.14%	0.10%	
FY 2021-22 1st Half		108		0.10%	
FY 2021-22 2nd Half		109		0.10%	
FY 2021-22		108		0.10%	





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	MAGI Children 6-18	Constant, trend, seasonal dummy variables	22.8	22.37	-0.176
ARIMA	log(MAGI Children 6- 18)	Constant, AR variables, MA variables	-6.75	-6.96	0.9845
Trend Stationary	log(MAGI Children 6- 18)	Constant, trend, 1 lag on the dependent variable	-7.02	-7.12	0.9848
Difference Stationary	dlog(MAGI Children 6-18)	Constant and 1 lag on the dependent variable	-7.00	-7.09	0.0183

	MAGI Eligible Children Ages 6-18: Model Results <sup>1</sup>							
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change		
Trend & Seasonality	269,599	258,853	-0.75%	256,912	(1,941)	(20)		
ARIMA	269,599	258,853	-0.65%	257,170	(1,683)	184		
Trend Stationary	269,599	258,853	1.90%	263,771	4,918	1,134		
Difference Stationary	269,599	258,853	-0.24%	258,232	(621)	324		
Average ARIMA & DS	269,599	258,853	-0.45%	257,688	(1,165)	254		
Constant with out year Growth\	269,599	258,853	-0.85%	256,643	(2,210)	151		
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change 2		
Trend & Seasonality	258,853	256,912	-0.09%	256,681	(231)	(20)		
ARIMA	258,853	257,170	0.97%	259,665	2,495	192		
Trend Stationary	258,853	263,771	4.61%	275,931	12,160	913		
Difference Stationary	258,853	258,232	1.57%	262,286	4,054	341		
Average ARIMA & DS	258,853	257,688	1.27%	260,961	3,273	266		
Constant with out year Growth\	258,853	256,643	1.45%	260,369	3,726	364		
FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change 2		
Trend & Seasonality	256,912	256,681	-0.09%	256,450	(231)	(20)		
ARIMA	257,170	259,665	0.81%	261,768	2,103	161		
Trend Stationary	263,771	275,931	3.46%	285,478	9,547	698		
Difference Stationary	258,232	262,286	1.57%	266,404	4,118	346		
Average ARIMA & DS	257,688	260,961	1.19%	264,066	3,105	253		
Constant with out year Growth\	256,643	260,369	1.68%	264,731	4,362	364		

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

## MAGI Eligible Children, Ages 6-18: Trend Selections

FY 2019-20: -0.24% FY 2020-21: 1.57% FY 2021-22: 1.57%

## MAGI Eligible Children, Ages 6-18: Justifications

MAGI Eligible Children Ages 6-18 have had an average decrease of 177 per month for the last 6 months and 570 per month for the last 12 months, suggesting decreasing negative growth over time, especially since October 2018. The magnitude of these decreases seems to be getting smaller and given that this age groups has the bulk of the population the Department again forecasts flat growth for FY 2019-20 with the trend increasing in FY 2020-21.

#### FY 2020-21 BUDGET REQUEST: CASELOAD NARRATIVE

	Actuals	Monthly Change	% Change
Jun-17	286,627	-	-
Jul-17	283,445	(3,182)	-1.11%
Aug-17	283,121	(324)	-0.11%
Sep-17	279,166	(3,955)	-1.40%
Oct-17	272,958	(6,208)	-2.22%
Nov-17	270,425	(2,533)	-0.93%
Dec-17	269,198	(1,227)	-0.45%
Jan-18	267,467	(1,731)	-0.64%
Feb-18	265,267	(2,200)	-0.82%
Mar-18	262,861	(2,406)	-0.91%
Apr-18	259,477	(3,384)	-1.29%
May-18	258,781	(696)	-0.27%
Jun-18	263,025	4,244	1.64%
Jul-18	264,531	1,506	0.57%
Aug-18	264,788	257	0.10%
Sep-18	264,904	116	0.04%
Oct-18	260,810	(4,094)	-1.55%
Nov-18	258,539	(2,271)	-0.87%
Dec-18	257,252	(1,287)	-0.50%
Jan-19	255,772	(1,480)	-0.58%
Feb-19	255,847	75	0.03%
Mar-19	255,708	(139)	-0.05%
Apr-19	255,551	(157)	-0.06%
May-19	256,343	792	0.31%
Jun-19	256,189	(154)	-0.06%

February 2019 Forecast	
Forecasted June 2019 Level	257,252

Base trend from June 2019 level					
FY 2019-20	256,189	-1.03%	(2,664)		

	MAGI Eligible Children Ages 6-18: Historical Caseload and Projections						
	Caseload	% Change	Level Change				
FY 2010-11	160,662	-	-				
FY 2011-12	185,521	15.47%	24,859				
FY 2012-13	205,770	10.91%	20,249				
FY 2013-14	240,151	16.71%	34,381				
FY 2014-15	269,234	12.11%	29,083				
FY 2015-16	285,953	6.21%	16,719				
FY 2016-17	290,219	1.49%	4,266	February 20	19 Projectio	n Before Ad	justme
FY 2017-18	269,599	-7.10%	(20,620)	FY 2017-18	269,599	-7.10%	(20,
FY 2018-19	258,853	-3.99%	(10,746)	FY 2018-19	259,516	-3.74%	(10,
FY 2019-20	258,232	-0.24%	(621)	FY 2019-20	257,699	-0.70%	(1,
FY 2020-21	262,286	1.57%	4,054	FY 2020-21	261,436	1.45%	3,
FY 2021-22	266,404	1.57%	4,118	,			

February 2019 Projection Before Adjustments						
FY 2017-18	269,599	-7.10%	(20,620)			
FY 2018-19	259,516	-3.74%	(10,083)			
FY 2019-20	257,699	-0.70%	(1,817)			
FY 2020-21	261,436	1.45%	3,737			

MAGI Eligible Children Ages 6-18 have seen strong negative growth, however the 6 month average suggest that the population is stabilizing. Given that this age groups has the bulk of the population the Department again forecasts flat growth for FY 2019-20 with the trend increasing in FY 2020-21.

Actuals				
	Monthly Change	% Change		
6-month average	(177)	-0.07%		
12-month average	(570)	-0.22%		
18-month average	(723)	-0.27%		
24-month average	(1,268)	-0.46%		

I						
Monthly Average Growth Actuals						
FY 2013-14 1st Half	2,907	1.32%				
FY 2013-14 2nd Half	3,263	1.34%				
FY 2013-14	3,085	1.33%				
FY 2014-15 1st Half	2,553	0.98%				
FY 2014-15 2nd Half	1,160	0.43%				
FY 2014-15	1,856	0.70%				
FY 2015-16 1st Half	1,594	0.57%				
FY 2015-16 2nd Half	636	0.22%				
FY 2015-16	1,115	0.39%				
FY 2016-17 1st Half	284	0.10%				
FY 2016-17 2nd Half	(1,004)	-0.34%				
FY 2016-17	(360)	-0.12%				
FY 2017-18 1st Half	(2,905)	-1.04%				
FY 2017-18 2nd Half	(1,029)	-0.38%				
FY 2017-18	(1,967)	-0.71%				
FY 2018-19 1st Half	(962)	-0.37%				
FY 2018-19 2nd Half	(177)	-0.07%				
FY 2018-19	(570)	-0.22%				

Monthl	Monthly Average Growth Comparisons						
Request	Monthly	Change	Percent	Change			
Request	S-1	R-1	S-1	R-1			
FY 2019-20 1st Half	0	312	0.00%	0.12%			
FY 2019-20 2nd Half	303	337	0.12%	0.13%			
FY 2019-20	151	324	0.06%	0.13%			
FY 2020-21 1st Half	364	339	0.14%	0.13%			
FY 2020-21 2nd Half	364	342	0.14%	0.13%			
FY 2020-21	364	341	0.14%	0.13%			
FY 2021-22 1st Half		343		0.13%			
FY 2021-22 2nd Half		349		0.13%			
FY 2021-22		346		0.13%			

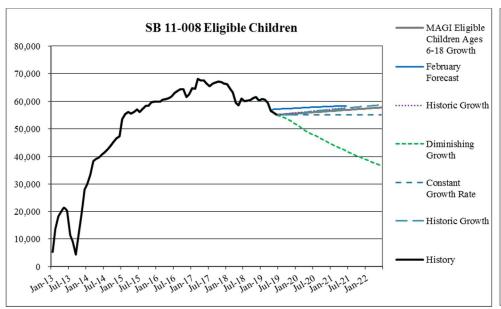
#### SB 11-008 Eligible Children

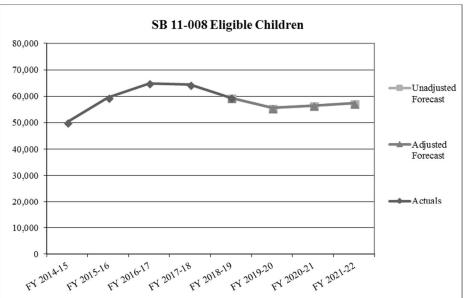
Prior to the implementation of SB 11-008 in January 2013, children age 0 to 5 whose family income was under 133% FPL were eligible for Medicaid, and children ages 6 to 18 whose family income was under 100% FPL were eligible for Medicaid. SB 11-008 increased the FPL threshold for children ages 6 to 18 up to 133% FPL, 142% FPL with income disregards applied after October 2013. Services for clients that would have been eligible for CHP+ before the implementation of SB 11-008 receive the enhanced CHP+ federal match. These clients are identified as Medicaid eligible children that are over the age of 6, with incomes above 108% FPL, and no other insurance.

25.5-5-101 (1), C.R.S.

(m) Children under the age of nineteen who meet the eligibility criteria pursuant to section 1902 (a) (10) (A) of the federal "Social Security Act".

## SB 11-008 Eligible Children: Model Results





SB 11-008 Eligible Children: Model Results <sup>1</sup>						
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change
Diminishing Growth	64,346	59,376	-12.95%	51,687	(7,689)	(574)
Constant Growth Rate	64,346	59,376	-7.08%	55,172	(4,204)	0
Historic Growth	64,346	59,376	-5.95%	55,843	(3,533)	104
Constant with Out Year Growth	64,346	59,376	-6.50%	55,516	(3,860)	99
MAGI Eligible Children Ages 6-18 Growth	64,346	59,376	-6.34%	55,611	(3,765)	70
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change 2
Diminishing Growth	59,376	51,687	-13.26%	44,833	(6,854)	(522)
Constant Growth Rate	59,376	55,172	0.00%	55,172	0	Ó
Historic Growth	59,376	55,843	2.27%	57,111	1,268	107
Constant with Out Year Growth	59,376	55,516	2.67%	56,998	1,482	99
MAGI Eligible Children Ages 6-18 Growth	59,376	55,611	1.57%	56,484	873	73
FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change 2
Diminishing Growth	51,687	44,833	-12.84%	39,076	(5,757)	(441)
Constant Growth Rate	55,172	55,172	0.00%	55,172	0	0
Historic Growth	55,843	57,111	2.27%	58,407	1,296	109
Constant with Out Year Growth	55,516	56,998	2.08%	58,184	1,186	99
MAGI Eligible Children Ages 6-18 Growth	55,611	56,484	1.57%	57,371	887	74

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

# SB 11-008 Eligible Children: Trend Selections

FY 2019-20: -6.34% FY 2020-21: 1.57% FY 2021-22: 1.57%

## SB 11-008 Eligible Children: Justifications

Average monthly caseload FY 2018-19 for SB 11-008 Eligible Children was 59,376. The June 2019 data point was approximately 1,979 lower than what was forecasted in February 2019, and average monthly growth in FY 2018-19 was -851, with strong negative growth in the most recent 6 months. The trend for FY 2019-20 is matched to MAGI Children 6-18 trend.

## FY 2020-21 BUDGET REQUEST: CASELOAD NARRATIVE

	Actuals	Monthly	%
	Actuals	Change	Change
Jun-17	66,503	-	-
Jul-17	65,467	(1,036)	-1.56%
Aug-17	66,362	895	1.37%
Sep-17	66,778	416	0.63%
Oct-17	67,110	332	0.50%
Nov-17	66,946	(164)	-0.24%
Dec-17	66,517	(429)	-0.64%
Jan-18	66,260	(257)	-0.39%
Feb-18	64,494	(1,766)	-2.67%
Mar-18	63,155	(1,339)	-2.08%
Apr-18	59,499	(3,656)	-5.79%
May-18	58,572	(927)	-1.56%
Jun-18	60,990	2,418	4.13%
Jul-18	60,021	(969)	-1.59%
Aug-18	60,233	212	0.35%
Sep-18	60,450	217	0.36%
Oct-18	61,197	747	1.24%
Nov-18	61,570	373	0.61%
Dec-18	60,273	(1,297)	-2.11%
Jan-19	60,891	618	1.03%
Feb-19	60,720	(171)	-0.28%
Mar-19	59,487	(1,233)	-2.03%
Apr-19	56,610	(2,877)	-4.84%
May-19	55,887	(723)	-1.28%
Jun-19	55,169	(718)	-1.28%

February 2019 Forecast	1
Forecasted June 2019 Level	60,443

Base	trend from	June 2019	level
FY 2019-20	55,169	-7.08%	(4,207)

		S	B 11-008 E	ligible Children: Hi	storical Cas	eload and Pro	jection
	Caseload	% Change	Level Change				
FY 2015-16	59,501	-	-				
FY 2016-17	64,907	9.09%	5,406	February 2	019 Projecti	on Before A	djustme
FY 2017-18	64,346	-0.86%	(561)	FY 2017-18	64,346	-0.86%	
FY 2018-19	59,376	-7.72%	(4,970)	FY 2018-19	60,447	-6.06%	(3
FY 2019-20	55,611	-6.34%	(3,765)	FY 2019-20	60,852	0.67%	
FY 2020-21	56,484	1.57%	873	FY 2020-21	61,497	1.06%	
FY 2021-22	57,371	1.57%	887				

February 2019 Projection Before Adjustments					
FY 2017-18	64,346	-0.86%	(561)		
FY 2018-19	60,447	-6.06%	(3,899)		
FY 2019-20	60,852	0.67%	405		
FY 2020-21	61,497	1.06%	645		

As the economy improves this population is expected to decrease, over the past year the Department has observed this. However the Department expects this to stabilized as it has observed with MAGI Children. The trend for FY 2019 -20 is matched to MAGI Childrens 6-18 trend.

Actuals				
	Monthly Change	% Change		
6-month average	(851)	-1.45%		
12-month average	(485)	-0.82%		
18-month average	(630)	-1.01%		
24-month average	(472)	-0.75%		

Monthly Average	Growth Actu	als
FY 2013-14 1st Half	1,288	26.27%
FY 2013-14 2nd Half	2,116	6.44%
FY 2013-14	1,702	16.35%
FY 2014-15 1st Half	1,087	2.11%
FY 2014-15 2nd Half	1,631	2.68%
FY 2014-15	1,359	2.40%
FY 2015-16 1st Half	468	0.69%
FY 2015-16 2nd Half	324	0.47%
FY 2015-16	396	0.58%
FY 2016-17 1st Half	119	0.21%
FY 2016-17 2nd Half	663	0.94%
FY 2016-17	391	0.57%
FY 2017-18 1st Half	2	0.02%
FY 2017-18 2nd Half	(921)	-1.13%
FY 2017-18	(459)	-0.56%
FY 2018-19 1st Half	(120)	-0.16%
FY 2018-19 2nd Half	(851)	-1.45%
FY 2018-19	(485)	-0.81%

Monthly Average Growth Comparisons					
Dannart	Monthly	Change	Percent Change		
Request	S-1	R-1	S-1	R-1	
FY 2019-20 1st Half	63	67	0.10%	0.12%	
FY 2019-20 2nd Half	57	72	0.09%	0.13%	
FY 2019-20	60	70	0.10%	0.13%	
FY 2020-21 1st Half	53	73	0.09%	0.13%	
FY 2020-21 2nd Half	44	74	0.07%	0.13%	
FY 2020-21	48	73	0.08%	0.13%	
FY 2021-22 1st Half	0	74		0.13%	
FY 2021-22 2nd Half	0	75		0.13%	
FY 2021-22	0	74		0.13%	

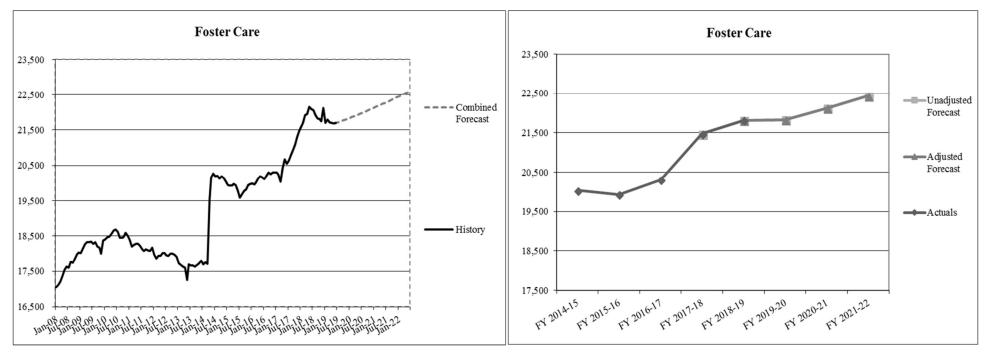
#### **Foster Care**

Federal law mandates that states provide Medicaid to individuals under Title IV-E of the Social Security Act (42 U.S.C. 470-479A) for adoption assistance and foster care. Title IV-E is a subpart of Title IV, Child Welfare, of the federal Social Security Act. Title IV-E provides federal reimbursement to states for the room and board costs of children placed in foster homes and other out-of-home placements. This is an entitlement program for children who are eligible and for whom the state can seek reimbursement. Eligibility is determined on family circumstances at the time when the child was removed from the home. Once eligible, the state determines if it can claim reimbursement for maintenance costs for the child. Adoption assistance is available for children with special health care needs who meet the same requirements. States have the option to extend Medicaid to former foster care children aged 18 through 20 years who were eligible for Title IV-E prior to their 18th birthday. During the 2007 legislative session, SB 07-002 was passed extending Medicaid eligibility through age 20 for children for whom adoption assistance or foster care maintenance payments are made under Title IV-E of the Social Security Act, which was implemented in July 2008. Eligibility for children receiving state subsidized adoption or foster care payments (non-Title IV-E) was extended through age 20 in the 2008 Legislative Session through SB 08-099, which was implemented in July 2009. Pursuant to the ACA, eligibility for children enrolled in Medicaid that turned 21 while in foster care was increased to age 26 in January 2014. This expansion was mandatory and was not subject to the Supreme Court of the United States ruling which found the Medicaid expansion unconstitutionally coercive of states.

25.5-5-101 (1), C.R.S.

- (e) Children for whom adoption assistance or foster care maintenance payments are made under Title IV-E of the "Social Security Act", as amended;
- 25.5-5-201 (1), C.R.S.
- (l) Children for whom subsidized adoption assistance payments are made by the state pursuant to article 7 of title 26, C.R.S, but who do not meet the requirements of Title IV-E of the "Social Security Act", as amended;
- (n) Individuals under the age of twenty-one years eligible for medical assistance pursuant to paragraph (l) of this subsection (1) or section 25.5-5-101
- (1) (e) immediately prior to attaining the age of eighteen years or otherwise becoming emancipated;

## Foster Care: Model Results



		Foster Ca	re: Model Result	$\mathbf{s}^1$		
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change <sup>2</sup>
Combined Forecast	21,473	21,815	0.68%	21,962	147	41
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change <sup>2</sup>
Combined Forecast	21,815	21,962	2.35%	22,480	518	43
FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change <sup>2</sup>
Combined Forecast	21,962	22,480	2.31%	22,998	518	43

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

### Foster Care: Trend Selections

FY 2019-20: 0.68% FY 2020-21: 2.34% FY 2021-22: 2.31%

# Foster Care: Justifications

• Average monthly caseload in FY 2018-19 for Foster Care was 21,815. Actual caseload for clients aged 22 to 26 was 1,375; monthly actuals for the past 12 months can be seen in the chart below. This Over 21 population has been in decline over the last twelve months.

SB 13-200 Medicaid Expansion Actuals				
Jul-18	1,351			
Aug-18	1,354			
Sep-18	1,354			
Oct-18	1,375			
Nov-18	1,375			
Dec-18	1,399			
Jan-19	1,383			
Feb-19	1,376			
Mar-19	1,377			
Apr-19	1,375			
May-19	1,387			
Jun-19	1,388			

• The Department selects models separately for the age group 0-18 and the age group 19-26. See below for more details.

	Actuals	Monthly Change	% Change
Jun-17	20,557	-	
Jul-17	20,651	94	0.46%
Aug-17	20,804	153	0.74%
Sep-17	20,941	137	0.66%
Oct-17	21,093	152	0.73%
Nov-17	21,305	212	1.01%
Dec-17	21,485	180	0.84%
Jan-18	21,576	91	0.42%
Feb-18	21,701	125	0.58%
Mar-18	21,926	225	1.04%
Apr-18	21,947	21	0.10%
May-18	22,153	206	0.94%
Jun-18	22,094	(59)	-0.27%
Jul-18	22,059	(35)	-0.16%
Aug-18	21,913	(146)	-0.66%
Sep-18	21,826	(87)	-0.40%
Oct-18	21,804	(22)	-0.10%
Nov-18	21,741	(63)	-0.29%
Dec-18	22,127	386	1.78%
Jan-19	21,696	(431)	-1.95%
Feb-19	21,794	98	0.45%
Mar-19	21,720	(74)	-0.34%
Apr-19	21,706	(14)	-0.06%
May-19	21,693	(13)	-0.06%
Jun-19	21,705	12	0.06%

February 2019 Forecast	
Forecasted June 2019 Level	22,450

Base trend from June 2019 level				
FY 2019-20	21,705	-0.51%	(110)	

			Foste	r Care: Histo	rical C	as eload and	Projections
	Caseload	% Change	Level Change				
FY 2006-07	16,724	-	-				
FY 2007-08	17,141	2.49%	417				
FY 2008-09	18,033	5.20%	892				
FY 2009-10	18,381	1.93%	348				
FY 2010-11	18,393	0.07%	12				
FY 2011-12	18,034	-1.95%	(359)				
FY 2012-13	17,777	-1.43%	(257)				
FY 2013-14	18,267	2.76%	490				
FY 2014-15	20,036	9.68%	1,769				
FY 2015-16	19,935	-0.50%	(101)				
FY 2016-17	20,310	1.88%	375		F	ebruary 201	9 Projection
FY 2017-18	21,473	5.73%	1,163	FY 20	017-18	21,473	5.73%
FY 2018-19	21,815	1.59%	342	FY 20	018-19	22,112	2.98%
FY 2019-20	21,964	0.68%	149	FY 20	019-20	22,808	3.15%
FY 2020-21	22,479	2.34%	515	FY 20	020-21	23,476	2.93%
FY 2021-22	22,998	2.31%	519				

Actuals					
	Monthly Change	% Change			
6-month average	(70)	-0.32%			
12-month average	(32)	-0.14%			
18-month average	12	0.06%			
24-month average	48	0.23%			

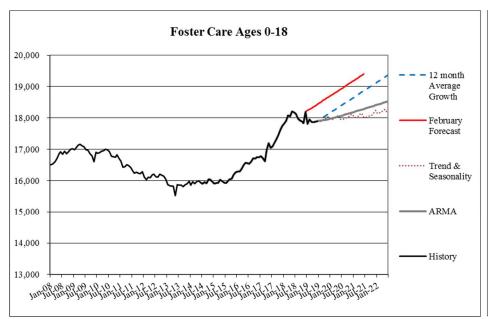
The 24-month average growth for Foster Care is 52, and the 6-
month average growth is (52), but this is heavily influenced by
the January data point. The Department expects this population
to continue to increase, but does predict lower growth. The
predicted average monthly growth for FY 2019-20 is 41 per
month.

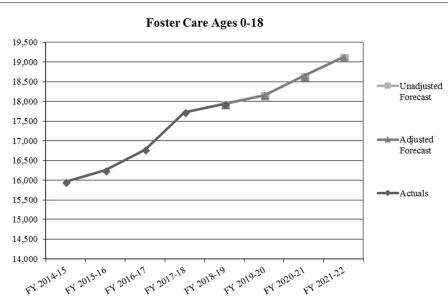
Fel	bruary 2019	Projection	
FY 2017-18	21,473	5.73%	1,163
FY 2018-19	22,112	2.98%	639
FY 2019-20	22,808	3.15%	696
FY 2020-21	23,476	2.93%	668

Monthly Average Growth Actuals						
FY 2013-14 1st Half	17	0.10%				
FY 2013-14 2nd Half	413	2.26%				
FY 2013-14	215	1.18%				
FY 2014-15 1st Half	(35)	-0.17%				
FY 2014-15 2nd Half	(44)	-0.22%				
FY 2014-15	(40)	-0.20%				
FY 2015-16 1st Half	31	0.16%				
FY 2015-16 2nd Half	31	0.16%				
FY 2015-16	31	0.16%				
FY 2016-17 1st Half	22	0.11%				
FY 2016-17 2nd Half	44	0.22%				
FY 2016-17	33	0.16%				
FY 2017-18 1st Half	155	0.74%				
FY 2017-18 2nd Half	102	0.47%				
FY 2017-18	128	0.60%				
FY 2018-19 1st Half	6	0.03%				
FY 2018-19 2nd Half	(70)	-0.32%				
FY 2018-19	(32)	-0.14%				

Monthly Average Growth Comparisons						
Dogwood	Monthly	Change	Percent	Percent Change		
Request	S-1	R-1	S-1	R-1		
FY 2019-20 1st Half	55	39	0.24%	0.18%		
FY 2019-20 2nd Half	56	43	0.24%	0.19%		
FY 2019-20	55	41	0.24%	0.19%		
FY 2020-21 1st Half	56	43	0.24%	0.19%		
FY 2020-21 2nd Half	56	43	0.24%	0.19%		
FY 2020-21	56	43	0.24%	0.19%		
FY 2021-22 1st Half	0	43	0.00%	0.19%		
FY 2021-22 2nd Half	0	43	0.00%	0.19%		
FY 2021-22	0	43	0.00%	0.19%		

# Foster Care, Ages 0-18: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	FC 0-18	Constant, trend, seasonal dummy variables	16.14	15.89	0.0404
ARMA	dlog(FC 0- 18)	Constant, AR variables, MA variables	-7.18	-7.31	0.0869
12 month Average Growth			NA	NA	NA
Avg T&S and ARMA			NA	NA	NA
Avg ARMA 12 mth growth			NA	NA	NA

~		Foster Care Ages 0-	18: Model Results <sup>1</sup>			
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	17,725	17,936	0.24%	17,979	43	5
ARMA	17,725	17,936	0.23%	17,977	41	14
12 month Average Growth	17,725	17,936	1.24%	18,158	222	40
Avg T&S and ARMA	17,725	17,936	0.24%	17,979	43	10
Avg ARMA 12 mth growth	17,725	17,936	0.74%	18,069	133	27
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	17,936	17,979	0.36%	18,044	65	5
ARMA	17,936	17,977	1.14%	18,182	205	18
12 month Average Growth	17,936	18,158	2.67%	18,643	485	40
Avg T&S and ARMA	17,936	17,979	0.75%	18,114	135	12
Avg ARMA 12 mth growth	17,936	18,069	1.91%	18,414	345	29
FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	17,979	18,044	0.59%	18,150	106	11
ARMA	17,977	18,182	1.26%	18,411	229	20
12 month Average Growth	18,158	18,643	2.60%	19,128	485	40
Avg T&S and ARMA	17,979	18,114	0.93%	18,282	168	15
Avg ARMA 12 mth growth	18,069	18,414	1.94%	18,771	357	30

<sup>1</sup> Bold denotes Trend Selection

<sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

# Foster Care, Ages 0-18: Trend Selections

FY 2019-20: 1.24% FY 2020-21: 2.67% FY 2021-22: 2.60%

# Foster Care, Ages 0-18: Justifications

The Department began estimating this eligibility category with two age group sub-categories, to increase forecast accuracy. The June 2019 data point was 53 clients lower than what was forecasted in the February 2019 forecast. The Department predicts that this population's growth will remain near the 24 month average, with a monthly average growth rate of 40.

	Actuals	Monthly	%
	Actuals	Change	Change
Jun-17	17,041	-	-
Jul-17	17,096	55	0.32%
Aug-17	17,204	108	0.63%
Sep-17	17,326	122	0.71%
Oct-17	17,459	133	0.77%
Nov-17	17,622	163	0.93%
Dec-17	17,755	133	0.75%
Jan-18	17,818	63	0.35%
Feb-18	17,905	87	0.49%
Mar-18	18,081	176	0.98%
Apr-18	18,045	(36)	-0.20%
May-18	18,207	162	0.90%
Jun-18	18,181	(26)	-0.14%
Jul-18	18,136	(45)	-0.25%
Aug-18	17,987	(149)	-0.82%
Sep-18	17,920	(67)	-0.37%
Oct-18	17,890	(30)	-0.17%
Nov-18	17,833	(57)	-0.32%
Dec-18	18,194	361	2.02%
Jan-19	17,809	(385)	-2.12%
Feb-19	17,950	141	0.79%
Mar-19	17,870	(80)	-0.45%
Apr-19	17,867	(3)	-0.02%
May-19	17,880	13	0.07%
Jun-19	17,895	15	0.08%

February 2019 Forecast	
Forecasted June 2019 Level	18,433

Base trend from June 2019 level				
FY 2019-20	17,895	-0.23%	(41)	

Foster Care Ages 0-18: Historical Caseload and Projection							
	Caseload	% Change	Level Change				
FY 2010-11	16,634	-	-				
FY 2011-12	16,191	-2.66%	(443)				
FY 2012-13	15,964	-1.40%	(227)				
FY 2013-14	15,910	-0.34%	(54)				
FY 2014-15	15,961	0.32%	51				
FY 2015-16	16,252	1.82%	291				
FY 2016-17	16,780	3.25%	528		F	ebruary 201	9 Pro
FY 2017-18	17,725	5.63%	945		FY 2017-18	17,725	4
FY 2018-19	17,936	1.19%	211		FY 2018-19	18,163	2
FY 2019-20	18,158	1.24%	222		FY 2019-20	18,695	2
FY 2020-21	18,643	2.67%	485		FY 2020-21	19,179	2
FY 2021-22	19,128	2.60%	485	•			

Actuals					
	% Change				
6-month average	(50)	-0.27%			
12-month average	(24)	-0.13%			
18-month average	8	0.05%			
24-month average	36	0.21%			

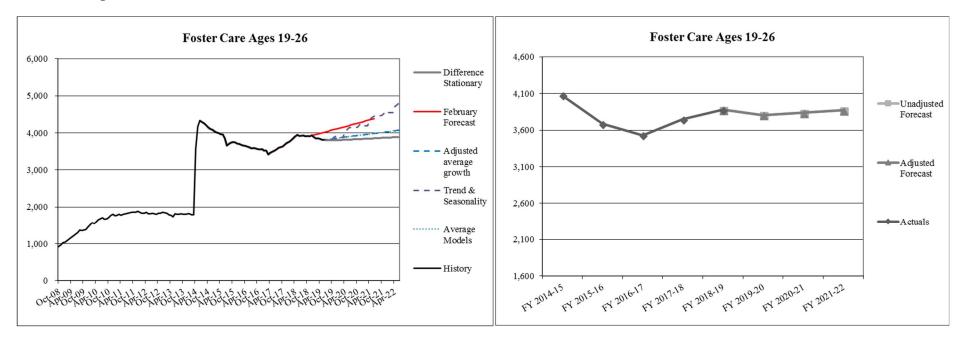
Over the last 6 months, Foster Care Ages 0-18 has remained flat, only decreasing slightly and the 6 month average is being skewed by the January data point. The 24-month average growth is 38 per month. Historically, this population has a lot of fluctuations in growth. The Department predicts that this population's growth will remain near the 24 month average, with a monthly average growth rate of 40..

February 2019 Projection					
FY 2017-18	17,725	5.63%	945		
FY 2018-19	18,163	2.47%	438		
FY 2019-20	18,695	2.93%	532		
FY 2020-21	19,179	2.59%	484		

Growth Act	uals
18	0.11%
(8)	-0.05%
5	0.03%
6	0.04%
(5)	-0.03%
0	0.00%
54	0.33%
49	0.30%
51	0.32%
31	0.18%
50	0.30%
40	0.24%
119	0.69%
71	0.40%
95	0.54%
2	0.02%
(50)	-0.27%
(24)	-0.13%
	18 (8) (5) 6 (5) 0 54 49 51 31 50 40 119 71 95 2 (50)

Month	Monthly Average Growth Comparisons				
Paguagt	Monthly	Monthly Change		hange	
Request	S-1	R-1	S-1	R-1	
FY 2019-20 1st Half	40	40	0.22%	0.22%	
FY 2019-20 2nd Half	40	40	0.22%	0.22%	
FY 2019-20	40	40	0.22%	0.22%	
FY 2020-21 1st Half	40	40	0.21%	0.22%	
FY 2020-21 2nd Half	40	40	0.21%	0.22%	
FY 2020-21	40	40	0.21%	0.22%	
FY 2021-22 1st Half	0	40	0.00%	0.21%	
FY 2021-22 2nd Half	0	40	0.00%	0.21%	
FY 2021-22	0	40	0.00%	0.21%	

# Foster Care, Ages 19-26: Model Results



Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	FC 19-26	Constant, trend, seasonal dummy variables	19.49	19.06	0.4229
Difference Stationary	dlog(FC 19- 26)	Constant, 2 lags on the dependent variable	-7.19	-7.45	0.9877
Average Models			NA	NA	NA
Adjusted average growth			NA	NA	NA

	Foster Care Ages 19-26: Model Results <sup>1</sup>					
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	3,748	3,879	0.95%	3,916	37	0
Difference Stationary	3,748	3,879	-1.88%	3,806	(73)	0
Average Models	3,748	3,879	-0.46%	3,861	(18)	27
Adjusted average growth	3,748	3,879	-0.54%	3,858	(21)	1
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	3,879	3,916	8.17%	4,236	320	0
Difference Stationary	3,879	3,806	0.79%	3,836	30	0
Average Models	3,879	3,861	4.53%	4,036	175	27
Adjusted average growth	3,879	3,858	2.23%	3,944	86	3
FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	3,916	4,236	8.00%	4,575	339	0
Difference Stationary	3,806	3,836	0.89%	3,870	34	0
Average Models	3,861	4,036	4.61%	4,222	186	29
Adjusted average growth	3,858	3,944	2.16%	4,029	85	3

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

## Foster Care, Ages 19-26: Trend Selections

FY 2019-20: -1.88% FY 2020-21: 0.79% FY 2021-22: 0.89%

### Foster Care, Ages 19-26: Justifications

Foster Care Ages 19-26 expanded from a maximum age of 21 to age 26 beginning January 2014. The first large increase can be seen in April 2014. Though this population recently expanded, this group decreased over the first few years after expansion, but at a decreasing rate. For the majority of the past year, this population has been decreasing, with a 12-month average growth of negative 4. The Department expects growth to occur over FY 2019-20, and has a selected an average growth rate slightly below the 12-month actuals.

#### FY 2020-21 BUDGET REQUEST: CASELOAD NARRATIVE

	Actuals	Monthly Change	% Change
Jun-17	3,516	-	
Jul-17	3,555	39	1.11%
Aug-17	3,600	45	1.27%
Sep-17	3,615	15	0.42%
Oct-17	3,634	19	0.53%
Nov-17	3,683	49	1.35%
Dec-17	3,730	47	1.28%
Jan-18	3,758	28	0.75%
Feb-18	3,796	38	1.01%
Mar-18	3,845	49	1.29%
Apr-18	3,902	57	1.48%
May-18	3,946	44	1.13%
Jun-18	3,913	(33)	-0.84%
Jul-18	3,923	10	0.26%
Aug-18	3,926	3	0.08%
Sep-18	3,906	(20)	-0.51%
Oct-18	3,914	8	0.20%
Nov-18	3,908	(6)	-0.15%
Dec-18	3,933	25	0.64%
Jan-19	3,887	(46)	-1.17%
Feb-19	3,844	(43)	-1.11%
Mar-19	3,850	6	0.16%
Apr-19	3,839	(11)	-0.29%
May-19	3,813	(26)	-0.68%
Jun-19	3,810	(3)	-0.08%

February 2019 Forecast	
Forecasted June 2019 Level	4,017

Base trend from June 2019 level				
FY 2019-20	3,810	-1.78%	(69)	

	Caseload	% Change	Level Change
FY 2010-11	1,759	-	-
FY 2011-12	1,844	4.83%	85
FY 2012-13	1,813	-1.68%	(31)
FY 2013-14	2,357	30.01%	544
FY 2014-15	4,075	72.89%	1,718
FY 2015-16	3,684	-9.60%	(391)
FY 2016-17	3,530	-4.18%	(154)
FY 2017-18	3,748	6.18%	218
FY 2018-19	3,879	3.50%	131
FY 2019-20	3,806	-1.88%	(73)
FY 2020-21	3,836	0.79%	30
FY 2021-22	3,870	0.89%	34

Actuals				
	Monthly Change	% Change		
6-month average	(21)	-0.53%		
12-month average	(9)	-0.22%		
18-month average	4	0.12%		
24-month average	12	0.34%		

Actuals					
FY 2017-18	3,748	6.18%	218		
FY 2018-19	3,949	5.36%	201		
FY 2019-20	4,113	4.15%	164		
FY 2020-21	4,297	4.47%	184		

Foster Care Ages 19-26: Historical Caseload and Projections

Foster Care Ages 19-26 expanded from a maximum age of 21 to age 26 beginning January 2014. The first large increase can be seen in April 2014. Though this population recently expanded, this group decreased over the first few years after expansion, but at a decreasing rate. For the majority of the past year, this population has been decreasing, with a negative 12-month average growth of (4). The Department expects growth to occure over FY 2019-20, and has a selected an average growth rate slightly below the 12-month actuals.

Monthly Average Growth Actuals				
FY 2013-14 1st Half	(1)	-0.04%		
FY 2013-14 2nd Half	420	19.74%		
FY 2013-14	210	9.85%		
FY 2014-15 1st Half	(41)	-0.97%		
FY 2014-15 2nd Half	(39)	-0.98%		
FY 2014-15	(40)	-0.98%		
FY 2015-16 1st Half	(23)	-0.58%		
FY 2015-16 2nd Half	(18)	-0.48%		
FY 2015-16	(20)	-0.53%		
FY 2016-17 1st Half	(8)	-0.23%		
FY 2016-17 2nd Half	(7)	-0.18%		
FY 2016-17	(8)	-0.20%		
FY 2017-18 1st Half	36	0.99%		
FY 2017-18 2nd Half	31	0.80%		
FY 2017-18	33	0.90%		
FY 2018-19 1st Half	3	0.09%		
FY 2018-19 2nd Half	(21)	-0.53%		
FY 2018-19	(9)	-0.22%		

Monthly Average Growth Comparisons					
Request	Monthly	Change	Percent	Percent Change	
Request	S-1 R-1		S-1	R-1	
FY 2019-20 1st Half	10	(1)	0.37%	-0.03%	
FY 2019-20 2nd Half	22	2	0.37%	0.06%	
FY 2019-20	16	1	0.37%	0.02%	
FY 2020-21 1st Half	10	3	0.37%	0.07%	
FY 2020-21 2nd Half	22	3	0.37%	0.07%	
FY 2020-21	16	3	0.37%	0.07%	
FY 2021-22 1st Half	0	3		0.07%	
FY 2021-22 2nd Half	0	3		0.07%	
FY 2021-22	0	3		0.07%	

Clients A	
	FPL
Jun-17	1,458
Jul-17	1,447
Aug-17	1,428
Sep-17	1,403
Oct-17	1,394
Nov-17	1,400
Dec-17	1,403
Jan-18	1,391
Feb-18	1,397
Mar-18	1,391
Apr-18	1,397
May-18	1,411
Jun-18	1,339
Jul-18	1,351
Aug-18	1,354
Sep-18	1,354
Oct-18	1,375
Nov-18	1,375
Dec-18	1,399
Jan-19	1,383
Feb-19	1,376
Mar-19	1,377
Apr-19	1,375
May-19	1,387
Jun-19	1,388

### **MAGI Eligible Pregnant Adults**

Between 1986 and 1991, Congress extended Medicaid to new groups of pregnant women and children. Referred to as Baby and Kid Care in Colorado, the program was authorized through the Medicare Catastrophic Coverage Act of 1988. The program enrolls Baby Care women and Kid Care children (see the Eligible Children section of this document for information on children). Baby Care-Adults are women with incomes up to 185% FPL beginning January 1, 2013 (195% FPL after income disregards are applied in October 2013). Coverage includes prenatal care and delivery services, plus 60 days of postpartum care. The Baby and Kid Care Program serves a much higher income level than the 1931 families program, and pregnant mothers were never subject to resource/asset limitations to qualify for the program. Moreover, the Baby and Kid Care Program has never had a cash-assistance component and was unaffected by welfare reform.

25.5-5-101 (1), C.R.S.

(m) Low-income pregnant women, and children through the age of six, whose income is at or below a certain percentage of the federal poverty level as determined by the federal government;

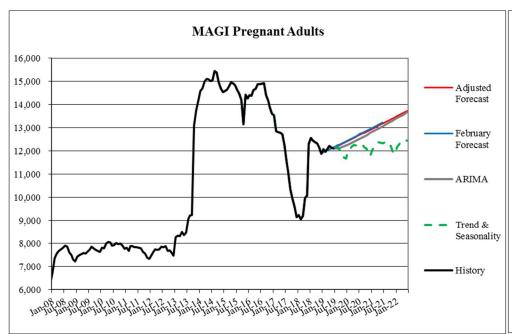
25.5-5-201 (2), C.R.S.

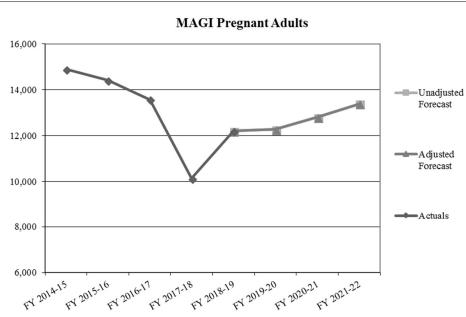
(b) Notwithstanding the five-year waiting period established in paragraph (a) of this subsection (2), but subject to the availability of sufficient appropriations and the receipt of federal financial participation, the state department may provide benefits under this article and articles 4 and 6 of this title to a pregnant woman who is a qualified alien and a child under nineteen years of age who is a qualified alien so long as such woman or child meets eligibility criteria other than citizenship.

25.5-5-205 (3), C.R.S.

- (a) On and after April 1, 1990, children under the age of six years and pregnant women shall be eligible for benefits under the baby and kid care program...
- (II) For pregnant women, the percentage level of the federal poverty line, as defined pursuant to 42 U.S.C. sec. 9902 (2), used to determine eligibility under this subsection (3) shall be one hundred eighty-five percent. If the federal government establishes a new federal minimum percentage level of the federal poverty line used to determine eligibility under this subsection (3) that is different from the level set in this subparagraph (II), the state department is authorized to meet such federal minimum level without requiring additional legislation; however, such minimum federal level shall be established by rule of the state board.

# MAGI Pregnant Adults: Model Results





Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	MAGI Pregnant	Constant, SB 250 dummy, October 2013 dummy, trend, seasonal dummy variables	14.7	14.27	0.4229
ARIMA	dlog(MAGI Pregnant)	Constant, SB 250 dummy, October 2013 dummy, AR variables, MA variables	-5.01	-5.2	0.196
Adjusted Forecast			NA	NA	NA
Constant			NA	NA	NA

	MAGI Pregnant Adults: Model Results <sup>1</sup>						
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change 2	
Trend & Seasonality	10,125	12,196	-1.16%	12,054	(142)	9	
ARIMA	10,125	12,196	0.58%	12,266	70	32	
Adjusted Forecast	10,125	12,196	1.70%	12,403	207	45	
Constant	10,125	12,196	-0.69%	12,112	(84)	0	
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change 2	
Trend & Seasonality	12,196	12,054	0.92%	12,165	111	9	
ARIMA	12,196	12,266	4.34%	12,798	532	48	
Adjusted Forecast	12,196	12,403	4.33%	12,940	537	45	
Constant	12,196	12,112	0.00%	12,112	0	0	
FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change 2	
Trend & Seasonality	12,054	12,165	0.91%	12,276	111	9	
ARIMA	12,266	12,798	4.62%	13,389	591	50	
Adjusted Forecast	12,403	12,940	4.16%	13,478	538	45	
Constant	12,112	12,112	0.00%	12,112	0	0	

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

### MAGI Pregnant Adults: Trend Selections

FY 2019-20: 0.58% FY 2020-21: 4.34% FY 2021-22: 4.62%

### MAGI Pregnant Adults: Justifications

- Average monthly caseload in FY 2018-19 for MAGI Pregnant Adults was 12,266. The June 2019 data point was approximately 198 less than the predicted value in the February 2019 forecast, mostly due to steady decreases in the first half of FY 2018-19. The Department predicts positive growth for this population, with monthly growth close to the most recent 6 months.
- In October 2013, over 3,000 clients were moved from MAGI Parents/Caretakers categories into MAGI Pregnant Adults. This was a one-time change in how pregnant adults were categorized by eligibility.

	Actuals	Monthly Change	% Change
Jun-17	12,236	-	
Jul-17	11,545	(691)	-5.65%
Aug-17	11,069	(476)	-4.12%
Sep-17	10,343	(726)	-6.56%
Oct-17	9,948	(395)	-3.82%
Nov-17	9,601	(347)	-3.49%
Dec-17	9,138	(463)	-4.82%
Jan-18	9,238	100	1.09%
Feb-18	9,067	(171)	-1.85%
Mar-18	9,198	131	1.44%
Apr-18	9,967	769	8.36%
May-18	10,082	115	1.15%
Jun-18	12,298	2,216	21.98%
Jul-18	12,567	269	2.19%
Aug-18	12,450	(117)	-0.93%
Sep-18	12,375	(75)	-0.60%
Oct-18	12,319	(56)	-0.45%
Nov-18	12,138	(181)	-1.47%
Dec-18	11,881	(257)	-2.12%
Jan-19	12,073	192	1.62%
Feb-19	11,977	(96)	-0.80%
Mar-19	12,097	120	1.00%
Apr-19	12,220	123	1.02%
May-19	12,140	(80)	-0.65%
Jun-19	12,112	(28)	-0.23%

February 2019 Forecast	
Forecasted June 2019 Level	12,150

Base trend from June 2019 level					
FY 2019-20	12,112	-0.69%	(84)		

	MAGI Pregnant Adults: Historical Caseload and Projections					
	Caseload	% Change	Level Change			
FY 2006-07	5,182	-	-			
FY 2007-08	6,288	21.34%	1,106			
FY 2008-09	6,976	10.94%	688			
FY 2009-10	7,830	12.24%	854			
FY 2010-11	7,868	0.49%	38			
FY 2011-12	7,630	-3.02%	(238)			
FY 2012-13	8,024	5.16%	394			
FY 2013-14	13,160	64.01%	5,136			
FY 2014-15	14,897	13.20%	1,737			
FY 2015-16	14,413	-3.25%	(484)			
FY 2016-17	13,567	-5.87%	(846)	I	February 20	19
FY 2017-18	10,125	-25.37%	(3,442)	FY 2017-18	10,125	
FY 2018-19	12,196	20.45%	2,071	FY 2018-19	12,163	
FY 2019-20	12,266	0.58%	70	FY 2019-20	12,442	
FY 2020-21	12,798	4.34%	532	FY 2020-21	12,979	
FY 2021-22	13,389	4.62%	591			

Actuals				
	Monthly	%		
	Change	Change		
6-month average	39	0.33%		
12-month average	(16)	-0.12%		
18-month average	165	1.71%		
24-month average	(5)	0.10%		

MAGI Pregnant Adults saw a large increase in October 2013 when nearly 4,000 clients were moved from MAGI Parents/Caretakers over to MAGI Pregnant Adults. Since that shift, this population remained steady, with seasonal fluctuations, until September 2016, from which point forward, this population has decreased until the second half of FY 2017-18. The Department has observed positive growth for this population, and expects this growth to continue in the future.

February 2019 Projection						
FY 2017-18	10,125	-25.37%	(3,442)			
FY 2018-19	12,163	20.13%	2,038			
FY 2019-20	12,442	2.29%	279			
FY 2020-21	12,979	4.32%	537			

Monthly Average	Growth Act	uals
FY 2013-14 1st Half	947	9.77%
FY 2013-14 2nd Half	145	1.00%
FY 2013-14	546	5.39%
FY 2014-15 1st Half	(78)	-0.51%
FY 2014-15 2nd Half	47	0.32%
FY 2014-15	(15)	-0.09%
FY 2015-16 1st Half	(95)	-0.52%
FY 2015-16 2nd Half	105	0.73%
FY 2015-16	5	0.10%
FY 2016-17 1st Half	(213)	-1.47%
FY 2016-17 2nd Half	(229)	-1.74%
FY 2016-17	(221)	-1.61%
FY 2017-18 1st Half	(516)	-4.74%
FY 2017-18 2nd Half	527	5.36%
FY 2017-18	5	0.31%
FY 2018-19 1st Half	(70)	-0.56%
FY 2018-19 2nd Half	39	0.33%
FY 2018-19	(16)	-0.12%

Monthly Average Growth Comparisons					
Request	Monthly Change		Percent	Percent Change	
Request	S-1	R-1	S-1	R-1	
FY 2019-20 1st Half	45	20	0.37%	0.16%	
FY 2019-20 2nd Half	45	44	0.36%	0.35%	
FY 2019-20	45	32	0.36%	0.26%	
FY 2020-21 1st Half	45	47	0.35%	0.37%	
FY 2020-21 2nd Half	45	49	0.34%	0.38%	
FY 2020-21	45	48	0.35%	0.38%	
FY 2021-22 1st Half		50		0.38%	
FY 2021-22 2nd Half		51		0.38%	
FY 2021-22		50		0.38%	

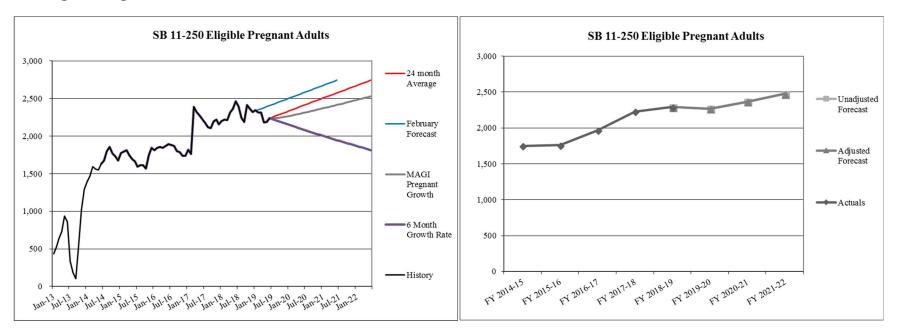
### **SB 11-250 Eligible Pregnant Adults**

Prior to the implementation of SB 11-250 in January 2013, pregnant adults whose family income was under 133% FPL were eligible for Medicaid. SB 11-250 increased the FPL threshold up to 185% FPL, 195% FPL with income disregards applied after October 2013. Services for clients that would have been eligible for CHP+ before the implementation of SB 11-008 receive the enhanced CHP+ federal match. These clients are identified as Medicaid eligible pregnant adults with incomes above 142% FPL and no other insurance.

25.5-5-201 (1)

(m.5) Pregnant women, whose family income does not exceed one hundred eighty-five percent of the federal poverty line, adjusted for family size.

# SB 11-250 Eligible Pregnant Adults: Model Results



	SB 11-250 Eligible Pregnant Adults: Model Results <sup>1</sup>					
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change
6 Month Growth Rate	2,229	2,293	-5.96%	2,156	(137)	(13)
24 month Average	2,229	2,293	1.62%	2,330	37	14
Quarter 6 Month Growth Rate	2,229	2,293	-3.26%	2,218	(75)	(3)
6 Month Average	2,229	2,293	-2.21%	2,242	(51)	0
MAGI Pregnant Growth	2,229	2,293	-1.12%	2,267	(26)	6
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change
6 Month Growth Rate	2,293	2,156	-6.73%	2,011	(145)	(12)
24 month Average	2,293	2,330	7.21%	2,498	168	14
Quarter 6 Month Growth Rate	2,293	2,218	-1.71%	2,180	(38)	(3)
6 Month Average	2,293	2,242	-0.13%	2,239	(3)	0
MAGI Pregnant Growth	2,293	2,267	4.37%	2,366	99	9
FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change
6 Month Growth Rate	2,156	2,011	-6.76%	1,875	(136)	(11)
24 month Average	2,330	2,498	6.73%	2,666	168	14
Quarter 6 Month Growth Rate	2,218	2,180	-1.74%	2,142	(38)	(3)
6 Month Average	2,242	2,239	0.00%	2,239	0	0
MAGI Pregnant Growth	2,267	2,366	4.61%	2,475	109	9

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

# SB 11-250 Eligible Pregnant Adults: Trend Selections

FY 2019-20: -1.12% FY 2020-21: 4.37% FY 2021-22: 4.61%

# SB 11-250 Eligible Pregnant Adults: Justifications

The Department expects the SB 11-250 Pregnant Adults population to behave similarly to the MAGI Pregnant Adults population, so the trend selected reflects low positive growth, based on the most recent actuals.

	Actuals	Monthly Change	% Change
Jun-17	2,229	-	-
Jul-17	2,177	(52)	-2.33%
Aug-17	2,119	(58)	-2.66%
Sep-17	2,105	(14)	-0.66%
Oct-17	2,197	92	4.37%
Nov-17	2,222	25	1.14%
Dec-17	2,154	(68)	-3.06%
Jan-18	2,202	48	2.23%
Feb-18	2,219	17	0.77%
Mar-18	2,216	(3)	-0.14%
Apr-18	2,316	100	4.51%
May-18	2,363	47	2.03%
Jun-18	2,463	100	4.23%
Jul-18	2,395	(68)	-2.76%
Aug-18	2,243	(152)	-6.35%
Sep-18	2,190	(53)	-2.36%
Oct-18	2,412	222	10.14%
Nov-18	2,366	(46)	-1.91%
Dec-18	2,323	(43)	-1.82%
Jan-19	2,347	24	1.03%
Feb-19	2,312	(35)	-1.49%
Mar-19	2,312	0	0.00%
Apr-19	2,184	(128)	-5.54%
May-19	2,190	6	0.27%
Jun-19	2,239	49	2.24%

February 2019 Forecast		
Forecasted June 2019 Level	2,407	

Base	trend from	June 2019	level
FY 2019-20	2,239	-2.34%	(54)

SB 11-250 Eligible Pregnant Adults: Historical Caseload and Projections							ojections
	Caseload	% Change	Level Change				
FY 2015-16	1,759	-	-				
FY 2016-17	1,968	11.88%	209		I	February 20	19 Projec
FY 2017-18	2,229	13.26%	261		FY 2017-18	2,229	13.269

FY 2018-19	2,293	2.86%	64
FY 2019-20	2,267	-1.12%	(20
FY 2020-21	2,366	4.37%	99
FY 2021-22	2,475	4.61%	109

Actuals				
	Monthly Change	% Change		
6-month average	(14)	-0.58%		
12-month average	(19)	-0.71%		
18-month average	5	0.28%		
24-month average	0	0.08%		

February 2019 Projection						
FY 2017-18	2,229	13.26%	261			
FY 2018-19	2,347	5.29%	118			
FY 2019-20	2,498	6.43%	151			
FY 2020-21	2,666	6.73%	168			

Monthly Average Growth Actuals					
72	64.40%				
57	4.06%				
64	34.23%				
7	0.50%				
(2)	-0.05%				
3	0.23%				
30	1.87%				
8	0.43%				
19	1.15%				
(26)	-1.42%				
82	5.06%				
28	1.82%				
(13)	-0.53%				
52	2.27%				
20	0.87%				
(23)	-0.84%				
(14)	-0.58%				
(19)	-0.71%				
	57 64 7 (2) 3 30 8 19 (26) 82 28 (13) 52 20 (23) (14)				

The Department expects the SB 11-250 Pregnant Adults population to behave similarly to the MAGI Pregnant Adults population, so the trend selected reflects low positive growth, based on the most recent actuals..

Monthly Average Growth Comparisons					
Request	Monthly Change		Percent Change		
Request	S-1	R-1	S-1	R-1	
FY 2019-20 1st Half	14	4	0.57%	0.16%	
FY 2019-20 2nd Half	14	8	0.57%	0.35%	
FY 2019-20	14	6	0.57%	0.26%	
FY 2020-21 1st Half	14	9	0.57%	0.37%	
FY 2020-21 2nd Half	14	9	0.57%	0.38%	
FY 2020-21	14	9	0.57%	0.38%	
FY 2021-22 1st Half		9		0.38%	
FY 2021-22 2nd Half		9		0.38%	
FY 2021-22		9		0.38%	

## Non-Citizens - Emergency Services Only

Section 403 of the Personal Responsibility Work Opportunity Reconciliation Act provides that certain immigrants arriving in the United States after August 22, 1996 are ineligible for full Medicaid benefits for their first five years of residence. The five-year ban only applies to immigrants who arrived in the United States after August 22, 1996. Full Medicaid coverage of individuals for the first five years is optional. Per federal regulations, states must provide mandatory full coverage for:

- Refugees for the first seven years after entry into the United States;
- Asylees for the first seven years after asylum is granted;
- Individuals whose deportation is being withheld for the first seven years after the initial withhold;
- Victims of trafficking;
- Lawful permanent residents who have 40 qualifying quarters of Social Security coverage;
- Cuban or Haitian entrants; and,
- Immigrants who are honorably discharged veterans of the United States military.

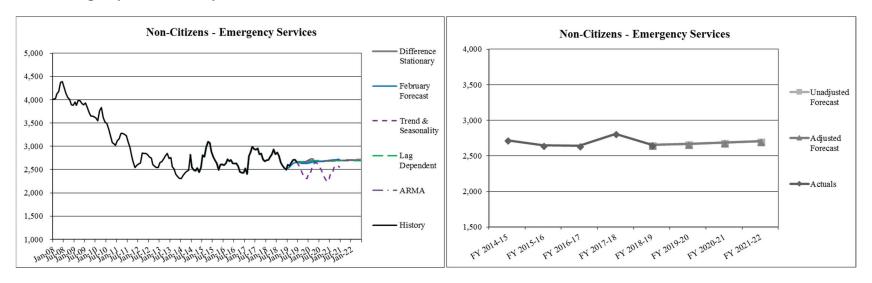
Regardless of whether the individual is an optional or mandatory immigrant, federal law requires all states to provide emergency medical services for individuals who otherwise meet Medicaid eligibility criteria, except for proof of U.S. citizenship.

In April 2001, an eligibility policy change was implemented such that clients are now only counted as eligible in the months they receive emergency medical care. Prior to this policy change, eligibility for this group continued as it would for any other category, although only for emergency medical services. For example, a Non-Citizen with an emergency visit on April 2000 could be eligible in that month, and continue to be eligible for as many months as he/she met other eligibility criteria. The same client would only be eligible for one month, had the emergency service occurred in April 2001. Thus, caseloads presented from April 2001 and forward are much lower than in previous years.

### 25.5-5-103 (3), C.R.S.

(a) Emergency medical assistance shall be provided to any person who is not a citizen of the United States, including undocumented aliens, aliens who are not qualified aliens, and qualified aliens who entered the United States on or after August 22, 1996, who has an emergency medical condition and meets one of the categorical requirements set forth in section 25.5-5-101; except that such persons shall not be required to meet any residency requirement other than that required by federal law.

# Non-Citizens- Emergency Services Only: Model Results



Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	NC	Constant, trend, and seasonal dummy variables	14.32	14.01	0.3478
Lag Dependent	NC	Constant and 4 lags on the dependent variable	11.93	11.77	0.6989
ARMA	log(NC)	Constant, AR variables, MA variables	-3.77	-3.9	0.9875
Difference Stationary	dlog(NC)	Constant and 5 lags on the dependent variable	-3.23	-3.51	0.0463
12-month Average			NA	NA	NA
Average TS & AMG			NA	NA	NA

	Non-Citizens- Emergency Services: Model Results <sup>1</sup>					
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	2,809	2,654	-6.06%	2,493	(161)	(5)
Lag Dependent	2,809	2,654	1.02%	2,681	27	2
ARMA	2,809	2,654	1.36%	2,690	36	3
Difference Stationary	2,809	2,654	0.49%	2,667	13	1
12-month Average	2,809	2,654	-3.31%	2,566	(88)	(15)
Average TS & AMG	2,809	2,654	-4.67%	2,530	(124)	(10)
February Forecast	2,809	2,654	-0.22%	2,648	(6)	2
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	2,654	2,493	-2.25%	2,437	(56)	(5)
Lag Dependent	2,654	2,681	0.30%	2,689	8	0
ARMA	2,654	2,690	0.22%	2,696	6	0
Difference Stationary	2,654	2,667	0.67%	2,685	18	2
12-month Average	2,654	2,566	-7.09%	2,384	(182)	(15)
Average TS & AMG	2,654	2,530	-4.70%	2,411	(119)	(10)
FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	2,493	2,437	-2.30%	2,381	(56)	(5)
Lag Dependent	2,681	2,689	0.04%	2,690	1	0
ARMA	2,690	2,696	0.07%	2,698	2	0
Difference Stationary	2,667	2,685	0.74%	2,705	20	2
12-month Average	2,566	2,384	-7.63%	2,202	(182)	(15)
Average TS & AMG	2,530	2,411	-4.94%	2,292	(119)	(10)

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

### Non-Citizens: Trend Selections

FY 2019-20: 0.49% FY 2020-21: 0.67% FY 2021-22: 0.74%

# Non-Citizens: Justifications

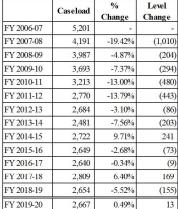
Average monthly caseload in FY 2018-19 for Non-Citizens was 2,654. The June 2019 data point was approximately 68 under the predicted value in the February 2019 forecast. The Department has reduced the current forecast accordingly.

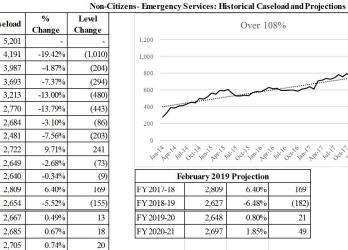
#### FY 2020-21 BUDGET REQUEST: CASELOAD NARRATIVE

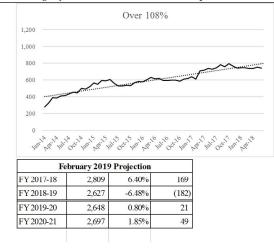
	Actuals	Monthly Change	% Change
Jun-17	2,941	-	
Jul-17	2,925	(16)	-0.54%
Aug-17	2,957	32	1.09%
Sep-17	2,831	(126)	-4.26%
Oct-17	2,842	11	0.39%
Nov-17	2,716	(126)	-4.43%
Dec-17	2,677	(39)	-1.44%
Jan-18	2,704	27	1.01%
Feb-18	2,707	3	0.11%
Mar-18	2,763	56	2.07%
Apr-18	2,823	60	2.17%
May-18	2,930	107	3.79%
Jun-18	2,831	(99)	-3.38%
Jul-18	2,868	37	1.31%
Aug-18	2,796	(72)	-2.51%
Sep-18	2,654	(142)	-5.08%
Oct-18	2,583	(71)	-2.68%
Nov-18	2,533	(50)	-1.94%
Dec-18	2,495	(38)	-1.50%
Jan-19	2,604	109	4.37%
Feb-19	2,580	(24)	-0.92%
Mar-19	2,650	70	2.71%
Apr-19	2,706	56	2.11%
May-19	2,713	7	0.26%
Jun-19	2,665	(48)	-1.77%

February 2019 Forecast	
Forecasted June 2019 Level	2,653

Base	trend from	June 2019 level	
FY 2019-20	2,665	0.41%	11







Actuals				
	Monthly Change	% Change		
6-month average	28	1.13%		
12-month average	(14)	-0.47%		
18-month average	(1)	0.01%		
24-month average	(12)	-0.38%		

FY 2020-21

FY 2021-22

Though this population has seen consistent declines from FY 2006-07 through the first half of FY 2013-14, the overall trend appears flat from January 2014 forward. The selected trend assumes an average monthly growth rate of 7 per month in FY 2019-20. This population tends to decrease in the first half of a fiscal year and increase in the second half. High growth March 2017 may be due to a level-shift resulting from better identification of this population in the new MMIS system.

FY 2013-14 1st Half	(71)	-2.76%
FY 2013-14 2nd Half	85	3.47%
FY 2013-14	7	0.36%
FY 2014-15 1st Half	(47)	-1.63%
FY 2014-15 2nd Half	57	2.29%
FY 2014-15	5	0.33%
FY 2015-16 1st Half	(45)	-1.56%
FY 2015-16 2nd Half	3	0.14%
FY 2015-16	(21)	-0.71%
FY 2016-17 1st Half	(34)	-1.33%
FY 2016-17 2nd Half	85	3.43%
FY 2016-17	26	1.05%
FY 2017-18 1st Half	(44)	-1.53%
FY 2017-18 2nd Half	26	0.96%
FY 2017-18	(9)	-0.29%
FY 2018-19 1st Half	(56)	-2.07%
FY 2018-19 2nd Half	28	1.13%
FY 2018-19	(14)	-0.47%

D	Monthly (	Change	Percent Change	
Request	S-1	R-1	S-1	R-1
FY 2019-20 1st Half	(3)	(0)	-0.12%	0.00%
FY 2019-20 2nd Half	7	2	0.25%	0.06%
FY 2019-20	2	1	0.07%	0.03%
FY 2020-21 1st Half	3	2	0.13%	0.06%
FY 2020-21 2nd Half	4	2	0.16%	0.06%
FY 2020-21	4	2	0.15%	0.06%
FY 2021-22 1st Half	0	2	0.00%	0.06%
FY 2021-22 2nd Half	0	2	0.00%	0.06%
FY 2021-22	0	2	0.00%	0.06%

Clients 108% -133%				
	PL			
Jun-17	728			
Jul-17	745			
Aug-17	783			
Sep-17	758			
Oct-17	796			
Nov-17	768			
Dec-17	741			
Jan-18	744			
Feb-18	746			
Mar-18	736			
Apr-18	738			
May-18	752			
Jun-18	741			
Jul-18	755			
Aug-18	739			
Sep-18	735			
Oct-18	721			
Nov-18	717			
Dec-18	701			
Jan-19	702			
Feb-19	673			
Mar-19	705			
Apr-19	692			
May-19	699			
Jun-19	685			

### **Partial Dual Eligibles**

Medicare-eligible beneficiaries who have incomes at a certain federal poverty level and limited resources may qualify to have Medicaid cover some of their out-of-pocket expenses, such as their Medicare Part B premiums and other coinsurance and deductibles. The two groups of clients that qualify for this cost-sharing program are Qualified Medicare Beneficiaries and Special Low Income Medicare Beneficiaries. This group, formerly known as Qualified Medicare Beneficiaries/Special Low Income Medicare Beneficiaries, is now collectively known as Partial Dual Eligibles. Qualified Medicare Beneficiaries have incomes at or below 100% of the federal poverty level, and resources twice the standard allowed under the federal Supplemental Security Income program. These clients receive hospital insurance and supplementary medical insurance premium coverage along with Medicare coinsurance and deductibles. Special Low Income Medicare Beneficiaries have incomes greater than 100% of the federal poverty level, but less than 120%. For Special Low Income Medicare Beneficiaries, Medicaid only pays the supplementary medical insurance premiums.

### 25.5-5-101 (1), C.R.S.

(1) Individuals with income and resources at a level which qualifies them as Medicare-eligible under section 301 of Title III of the federal "Medicare Catastrophic Coverage Act".

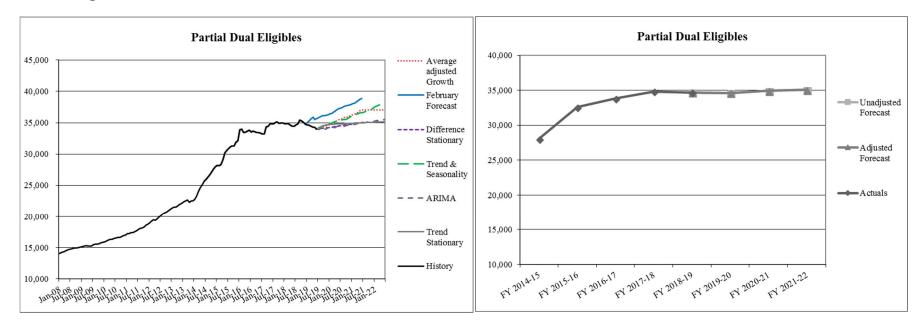
#### 25.5-5-104, C.R.S.

Qualified Medicare beneficiaries are Medicare-eligible individuals with income and resources at a level which qualifies them as eligible under section 301 of Title III of the federal "Medicare Catastrophic Coverage Act of 1988", as amended, or subsequent amending federal legislation.

#### 25.5-5-105, C.R.S.

Qualified disabled and working individuals are persons with income and resources and disability status, as determined by the social security administration, which qualify them as "qualified disabled and working individuals" under sections 6012 and 6408 of the federal "Omnibus Budget Reconciliation Act of 1989", or subsequent amending federal legislation. The state department is hereby designated as the single state agency to administer benefits available to qualified disabled and working individuals. Such benefits are limited to Medicare cost-sharing expenses as determined by the federal government.

# Partial Dual Eligibles: Model Results



Model	Dependent Variable	Independent Variables	Schwarz Info Criterion	Akaike Info Criterion	Adjusted R <sup>2</sup>
Trend & Seasonality	PDE	Constant, trend, seasonal dummy variables	19.11	18.97	0.908
ARIMA	dlog(PDE)	Constant	-5.54	-5.83	-0.0433
Trend Stationary	log(PDE)	Constant, trend, 2 lags on the dependent variable	-6.12	-6.24	0.6962
Difference Stationary	dlog(PDE)	Constant and 1 lag on the dependent variable	-5.95	-6.03	-0.0138
Average adjusted Growth			NA	NA	NA
Average TS& ARIMA			NA	NA	NA

QUEST. CASELOAD WAR	·	Partial Dual Eli	gibles: Model Res	sults <sup>1</sup>		
FY 2019-20	FY 2017-18	FY 2018-19	Projected Growth Rate	Projected FY 2019-20 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	34,828	34,687	0.14%	34,735	48	107
ARIMA	34,828	34,687	-1.62%	34,125	(562)	35
Trend Stationary	34,828	34,687	-0.16%	34,631	(56)	69
Difference Stationary	34,828	34,687	-1.26%	34,250	(437)	41
Average adjusted Growth	34,828	34,687	0.14%	34,735	48	126
Average TS& ARIMA	34,828	34,687	0.14%	34,735	48	107
February Forecast	34,828	34,687	5.07%	36,445	1,758	132
FY 2020-21	FY 2018-19	Projected FY 2019-20 Caseload	Projected Growth Rate	Projected FY 2020-21 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	34,687	34,735	3.69%	36,017	1,282	107
ARIMA	34,687	34,125	1.60%	34,671	546	39
Trend Stationary	34,687	34,631	0.81%	34,912	281	14
Difference Stationary	34,687	34,250	1.56%	34,784	534	45
Average adjusted Growth	34,687	34,735	4.36%	36,249	1,514	127
Average TS& ARIMA	34,687	34,735	1.84%	35,374	639	107
February Forecast	34,687	36,445	4.36%	38,034	1,589	133
FY 2021-22	Projected FY 2019-20 Caseload	Projected FY 2020-21 Caseload	Projected Growth Rate	Projected FY 2021-22 Caseload	Level Change	Average Monthly Change 2
Trend & Seasonality	34,735	36,017	3.77%	37,375	1,358	118
ARIMA	34,125	34,671	1.67%	35,250	579	52
Trend Stationary	34,631	34,912	0.46%	35,073	161	13
Difference Stationary	34,250	34,784	0.71%	35,031	247	0
Average adjusted Growth	34,735	36,249	2.15%	37,028	779	0
Average TS& ARIMA	35,263	36,264	3.04%	37,366	1,102	189

<sup>&</sup>lt;sup>1</sup> Bold denotes Trend Selection

<sup>&</sup>lt;sup>2</sup> Average monthly change is calculated as that between June of the respective fiscal year and June of the prior fiscal year. This is not directly comparable to the annual level change, which is calculated as the difference between the annual average caseload.

## Partial Dual Eligibles: Trend Selections

FY 2019-20: -0.16% FY 2020-21: 0.81% FY 2021-22: 0.46%

### Partial Dual Eligibles: Justification

- Average monthly caseload in FY 2018-19 for Partial Dual Eligibles was 34,687. The June 2019 data point was nearly 31 lower than the previous estimate in the February 2019 request. The Department has lowered the trend in order to match recent actuals.
- These clients have higher income than Adults 65 and Older or Disabled Adults 60 to 64, and are relatively healthy. Given increased life expectancy, more people are living healthier longer, which would support strong growth rates in this population. In addition, this population may be affected by the "baby boomers", defined by the U.S. Census Bureau as the generation born between 1946 and 1964, beginning in calendar year 2006.

	Actuals	Monthly Change	% Change
Jun-17	34,798	-	-
Jul-17	34,833	35	0.10%
Aug-17	35,078	245	0.70%
Sep-17	35,157	79	0.23%
Oct-17	34,883	(274)	-0.78%
Nov-17	34,999	116	0.33%
Dec-17	35,001	2	0.01%
Jan-18	34,842	(159)	-0.45%
Feb-18	34,868	26	0.07%
Mar-18	34,817	(51)	-0.15%
Apr-18	34,553	(264)	-0.76%
May-18	34,463	(90)	-0.26%
Jun-18	34,444	(19)	-0.06%
Jul-18	34,656	212	0.62%
Aug-18	34,802	146	0.42%
Sep-18	35,434	632	1.82%
Oct-18	35,294	(140)	-0.40%
Nov-18	35,078	(216)	-0.61%
Dec-18	34,728	(350)	-1.00%
Jan-19	34,657	(71)	-0.20%
Feb-19	34,608	(49)	-0.14%
Mar-19	34,426	(182)	-0.53%
Apr-19	34,273	(153)	-0.44%
May-19	34,284	11	0.03%
Jun-19	33,999	(285)	-0.83%

February 2019 Forecast	:
Forecasted June 2019 Level	35,673

Base	trend from	June 2019	level
FY 2019-20	33,999	-1.98%	(688)

		Partial Du	ıal Eligibles	: Historical Ca	seload	and Projecti	ons
	Caseload	% Change	Level Change				
FY 2006-07	12,908	-	-				
FY 2007-08	14,214	10.12%	1,306				
FY 2008-09	15,075	6.06%	861				
FY 2009-10	15,919	5.60%	844				
FY 2010-11	17,090	7.36%	1,171				
FY 2011-12	18,871	10.42%	1,781				
FY 2012-13	21,206	12.37%	2,335				
FY 2013-14	23,378	10.24%	2,172				
FY 2014-15	28,045	19.96%	4,667				
FY 2015-16	32,585	16.19%	4,540				
FY 2016-17	33,809	3.76%	1,224		Fe	bruary 2019	Pro
FY 2017-18	34,828	3.01%	1,019	FY 2017	7-18	34,828	
FY 2018-19	34,687	-0.41%	(141)	FY 2018	3-19	35,260	
FY 2019-20	34,631	-0.16%	(56)	FY 2019	9-20	36,445	
FY 2020-21	34,912	0.81%	281	FY 2020	)-21	38,034	
FY 2021-22	35,073	0.46%	161				

Actuals					
	Monthly Change	% Change			
6-month average	(122)	-0.35%			
12-month average	(37)	-0.11%			
18-month average	(56)	-0.16%			
24-month average	(33)	-0.09%			

Partial Dual Eligibles has seen negative growth at an increasing rate between the last 12 months and the last 3 months, have seen sharp decreases. With the high September point we have small growth for FY 2019-20. The Department expects positive growth to return, due to an aging population.

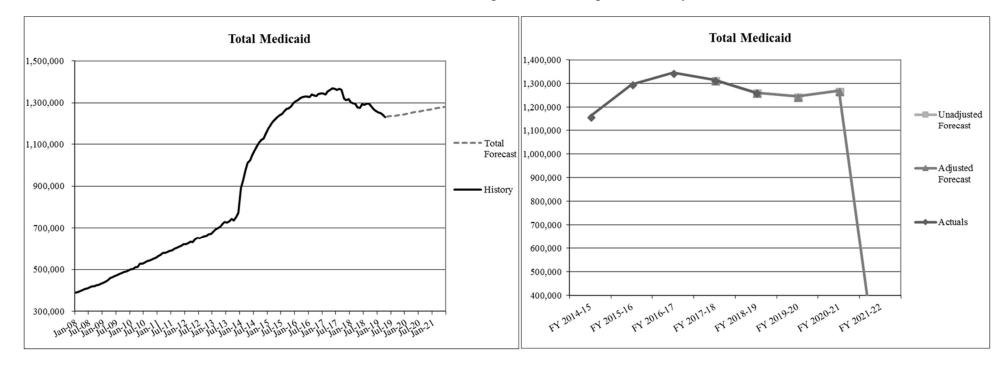
24020		
34,828	3.01%	1,019
35,260	1.24%	432
36,445	3.36%	1,185
38,034	4.36%	1,589
	35,260 36,445	35,260     1.24%       36,445     3.36%

-		
Monthly Average	Growth Act	uals
FY 2013-14 1st Half	61	0.28%
FY 2013-14 2nd Half	524	2.20%
FY 2013-14	292	1.24%
FY 2014-15 1st Half	378	1.42%
FY 2014-15 2nd Half	436	1.51%
FY 2014-15	407	1.47%
FY 2015-16 1st Half	264	0.85%
FY 2015-16 2nd Half	278	0.87%
FY 2015-16	271	0.86%
FY 2016-17 1st Half	(71)	-0.21%
FY 2016-17 2nd Half	235	0.70%
FY 2016-17	82	0.25%
FY 2017-18 1st Half	34	0.10%
FY 2017-18 2nd Half	(93)	-0.27%
FY 2017-18	(30)	-0.08%
FY 2018-19 1st Half	47	0.14%
FY 2018-19 2nd Half	(122)	-0.35%
FY 2018-19	(37)	-0.11%
FY 2018-19 2nd Half	47 (122)	-0.35%

Monthly Average Growth Comparisons						
Paguast	Monthly	Change	Percent	Percent Change		
Request	S-1	R-1	S-1	R-1		
FY 2019-20 1st Half	102	113	0.29%	0.33%		
FY 2019-20 2nd Half	162	24	0.44%	0.07%		
FY 2019-20	132	69	0.36%	0.20%		
FY 2020-21 1st Half	103	14	0.28%	0.04%		
FY 2020-21 2nd Half	163	13	0.42%	0.04%		
FY 2020-21	133	14	0.35%	0.04%		
FY 2021-22 1st Half	0	13		0.04%		
FY 2021-22 2nd Half	0	13		0.04%		
FY 2021-22	0	13		0.04%		

### TOTAL MEDICAID SUMMARY

Average monthly caseload for total Medicaid in FY 2018-19 was 1,261,365. The June 2019 data point was nearly 73,292, or 5.63%, lower than the previous estimate from the February 2019 request. This was driven primarily by a system update which effects the end of every quarter, which improved the process for verifying income for Medicaid eligibility purposes, primarily affecting adult, income-based populations.. The Department predicts an overall reduction in caseload in FY 2019-20 over FY 2018-19, with low growth in the request and out years.



### FY 2020-21 BUDGET REQUEST: CASELOAD NARRATIVE

		Monthly	%
	Actuals	Change	Change
Jun-17	1,365,940	-	
Jul-17	1,360,760	(5,180)	-0.38%
Aug-17	1,366,880	6,120	0.45%
Sep-17	1,361,174	(5,706)	-0.42%
Oct-17	1,319,016	(42,158)	-3.10%
Nov-17	1,313,234	(5,782)	-0.44%
Dec-17	1,318,334	5,100	0.39%
Jan-18	1,303,683	(14,651)	-1.11%
Feb-18	1,298,809	(4,874)	-0.37%
Mar-18	1,294,260	(4,549)	-0.35%
Apr-18	1,277,738	(16,522)	-1.28%
May-18	1,276,946	(792)	-0.06%
Jun-18	1,291,770	14,824	1.16%
Jul-18	1,291,160	(610)	-0.05%
Aug-18	1,294,359	3,199	0.25%
Sep-18	1,295,818	1,459	0.11%
Oct-18	1,283,860	(11,958)	-0.92%
Nov-18	1,269,229	(14,631)	-1.14%
Dec-18	1,262,295	(6,934)	-0.55%
Jan-19	1,253,984	(8,311)	-0.66%
Feb-19	1,250,778	(3,206)	-0.26%
Mar-19	1,244,320	(6,458)	-0.52%
Apr-19	1,230,860	(13,460)	-1.08%
May-19	1,230,374	(486)	-0.04%
Jun-19	1,229,339	(1,035)	-0.08%

			Total N	Aedicaid: Histori	cal Caseload	and Project	ions
	Caseload	% Change	Level Change	The forecast for the Medicaid por 2019 forecast. This is largely due			
FY 2006-07	392,229	-	-	economic co			
FY 2007-08	391,962	-0.07%	(267)				
FY 2008-09	436,812	11.44%	44,850				
FY 2009-10	498,797	14.19%	61,985		Act	uals	
FY 2010-11	560,759	12.42%	61,962			Monthly Change	% (
FY 2011-12	619,963	10.56%	59,204	6-month ave	rage	(5,493)	
FY 2012-13	682,994	10.17%	63,031	12-month av	erage	(5,203)	
FY 2013-14	860,957	26.06%	177,963	18-month av	erage	(4,944)	
FY 2014-15	1,161,157	34.87%	300,200	24-month av	erage	(5,692)	
FY 2015-16	1,296,986	11.70%	135,829				
FY 2016-17	1,346,114	3.79%	49,128				
FY 2017-18	1,315,217	-2.30%	(30,897)	February 2	019 Projecti	on Before A	djust
FY 2018-19	1,261,365	-4.09%	(53,852)	FY 2017-18	1,315,217	-2.30%	(
FY 2019-20	1,242,237	-1.52%	(19,128)	FY 2018-19	1,276,198	-2.97%	(
FY 2020-21	1,268,487	2.11%	26,250	FY 2019-20	1,292,797	1.30%	
FY 2021-22	1,295,518	2.13%	27,031	FY 2020-21	1,328,293	2.75%	

The forecast for the Medicaid population is lower than the February
2019 forecast. This is largely due to the low starting point due to strong
economic conditions.

Actuals			
	Monthly Change		
6-month average	(5,493)	-0.44%	
12-month average	(5,203)	-0.41%	
18-month average	(4,944)	-0.39%	
24-month average	(5,692)	-0.43%	

February 2019 Projection Before Adjustments			
FY 2017-18	1,315,217	-2.30%	(30,897)
FY 2018-19	1,276,198	-2.97%	(39,019)
FY 2019-20	1,292,797	1.30%	16,599
FY 2020-21	1,328,293	2.75%	35,496

Total Adj	ustments
FY 2017-18	50
FY 2018-19	51
FY 2019-20	51
FY 2020-21	51

February 2019 Forecast	t
Forecasted June 2019 Level	1,275,407

Base trend from June 2019 level					
FY 2019-20	1,229,339	-2.54%	(32,026)		

November 2019 Projection After Adjustments					
FY 2018-19 1,261,365 -4.09% (53,852)					
FY 2019-20	1,242,237	-1.52%	(19,128)		
FY 2020-21	1,268,487	2.11%	26,250		
FY 2021-22	1,295,518	2.13%	27,031		

February 2019 Projection After Adjustments				
FY 2017-18	1,315,217	-2.30%	(30,897)	
FY 2018-19	1,303,396	-0.90%	(11,821)	
FY 2019-20	1,321,800	1.41%	18,404	
FY 2020-21	1,344,876	1.75%	23,076	

Monthly Average Growth Actuals				
FY 2013-14 1st Half	7,313	0.99%		
FY 2013-14 2nd Half	45,752	5.29%		
FY 2013-14	26,533	3.14%		
FY 2014-15 1st Half	17,618	1.62%		
FY 2014-15 2nd Half	14,711	1.24%		
FY 2014-15	16,164	1.43%		
FY 2015-16 1st Half	9,488	0.75%		
FY 2015-16 2nd Half	5,436	0.41%		
FY 2015-16	7,462	0.58%		
FY 2016-17 1st Half	2,121	0.16%		
FY 2016-17 2nd Half	3,706	0.28%		
FY 2016-17	2,914	0.22%		
FY 2017-18 1st Half	(7,934)	-0.58%		
FY 2017-18 2nd Half	(4,427)	-0.34%		
FY 2017-18	(6,181)	-0.46%		
FY 2018-19 1st Half	(4,913)	-0.38%		
FY 2018-19 2nd Half	(7,859)	-0.63%		
FY 2018-19	(6,091)	-0.48%		

Monthly Average Growth Comparisons					
D.	Monthly Change		Percent Change		
Request	S-1	R-1	S-1	R-1	
FY 2019-20 1st Half	2,538	1,939	0.20%	0.16%	
FY 2019-20 2nd Half	3,156	2,198	0.24%	0.18%	
FY 2019-20	2,847	2,069	0.22%	0.17%	
FY 2020-21 1st Half	2,868	2,182	0.22%	0.17%	
FY 2020-21 2nd Half	2,934	2,249	0.22%	0.18%	
FY 2020-21	2,901	2,216	0.22%	0.17%	
FY 2021-22 1st Half	0	2,261	0.00%	0.18%	
FY 2021-22 2nd Half	0	2,307	0.00%	0.18%	
FY 2021-22	0	2,284	0.00%	0.18%	