Developed by Colorado Center on Law and Policy in partnership with Hunger Free Colorado, the Gap Map provides a window into how effectively Colorado counties are delivering the basic building blocks needed for lifelong health and well-being. It is intended to spark a dialogue among human service directors, their staff, advocacy organizations and community leaders about the most effective strategies for closing gaps in enrollment vs. eligibility, allocation vs. spending and improving the overall effectiveness and efficiency of limited resources. Provided below is a detailed explanation of the methodology used in creating the Gap Map graphs and the data sources.

**Methodology**

**Program Access Estimates**

The program access graphs (Human Services Gap #1) display the “gap” between the estimated number of people eligible for Medicaid, SNAP, WIC, CCCAP and CO Works and current caseloads for each of these programs by county. An average participation rate is calculated from this data for each program in every county of the state where we had access to the necessary data.

Caseload numbers were derived from administrative data provided by the state agencies that oversee these programs. Average annual caseload numbers for 2014, 2015 and 2016 were obtained for most programs in the majority of counties. Caseload numbers were then averaged across those three years and compared to eligibility estimates.

Eligibility estimates were derived from the U.S. Census American Community Survey (ACS) data. These eligibility estimates do have limitations. Because the American Community Survey does not ask the same questions that appear on eligibility applications, using this data source can only produce an estimate of eligibility. For example, CCCAP, SNAP, and Colorado Works, all have some variation of a work requirement for all or part of the caseload. Our eligibility estimates only take into account the income eligibility threshold. Further, we are also limited in how close we can come to that income eligibility threshold. For instance, our SNAP eligibility estimates count the population with income at or below 125% of federal poverty level (FPL)—when actual eligibility is set at 130% of FPL. Also, eligibility for Medicaid, SNAP and WIC are based on different definitions of “countable income” which do not perfectly match the census income variable.

Finally, point-estimates, especially for small counties, should be interpreted carefully. Often, it is difficult to get precise estimates using Census data, particularly for small geographic areas.
Participation rates displayed on the Gap Map are meant to merely identify whether program access is broadly high, low, or somewhere in the middle for individual programs, across programs and/or across counties. Again, the data is meant to be a resource for communities to begin the conversation about how these programs are functioning broadly speaking and then pursue additional data to understand the trends shown here.

**Program Access Rankings**

The program access estimates for Medicaid, SNAP, WIC, CCCAP and Colorado Works by county were used to develop access rankings displayed in the map that opens the Gap Map site. Access rankings were developed by calculating standardized z-scores for each program’s participation rates. The z-scores were averaged across the five programs for each county. The average program access z-score for each county was then used to rank counties into three groups (i.e., top 20, middle, and bottom 20). Counties with the highest participation rate averages hold the top spots.

Each program was weighted evenly. Each z-score in the Gap Map program access ranking is relative to the other counties in the state and not compared to an absolute standard. A positive program access z-score for a county means that that county had a higher program access score compared to the average of all counties. Likewise, a negative z-score indicates that the county had a program access score lower than the average across all counties.

We modeled this methodology on the Robert Wood Johnson County Health Rankings, which calculates standardized scores on a variety of health measures and then provides an overall ranking.

**Fiscal Data**

The primary source of fiscal data for all five programs was the Colorado Fiscal Management System—the accounting tool the state of Colorado uses to keep track of allocation and expenditure data. The graphs in Human Services Gaps #2 and #3 highlight the following fiscal measures.

- **Allocation vs. Expenditure** (Human Services Gap #2). For Colorado Works and Colorado Child Care Assistance Program (CCCAP), we include graphs comparing the allocation and expenditure data for SFY 2014, 2015 and 2016. Graphs for Colorado Works also include the beginning balance of the county reserve fund for SFY 2014, 2015 and 2016.

- **Cost per case** (Human Services Gap #3). For all five programs, we calculated the cost per case—the amount of administrative dollars spent per case to enroll a client, and for some programs, to manage the administrative aspects of the case. It is important to note that CPC is a measure of administrative costs per case and is not associated with the cost of benefits per case. A lower cost per case is an indicator of more efficient systems for enrolling and processing client cases. Larger counties may benefit from economies of scale on this measure.

- **Benefits provided per administrative dollar spent** (Human Services Gap #3). This is a measure of how much in program benefits (i.e., cash, cash equivalent and/or services) are distributed per administrative dollar spent. This measure can be influenced by many factors, including efficiency of enrollment
procedures, staffing costs driven by cost of living in a community, and the type of services provided. For example, administrative costs for the WIC program include nutrition education by registered dieticians, increasing the cost of the services provided especially compared to the cash benefits provided to participants.

## Data Sources

<table>
<thead>
<tr>
<th>Program</th>
<th>Caseload Data</th>
<th>Fiscal Data</th>
<th>Eligible Population Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food Security:</strong> Supplemental Nutrition Assistance Program (SNAP)</td>
<td>• Colorado Department of Human Services, average annual county caseload, SFY 2014, 2015 and 2016, as reported in the FNS-388 (the annual caseload report that states provide to the Federal Nutrition Service).</td>
<td>• Colorado Department of Human Services, county administrative expenditures, SFY 2014, 2015 and 2016. • Colorado Department of Human Services, total annual benefits issued by county, SFY 2014, 2015 and 2016.</td>
<td>• U.S. Census Bureau, American Community Survey, 2012-2016 (5-year estimates), county population at or below 125% FPL • For Big 10 counties¹, annual estimates of population at or below 125% FPL from American Community Survey for 2014, 2015 and 2016.</td>
</tr>
<tr>
<td><strong>Health:</strong> Health First Colorado (Medicaid)</td>
<td>• Colorado Department of Health Care Policy and Financing, average annual Medicaid enrollment, 2014, 2015 and 2016. Compiled by the Colorado Health Institute.</td>
<td>• Colorado Department of Health Care Policy and Financing, total county administrative expenditures (regular + enhanced), SFY 2014, 2015 and 2016.</td>
<td>• U.S. Census Bureau, American Community Survey, public use microdata sample (PUMS) data for 2014, 2015 and estimates for 2016 (by applying population growth rates from the State Demography Office to 2015 data). • County population ages 0-64 living at or below 138% FPL for adults and 147% FPL for children. Estimates of the eligible population compiled by the Colorado Health Institute.</td>
</tr>
</tbody>
</table>

¹ Adams, Arapahoe, Boulder, Denver, El Paso, Jefferson, Larimer, Mesa, Pueblo, and Weld
<table>
<thead>
<tr>
<th>Program</th>
<th>Caseload Data</th>
<th>Fiscal Data</th>
<th>Eligible Population Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food Security:</strong> Special Supplemental Nutrition Program for Women, Infants and Children (WIC)</td>
<td>• Colorado Department of Public Health and Environment, average annual caseload data by WIC Clinic, CY 2014, 2015 and 2016.</td>
<td>• Colorado Department of Public Health and Environment, total administrative expenditures (which includes spending on nutrition counseling, lactation support, and comprehensive referrals) and WIC benefits redeemed, SFY 2014, 2015 and 2016.</td>
<td>• Data compiled by U.S. Census Bureau, Profile of WIC Modeled Eligibility and Participation in Colorado, 2014 and 2015. Due to small sample sizes, the Census cannot report this data for all counties in Colorado.</td>
</tr>
<tr>
<td><strong>Early Learning:</strong> Colorado Child Care Assistance Program (CCCAP)</td>
<td>• Colorado Department of Human Services, unduplicated count of children who used CCCAP care by county (defined as any CCCAP subsidy dollars spent on care for a child and/or any positive amount of CCCAP care units used (i.e. any instance of care covered by parent fee), SFY 2014, 2015 and 2016.</td>
<td>• Colorado Department of Human Services, total CCCAP allocation, total administrative and direct service expenditures by county, SFY 2014, 2015 and 2016.</td>
<td>• U.S. Census Bureau, American Community Survey, public use microdata sample (PUMS) data, for 2014, 2015 and 2016. Estimates of population ages 13 and below, living in households earning at or below 165% FPL by county.</td>
</tr>
<tr>
<td><strong>Financial Security:</strong> Colorado Works (TANF)</td>
<td>• Colorado Department of Human Services, annual unduplicated basic cash assistance, state diversion and county diversion cases by county, SFY 2014, 2015 and 2016.</td>
<td>• Colorado Department of Human Services, Colorado Works allocation, expenditures, beginning balance of reserve fund, administrative expenditures(^2) and basic cash assistance and state diversion payments.</td>
<td>• U.S. Census Bureau, American Community Survey, 2012-2016 (5 year estimates), county population at or below 100% FPL(^3) with children under age 18. • For Big 10 counties, estimates of population at or below 125% FPL from American Community Survey for 2014, 2015 and 2016.</td>
</tr>
</tbody>
</table>

\(^2\) Colorado Works administrative expenditures includes both basic administrative costs and costs associated with screening and assessment, including substance abuse screening, SSI/SSDI application services, case planning and management, and providing direct services.

\(^3\) Eligibility for Colorado Works is well below the poverty line. The need standard for eligibility for cash assistance is about 30% FPL. The method used to estimate eligibility is an accepted approach to evaluating the reach of basic cash assistance in the TANF program.