Exploring Kentucky’s benefit cliff calculator

The Family Resource Simulator, designed by the Kentucky Center for Statistics (KYSTATS) in partnership with the National Center for Children in Poverty, is a benefit cliff calculator that was created to help individuals and families in Kentucky understand how changes in income may impact state and federal benefits like health care and childcare. The tool can be used by service providers, families, and employers to generate a report that illustrates what changes might occur to public benefits as wages increase.

Simulation Example

Bluegrass Local Workforce Area

Fayette County
Median Household Income: $58,954 per year

- Two parents, age 28 and 25
- Three children, ages 0, 5, and 7
- Parent 1 income: $23,000 per year
  - 40 hours per week, 9 a.m.-5 p.m.
- Parent 2 income: $8,320 per year
  - 16 hours per week, 6 p.m.-10 p.m.
  - Total annual income: $31,320
- Rent & electricity - $14,872 per year
- Other expenses - $8,743 per year
- Food - $12,510 per year
- Child care - $2,288 per year
- Transportation - $720 per year
- Healthcare - $300 per year
- $4,800 per year in credit card debt
- No savings account
- Not a homeowner
- Owns vehicle, valued at $5,500
- Child Care Assistance Program (CCAP)
- SNAP/Food Stamps
- Medicaid
- LIHEAP
- WIC
- School meal programs
- Four federal tax credits, one state income tax credit

Every family in Kentucky is different, so each simulation will vary based on what is entered. Each Kentucky county also has its own median household income, which is taken into consideration when results are calculated. The scenario outlined below illustrates the input a user will enter into the tool. The next page explains the results that the simulator provides.
This Fayette County family could experience 6 benefit cliffs as their pay increases over time.

When the parents have increased their annual income from $31,320 to $42,000 per year, the family could experience the first benefit cliff, losing its Medicaid benefit for the adults, who could then begin paying for employer-based health care and leading to a decline in net resources.

At $43,000 per year, the family could experience the second cliff with a reduction in SNAP benefits.

At $45,000 per year the family could experience the third cliff, with the loss of CCAP benefits.

At $49,000 per year, the family could see a reduced SNAP benefit.

At $50,000 per year, the family could lose its SNAP, LIHEAP, and Lifeline benefits.

At $66,000 per year, the children could lose health benefits, WIC, and move to the parents’ employer plan.

The family would reach self-sufficiency - only receiving federal tax credits, and having $3,152 in net resources - at $66,000 per year.

Regional in-demand jobs

Much like the median income in each Kentucky county, in-demand jobs also vary by region. KYSTATS’ Occupational Outlook, provides insight on in-demand jobs by local workforce area, what the median incomes for those jobs are, and what the projected openings are through 2029. The following job titles, median pay, and projected openings follow the salary levels outlined in the scenario above. Visit the Occupational Outlook at kystats.ky.gov/Reports/Tableau/2022_OCC.

Occupational Outlook 2019-2029

- Automotive Service Technicians - $39,317 - 1,647 projected openings*
- Welders Cutters and Solderers - $42,334 - 1,299 projected openings*
- Installation & Repair Occupations - $46,718 - 16,910 projected openings*
- Computer User Support Specialists - $49,964 - 511 projected openings*
- Operation Research Analysts - $51,529 - 511 projected openings*
- Budget Analysts - $56,178 - 660 projected openings*