Outlining the Disincentives and Opportunity Costs for Working Mothers

Report for the Women's Fund of the Greater Cincinnati Foundation on

Gaps in Income Support Programs

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Prepared by the Economics Center

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II. EXECUTIVE SUMMARY

The Economics Center at the University of Cincinnati partnered with the Women's Fund of the Greater Cincinnati Foundation to explore disincentives to career advancement, educational investment, and increased hours worked caused by cliff effects, social assistance on-ramping, and a stagnant gross resources benefits curve. This creates a situation where working women, engaged in rational decision-making, results in a workforce that does not seek promotions or raises unless they are greater than the increases in annual earned income, exceeding the amount of benefits lost.

BACKGROUND

Ten different social assistance programs across four geographies were researched to understand the relationship between various family compositions, earned income, and social assistance. In the majority of these programs, the more income one earns, the less one receives in social assistance. Some programs, however, take into account *gross resources* (earned income plus other social assistance) to calculate an individual's benefits.

Cliff effects are defined as points along the benefits curve where a marginal increase in annual earned income results in a greater loss of social assistance. On-ramping occurs when there are narrow windows when individuals can apply for benefits, but once they are receiving the benefits, they can, to some extent, retain them regardless of annual earned income. Self-sufficiency is defined as the level of gross resources needed to provide for basic needs such as food, housing, transportation, and childcare. Lastly, self-sufficiency does not allow for wealth accumulation or saving for an emergency fund.

FINDINGS

The Economics Center found the following with respect to disincentives to career advancement for single mothers within Hamilton County:

- Substantial increases in annual earned income have little to no effect on gross resources for full-time workers earning between $9 and $20 an hour.[1]
- A single mother working fulltime and earning $9 an hour receiving full social assistance benefits will be $800 over the self-sufficiency level. If she receives a raise to $11 an hour, she will be $3,500 under the self-sufficiency level.
- The same mother can go from a wage of $9 an hour -barely over self-sufficiency - to $20 an hour and be $2,300 over self-sufficiency. This is equal to a more than 90 percent penalty to earned income *before* taxes.
- Transitioning from social assistance to additional hours worked or to less-stable or seasonal employment may result in increased reliance on social assistance in the long-term if she loses her job or the work was seasonal.
- For a single mother of one, the social assistance benefits from having a second child *do not* outweigh the additional expenditures in terms of childcare, food, and overall costs.

[1] All references to Workers or Households will be relative to a single mother of a preschool-aged child in Hamilton County, Ohio.

- If an individual earns $20 an hour, the full economic impact (including the impact of reduced benefits) of going from 20 hours a week to 40 hours a week—1,000 additional hours worked-- is approximately $900.

III. INTRODUCTION

Social assistance programs aim to alleviate devastating economic disparities by providing individuals with means to reach self-sufficiency. This battle to earn enough income to support a family for a single female head of household stretches from instances where she makes the minimum wage all the way *to over twenty dollars an hour*. In other words, a single mother with one child has to make over twenty dollars an hour and work full-time to provide herself and her child the earned income necessary to be self-sufficient. It is not the case that every single mother is able to earn $20 an hour based on their work experience, education, and ability. The problem is that even if an individual receives all of the benefits that she is eligible for, her gross resources (annual earned income plus all social assistance) remain flat from the minimum wage to twenty dollars an hour.

Hamilton County, Ohio, like many other regions around the country, is affected by the harsh reality of poverty. Approximately 800,000 individuals live in Hamilton County and poverty affects nearly 145,000 of them.[2] Additionally, women are more likely to be impoverished than men (80,000 women to 65,000 men)[3] and single mothers are even more profoundly affected. Already battling higher poverty rates and lower wages, single mothers in Hamilton County face many challenges in attempts to better their financial situations.

The Women's Fund of the Greater Cincinnati Foundation, an organization leading the community to ensure economic self-sufficiency for women, focuses its mission precisely on this population. The challenges brought about by poverty and economic fragility cannot be ignored. Of approximately 12 million single-parent households in the U.S., 84 percent are headed up by single mothers.[4] The annual income of female-headed-households with children under 18 of years averaged approximately $19,700 in Hamilton County, Ohio.[5] This is approximately 20 percent above the poverty threshold for a family of two. The Federal Poverty Guidelines are prepared yearly by the Department of Health and Human Services and are intended to aid in determining financial eligibility for certain federal programs. However, poverty status alone does not paint a realistic image of the amount of money required to live and raise a family. Instead, the Self-Sufficiency Standard is an economic measure that defines the minimum income for families to meet basic needs at an adequate level without public assistance. The annual income needed to meet the Self-Sufficiency Standard for a household with one adult and one preschool-aged child in Hamilton County is approximately $41,300[6], which is more than 250 percent of the federal poverty level. The difference of $ 21,500 between the Self-Sufficiency Standard and average annual income of a female-led household in Hamilton County is substantial, roughly half of the

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[2] U. S. Census Bureau, "American FactFinder," 2010-2014 American Community Survey 5-Year Estimates, (2014)
[3] Ibid.
[4] Demographic Internet Staff U. S. Census Bureau, "America's Families and Living Arrangements: 2014: Family Groups (FG Table Series)
[5] U. S. Census Bureau, "American FactFinder," *Median Family Income in the Past 12 Months (In 2014 Inflation-Adjusted Dollars) By Family Type by Presence of Own Children Under 18 Years: Families 2010-2014 American Community Survey 5-Year Estimates*
[6] Center for Women's Welfare University of Washington, "Self-Sufficiency Standard by State"

suggested minimum. In all, 46 percent of female-headed households with at least one child live in poverty.[7] There are many programs intended to improve or alleviate the challenges faced by low income individuals and families, including the Earned Income Tax Credit (EITC), Child Care Assistance, and Supplemental Nutrition Assistance Program (SNAP). These programs provide a tax break, child care assistance for working parents, and food assistance to those in need. The intent of these programs is assistance to families and individuals experiencing economic hardship; however, navigating the complex rules of each of the social assistance programs can be a challenge. Income eligibility and benefits qualifications vary significantly among programs. These differences lead to complexities in determining what social assistance individuals can receive and when, which may deter participation.

The income eligibility structure is at the heart of participation rates. In fact, a potential participant may fear a worse-off situation called the income "cliff effect." Income cliffs occur at certain wage thresholds where a recipient becomes ineligible for particular benefits due to an increase in annual earned wages, while, in fact, their overall income falls. When an income relief program participant faces the prospect of losing social assistance benefits after they meet or exceed a particular income threshold, they face a perverse incentive. In other words, they are better off keeping their earned income at a lower level rather than increasing their income and losing their benefits. This disincentivizes many individuals from taking a job promotion or a raise, and more broadly, stifles the potential of an individual to better their own circumstances and more fully participate in the economy.

All benefit programs are designed to help those who need assistance. It is a disservice to both the mission and intent of these programs and to the programs' participants to *not* address the cliff effect, especially since it negates the primary objectives of these programs--to lift people out of poverty.

An additional barrier to social assistance examined in this report deals with the on-ramp effect. The on-ramp effect occurs when a social assistance program has stricter application restraints on income than it does on eligibility restraints. In other words, some programs only allow individuals to apply for aid if their income is below a certain percent of the poverty level. However, once they have been approved, they can keep receiving the assistance as long as their income stays below 250 or 300 percent of the poverty level depending on the program. This creates a situation in which someone might make 150 percent of the poverty level and not be able to receive aid whereas their neighbor is making 225 percent of the poverty level and receiving the assistance.

The Women's Fund of The Greater Cincinnati Foundation commissioned the Economics Center to further analyze the impacts of the cliff effects and the disincentives for single mothers to take actions to increase wages through additional hours worked, education, or career advancement.

[7] U. S. Census Bureau, "American FactFinder," *Poverty Status in the Past 12 Months of Families by Household Type by Number of Related Children Under 18 Years: Families 2010-2014 American Community Survey 5-Year Estimates*

IV. FRAMING THE ISSUE

Benefit programs aim to assist many individuals and are extremely important to those who use them most, particularly single mother headed households. Social assistance programs are an extremely important component of helping people get out of poverty, but they need to work efficiently and within the context of a larger structure. Detailed below are a number of issues pertaining to the ways in which social assistance eligibility is determined as well as the relationship between annual earned income and gross resources.

A. CLIFF EFFECTS AND ON-RAMPING

An obstacle experienced by many families who receive some form of social assistance - one they struggle to overcome - is the phenomenon known as the cliff effect. The cliff effect occurs when a household loses eligibility for social assistance programs due to the family's income surpassing a certain threshold set within the Federal Poverty Guidelines (FPG). This FPG income threshold is the percentage of the poverty-level (FPL) income at which families can begin to qualify for government assistance. For example, in Ohio, a family can apply for social assistance if its income is at the 125 percent of the federal poverty level or lower, roughly $20,000 annually for a family of two. Social welfare programs these families typically qualify for include the Supplemental Nutrition Assistance Program (SNAP- also known as food stamps), Child Care Development Fund support (CCDF) or Child Care Assistance Programs (CCAP), and Public Health Insurance.

As earned annual wages increase, families can continue to receive these benefits until their income level reaches a certain percentage of the poverty level, which varies depending on the different government programs. Once a household surpasses that threshold, it is no longer eligible to receive assistance. Again, the eligibility threshold changes depending on the program. In this circumstance, families face the hard reality of having to allocate a larger percentage of their earned income to replace the service they previously received. While their earned annual wages have increased, families are effectively worse off due to a sudden, higher demand on income where an increase in annual earned income may have been less than the amount of benefits lost. Additionally, the only way for those families to begin receiving those benefits again is for their earned annual income fall back to below the application eligibility percent of the FPL. In some programs, the application eligibility is lower than the maximum eligibility to receive the benefit. In other words, a situation can occur where a household makes less than their neighbor but is not eligible to apply for the same benefits.

Single-parent headed households are hit particularly hard, and in most cases, such households are headed by a female. Because the sudden loss in benefits is so financially detrimental for a household, a working parent may have to turn down opportunities for promotion or forego increased work hours to avoid exceeding income thresholds for benefits such as child care assistance. Therefore, parents may stay in economically and professionally stagnant entry-level positions and remain dependent on social assistance programs in the long-run.

B. UNINTENDED OUTCOMES

To see these effects more clearly, lets meet Tammy. Tammy has been a hard worker her whole life. She got her first job at the age of 16, bagging groceries at a local store, and has worked jobs in retail and office administration while earning her degree at a local community college. After working through the majority of her associate degree, Tammy took a fulltime job at a home health care agency. She also had her first child.

Tammy was making $9 an hour working fulltime to support herself and her child. She received a raise to $11 an hour, a nearly 20 percent increase to her hourly wage. However, when this happened, many of her social assistance benefits were reduced by much more than the amount of new wages she was earning. At $9 an hour, Tammy's gross resources were $42,000, almost $800 over the Self-Sufficiency Standard. However, after her raise to $11 an hour, she now had $37,800 in gross resources, $3,500 under the Self-Sufficiency threshold and $2,700 less than she had when earning two dollars less an hour.

Among the most important forms of benefits that Tammy's family received was child care assistance, as child care is often as significant an expense as rent is. Without supplemental funding for daycare costs, Tammy would not have been able to break even on her monthly budget. In order to maintain her family's eligibility and continue receiving aid for daycare, she and her child were required to adhere to an activity schedule throughout the year. More specifically, Tammy could not change jobs frequently, or even change her work schedule regularly for her job.

Tammy's life story is one that mirrors the experience of many single mothers. A promotion or increased hourly pay meant that Tammy would have lost access to child care support or other benefits because her income would have exceeded the high-end threshold of aid eligibility. She then would have had to pay for daycare out-of-pocket, which would have brought her family below its financial breakeven point. In other words, she would have to experience a pay *decrease* in some form to be (re)eligible for the benefit.

The income eligibility rules surrounding the social assistance systems - programs intended to help people out of poverty – are instead, providing a negative incentive to remain at a low-income level. Incremental increases in one's income only disqualify a working mother from crucial assistance because incremental increases are typically not enough to cover the cost of some of the benefits lost. This means that for many, there is virtually no chance of achieving upward mobility.

Tammy's family is one example of how cliff effects and a lack of appropriate eligibility tapering in social assistance programs can adversely affect women and the community at large. While decisions such as the one Tammy made by turning down a promotion may not seem to be optimal or even understandable from an outside perspective, low-wage earners are often acting in a rational manner by foregoing raises.

C. OTHER CONCERNS

An additional strain on parents utilizing child care assistance is that they must meet strict requirements while receiving assistance. Deviations from these requirements can result in the loss of child care support eligibility. Single mothers of students in particular, must consistently adhere to a fairly rigid work schedule while receiving benefits or else, they may create a situation where they become ineligible for assistance. This is regardless of student activities, snow days, and extracurricular events. For every change in a family's working or school status - which may affect eligibility- the parent must report the change to the childcare system within ten days of an occurrence. This can be complicated since the parent must also submit supporting documentation to justify the change such as employer letters, pay stubs, and class schedules. If this documentation is not provided in a timely manner the parent can lose eligibility. Furthermore, something as simple as illness or a school break can result in loss of eligibility due to an interruption in activity participation. In fact, this is cited as the most common reason why families lose eligibility for child care support in Ohio. Loss of eligibility on the basis of activity interruption is even more common than surpassing the 200 percent of FPL threshold.

V. CASE STUDY OF SOCIAL ASSISTANCE PROGRAMS

The dynamics of social assistance programs and participants' eligibility requirements are not unique to Hamilton County, Ohio. This case study looks further into the criteria for programs and benefits in four counties, which include Hamilton, Franklin and Cuyahoga in Ohio and Boone County in Kentucky. This report provides a deeper analysis of both federally-funded programs such as Earned Income Tax Credit (EITC), Child Tax Credit, Temporary Assistance for Needy Families (TANF), Supplemental Nutrition Assistance Program (SNAP), and Child and Dependent Care Tax Credit, as well as state-controlled programs such as Child Care Assistance, Affordable Care Act (ACA), Medicaid, Home Energy Assistance Program (HEAP), and Housing Assistance (Section 8). The FPL and the Self-Sufficiency Standard are two indicators used in the analysis of these programs. The FPL was developed in the 1960s, based on U.S. Department of Agriculture's (USDA) food budget, devised to meet minimal nutritional standards for American families. The following table shows the federal poverty guidelines by household size for 2015.

TABLE 1 - U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES POVERTY GUIDELINES FOR 2015[8]

Persons/ Family in Household	Poverty Guideline (100%)
1	$11,770
2	$15,930
3	$20,090
4	$24,250
5	$28,410
6	$32,570
7	$36,730

The Self-Sufficiency Standard, as another measure of economic standing, was more recently developed in the mid-1990s and defines income requirements in order to meet basic needs. It is a measure that provides realistic and detailed requirements at the county level for different family composition. The following table presents the Self-Sufficiency Standard for the four counties under analysis with two scenarios: 1) a single mother with a one preschooler and 2) a household that includes a single mother with a preschooler, and an infant.

[8] U.S. Department of Health and Human Services. "2015 Poverty Guidelines."

TABLE 2 – SELF-SUFFICIENCY STANDARD BY COUNTY[9]

	Self-Sufficiency Standard	
County	Single Mother + 1 Preschooler	Single Mother + 1 Preschooler + 1 Infant
Hamilton, OH	$41,282	$61,048
Franklin, OH	$43,399	$63,355
Cuyahoga, OH	$39,256	$56,634
Boone, KY	$38,039	$56,252

The annual income limit varies depending on the family size, social assistance program, and geographic location. The following tables indicate the annual income limit for the two scenarios, in the four counties examined.

TABLE 3 – INCOME THRESHOLDS BY COUNTY COMPARISONS FOR HOUSEHOLD OF SINGLE MOTHER + 1 PRESCHOOLER

	OHIO			KENTUCKY
	Hamilton County	Franklin County	Cuyahoga County	Boone County
Self-Sufficiency Standard (2015)	$41,282	$43,398	$39,256	$38,039
Earned Income Tax Credit	$39,131			
Child Tax Credit	Modified Adjusted Gross Income <$75,000			
TANF	$7,965			$10,212
SNAP	$20,712			
Child Care Subsidy	$47,808	$47,808	$31,464	$24,271
Medicaid	$21,983			
ACA	$63,720			
Utilities	$28,035			$20,826
Housing Voucher (Section 8)	$28,500	$28,400	$26,450	$28,500

[9] Center for Women's Welfare University of Washington. "Self-Sufficiency Standard by State.

TABLE 4 – INCOME THRESHOLDS BY COUNTY COMPARISONS FOR HOUSEHOLD OF SINGLE MOTHER + 1 PRESCHOOLER + 1 INFANT

	OHIO			KENTUCKY
	Hamilton County	Franklin County	Cuyahoga County	Boone County
Self-Sufficiency Standard (2015)	$61,048	$63,355	$56,634	$56,252
Earned Income Tax Credit	$44,454			
Child Tax Credit	Modified Adjusted Gross Income <$75,000			
TANF	$10,045			$11,688
SNAP	$26,124			
Child Care Subsidy	$60,264	$60,264	$39,576	$30,574
Medicaid	$27,724			
ACA	$80,360			
Utilities	$35,280			$26,208
Housing Voucher (Section 8)	$32,050	$31,950	$29,750	$32,050

i. EARNED INCOME TAX CREDIT (EITC)[10]

The Earned Income Tax Credit, (EITC), is a federally administered and controlled tax credit for low-to-moderate income working people which reduces the income tax owed. This potentially enables those households to receive a tax refund. Qualification for EITC depends on earned income, the presence of dependent children, a valid social security number, and filing status. The table below outlines the income qualifications by household size and filing status.

TABLE 5 - INCOME LIMITS BY HOUSEHOLD TYPE, CHILDREN, AND MARITAL STATUS 2015

Filing Status	Qualifying Children Claimed		
	One	Two	Three or more
Single, Head of Household or Surviving Spouse	$39,131	$44,454	$47,747

ii. CHILD TAX CREDIT [11]

The Child Tax Credit helps reduce one's federal income tax by up to $1,000 for each qualifying child. This tax credit can be claimed annually while filing a federal tax return. In order to qualify for the Child Tax Credit, a household must meet all of the following qualifications:

- The dependent child for whom the benefit is claimed must be 16 years of age, or younger
- The child must be related to the individual requesting assistance as either a daughter, son, stepchild, sister, brother, foster child, grandchild, niece, nephew, or a legally adopted child
- The child must not have provided more than half of their own financial support
- The child must be claimed as a dependent on the household's federal tax forms

[10] U.S. Internal Revenue Service. "Earned Income Tax Credit (EITC)."
[11] U.S. Internal Revenue Service. "Ten Facts about the Child Tax Credit."

- The child must be a U.S. citizen, U.S. national, or U.S. resident alien
- The dependent child must have lived with the adult claiming the credit for more than half of the calendar year in which the benefit is sought

iii. CHILD CARE ASSISTANCE[12]

The Child Care Assistance program is administered at the county level, with the intent to assist low-income families with children by subsidizing child care costs. In order to qualify, a household must meet state and county requirements, although typically, the FPG are used to determine eligibility. General qualifications include gross income limits, occupation of the head of the household, and child eligibility.

iv. TEMPORARY ASSISTANCE FOR NEEDY FAMILIES (TANF)[13]

The Temporary Assistance for Needy Families (TANF) program provides temporary financial assistance to the families in need. . It is administered by federal government but controlled by state governments. Each state receives block grant to plan and operate programs that are intended to achieve one of the four purposes of the TANF program:

1. Child care assistance for needy families in their own home
2. Helping needy parents by promoting job preparation, work and marriage, by their reducing dependency on social assistance
3. Prevent and reduce the incidence of out-of-wedlock pregnancies
4. Encourage formation and maintenance of two-parent families

In Ohio, TANF has various programs and services, such as Ohio Works First (OWF), Prevention, Retention and Contingency (PRC), Family Supports, and other TANF-Funded benefits and services.

v. SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM (SNAP)[14]

Supplemental Nutrition Assistance Program (SNAP), is a federally-funded nutrition program. More colloquially known as food stamps, the intent of the SNAP program is to offer relief for families in the form of subsidizing grocery expenses. A family on SNAP is given an Electronic Benefits Transfer (EBT), a card that can be used at a grocery store as a debit card. A household's gross monthly income typically must be at or under 130 percent of the FPL to qualify for SNAP, although a family may still qualify if the income is over 130 percent of the FPL and certain other criteria are met. For example, a family may maintain eligibility if they are caring for an elderly or disabled individual. In the case of a family of two, a working mother and a preschooler, eligibility for SNAP is capped at $20,712 per year. Whereas, for a single mother with a preschooler and an infant, the income limit is $26,124.

vi. AFFORDABLE CARE ACT (ACA) & MEDICAID[15]

The Affordable Care Act (ACA) is a fairly recent reform to healthcare law which outlines new rules, benefits, rights, and protections for every citizen in the country. The ACA broadens the number of citizens who qualify for subsidized healthcare by defining different eligibility standards. For instance,

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[12] Hamilton County Job & Family Services. "Child Care – Caretakers (Parents)."
[13] U. S. Department of Health & Human Services. "About TANF | Office of Family Assistance | Administration for Children and Families."
[14] U. S. Department of Agriculture. "Supplemental Nutrition Assistance Program (SNAP) | Food and Nutrition Service."
[15] ObamaCare Facts. "Affordable Care Act Summary."

Medicaid coverage can now be provided to low-income adults in states that have opted to expand eligibility, and tax credits are available for middle-income households who purchase health insurance coverage through the insurance Marketplace.

vii. HOME ENERGY ASSISTANCE PROGRAM (HEAP) - UTILITIES[16]

The Home Energy Assistance Program (HEAP), is a federally funded program administered by state agencies It is also referred to as the Low Income Home Energy Assistance Program (LIHEAP) in some states. It provides assistance to low-income households pay their home energy bill. The amount of the benefit is determined by the number of people in the household, income limit, the heating source for their home, and the region of residence.

viii. HOUSING VOUCHER/ SECTION 8[17]

The Housing Voucher Program, regulated by the U.S. Department of Housing and Urban Development (HUD), provides support to low-income households by assisting them in obtaining safe, sanitary housing in private markets. Recipients include low-income families, the elderly, and the disabled. Eligible recipients are able to choose their own housing as long as it meets certain requirements. A family's eligibility is determined by the local Public Housing Agency, and is usually based on household income, not to exceed 50 percent of the median income for that county. This criterion is in addition to family size and a requirement of citizenship or legal residency. Fair market rent, or FMR, is used as a standard for rent by county.

ix. CHILD AND DEPENDENT CARE CREDIT[18]

The Child and Dependent Care Credit, a federal tax credit, can be claimed by an individual who pays someone to care for a dependent who is under the age 13 or for a dependent who is not able to care for himself or herself. In order to qualify, an applicant must have paid for care which allowed her to work or look for work. The credit can be claimed up to 35 percent of the child or dependent care expenses, depending on income. The credit is capped at $3,000 for one qualifying individual and $6,000 for two or more qualifying individuals.

VI. COMPARATIVE ANALYSIS

A comparative analysis of different income levels will highlight the differences in policies and benefits across the four counties—Hamilton, Franklin, and Cuyahoga, Ohio and Boone County, Kentucky. To streamline the comparison process, two types of household sizes were standardized across each scenario: 1) a single mother with a preschooler and 2) a single mother with a preschooler and an infant. The comparative analysis was done with respect to the social assistance programs described above.

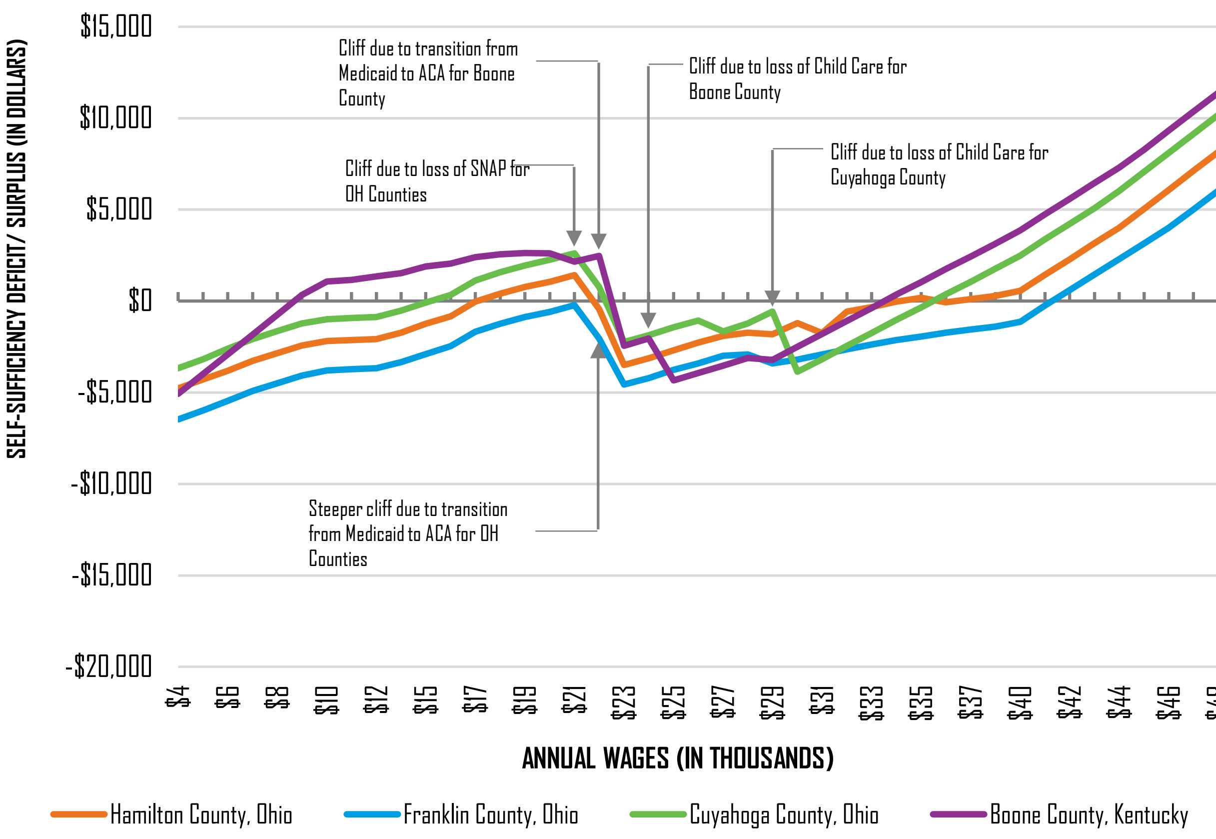
For the purpose of this analysis, the self-sufficiency deficit figures are benchmarked to include the difference of gross resources (earned income plus social assistance) compared to the amount that is considered self-sufficiency for a family of that size. Anything below zero means that the gross resource

[16] Ohio Development Services Agency, "Home Energy Assistance Program (HEAP)," *Individual - Energy Assistance Programs*
[17] U.S. Department of Housing and Urban Development. "Housing Choice Voucher Program Section 8."
[18] U.S. Internal Revenue Service. "Child and Dependent Care Credit at a Glance."

potential at a particular earned income level does not adequately cover self-sufficiency. Anything above zero represents greater than self-sufficient amounts, again combining earned income and social assistance. Additionally, gross resources are calculated at the maximum amount of benefits a household can receive based on eligibility.

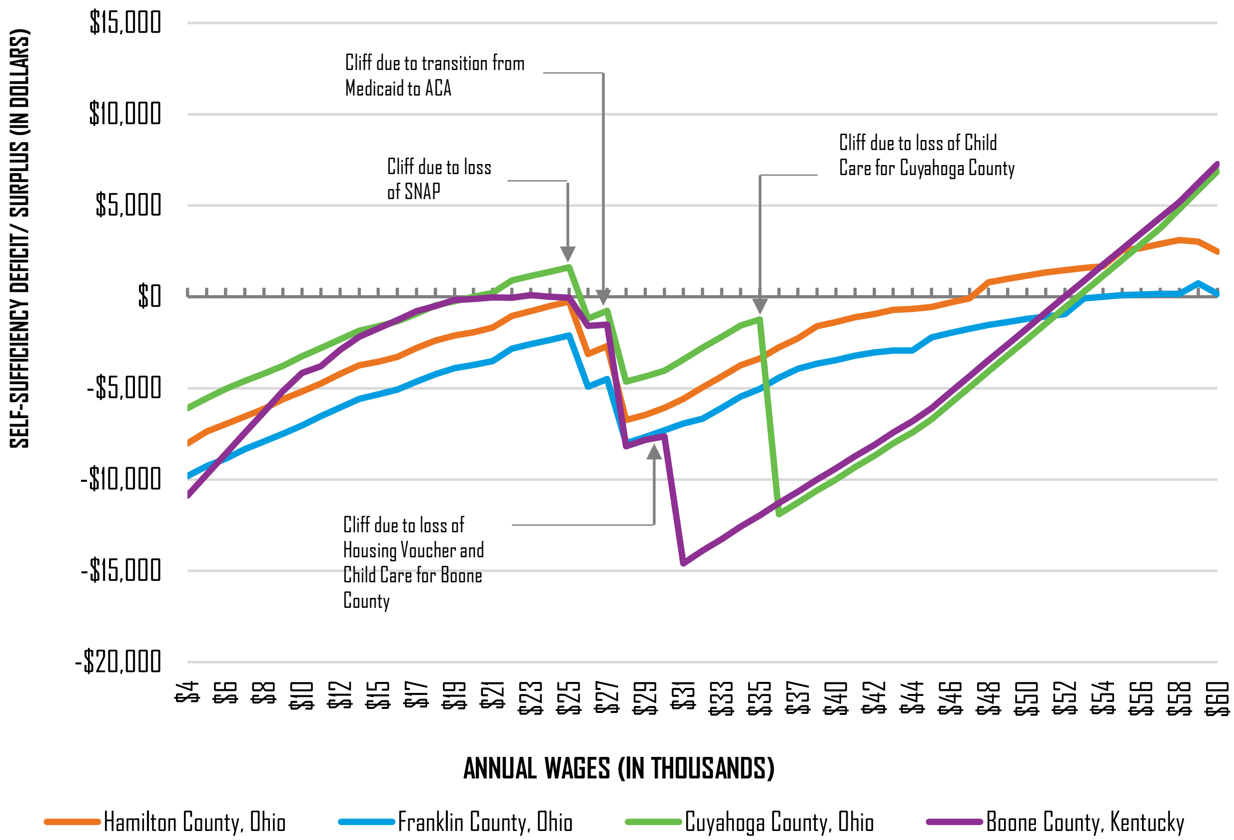
Figure 1 shows the county-specific difference in annual wages and self-sufficiency from $4,000 in earned annual wages up to $48,000 in earned annual wages (i.e. approximately 300 percent of the FPL) for a working mother with a preschooler. The pattern is similar for all counties until $21,000 where families in Boone County and Cuyahoga County start to experience differences. Hamilton and Franklin counties are relatively similar throughout the earned income ranges as shown. Boone and Cuyahoga counties have more restrictive regulations on Child Care Assistance and therefore have cliff effects experienced by working mothers at approximately $24,000 and $29,000 respectively. The Child Care assistance program in Hamilton and Franklin Counties allows an eligible household to be enrolled until 300 percent of the FPL. On the other hand, the child care assistance curtails at 165 percent for Boone County and 200 percent for Cuyahoga County, which results in a cliff due to a loss in child care assistance.

FIGURE 1 – COMPARATIVE ANALYSIS FOR A SINGLE MOTHER + 1 PRESCHOOLER WITH FULL SUBSIDIES



The cliff effects in the social assistance programs differ with respect to household size and geographic location. Perhaps not surprisingly, steeper cliffs can be noticed in the case of a single mother with a preschooler and an infant, as seen in Figure 2. In Cuyahoga County, a household of three with annual earned income from $19,760 to $26,000 can attain self-sufficiency, only if all the social assistances are fully utilized. Of the four counties, Hamilton County has one of the most equitable benefits curve with families having the ability to be nearly self-sufficient from $47,000 and up. A family of three in Franklin, Cuyahoga, and Boone County attains self-sufficiency around $52,000.

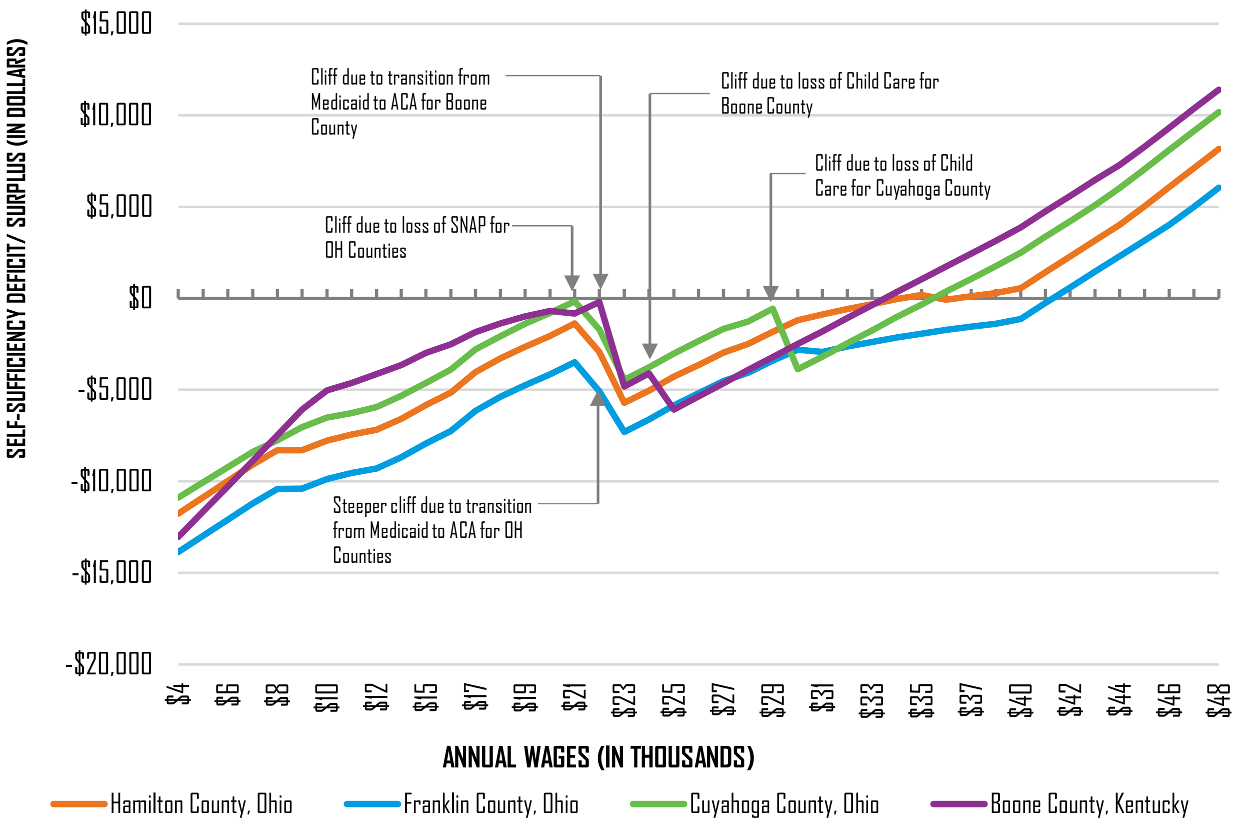
FIGURE 2 – COMPARATIVE ANALYSIS FOR A SINGLE MOTHER + 1 PRESCHOOLER + 1 INFANT WITH FULL SUBSIDIES



Of all the social assistance programs, Medicaid, Housing, and Child Care contributes the largest amount of benefits to total gross resources of low-income households. However, availability of housing assistance in Hamilton County is often very difficult. The wait-list for Section-8 and Housing Choice Vouchers in Hamilton County has been closed since December 2014, and there is no official information as to when the list will be reopened. Therefore, the analysis without housing assistance is carried out in order to understand the cliffs.

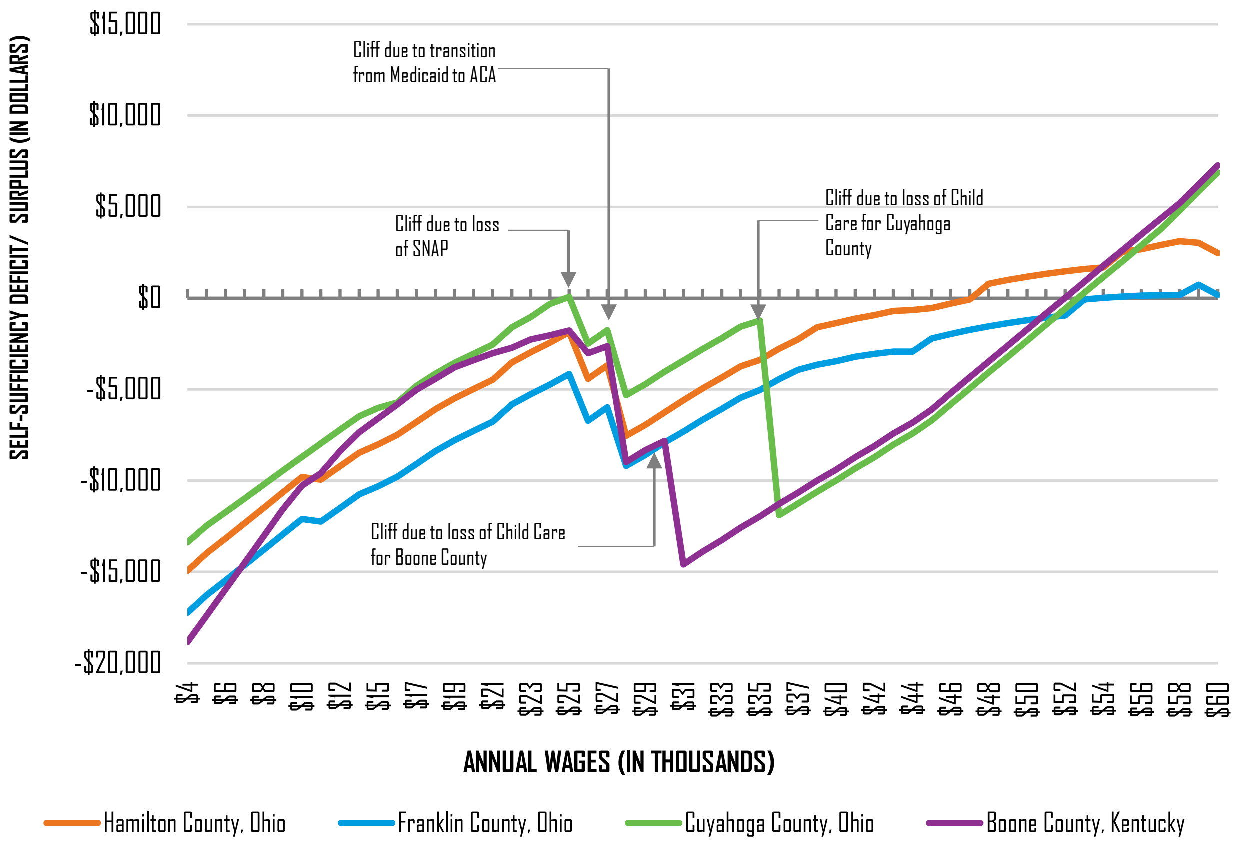
Figure 3 shows the cliffs for the four counties without the housing assistance for a single mother with a preschooler. Losing housing assistance makes it more challenging for a household of two to become self-sufficient, even when the rest of the social assistance is availed. Among the four counties, Boone County would attain self-sufficiency at the lowest point, at around $34,000. On the other hand, a comparable household in Franklin County would need earned annual wages of more than $41,000 to attain self-sufficiency. In case of Hamilton County, it would take nearly $40,000 of earned annual wages for a working mother and her child to be self-sufficient. Additionally, the self-sufficiency deficit increases due to the loss of housing assistance. For a low-income household ($4,000 of annual wage) in Hamilton County, the self-sufficiency deficit increases from approximately $5,000 to $12,000, as a result of losing housing assistance.

FIGURE 3 – COMPARATIVE ANALYSIS FOR A SINGLE MOTHER + 1 PRESCHOOLER WITH FULL SUBSIDIES (EXCEPT HOUSING)



The self-sufficiency deficit for low-income households increases as household size increases. For a low-income household ($4,000 of annual wage) comprised of a single mother, a preschooler, and an infant residing in Hamilton County, the self-sufficiency deficit increases approximately from $8,000 to $15,000 after removing housing assistance. A single mother with a preschooler and an infant in Hamilton County reaches self-sufficiency earlier compared to the rest of counties at around $47,500.

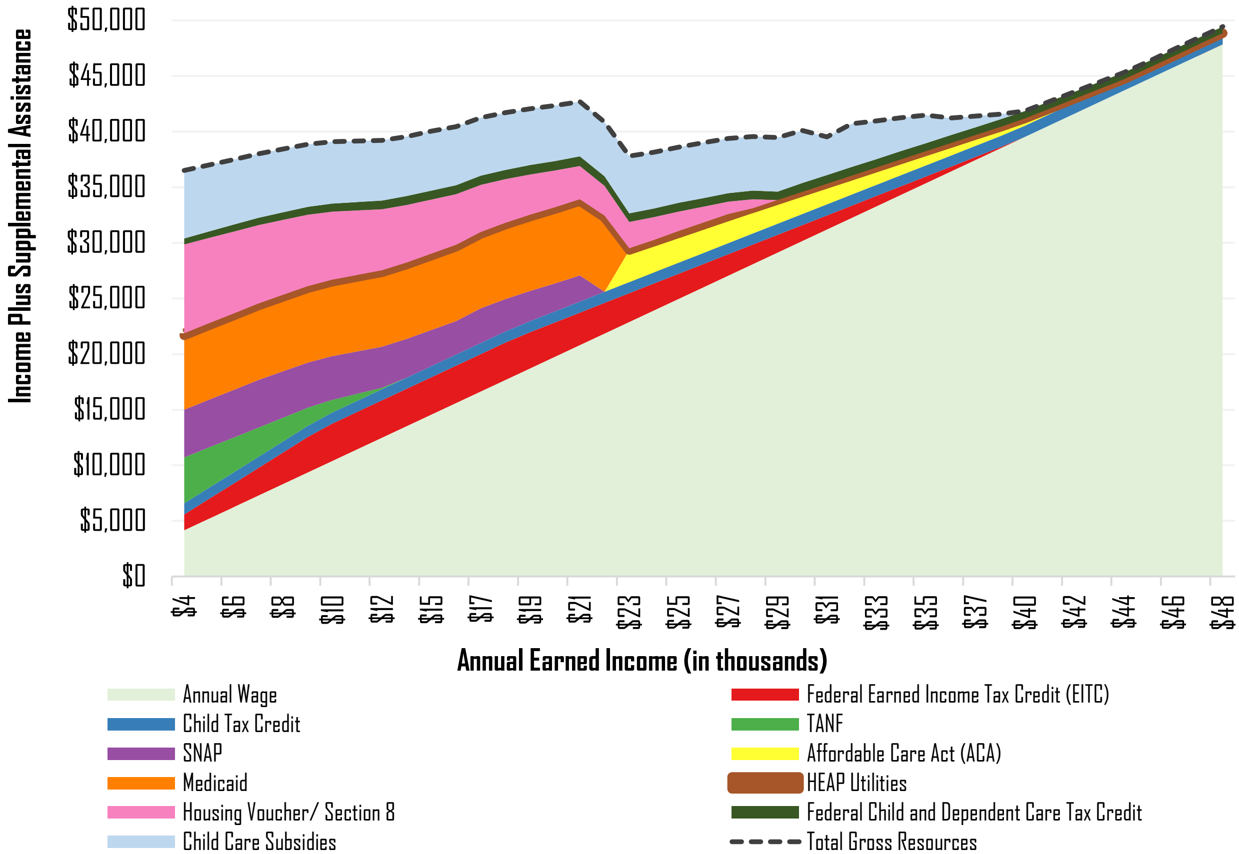
FIGURE 4 – COMPARATIVE ANALYSIS FOR A SINGLE MOTHER + 1 PRESCHOOLER + 1 INFANT WITH FULL SUBSIDIES (EXCEPT HOUSING)



From these four charts, some interactions emerge among the social assistance calculations which have real implications for low-income residents of these counties. An interesting finding is that in Hamilton County the cliff effects are not nearly as pronounced as they are in other counties. This reduces the number of individuals who potentially may have to forego career advancement in order to avoid reducing their total incomes in the short term. However, when Hamilton County is isolated, it becomes apparent that the amount of total earned income combined with social assistance received – in the case of a single parent with a preschooler who is working full-time--does not substantially change regardless of wages increasing from $10.50 an hour to $17.50 an hour.

Figure 5 illustrates the dynamics between total gross resources (the dotted line), earned wages, and the array of varying social assistances for a single mother with a preschooler in Hamilton County.

FIGURE 5 – GROSS INCOME ACROSS A RANGE OF EARNED INCOMES FOR SINGLE MOTHER + 1 PRESCHOOLER, HAMILTON COUNTY, OHIO 2015



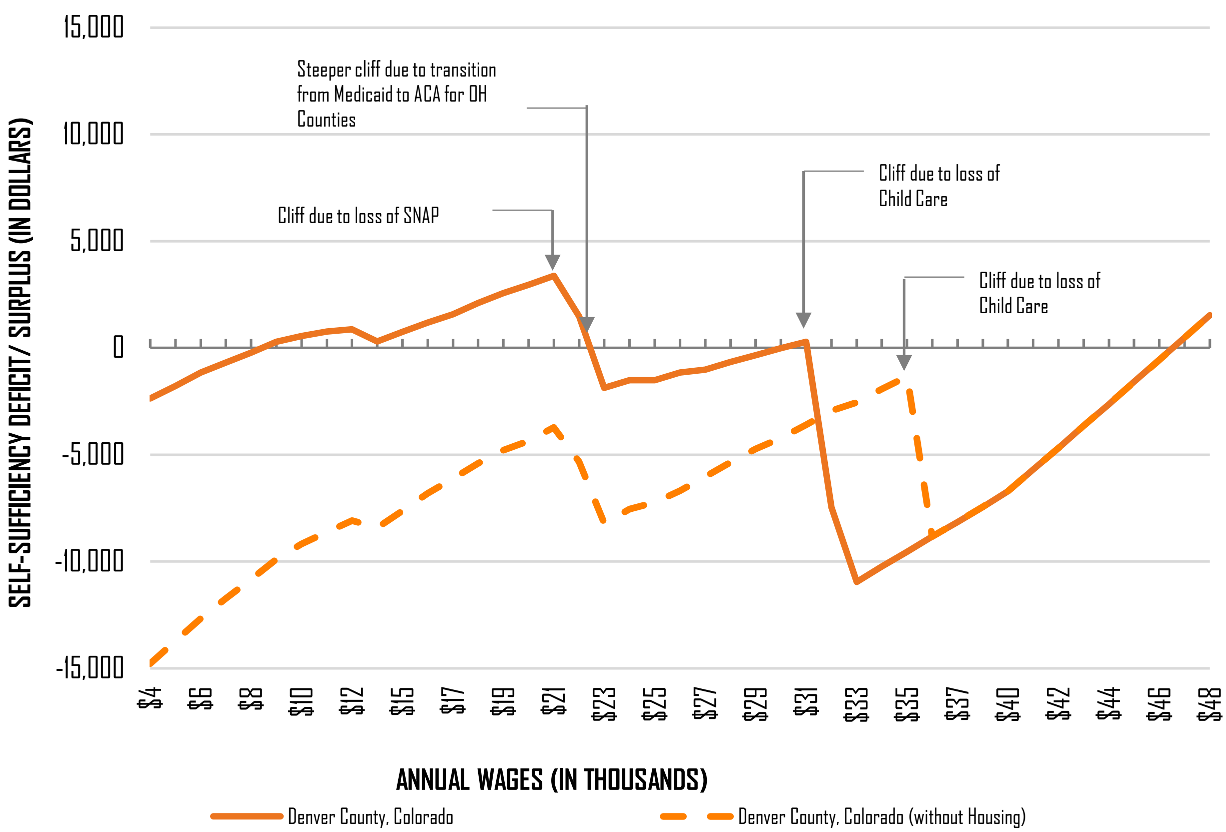
The potential disincentives to earn more money become more apparent when looking at the gross resources (the dotted line) in the graph above. Consider an example of a single mother with a preschooler, earning $24,960 (i.e. $12.00 per hour for full-time) annually in Hamilton County. Including her social assistance, her total gross resources was approximately $38,595 a year. If there was a raise of $0.50 per hour, putting earned income to $26,000 annually, her total gross resources will actually only increase to approximately $39,000. This is a net of a $405 increase *of total gross resources* resulting from an additional $1,040 of wages. This occurs because her social assistance benefits reduce based on higher earned income. However, when applying the idea of an earned income penalty, the single mother in our example is taxed approximately 65 percent of her income before factoring in state, local, and federal taxes.

Even more striking are the aggregate earned income penalty rates throughout the $16,000 and $40,000 annual earned incomes. On average, an individual would be taxed 85 percent for every additional $1,000 of earned income. If higher wages are associated with more hours worked or a more difficult level of work then an individual is likely not incentivized to earn more.

Due to the nature of organization management spanning from federal guidelines to state oversight and local or county regulations, examples of arbitrage or loopholes exist within social assistance programs. These are due to the fact that some social assistance programs use earned income as a measure of eligibility, while others consider a household's gross resources. Additionally, certain programs exclude other social assistances in their calculation.

If we look beyond the local situation, we can see similar patterns in Denver County, Colorado. This particularly locality was included because Colorado was one of the first states to decentralize the threshold decisions and place them at the county level. Figure 6 shows the situation in Denver County, CO, where an individual is better off financially if they forfeit their housing benefits between the earned incomes of approximately $31,000 and $37,000. This is due to how child care benefits are calculated. The value of child care benefits exceeds the value of the housing benefits, however if one chooses to keep receiving the housing benefits they are no longer eligible for child care benefits.

FIGURE 6 – DENVER COUNTY, COLORADO AND SOCIAL ASSISTANCE ARBITRAGE FOR A SINGLE MOTHER WITH A PRESCHOOLER



This example of a social assistance arbitrage was found during a cursory exploration of two additional geographies (New Jersey and Virginia). There are likely many other geographies including other counties in Colorado that suffer from a paradoxical or seemingly illogical public assistance eligibility calculations.

VII. INCOME SCENARIOS

SINGLE MOTHER + ONE PRESCHOOLER

A single mother with a preschooler earning an annual wage of $16,640 in Hamilton County is able to qualify for benefits worth a total $24,610, assuming the full amount for each program is received. This mother and her child, then, have a total gross income of $41,250, which is within $50 of the self-sufficiency level. The same family in Franklin County would be below the self-sufficiency standard by $1,680 because it is higher in Franklin compared to Hamilton County. On the contrary, the same family with same annual wage receiving all benefits would be over the self-sufficient level by $1,118 in Cuyahoga County and over by $2,396 in Boone County due to lower self-sufficiency amounts in those counties.

There are instances in which a household might not receive some or a portion of certain benefits. For example, the housing assistance is designed to help low-income families by providing them safe and sanitary housing, the need for housing vouchers often exceeds the availability. In such cases, a wait-list or lottery system is often used to determine recipients. Table 6 below shows the varying level of benefits received by a single mother with a preschooler making $16,000 a year in earned income. Hamilton County, Ohio is duplicated to show the impact of not being able to access Housing Assistance benefits.

TABLE 6 – SINGLE MOTHER + ONE PRESCHOOLER AT $16,640 ($8.00/HR.)

STATE	OHIO				KENTUCKY
County	**Hamilton**	**Hamilton**	**Franklin**	**Cuyahoga**	**Boone**
	No Housing	**With Housing**			
Federal Earned Income Tax Credit (EITC)	$3,359	$3,359	$3,359	$3,359	$3,359
Child Tax Credit	$1,000	$1,000	$1,000	$1,000	$1,000
TANF	$0	$0	$0	$0	$0
SNAP	$3,119	$3,119	$3,119	$3,119	$1,956
Medicaid	$6,675	$6,675	$6,675	$6,675	$8,394
ACA	$0	$0	$0	$0	$0
HEAP Utilities	$181	$181	$193	$204	$249
Housing Voucher (Section 8)	$0	$4,236	$4,740	$4,176	$4,236
Child Care Subsidy	$5,560	$5,211	$5,140	$4,355	$4,158
Federal Child and Dependent Care Tax Credit	$710	$828	$853	$846	$443
Total Benefits Received	**$20,604**	**$24,609**	**$25,079**	**$23,734**	**$23,795**
Total Gross Income	**$37,244**	**$41,249**	**$41,719**	**$40,374**	**$40,435**
Self-Sufficiency Standard	**$41,282**	**$41,282**	**$43,399**	**$39,256**	**$38,039**
Gross Income-Standard Gap	**$(4,038)**	**$(33)**	**$(1,680)**	**$1,118**	**$2,396**

Increases in annual earned income reduces eligibility for social assistance programs. A household with a single mother and a preschooler is no longer eligible for federally-funded SNAP once that mother makes more than $22,000, regardless of her location. Also, her household is no longer eligible for Medicaid, but qualifies for ACA. The Low Income Home Energy Assistance Program (LIHEAP) in Boone County is offered to households whose annual wage is at or below 130 percent of FPL. Therefore, a household of two with an annual wage of about $22,880 in Boone County cannot receive LIHEAP benefit. However, residents of Ohio are eligible to receive HEAP benefits until their annual wage is at or below 175 percent of FPL, or approximately $28,000.

At an annual wage of $22,880, even after receiving all the benefits, single-mother households with one child are not self-sufficient in any of the four study geographies. A household of two in Cuyahoga County or Boone County will be closer to self-sufficiency compared to Hamilton and Franklin Counties. In Hamilton County, a mother with a child earning annual wages of $22,880 receives $14,909 of total benefits. Her total gross income is $37,789, which is $3,493 below the self-sufficiency level in Hamilton County.

TABLE 7 – SINGLE MOTHER + ONE PRESCHOOLER AT $22,880 ($11.00/HR.)

STATE	OHIO				KENTUCKY
County	**Hamilton**	**Hamilton**	**Franklin**	**Cuyahoga**	**Boone**
	No Housing	**With Housing**			
Federal Earned Income Tax Credit (EITC)	$2,590	$2,590	$2,590	$2,590	$2,590
Child Tax Credit	$1,000	$1,000	$1,000	$1,000	$1,000
TANF	$0	$0	$0	$0	$0
SNAP	$0	$0	$0	$0	$0
Medicaid	$0	$0	$0	$0	$0
ACA	$2,872	$2,872	$3,449	$2,928	$3,088
HEAP Utilities	$166	$166	$177	$187	$0
Housing Voucher (Section 8)	$0	$2,364	$2,868	$2,304	$2,364
Child Care Subsidy	$5,344	$5,140	$5,067	$4,355	$2,857
Federal Child and Dependent Care Tax Credit	$714	$777	$800	$771	$807
Total Benefits Received	**$12,686**	**$14,909**	**$15,951**	**$14,135**	**$12,706**
Total Gross Income	**$35,566**	**$37,789**	**$38,831**	**$37,015**	**$35,586**
Self-Sufficiency Standard	**$41,282**	**$41,282**	**$43,399**	**$39,256**	**$38,039**
Gross Income-Standard Gap	**$(5,716)**	**$(3,493)**	**$(4,568)**	**$(2,241)**	**$(2,453)**

A single mother with a preschooler working full-time at $19.50 per hour would receive fewer social assistance benefits as she would not be eligible due to her higher annual earned income. At $40,560 annual earned income, a household of two residing in any of the four counties can receive the Child Tax Credit, ACA, and Federal Child and Dependent Care Tax Credit. Even after receiving fewer benefits the household would be moderately self-sufficient, except in Franklin County due to a higher self-sufficiency level due to cost of living.

As the income limit for housing assistance for two-person household in Hamilton County is $28,500, therefore, a single mother with preschooler is ineligible for housing assistance.[19]

[19] Considering very low (50%) Income Limits.
U.S. Department of Housing and Urban Development Economic and Market Analysis Division, "FY 2015 Income Limits Documentation System -- Summary for Hamilton County, Ohio,"

TABLE 8 – SINGLE MOTHER + ONE PRESCHOOLER AT $40,560 ($19.50/HR.)

STATE	OHIO				KENTUCKY
County	**Hamilton**	**Hamilton**	**Franklin**	**Cuyahoga**	**Boone**
	No Housing	**With Housing**			
Federal Earned Income Tax Credit (EITC)	$0	$0	$0	$0	$0
Child Tax Credit	$1,000	$1,000	$1,000	$1,000	$1,000
TANF	$0	$0	$0	$0	$0
SNAP	$0	$0	$0	$0	$0
Medicaid	$0	$0	$0	$0	$0
ACA	$495	$495	$929	$409	$568
HEAP Utilities	$0	$0	$0	$0	$0
Housing Voucher (Section 8)	$0	$0	$0	$0	$0
Child Care Subsidy	$0	$0	$0	$0	$0
Federal Child and Dependent Care Tax Credit	$660	$660	$660	$660	$660
Total Benefits Received	**$2,155**	**$2,155**	**$2,589**	**$2,069**	**$2,228**
Total Gross Income	**$42,715**	**$42,715**	**$43,149**	**$42,629**	**$42,788**
Self-Sufficiency Standard	**$41,282**	**$41,282**	**$43,399**	**$39,256**	**$38,039**
Gross Income-Standard Gap	**$1,433**	**$1,433**	**$(250)**	**$3,373**	**$4,749**

SINGLE MOTHER + ONE PRESCHOOLER + ONE INFANT

There is a common belief that low-income families with more children receive more social assistance. However, a household with an additional infant has a higher cost of living, and therefore experiences additional challenges to achieve self-sufficiency. The following scenarios illustrate changes in social assistance at three different income levels.

A single mother working fulltime with a preschooler and an infant, with annual earned income of $16,640, is eligible to receive all social assistance benefits in the four study area counties. Even with all of the benefits, however, this three-member household is not self-sufficient in any of the geographies. This implies that a single mother of two has to earn a higher income to be self-sufficient. A single mother with a preschooler and an infant residing in Hamilton County, making an annual wage of $16,640 is eligible to receive benefits that total$41,612. As a result, her total gross income is $58,252, which is below self-sufficiency standard by $2,797. Additionally, due to the unavailability of housing assistance in Hamilton County, the three-member household's self-sufficiency deficit could be as high as $6,795 when receiving all other eligible social assistance.

The same family would experience a larger self-sufficiency deficit in Franklin County compared to Hamilton County because the self-sufficiency level is higher in Franklin than in Hamilton County. A single mother of a preschooler and an infant residing in Franklin County is eligible to receive benefits totaling $42,072 including housing assistance. Therefore, the total gross income is $58,712. Since, the self-sufficiency standard for Franklin County is $63,355, as a result, the household lacks $4,643 to become self-sufficient.

The same family would be closer to the self-sufficiency levels in Cuyahoga and Boone County. After receiving all benefits, a single mother-headed household of three in Cuyahoga is $919 below self-sufficiency and a household in Boone County would be $789 below self-sufficiency.

TABLE 9 – SINGLE MOTHER + ONE PRESCHOOLER + ONE INFANT AT $16,640 ($8.00/HR.)

STATE	OHIO				KENTUCKY
County	**Hamilton**	**Hamilton**	**Franklin**	**Cuyahoga**	**Boone**
	No Housing	**With Housing**			
Federal Earned Income Tax Credit (EITC)	$5,548	$5,548	$5,548	$5,548	$5,548
Child Tax Credit	$2,000	$2,000	$2,000	$2,000	$2,000
TANF	$0	$0	$0	$0	$0
SNAP	$4,614	$4,614	$4,614	$4,614	$4,476
Medicaid	$8,898	$8,898	$8,898	$8,898	$11,461
ACA	$0	$0	$0	$0	$0
HEAP Utilities	$190	$190	$202	$214	$261
Housing Voucher (Section 8)	$0	$4,236	$4,740	$4,176	$4,236
Child Care Subsidy	$15,588	$15,228	$15,144	$12,710	$10,398
Federal Child and Dependent Care Tax Credit	$775	$898	$926	$915	$443
Total Benefits Received	**$37,613**	**$41,612**	**$42,072**	**$39,075**	**$38,823**
Total Gross Income	**$54,253**	**$58,252**	**$58,712**	**$55,715**	**$55,463**
Self-Sufficiency Standard	**$61,048**	**$61,048**	**$63,355**	**$56,634**	**$56,252**
Gross Income-Standard Gap	**$(6,795)**	**$(2,796)**	**$(4,643)**	**$(919)**	**$(789)**

A single mother of two in Hamilton County earning $22,880 annually is eligible to receive benefits worth $37,382. As a result, a total gross income of $60,262 is received annually, which is just below the self-sufficiency standard by $786. Additionally, if the $2,364 for housing assistance is not available to her, total benefits decrease to $35,200, which further drops the self-sufficiency deficit to $2,968.

In Franklin County, even with similar amount of social assistance (including housing assistance) as Hamilton County, a household of three would be below self-sufficiency level by $2,578. The same household would be noticeably better in Cuyahoga and Boone Counties. There, the same household of three is self-sufficient by $1,146 in Cuyahoga County and in by $98 in Boone County.

TABLE 10 – SINGLE MOTHER + ONE PRESCHOOLER + ONE INFANT AT $22,880 ($11.00/HR.)

STATE	OHIO				KENTUCKY
County	**Hamilton**	**Hamilton**	**Franklin**	**Cuyahoga**	**Boone**
	No Housing	**With Housing**			
Federal Earned Income Tax Credit (EITC)	$4,534	$4,534	$4,534	$4,534	$4,534
Child Tax Credit	$2,000	$2,000	$2,000	$2,000	$2,000
TANF	$0	$0	$0	$0	$0
SNAP	$3,660	$3,660	$3,660	$3,660	$2,784
Medicaid	$8,898	$8,898	$8,898	$8,898	$11,461
ACA	$0	$0	$0	$0	$0
HEAP Utilities	$177	$177	$189	$200	$244
Housing Voucher (Section 8)	$0	$2,364	$2,868	$2,304	$2,364
Child Care Subsidy	$15,060	$14,796	$14,796	$12,362	$9,357
Federal Child and Dependent Care Tax Credit	$870	$952	$952	$942	$726
Total Benefits Received	**$35,199**	**$37,381**	**$37,897**	**$34,900**	**$33,470**
Total Gross Income	**$58,079**	**$60,261**	**$60,777**	**$57,780**	**$56,350**
Self-Sufficiency Standard	**$61,048**	**$61,048**	**$63,355**	**$56,634**	**$56,252**
Gross Income-Standard Gap	**$(2,969)**	**$(787)**	**$(2,578)**	**$1,146**	**$98**

At an annual wage of $40,560, a single mother of one preschooler and an infant residing in Hamilton or Franklin County is eligible for the Federal EITC, Child Tax Credit, Child Care Subsidy and Federal Child and Dependent Care Tax Credit. However, the same household in Cuyahoga or Boone County is eligible for all the benefits mentioned previously, except Child Care Subsidy. The income limit for Child Care Subsidy in Cuyahoga County is 200 percent of FPL, whereas, in Boone County it is 165 percent of FPL.

It is challenging for a single mother of two to become self-sufficient in any of the four focus counties, even after receiving full amount of benefits in each category. A household of three residing in Hamilton County, having $40,560 as an annual wage can receive a total benefit of $19,368. As a result, the total gross income of that household is $59,928, which is below self-sufficiency standard by $1,120. Since, the income limit for Housing Assistance for a three-person household in Hamilton County is $32,050, the household earning $40,560 annually is ineligible for housing assistance.[20]

[20] Ibid.

A household of three in Franklin County can receive benefits worth $19,582, which results in a total gross income of $60,142, which is below self-sufficiency by $3,214. Due to unavailability of Child Care Subsidy, the self-sufficiency deficit is greater for Cuyahoga County at $9,324 and in Boone County's at $8,720.

TABLE 11 – SINGLE MOTHER + ONE PRESCHOOLER + ONE INFANT AT $40,560 ($19.50/HR.)

STATE	OHIO				KENTUCKY
County	Hamilton	Hamilton	Franklin	Cuyahoga	Boone
	No Housing	With Housing			
Federal Earned Income Tax Credit (EITC)	$815	$815	$815	$815	$815
Child Tax Credit	$2,000	$2,000	$2,000	$2,000	$2,000
TANF	$0	$0	$0	$0	$0
SNAP	$0	$0	$0	$0	$0
Medicaid	$0	$0	$0	$0	$0
ACA	$2,392	$2,392	$3,036	$2,615	$2,837
HEAP Utilities	$0	$0	$0	$0	$0
Housing Voucher (Section 8)	$0	$0	$0	$0	$0
Child Care Subsidy	$13,116	$13,116	$12,564	$0	$0
Federal Child and Dependent Care Tax Credit	$1,045	$1,045	$1,167	$1,320	$1,320
Total Benefits Received	**$19,368**	**$19,368**	**$19,582**	**$6,750**	**$6,972**
Total Gross Income	**$59,928**	**$59,928**	**$60,142**	**$47,310**	**$47,532**
Self-Sufficiency Standard	**$61,048**	**$61,048**	**$63,355**	**$56,634**	**$56,252**
Gross Income-Standard Gap	**$(1,120)**	**$(1,120)**	**$(3,213)**	**$(9,324)**	**$(8,720)**

VIII. CONCLUSION

Poverty is an issue that affects tens of thousands of people throughout Hamilton County, Ohio. Nearly one in five females in the county are at, or under, the poverty threshold. However, poverty does not begin to tell the story of what women, mothers, and households endure even if they are above the poverty line. Economic self-sufficiency is a measure that helps determine whether or not a household has the financial capabilities to pay bills, purchase food, pay for child care, and pay medical expenses as well as a number of other burdens. This amount is approximately two-and-a-half times the poverty amount and takes into account the number of people in a household as well as their local residence. Ultimately, the current policies to aid and assist individuals to become economically self-sufficient provide little to no incentives for individuals to invest in education, workforce development, or means of career mobility.

Households currently receiving social assistance are subject to navigating a maze of program interdependencies and varying rules. Some of these interdependencies are that certain programs include or make exempt other forms of assistance or earned income. This can result in arbitrage opportunities (demonstrated by the Colorado example) whereby giving up one social assistance, causes others to increase. These intricacies are inefficient and can lead to overburdened citizens who now must spend time learning every detail of their aide in order to maximize benefits. Additionally, individuals may be required to go in-person to the benefits office while still being required to hold a part- or full-time job. These visits, occurring during regular business hours, make working those days potentially impossible. Since many benefits have employment or a job search as a requirement for eligibility, this coordination is very burdensome.

The disincentives in investing in education or career mobility are clear: a household of two, for example, does not see appreciable returns to investment until they are making over $40,000 a year in earned income. This range of $9 to $20 an hour for full-time work may be overwhelmingly exclusionary, especially if a single mother does not have more than a high school education. The incentives to continuing education at the expense of being out of the workforce and taking on debt are limited and not always positive.

Lastly, policymakers need to seriously examine the interactions and eligibility requirements of social assistance programs. Additionally, the calculation of benefits is burdensome and often obfuscated by state or federal legislative documents that can be difficult to find or difficult to understand. The current policy does not act as a catalyst for propelling a household from poverty to economic self-sufficiency. Instead, the policies create a myriad of traps and sinkholes that keep individuals from being self-sufficient until they exceed $20 an hour.

IX. APPENDIX

A. AFFORDABLE CARE ACT (ACA) & MEDICAID

Under Affordable Care Act provision, some U.S. states have adopted the policy to expand the health care coverage by providing Medicaid to low-income adults and children. Ohio, Kentucky, and Colorado, have expanded coverage to low-income adults. Table 12 indicates the Medicaid income limit by state for adults and children.

TABLE 12– MEDICAID INCOME ELIGIBILITY STANDARDS (IN FPL)[21]

	Children		Adults
State	**Age 0-1**	**Age 1-5**	**Age 18+**
Ohio	206%	206%	133%
Kentucky	195%	159%	133%
Colorado	142%	142%	133%

For the purpose of analysis, estimates of Medicaid spending per enrollee from Kaiser Commission on Medicaid and the Uninsured and Urban Institute are used. The dollars are adjusted for inflation to 2015 values.

TABLE 13 – MEDICAID SPENDING PER ENROLLEE BY STATE, 2015[22]

State	Adult	Child	Single Mother + 1 Child	Single Mother + 2 Child
Ohio	$4,452	$2,223	$6,675	$8,898
Kentucky	$5,326	$3,067	$8,393	$11,460
Colorado	$3,655	$2,361	$6,016	$8,377

The federal government provides financial assistance in the form of subsidies to the beneficiary who purchases health coverage through the Health Insurance Marketplace. There are two type of health insurance subsidies available through the Marketplace – the premium tax credit and the cost-sharing subsidy. The subsidy received depends on the family size, income, and geographic location. The premium tax credit is taken into consideration for the purpose of this analysis. The premium tax credit helps lower an individual's monthly income and it is available to an individual whose family households with incomes between 100 percent and 400 percent of FPL. The beneficiary can choose to have the tax credit paid directly to the insurance company or receive a lump sum tax credit while filing taxes in the following year.

[21] "Medicaid and CHIP Eligibility Levels," *Medicaid.gov. Keeping America Healthy*
[22] The Henry J. Kaiser Family Foundation, "Medicaid Spending per Enrollee (Full or Partial Benefit)"

B. HOME ENERGY ASSISTANCE PROGRAM (HEAP) - UTILITIES

Home Energy Assistance Program provides assistance to low-income households by helping them pay their home energy bill. The amount of the benefit is determined based upon the number of people in the household, income limit, the home's heating source, and the region of residence. Table 14 represents the maximum income limit by household size in each state.

TABLE 14 – HEAP INCOME LIMITS

State	Maximum Income Level (Per Year)	
	2 Person	3 Person
Ohio[23]	$28,035	$35,280
Kentucky[24]	$20,712	$26,124
Colorado[25]	$24,030	$30,240

C. HOUSING VOUCHER/ SECTION 8

The University of Washington's Self-Sufficiency Standard report assumes that families with one or two children requires two bedrooms.[26] Therefore, for the purpose of this analysis, two-bedroom rent was taken into consideration in both scenarios 1) a single mother with a preschooler and 2) a single mother with a preschooler and an infant. The following table indicates the income limit and corresponding monthly rent for two-bedroom unit in each county. A very low (50 percent or less of the area's median family income) income limit is taken into consideration.

TABLE 15 – HOUSING VOUCHER (SECTION 8) INCOME LIMITS AND MONTHLY RENTS, 2015[27]

State	County	Maximum Income Limit		Monthly Fair Market Rent
		2 Person	3 Person	
Ohio	Hamilton	$28,500	$32,050	$769
	Franklin	$28,400	$31,950	$811
	Cuyahoga	$26,450	$29,750	$764
Kentucky	Boone	$28,500	$32,050	$769
Colorado	Denver	$32,000	$36,000	$1,156
	El Paso	$29,200	$32,850	$856

[23] Ohio Development Services Agency, "Home Energy Assistance Program (HEAP)."
[24] Kentucky Cabinet for Health and Family Services, "Kentucky: Cabinet for Health and Family Services - LIHEAP," *The Low Income Home Energy Assistance Program (LIHEAP)*
[25]Benefits.Gov, "Energy Assistance | Benefits.gov," *Energy Assistance*
[26] Center for Women's Welfare University of Washington, "Ohio | Center for Women's Welfare," *Ohio*
[27] U.S. Department of Housing and Urban Development, "DATA SETS | HUD USER," *DATA SETS | HUD USER*

D. Child Care Assistance

The Child Care Assistance program is administered at the county level, with the intent to assist low-income families with children by subsidizing child care costs. In order to qualify, a household must meet state and county requirements, although typically, the FPL guidelines are used to determine eligibility. General qualifications include gross income limits, occupation of the head of the household, and child eligibility. Additionally, some counties have different income limit eligibility to enrolled or retain the child care assistance. The following table indicates the maximum income limit for new and existing applicants in various counties.

Table 16 – Child Care Assistance Income Limits (FPL), 2015

State	County/*City*	Maximum Income Limit	
		New Applicants	Existing Applicants
Ohio	Hamilton[28]	130%	300%
	Franklin[29]	130%	300%
	Cuyahoga[30]	125%	200%
Kentucky	Boone[31]	150%	165%
Colorado	Denver[32]	225%	
	El Paso[33]	165%	200%

[28] Hamilton County Job & Family Services, "Determine Eligibility & Income Guidelines | Hamilton County Job & Family Services"
[29] Franklin County Job & Family Services, "Franklin County Job & Family Services - Program Information," *Child Care Eligibility*
[30] Cuyahoga County, "Child Care Assistance Program - Cuyahoga Job & Family Services," *Cuyahoga County Job & Family Services*
[31] Child Care Council of Kentucky, "Child Care Assistance Program | Child Care Council of Kentucky"
[32] Colorado Department of Human Services, "Colorado Office of Early Childhood," *Colorado Child Care Assistance Program: Information for Parents and Caregivers*
[33] Ibid.

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