

Profiling the Disincentives & Opportunity Costs for Low-Wage Earners in Clark County, Ohio

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Executive Summary

Framing the Issue

Many individuals across the United States are classified as low-income, or low-wage earners. Households, whether comprised of individuals or families, in some cases are not self-sufficient and struggle to make ends meet financially, even if employed. Public assistance programs help alleviate these existing disparities by providing these individuals with the means to better their situations, and attain incomes at or above the self-sufficient equivalency. **Self-sufficiency** in this report is defined as the level of annual earned income needed to provide for a household's basic needs, including housing, food, transportation, childcare, and healthcare without accessing aid from public assistance programs.¹

Unfortunately, many households are not only low-income, but also fall below the Federal Poverty Level (FPL) and rely heavily on public assistance programs. On average, self-sufficiency amounts are approximately 200 to 300 percent of the federal poverty level. Clark County, Ohio, like many regions in the United States, is affected by poverty. However, there are many federal, state, and local programs available for low-income families to help alleviate the financial challenges they face.

There are many caveats for households receiving public assistance benefits.

- Some public assistance programs such as TANF (cash assistance) and SNAP (food assistance) require individuals to participate in work activities in order to receive benefits.
 - This aspect may be more difficult for certain household types, such as single-parent households, as the work requirement persists regardless of child-related events or illness.
- Additionally, visits to the benefits office in person are occasionally required and it is sometimes difficult for individuals to visit during business hours while also fulfilling public assistance program work requirements.

Under certain conditions, unfortunately, the current public assistance program structure creates economic disincentives to work and opportunity costs for low-wage earners.

- **Opportunity costs** in this report are defined as some type of benefit given up when another is chosen, and include:

¹ Self-sufficiency standards cover the bare-minimum needs for households, and therefore do not include expenses such as internet, television, and telephone, that are otherwise considered 'luxury' items. The annual earned income required to meet basic needs for a household varies depending on the household size and composition. Additionally, the self-sufficiency standard accounts for federal and state income taxes, payroll taxes, and other state and local taxes where applicable.

- Applying and re-applying to various public assistance programs takes time that individuals could otherwise spend working or with their loved ones.
 - Transportation for those who do not have cars is also oftentimes a barrier for individuals who need to travel to the Clark County Department of Job and Family Services (CCDJFS) or to work, as public transportation ride times are often long.
- Oftentimes, in order for an individual to increase his or her level of earned income, further education or training is required. However, attending school or training takes time away from working and earning money, causing decreased personal investment in education or career mobility. In other words, individuals may not be willing to accrue additional student loan debt, while working fewer hours and thus earning less, while still trying to maintain public assistance benefits.
 - This impact is further deepened for households with children, having to manage child care, a child's sick days, and snow days, for example.
 - Additionally, large increases in annual earned income may not always improve a household's total gross resources² at a similar rate. This further causes disincentives for households to increase their annual earnings, either by furthering their education/training or accepting a raise.
- **Economic disincentives to work** include what are called income cliff effects. **Income cliff effects** occur at certain earned income thresholds when the individual becomes ineligible for assistance due to increased annual earnings. In some cases, these cliff effects cause an individual's total gross resources to fall, even though they are earning more annually.
 - This creates a perverse incentive for these individuals, as they may recognize that they are better off keeping annual earnings at a lower level rather than increase their wages and risk losing all or a portion of the financial resources received through public assistance programs.
 - Households act rationally in these situations, in that they do not want to give up guaranteed public assistance benefits to earn additional income and attempt to improve their situations. When their annual earnings are lower, public assistance benefits are guaranteed, and there is little incentive (and even disincentives, as with cliff effects) to increase their earnings.

These disincentives negatively impact the labor market and deter individuals from bettering their financial situation by accepting a promotion, working more hours, or

² Total gross resources are defined as the household's annual earned income or wages, plus all public assistance benefits the household receives. In this report, full benefits are assumed, meaning that each household receives the maximum amount of benefits that they are eligible for.

investing in education or training. Public assistance programs are designed to support low-income individuals and families who need the assistance. Therefore, the income cliff effect and disincentives are especially important issues to address as they cause these programs to run inefficiently and negate the goal of the programs, which is to assist in lifting people out of poverty.

The poverty rate in Clark County is 17.9 percent, which is slightly higher than the statewide level of 15.4 percent. Additionally, in Ohio, the labor force participation rate for individuals 16 years and over is 63.3 percent. Clark County, in comparison, has a labor force participation rate of 60.5 percent for those 16 and over.³

The Greater Springfield Chamber of Commerce has commissioned the Economics Center to conduct an analysis to observe these economic disincentives to work in the local labor market, as well as assistance program inefficiencies for low-wage earners in Clark County. By eliminating these labor market inefficiencies public agencies could improve the return on public investment in human capital and thereby economic development.

Federal Poverty Level and Self-Sufficiency

The two primary indicators used in this report are the Federal Poverty Level (FPL) and the Self-Sufficiency Standard. The **FPL** is a measure of annual earned income used to determine eligibility for certain public assistance programs and benefits, nationwide. The FPL does not take into account different prices by geography (housing, specifically) or the composition of a household (whether a two-person household is two working adults or a single parent and a child). For these reasons, the self-sufficiency standard must also be analyzed.⁴

The concept of **Self-Sufficiency** is defined as the level of annual earnings necessary to provide for a family's basic needs, without accessing public assistance programs. The standard varies depending on a household's size, composition, and geographic price differences.

- Approximately 74 percent of the 54,681 households in Clark County are self-sufficient. The remaining 26 percent do not have self-sufficient levels of earned income for their household composition.
- Sixteen percent of all households in Clark County are below the FPL for their respective household composition.

Case Study Examples

This analysis discusses the various tax credits and public assistance programs available to Clark County residents. Three household compositions receiving maximum public

³ Data provided by the United States Census Bureau.

⁴ As the FPL is a nation-wide standard and does not take into account household composition and does not distinguish the various costs of living across geographical areas in the US, the self-sufficiency standard is important to include when looking at overall household financial well-being.

assistance benefits⁵ were then compared to the respective self-sufficiency standard for the household's composition, across a range of annual earned incomes.⁶ Annual earned income ranged from each adult earning the State of Ohio's 2018 minimum wage of \$8.30 per hour to approximately 400 percent FPL, based on the household's composition.

- The tax credit and assistance programs included in this report are the Earned Income Tax Credit (EITC), Child and Dependent Care Tax Credit (CCDCTC), Child Tax Credit, Temporary Assistance for Needy Families (TANF), Child Care Assistance, Supplemental Nutrition Assistance Program (SNAP), the Affordable Care Act (ACA), Medicaid, Home Energy Assistance Program (HEAP), and Housing Assistance (Section 8).

The three Clark County household compositions used in this analysis include a two-adult household with one preschool-aged child and one school-aged child, a single-parent household with one preschool-aged child and one school-aged child, and a two adult household with no children.⁷

- For adults in each household, it was assumed that all were working full-time hours for 50 weeks in the year.
- The 2016 self-sufficiency standard for a two-adult household with one preschooler and one school-aged child was \$48,745. The 2016 self-sufficiency standard for a one-adult household with one preschooler and one school-aged child was \$39,626. And finally, the self-sufficiency level for a two adult household with no children, in 2016, was \$29,098.
- Each household had specific earned income limits for public assistance benefits phasing out, according to each public assistance program's eligibility requirements.⁸
 - In other words, for each household, the 138 percent FPL phase-out of adults' Medicaid eligibility occurs at different earned income thresholds, as FPL is based on household size.

⁵ This report assumes all three household examples are receiving the maximum benefits amount of every public assistance program that they are eligible for at the lowest level of earned income (the 2018 State of Ohio minimum wage at \$8.30 per hour).

⁶ The charts and graphs discussing each household example begin at minimum wage and end at each household compositions' 400 percent of the FPL. It is important to note, however, that in reality the household types could be earning income at any level between minimum wage and 400 percent FPL. Therefore, the figures represent ranges of income and should not be interpreted as each household compositions' actual starting and ending earned annual incomes, but rather as a range.

⁷ For this analysis, these three household compositions were assumed. In reality, many more household compositions exist in Clark County than what is described in this report.

⁸ As the public assistance phase-outs occur at specific percentages of the FPL, the earned incomes axes in the figures and graphs in this report may not be entirely consistent in terms of the rate of increase.

Cliff Effects and Disincentives to Work

Cliff effects occur at certain income thresholds when individuals become ineligible for various assistance programs as a result of increased annual earnings. In some cases, these cliff effects cause an individual's overall total gross resources to fall, even though they are earning more annually. Cliff effects negatively incentivize individuals to keep their annual earnings low, in order to keep full public assistance benefits or, in other words, disincentivize individuals from workforce development and career improvement. These cliff effects negatively impact the labor market and deter individuals from bettering their situation by accepting a promotion, working more hours, or increasing their level of education or training.

- To reach the same level of total gross resources as before cliff effects occur, households must increase their annual earned incomes/receive raises high enough to offset the loss of benefit dollars. Depending on the extent of the cliff effect, or how steep the cliff is, households may require a larger increase in annual earnings to attain the same level of total gross resources. The steeper the cliff, the higher the rise in annual earnings required.
- Large increases in annual earnings for most households have a lesser effect on the amount of total gross resources for full-time workers. In other words, large increases in annual earnings for most households do not mean that their total gross resources also increase, due to cliff effects experienced. This creates further disincentives for households to increase their annual earned income, as their total gross resources are not greatly improved. This stagnation in the household's total gross resources negates a substantial incentive for working adults to earn more annual income, especially if these raises would be associated with additional education or workforce training programs.

Two of the three household compositions examined in this report experience a cliff when the adult wage earners lose eligibility for Medicaid at 138 percent of FPL.⁹ This cliff effect decreases a household's amount of total gross resources and the household must increase their annual earnings to achieve the same level of pre-cliff effect total gross resources. Depending on the extent or steepness of the cliff, this necessary increase in annual earnings varies across the household compositions.

Households are disincentivized by this cliff effect and other disincentives to work, however, and realize that they are better off keeping their earnings at lower levels in order to keep public assistance eligibility and benefits (and therefore total gross resources at higher levels). Households act rationally, in that individuals would rather not give up guaranteed public assistance benefits, than try to improve their situation and advance in their career.

⁹ The household with 2 adults and no children does not experience a cliff effect, as their minimum wage income is already greater than 138% FPL. Therefore, the household never receives Medicaid aid, but rather is automatically enrolled in ACA.

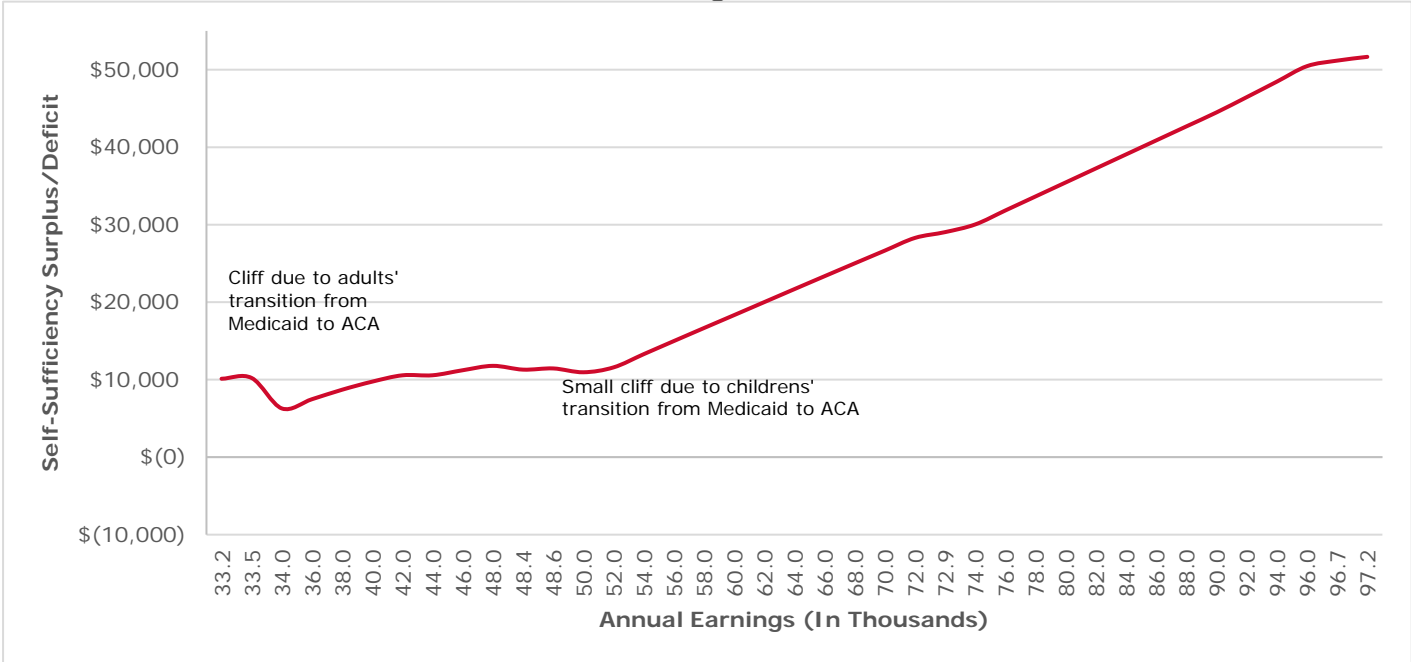
Household with 2 Adults, 1 Preschooler, and 1 School-aged Child

- Annual earnings for this four-person household composition ranged from \$33,200 (137% FPL) to \$97,200 (400% FPL). This equates to each adult working full-time hours at \$8.30 per hour, up to \$24.30 per hour.
- The 2016 self-sufficiency standard for the household was \$48,745.
- As shown in Figure 1, the household's only cliff occurs from the parents' transition to ACA when household earned income reaches 138 percent of the FPL, or \$33,534. The two children, however, continue to be enrolled in Medicaid until the household's annual earnings reach 200 percent of the FPL or \$48,600.
- To achieve a similar level of total gross resources before the adults' Medicaid benefits were lost (at \$33,534), the household would have to attain annual earnings of approximately \$42,000. Increasing annual earnings from \$33,534 to \$42,000 leaves the household with a similar level of total gross resources when factoring in the adults' Medicaid to ACA cliff effect.
 - In other words, the two-adult, two-child household would have to earn \$8,466 more annually to reach the same level of total gross resources above the self-sufficiency standard as before the ACA/Medicaid cliff.
 - An \$8,466 increase in annual earned income translates to each adult receiving an hourly raise of \$2.12 per hour (from \$8.38 to \$10.50) in order to offset the cliff effect.
- Full-time employment plus full utilization of public assistance benefits allows the household to have dollars in self-sufficiency surplus, or total gross resources above the equivalent self-sufficient level of earnings (\$48,745). Even with the cliff effects, the household never drops below the self-sufficient equivalency.
- There are disincentives to take a raise or earn more annually, as the household's total gross resources are not largely improved and may in fact decrease as annual earnings increase. For example, when annual earned income is increased from \$40,000 to \$50,000, the amount of total gross resources only rise by \$1,207. A \$10,000 increase in annual earnings only provides the household approximately \$1,000 more in total gross resources, which creates a substantial incentive for the adults to earn less annual income, as their total gross resources are relatively stagnant. This could mean turning down additional education or training opportunities, to keep annual earnings lower.
 - In other instances, total gross resources fall as annual earned income increases, as with the Medicaid/ACA cliff effect. For the two-adult, two-child household, increasing annual earnings by \$800 from \$33,200 to \$34,000, causes a decrease in total gross resources of \$3,832, due to the two adults losing Medicaid benefits. This scenario disincentivizes the adults to earn more annually, as the total gross resources are less than at

the lower earned income. In this Medicaid cliff effect example, the household loses more than \$4.50 (\$4.79 to be exact) in total gross resources for every \$1.00 gained in increased annual earnings.

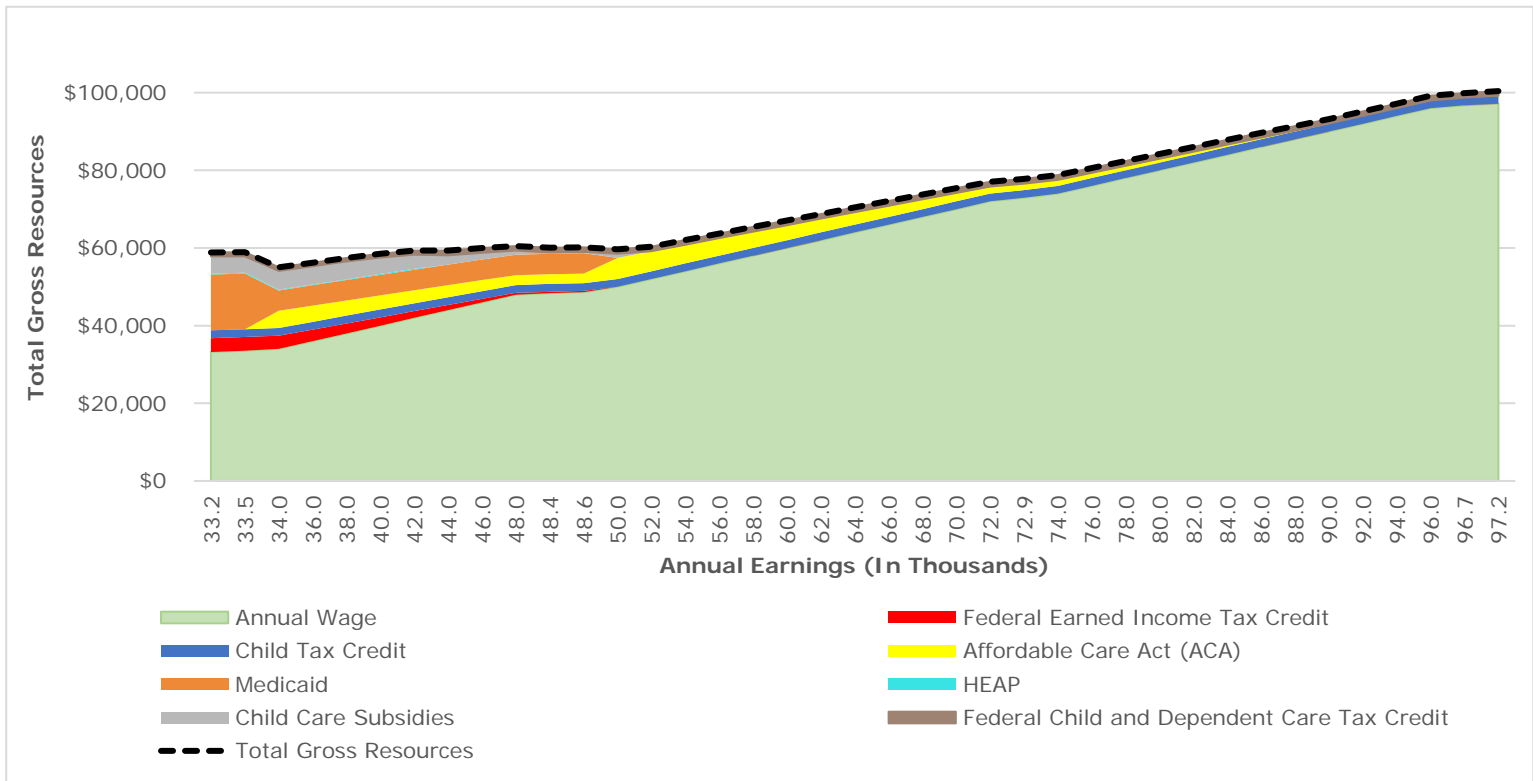
- When annual earnings increase from \$33,534 to \$33,535, the \$1.00 increase in earnings puts the household above the 138 percent FPL threshold. From this small increase in annual earnings, the two adults lose Medicaid eligibility and more than four thousand dollars are lost in public assistance benefits. This loss primarily stems from the adults losing Medicaid, but the household also receives fewer dollars from EITC, Child Care Assistance, HEAP, and the CCDCTC, as their earnings increase.
- Until annual earned income reaches approximately \$52,000, the household experiences stagnation in total gross resources relative to the growth rate of annual earned income. After the \$52,000 threshold is achieved, the household's total gross resources increase linearly with increases in annual earned income.
 - In other words, increasing annual earnings from \$33,200 to \$52,000 translates to each adult earning \$8.30 per hour to \$13.00 per hour. Until both adults earn \$13.00 (each) per hour, there is little incentive to increase their earnings via a promotion or raise, as their total gross resources remain relatively stagnant.
- Figure 2 details total gross resources and the income thresholds where certain public assistance benefits phase out. It can be seen when the two adults are employed at minimum wage, public assistance dollars make up almost half (44%) of the household's total gross resources.

Figure 1: Cliff Effects for a Household with 2 Adults, 1 Preschooler, and 1 School-aged child



Source: Economics Center calculations

Figure 2: Total Gross Resources Across a Range of Annual Earned Incomes for a Household with 2 Adults, 1 Preschooler, and 1 School-aged child



Source: Economics Center calculations

Household with 1 Adult, 1 Preschooler, and 1 School-aged child

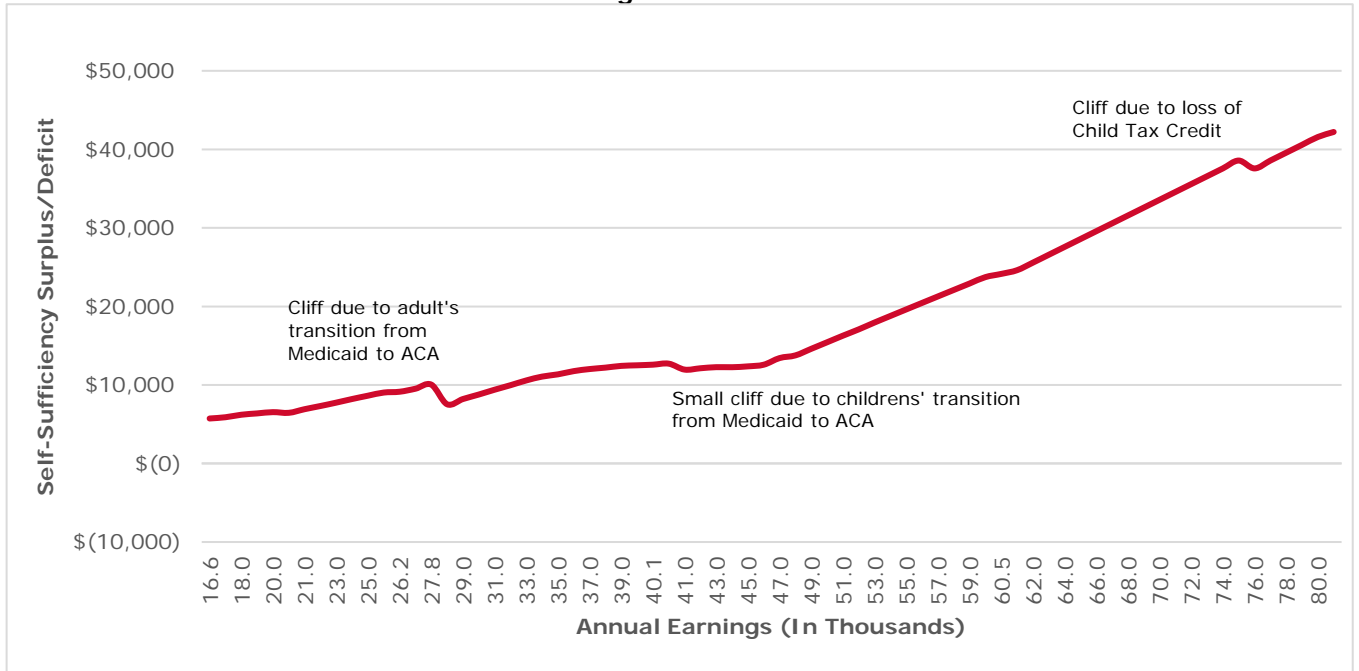
- Annual earnings for this three-person household composition ranged from \$16,600 (82% FPL) to \$80,640 (400% FPL). This equates to each adult working full-time hours at \$8.30 per hour, up to \$40.32 per hour.
- The self-sufficiency standard for the household was \$39,626 in 2016.
- Two cliffs occur with increases in annual earnings for this household composition. The first cliff occurs when the adult in the household transitions to ACA from Medicaid. There is an additional, albeit small, impact when the children lose Medicaid benefits at 200 percent FPL, as well. The second cliff effect occurs when the Child Tax Credit is lost as a result of household earnings exceeding \$75,000.
 - o To achieve a similar level of total gross resources after the parent’s Medicaid assistance is lost (when annual earnings exceed \$27,821), annual earned income would have to increase to \$32,000. This increase in

earnings of \$4,179 (from \$27,821 to \$32,000) equates to the full-time worker receiving a \$2.09 hourly raise.

- o An increase of \$2,000 in annual earnings is required to reach the same level of total gross resources after the cliff effect resulting from losing the Child Tax Credit, from \$75,000 to \$77,000.
- For this single-parent household, there are disincentives to take a raise or earn more annually, as total gross resources are not greatly improved, and may in fact decrease as annual earned income increases. For example, when annual earnings increase from \$25,000 to \$35,000, total gross resources for the household increase by \$2,718. A \$10,000 increase in annual earned income only gives the household nearly three thousand dollars more in total gross resources.
- Cliff effects cause decreases in the household's total gross resources as annual earnings increase. As shown in Figure 3, a \$1,000 increase in annual earnings from \$27,000 to \$28,000 decreases total gross resources available for the household by \$1,980 due to the adult's loss of Medicaid. In this scenario, for every \$1.00 gained in earned income, nearly \$2.00 of total gross resources is lost.
 - o Furthermore, a \$1.00 increase in annual earnings, from \$27,821 to \$27,822, puts the household above the 138 percent FPL Medicaid threshold. From this small increase in annual earnings, the household loses more than two thousand dollars in public assistance aid, primarily due to the adult losing Medicaid eligibility.
- Figure 4 details the household's total gross resources as well as the income thresholds where the various public assistance program aid phases out. At the lowest level of annual earned income for the single-parent household, two-thirds of the household's total gross resources comes from public assistance aid.
- Even after the Medicaid/ACA cliff, when the household's annual earned income is \$30,000 and increases to approximately \$45,000, there is little to no change in the household's total gross resources, which provides the workers with a disincentive to advance in their career or accept a raise. This \$15,000 increase in earnings only increases the household's total gross resources by \$3,588.
- Until earned income reaches approximately \$45,000, the household does not see large increases in total gross resources, when there are large increases in annual earnings. After the \$45,000 threshold is achieved, the household experiences more linear increases in total gross resources as earnings increase. From the minimum annual earnings of \$16,600 to \$45,000, the household's total gross resources do not greatly improve as earnings increase.
 - o These annual earnings amounts translate to the adult earning \$8.30 per hour (\$16,600 annually) to \$22.50 per hour (\$45,000 annually).

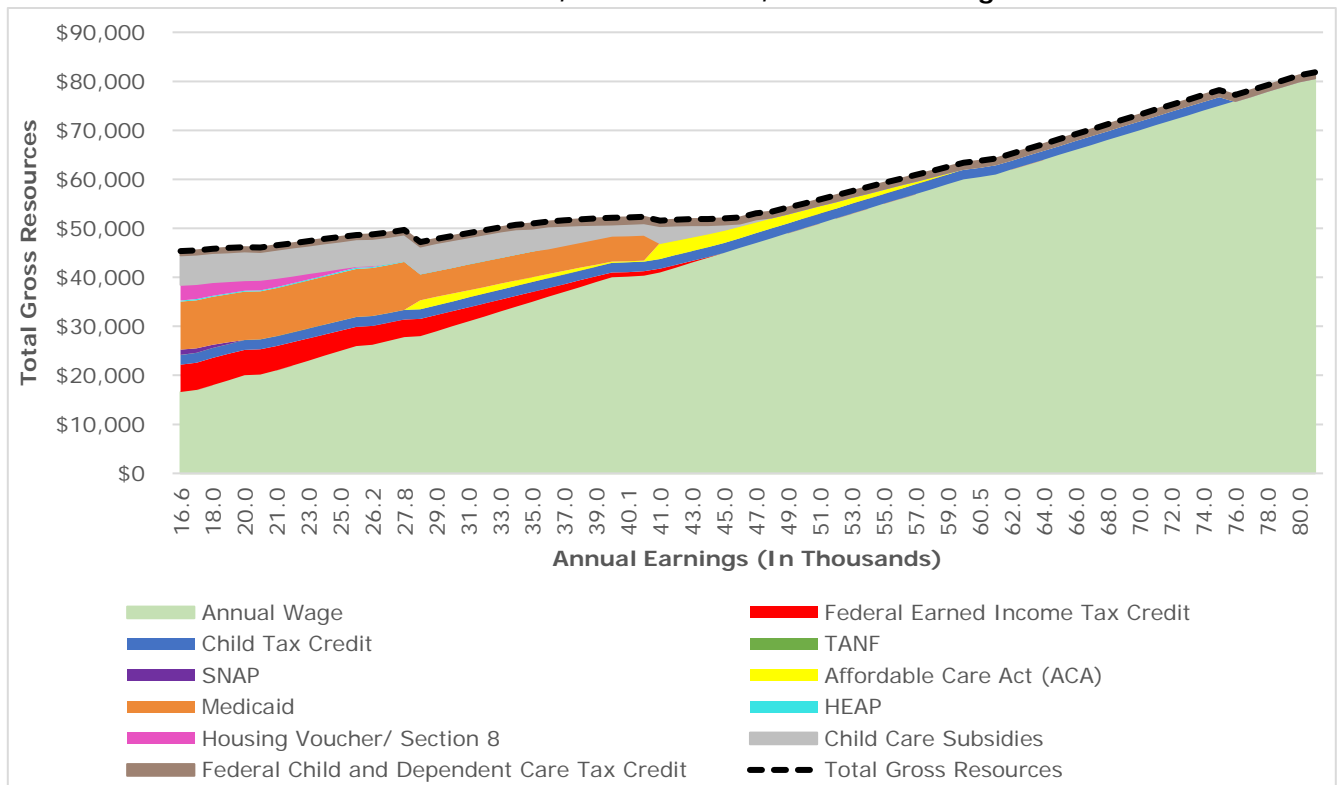
- o When the adult is earning minimum wage, or wages less than \$22.50 per hour, there is relatively little incentive to increase earnings, as the household's total gross resources are not greatly improved.

Figure 3: Cliff Effects for a Household with 1 Adult, 1 Preschooler, and 1 School-aged Child



Source: Economics Center calculations

Figure 4: Total Gross Resources Across a Range of Annual Earned Incomes for a Household with 1 Adult, 1 Preschooler, and 1 School-aged child



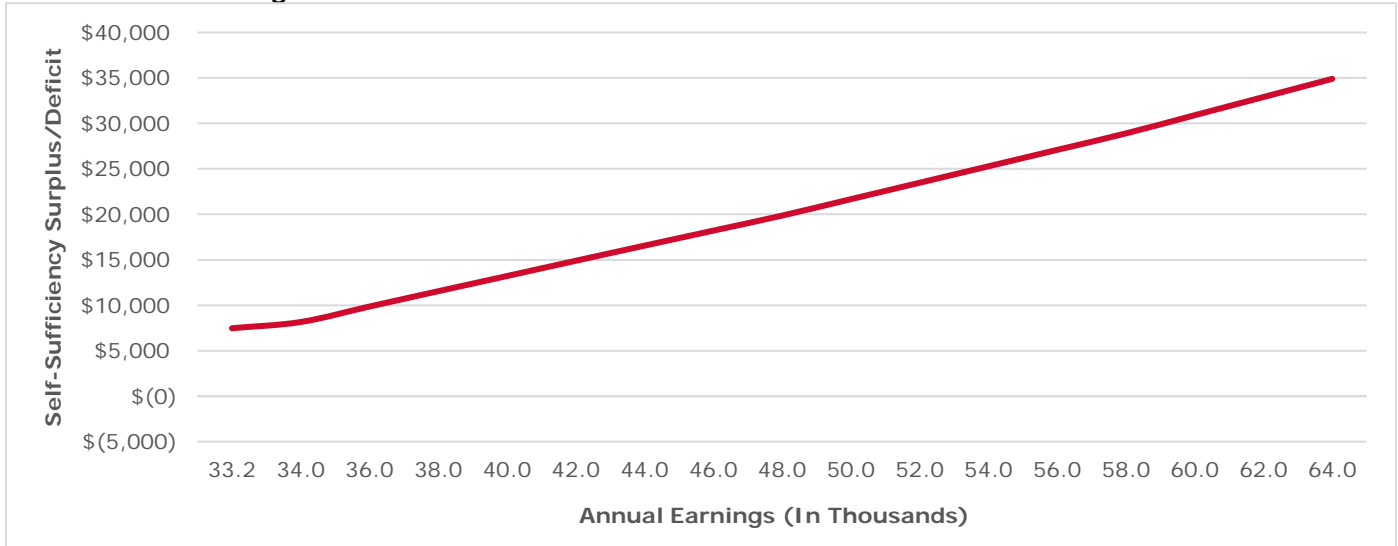
Source: Economics Center calculations

Household with 2 Adults and No Children

- Annual earnings for this household composition ranged from \$33,200 (207% FPL) to \$64,000 (400% FPL). This equates to each adult working full-time hours at \$8.30 per hour up to \$16.00 per hour.
- The 2016 self-sufficiency standard for this two-adult household was \$29,098.
- As shown in Figure 5, there are no cliff effects experienced for this household composition. The lowest annual earnings for the household (both adults earning minimum wage) is already above 138 percent of the FPL for the household, and therefore the household is only eligible for ACA benefits.
- Figure 6 details the household's total gross resources, which includes annual earned income and ACA aid.
- Unlike the two examples of households with children, the adults in this household composition fair better in terms of having minimal disincentives to increase

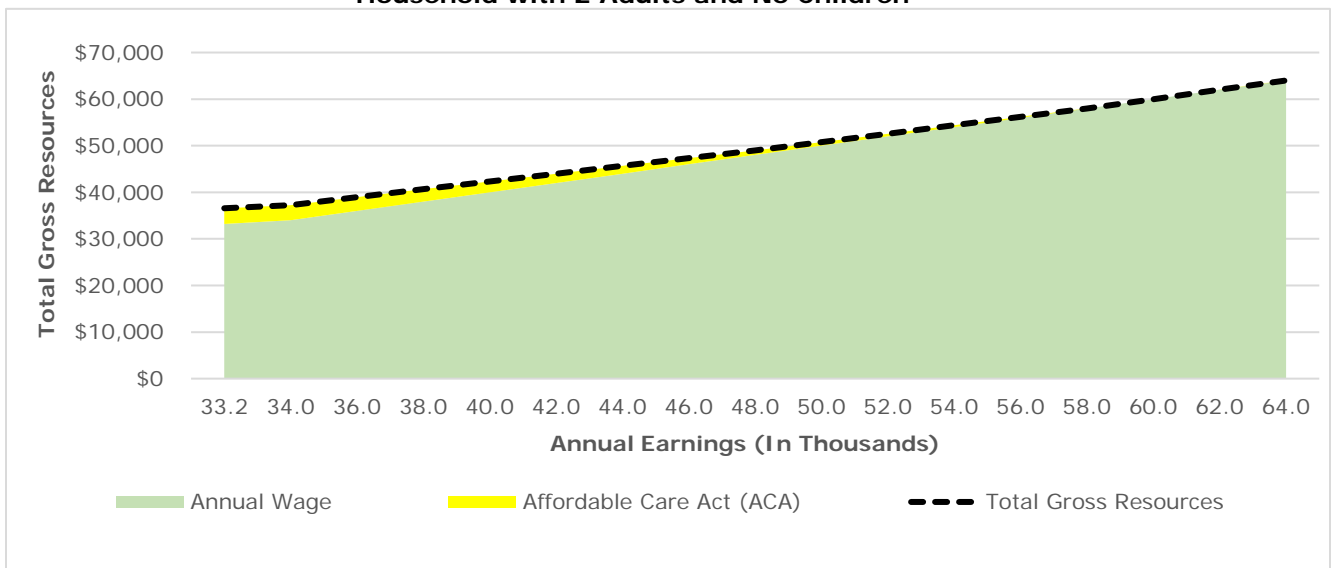
earnings. With no children, the two-adult household's total gross resources increase at a fairly linear rate with annual earnings.

Figure 5: Cliff Effects for a Household with 2 Adults and No Children



Source: Economics Center calculations

Figure 6: Total Gross Resources Across a Range of Annual Earned Incomes for a Household with 2 Adults and No Children



Source: Economics Center calculations

Just Above Poverty Gap

The “Just Above Poverty” gap is a hidden trap for households with annual earnings between 130 to 199 percent of the FPL as they are not eligible to apply for certain public assistance programs. This creates additional hardship for these individuals and one that is not faced by other households with similar earnings, which were able to enroll in the public assistance programs when their annual earnings were lower.

Households that fall into this just above poverty gap do not qualify for Child Care Subsidy assistance if earnings are more than 130 percent of the FPL at the time of application. Additionally, these households are not eligible for TANF cash assistance, Section 8 housing, or SNAP benefits, as their annual earned income is already too high.

More Concerns

- Education/Training
 - For some households, cliff effects require large hourly raises to offset the amount of total gross resources lost through benefit reductions.
 - In some instances, however, individuals are not able to earn due to a lack of education or training.
 - Individuals may not be able to afford to go to school due to financial limitations.
 - Workers may be reluctant to take out student loans when they are already struggling financially.
 - Individuals may have had children at a young age and therefore were not able to finish their education.
 - Workers receiving TANF and SNAP assistance may not be able to take time off work in order to attain a higher level of education, as both public assistance programs require some form of work participation to receive and maintain benefits.
 - Households may not be willing to go through training or additional education to earn more money, as increasing their annual earnings does not necessarily mean their total gross resources rise at a similar rate.
 - In other words, there are minimal incentives for households to increase annual earned income, through additional education and training, as the corresponding level of total gross resources does not increase at the same rate as annual earnings.

- Employers
 - Some employers may be keeping wages low due to the existence of public assistance programs available to their employees. Employers may know that at certain low-wage thresholds employees are eligible to receive public assistance benefits from federal and/or state levels, and therefore have little incentive to increase wages.
 - Again, an increase in employee wages usually requires the employees to either attain a higher level of education, or receive additional training.
- Accessibility
 - Individuals who do not have their own vehicle, must use other means like public transportation to get to work and to public assistance programs' offices. Public transportation in some cases is not reliable, or timely for households and workers receiving public assistance benefits.
- Individuals who are receiving public assistance benefits are required to continue meeting program eligibility requirements, fill out paperwork, and go to the benefits offices in person to continue receiving assistance, all while trying to also maintain work requirements and care for children, if applicable. Taking time off work to care for sick children, attend school themselves, or go to the county benefits office further burdens households receiving public assistance, especially if the household is receiving aid that requires work activities.

Evaluating the Economic Benefits of Policy Revision

Overall, a better understanding and widespread knowledge of the concept of self-sufficiency is needed and how households in Clark County fair in comparison based on their specific household type. Self-sufficient levels of income vary by county, as well as by household compositions.

- It would be beneficial for entities and employers in Clark County to have an understanding of self-sufficiency and what self-sufficient levels of income are, based on household composition. Public assistance offices therefore would gain an understanding of a household's total gross resources, and how it compares to the self-sufficiency standard for that household type.
- Employers in Clark County would also benefit from understanding how wages and changes in wages impact their employees that are currently receiving public assistance. Additionally, how a change in wages impacts households (i.e. those not on public assistance may then apply to public assistance programs after a wage cut) is important for employers to understand. Familiarizing businesses with the concept of self-sufficiency and cliff effects is crucial.
- Some employers may reimburse employees for a portion of their education expenses once the employee completes the training or education. However,

individuals working less to attend educational or training programs earn less, and therefore would benefit from receiving some of the reimbursement while they are attending school or training.

- Employers providing continual aid to those attending school or receiving additional training would both incentivize workers to advance in their careers, as well as aid the individual financially while they are attending classes/training sessions.
- This would also incentivize other workers to advance their educations, thereby increasing their on-the-job skill sets. In this way, employers would have highly educated employees and greater levels of productivity as a result.
- In understanding how households in Clark County compare to the self-sufficiency standard, educational institutions would have the opportunity to help those individuals attain higher levels of education and training.
 - State, county, or even institution-level educational subsidies or grants could be created for low-wage workers in Clark County, in order to make it easier for those individuals to attend school and increase their education/skill level.
 - Educational grants or subsidies would especially aid single-parent low-wage households in terms of providing additional dollars for childcare assistance, while the parents are attending school or training. Subsidy or grant dollars would be based on the household's annual earnings and relationship (amount of surplus or deficit) to the equivalent self-sufficiency level for the specific household type.
 - Educational institutions must also verify that individuals are aware of the financial aid currently available to them, such as the Pell Grant.
- It is also important for public assistance offices to be accessible to everyone in the County, in terms of hours open and location along a bus route.
- If not the case already, information on all public assistance programs and eligibility requirements must be readily available and accessible to all in Clark County.
 - The process of applying for public assistance benefits itself may be a deterrent for some. Streamlining the application and information process would be helpful to maximize the impacts of the public assistance programs.

- For individuals receiving TANF and SNAP assistance, taking time off work in order to attend school or training to increase their level of education, may not be feasible, as these two programs require work activities. In these situations, it would be extremely beneficial for TANF and SNAP recipients if the programs' eligibility requirements also included being enrolled in an education or training program.
 - If the eligibility requirements were expanded, workers receiving TANF and SNAP, and with lower levels of education would be encouraged to go back to school or gain additional training without fear of losing public assistance aid. This would in turn promote area workforce development, while not penalizing low-wage earners who receive food and/or cash assistance.
- The concept of public assistance work requirements in general must also be analyzed as they assume workers, regardless of current education/training level, would be able to work/fill a vacant position. However, if there are no positions currently available or vacant for low-skill/low-education workers, aiding the workforce in attaining higher levels of education and training would be necessary.
- Finally, there are certain assumptions in this report to take into account, as this report may not paint a complete picture of all households in Clark County. Full and maximum benefits from all public assistance programs are assumed, where the household is eligible. In other words, each household example was assumed to receive benefits from each program they are eligible for, and at the maximum dollar amounts. Also, three household examples were detailed in this report, whereas many other different types of households exist. Furthermore, the self-sufficiency standards reported were for the three specific household types described, and vary between the different household compositions.

Introduction and Framing the Issue

One of the most persistent problems facing employers since the recession is the inability to find qualified workers for vacant positions. On the other hand, many qualified workers feel as if there are few jobs currently open. Reasons for this labor shortage or mismatch may include a lack of appropriate skills among the labor pool, lack of positions with adequate wages, or a problem that can be addressed by public and private investment in workforce assistance and training programs.

Many individuals across the United States are classified as low-income, or low-wage earners. Low-income individuals in some cases are not self-sufficient and continuously struggle to make ends meet financially, even if employed. Public assistance programs help alleviate these existing economic and financial disparities by providing lower-income individuals with the means to reach self-sufficiency. Self-sufficiency in this report is defined as the level of annual earnings needed to provide for a household's basic needs, including housing, food, transportation, childcare, and healthcare without accessing public assistance programs.¹⁰

Unfortunately, many households are not only low-income, but also fall below the Federal Poverty Level (FPL) and rely heavily on public assistance programs. Clark County, Ohio, like many regions in the United States, is affected by poverty. However, there are many federal, state, and local programs available for low-income families to help alleviate the financial challenges they face. These programs offer assistance for housing, healthcare, childcare, food, and utility bills. However, not all programs have the same eligibility requirements, and requirements for county programs sometimes vary from federal standards. Annual household earnings is a key factor in determining eligibility for most public assistance programs. Some public assistance programs such as TANF (cash assistance) and SNAP (food assistance) also require individuals to participate in work activities in order to be eligible and maintain eligibility. This aspect may be more difficult for certain household types, such as single-parent households, as this work requirement persists regardless of unforeseen events such as school closure due to inclement weather or a sick child.

Visits to the benefits office in person and during business hours are oftentimes required. It is difficult for some individuals to do so while also fulfilling public assistance work requirements, whether due to lack of transportation or access to the public assistance office, child(ren) care, and/or illness. Understanding the requirements of each program

¹⁰ Self-sufficiency standards cover the bare-minimum needs for households, and therefore do not include expenses such as internet, television, and telephone, that are otherwise considered 'luxury' items. Additionally, the Self-Sufficiency Standard deducts federal and state income taxes, payroll taxes, and other state and local taxes where applicable.

and gathering the respective paperwork is also necessary in order to maximize public assistance benefits received, which also takes time.

The perception of labor market discrimination in terms of wages and employment opportunities can contribute to a decreased personal investment in education or training.¹¹ This can cause potential workers to not join the local labor force or to avoid progressing along a career path, leaving employers struggling to fill open positions. This situation not only harms the individual, but businesses and the local economy as well.

Under certain conditions, unfortunately, the current public assistance program structure creates economic disincentives to work and opportunity costs for low-wage earners.

Opportunity costs in this report are defined as some type of benefit given up when another opportunity is chosen. For example, applying and re-applying to various public assistance programs takes time that individuals could otherwise spend working or with their loved ones. This represents an opportunity cost for these workers.

Transportation for those who do not have cars is also oftentimes a barrier for families who need to travel to the Clark County Department of Job and Family Services (CCDJFS) or to work, as public transportation ride times are often long, though opportunity costs are low due to low wages.

Decreased personal investment in education or career mobility is also a factor. Oftentimes, for an individual to increase their level of earned income, further education or training is required. Attending school or a training program to increase education takes time away from working and earning money. Individuals may not be willing to accrue additional student loan debt, while working fewer hours and thus earning less, while still trying to maintain public assistance benefits. This impact is further deepened for households with children, having to manage child care, a child's sick days, snow days, for example. Another factor is that large increases in annual earned income may not always improve a household's total gross resources at a similar rate. This further causes disincentives for households to increase their annual earnings, either by advancing their education or accepting a raise.

Economic disincentives to work include what are called **income cliff effects**. Income cliff effects occur at certain income thresholds when the individual becomes ineligible for assistance due to increased annual earnings. In some cases, these cliff effects cause an individual's total gross resources to fall, even though they are earning more annually. In other words, individuals' increased earnings are not enough to cover the loss of benefit dollars that occur. This, in turn, creates a perverse incentive for individuals who receive assistance aid. These individuals may recognize that they are better off keeping their

¹¹ Discrimination in wages and employment opportunities does not solely impact low-wage earners, but rather workers across all wage levels, genders, and ethnicities.

annual earnings at a lower level rather than increase their wages and risk losing all or a portion of the financial resources received through the public assistance programs.

These disincentives negatively impact the labor market and deter individuals from bettering their financial situation by accepting a promotion, working more hours, or investing in education or training. Public assistance programs are designed to support low-income individuals and families who need the assistance. The cliff effect is an extremely important issue to address as it causes these programs to run inefficiently and negates the goal of the programs which is to assist in lifting people out of poverty.

The 2016 poverty rate in Clark County was 17.9 percent. Compared to several counties surrounding the county, Clark County has a slightly higher percentage of individuals living in poverty, though actual population count is a factor, as the surrounding counties additionally have smaller populations than Clark County. Clark County's 17.9 percent of individuals in poverty is slightly higher than the statewide level of 15.4 percent. Figure 7 below, provided by the Ohio Development Services Agency, shows the counties in the state of Ohio and their respective populations and percent in poverty.¹²

¹² Data provided by the United States Census Bureau and the Ohio Development Services Agency (2018).

of the County's households and corresponding demographics. Furthermore, the Economics Center examined cliff effects for various households who receive public assistance in Clark County and impacts to households just above the poverty line (130-199% of the FPL). Households just above the FPL are not eligible for certain public assistance programs, and nonetheless struggle with making ends meet financially.

By eliminating these labor market inefficiencies public agencies could improve the return on public investment in human capital and thereby economic development. In this report, the Economics Center provides potential policy revisions and solutions to address Clark County's labor market and public assistance program inefficiencies, as well as the benefits accrued to individuals and society as result of removing the "getting out of poverty" trap.

Methodology

The two primary indicators used in this report are the Federal Poverty Level (FPL) and the Self-Sufficiency Standard. The **FPL** is a measure of household annual earnings used to determine eligibility for certain public assistance programs and benefits, nationwide. The 2016 FPL numbers for the United States are listed in the table below.¹⁴

Table 1: United States 2016 Federal Poverty Level (FPL)

Household Size	Annual (100% FPL)
Individuals	\$11,880
Family of 2	\$16,020
Family of 3	\$20,160
Family of 4	\$24,300

Source: Computations for the 2016 Poverty Guidelines (2016, July 16).

The concept of **Self-Sufficiency** is defined as the level of annual income needed to provide for a family's basic needs, such as housing, food, transportation, childcare, and healthcare without the aid of public assistance programs. The annual earned income required to meet basic needs for a household varies depending on household size and composition. The standard set by the Center for Women's Welfare at the University of Washington was used in this analysis.^{15, 16} The Self-Sufficiency Standard assumes adults in the household work 8 hours per day, 22 days per month, and 12 months per year. The standard does not calculate costs for those who are disabled or those who are retired. The Standard excludes expenses such as internet or cable television which are considered "luxury" items and above basic needs. Self-sufficiency varies depending on the household

¹⁴ *Computations for the 2016 Poverty Guidelines. (2016, July 16).*

¹⁵ *The Self-Sufficiency Standard, Ohio. (2015).*

¹⁶ In this report, the 2015 Self-Sufficiency Standard from the University of Washington was adjusted for inflation, and is expressed in 2016\$.

composition, whether or not there are children, and how old the children are. In terms of children's ages, "infant" is defined as children ages 0 to 2 years old, "preschooler" as 3 to 5 years old, "school-aged child" as 6 to 12 years old, and "teenager" as 13 to 18 years old.¹⁷ In this report, for the number of self-sufficient (or not) households in Clark County, individuals over the age of 18 were classified as adults. Therefore, children over the age of 18 and still living at home were added to the number of adults in the household.

Self-sufficiency in Clark County was analyzed using Integrated Public Use Microdata Series (IPUMS)¹⁸ data as well as the University of Washington self-sufficiency standard tables, and United States Census Bureau data for Clark County. Combining the data sets paints a clearer picture of actual household composition in Clark County and their relative self-sufficiency levels.

Public assistance program eligibility requirements vary per program, but earned income level requirements are common throughout. This analysis looks at various federal and local assistance programs, including Temporary Assistance for Needy Families (TANF), Supplemental Nutritional Assistance Program (SNAP), Child Care Assistance, Affordable Care Act (ACA), Medicaid, Home Energy Assistance Program (HEAP), and Housing Assistance (Section 8).

The Economics Center additionally analyzed data on individuals enrolled in various assistance programs, provided by the Clark County Department of Job and Family Services (CCDJFS). Data were available for TANF, SNAP, Medicaid, and child care assistance. It's important to note, however, that CCDJFS data is aggregated and does not separate out households by size, composition, or earnings.

Self-Sufficiency in Clark County

IPUMS data was used to determine Clark County's self-sufficiency rates at the household level. Table 2 shows the number of self-sufficient (or not) households in Clark County via data from IPUMS, the U.S. Census, and the adjusted University of Washington self-sufficiency standards.¹⁹ The self-sufficiency standards were gathered according to household composition and were applied to the respective compositions provided by IPUMS for the County. IPUMS provided household weights, representing the number of households with a specific composition, as well as individual household earnings, which was then compared to the corresponding self-sufficiency levels to determine if the household was in fact self-sufficient or not. For example, if the household earned income

¹⁷ Pearce, D. M. (2015, December).

¹⁸ Ruggles, et al. (2017).

¹⁹ The Economics Center adjusted the 2015 self-sufficiency standards for inflation in order to calculate the standards in 2016 dollars. The Consumer Price Index for 2016 was used to adjust the 2015 dollars to 2016. Source: *Historical CPI-U, Archived Consumer Price Index Supplemental Files*. (2018, March).

for a '2 adult 1 infant' household was above the respective self-sufficiency standard, then it was labeled as "Yes, self-sufficient."

Percentages of households above or below self-sufficiency were calculated using IPUMS data and applied to the total number of occupied households in Clark County (54,681) from 2016 U.S. Census Bureau estimates.²⁰

Results showed that approximately 26 percent of all households are not economically self-sufficient. In other words, more than 14,400 households in Clark County do not have annual earnings that are above the self-sufficiency standard. Seventy-four percent of households, on the other hand, were self-sufficient.

Table 2: Self-Sufficiency in Clark County, 2016

Total Households	Yes, self-sufficient	No, not self-sufficient
54,681	40,252 (74%)	14,429 (26%)

Source: Economics Center calculations using data from US Census Bureau. (2016.), IPUMS, and the University of Washington's Self-Sufficiency Standards (2015).

Federal Poverty Level

Using the United States Census Bureau American Community Survey estimates for 2016, the FPL was compared to households' annual earnings. It was found that the majority of households in Clark County (84%) are above the FPL in accordance with their annual earned income, while the remaining 16 percent of households fell below the FPL. Table 3 details the number and percentage of households above and below the FPL in Clark County.²¹

Table 3: FPL in Clark County, 2016

Total Households	Yes, above FPL	No, not above FPL
54,681	45,756 (84%)	8,925 (16%)

Source: Economics Center calculations using data from IPUMS and the U.S. Census Bureau. (2016).

Self-Sufficiency and Federal Poverty Level

The majority of households (74%) are both above their relative self-sufficiency standards and therefore above the FPL. It is important to note, however, that it is possible for a household to be below the self-sufficiency standard, but still above 100 percent of the

²⁰ U.S. Census Bureau. (2016). "Selected Housing Characteristics", 2012-2016 American Community Survey 5-year estimates.

²¹ U.S. Census Bureau. (2016). "Poverty Status in the Past 12 Months by Household Type by Age of Householder", 2012-2016 American Community Survey 5-year estimates.

FPL.²² Ten percent of Clark County households fall into this category. And finally, 16 percent fall below both the self-sufficiency standard and the FPL for their household type. In other words, of the 14,429 households that are below a self-sufficient level of annual earned income, 16 percent of those households fall further, and have earnings that are also below the FPL. Table 4 shows these different scenarios and the number/percentage of households in Clark County that fall within each category.

There is one caveat with the FPL, however, in that it is a nation-wide standard and does not take into account household composition or geographical areas in the US. Therefore, the self-sufficiency standard, taking into account both geography and composition, is important to include when analyzing households in Clark County. While 16 percent fall below the national FPL, there are many more households (26 percent) that are below self-sufficiency.

Table 4: Self-Sufficiency and FPL in Clark County, 2016

	Above FPL	Below FPL	Total
Above Self-Sufficiency	40,252 (74%)	0 (0%)	40,252 (74%)
Below Self-Sufficiency	5,504 (10%)	8,925 (16%)	14,429 (26%)
Total	45,756 (84%)	8,925 (16%)	54,681 (100%)

Source: Economics Center calculations using data from US Census Bureau. (2016.), IPUMS, and the University of Washington's Self-Sufficiency Standards (2015).

Background Information on Tax Credits and Public Assistance Programs in Clark County

This section details the various tax credits and public assistance available to residents in Clark County, Ohio. Descriptions of each program are provided, including eligibility requirements and credit or assistance dollar amount provided based on household size, composition, and earned income level, according to each program's specific requirements. This section analyzes both federal and state programs which include the Earned Income Tax Credit (EITC), Child and Dependent Care Tax Credit, Child Tax Credit, Temporary Assistance for Needy Families (TANF), Child Care Assistance, Supplemental Nutrition Assistance Program (SNAP), the Affordable Care Act (ACA), Medicaid, Home Energy Assistance Program (HEAP), and Housing Assistance (Section 8). County-specific requirements when they differ from state or federal requirements are also defined. This

²² These households, therefore, may not qualify for certain public assistance programs, depending on actual annual income and percentage of FPL the household falls into.

section also includes, where applicable, analyses of data provided by CCDJFS, on individuals enrolled in a few of the public assistance programs.²³

Earned Income Tax Credit (EITC)

The Earned Income Tax Credit or EITC is a benefit for working people with low to moderate income. EITC reduces the amount of tax an individual owes and may provide them with a refund or credit. Eligibility for the EITC depends on filing status and the number of qualifying children in a household.²⁴ Additional requirements include investment incomes of \$3,400 or less for the year.

For children to qualify under this program, they must be a son, daughter, adopted child, stepchild, foster child, or descendant of any of them (such as a grandchild). A qualifying child may also be the filer’s half or stepsibling, or descendant of any (such as a niece or nephew). Additionally, the child must either be less than 19 years old, or less than 24 years old and a full-time student. Permanently and totally disabled children are exempt from these age requirements and automatically qualify. And finally, the child must reside with the applicant for at least half of the year.²⁵ The table below shows earned income limitations for receiving EITC in the 2016 tax year.²⁶

Table 5: EITC Earned Income Limits

	Qualifying Children Claimed			
	Zero	One	Two	Three or more
Single, Head of Household, or Widowed	\$14,880	\$39,296	\$44,648	\$47,955
Married Filing Jointly	\$20,430	\$44,846	\$50,198	\$53,505

Source: IRS, 2016 EITC Income Limits, Maximum Credit Amounts and Tax Law Updates. (2018, March).

The maximum amount of earned income credit varies with the number of qualified children. For households with no qualifying children, the maximum tax credit provided is \$506. With one qualifying child, households are provided up to \$3,373 and for two children, up to \$5,572. Finally, for households with three or more qualifying children, the maximum earned income tax credit is \$6,269.

²³ CCDJFS provided anonymous information on Medicaid, SNAP, OWF cash assistance, and child care assistance enrollees. It’s important to note, however, that JFS data is aggregated and does not account for income variances and household size and composition.

²⁴ *Earned Income Tax Credit (EITC)*. (2018, February).

²⁵ *Qualifying Child Rules*. (2017, September).

²⁶ *2016 EITC Income Limits, Maximum Credit Amounts and Tax Law Updates*. (2018, March).

Table 6: EITC Maximum Credit Amount

Qualifying Children Claimed			
Zero	One	Two	Three or more
\$506	\$3,373	\$5,572	\$6,269

Source: IRS, 2016 EITC Income Limits, Maximum Credit Amounts and Tax Law Updates. (2018, March).

In Ohio, for taxable years beginning on or after January 1, 2013, a nonbusiness, nonrefundable earned income credit is available for taxpayers who were eligible for the federal earned income tax credit (EITC) on their federal tax returns. The Ohio earned income credit (Ohio EIC) is equal to 10 percent of the taxpayer's federal EITC. However, if the taxpayer's Ohio income tax base (Ohio adjusted gross income less exemptions) exceeds \$20,000 on an individual or joint tax return, then the credit is limited to 50 percent of the tax otherwise due, after deducting all other credits that precede this credit except for the joint filing credit.²⁷

Child and Dependent Care Tax Credit (CDCTC)

Applicants may claim the Child and Dependent Care Tax Credit (CDCTC) if they paid for the care of a qualifying individual to enable the applicant (and spouse, if filing a joint return) to work or actively look for work. Applicants with the filing status of married filing separately do not qualify for this credit.

The total expenses that may be used to calculate the tax credit may not be more than \$3,000 (for one qualifying person) or \$6,000 (for two or more). Expenses paid for the care of a qualifying individual are eligible expenses if the primary reason for paying the expense is to assure the individual's well-being and protection.

A qualifying individual is defined as a dependent child who is under age 13 when the care is provided, the applicant's spouse who is physically or mentally incapable of self-care and lived with the applicant for more than half of the year, or an individual who is physically or mentally incapable of self-care, lived with applicant for more than half of the year, and either is a dependent or could have been a dependent except that he or she has gross income that equals or exceeds the exemption amount.²⁸

The amount of the credit is a percentage (20 to 35%) of the total amount of expenses paid to a care provider for the care of a qualifying individual. The percentage covered depends on the amount of the applicant's adjusted gross income.²⁹ If an applicant's income is below \$15,000, they qualify for the full 35 percent credit. The percentage

²⁷ FAQs - Individual Income Tax. (n.d.).

²⁸ Topic No. 602 Child and Dependent Care Credit. (2018, March).

²⁹ Child and Dependent Care Credit. (2017, August).

decreases one percent for every additional \$2,000 of income until it reaches 20 percent for annual earnings of \$43,000 or more.³⁰ The maximum amount of credit an applicant may receive is \$2,100, which is based on 2 or more qualified dependents and the maximum \$6,000 of qualifying expenses.

Table 7: CDCTC Earned Income Limits and Percentages of Expenses Covered

Annual Earnings	Percent Covered
\$0 - \$15,000	35%
\$15,001 - \$17,000	34%
\$17,001 - \$19,000	33%
\$19,001 - \$21,000	32%
\$21,001 - \$23,000	31%
\$23,001 - \$25,000	30%
\$25,001 - \$27,000	29%
\$27,001 - \$29,000	28%
\$29,001 - \$31,000	27%
\$31,001 - \$33,000	26%
\$33,001 - \$35,000	25%
\$35,001 - \$37,000	24%
\$37,001 - \$39,000	23%
\$39,001 - \$41,000	22%
\$41,001 - \$43,000	21%
\$43,001 - No limit	20%

Source: Publication 503 (2016), Child and Dependent Care Expenses. (2016, December).

In Ohio, the CDCTC is non-refundable and all Ohio taxpayers that qualify for the federal credit are automatically eligible. Families with an adjusted gross income below \$20,000, receive 100 percent of the federal credit. Families with an adjusted gross income of \$20,000-\$40,000 receive 25 percent of the federal credit. As with federal requirements, the maximum amount of claimable expenses is \$3,000 for one qualifying dependent and \$6,000 for two or more.³¹

Child Tax Credit

The Child Tax Credit is in addition to the tax credit for child and dependent care expenses and the EITC, for applicants with a qualifying child. For children to qualify, they must be claimed as a dependent on the applicant's tax return and be a U.S. citizen. The child must be the applicant's son, daughter, stepchild, foster child, adopted child, brother, sister, step or half-sibling, or a descendant of any of them (for example, grandchild, niece, or

³⁰ *Publication 503 (2016), Child and Dependent Care Expenses. (2016, December).*

³¹ *Ohio. (2016).*

nephew). Additionally, the child has to be under the age of 17, lived with the applicant for more than half of the tax year, and did not provide over half of his or her own support for the year.

The maximum Child Tax Credit is \$1,000 per child. The credit is also subject to an income limitation. The income limit on the Child Tax Credit is based on the household's modified adjusted gross income (MAGI). If a household's MAGI amount for 2016 falls between certain dollar limits, the credit amount is subject to a phase-out (is reduced or eliminated). For the tax year 2016, the MAGI income limits are shown in the table below.^{32, 33}

Table 8: Child Tax Credit Earned Income Limits

	Annual Earnings Limit
Single, Head of Household, or Widowed	\$75,000
Married Filing Jointly	\$110,000
Married Filing Separately	\$55,000

Source: IRS, Is My Child a Qualifying Child for the Child Tax Credit? (2017, December).

Ohio does not currently offer a state-level Child Tax Credit in addition to the federal credit.³⁴

TANF Cash Assistance

The Temporary Assistance for Needy Families (TANF) program is designed to help disadvantaged families in need and also emphasizes employment and personal responsibility. The purposes of the TANF program are to provide assistance to needy families so that children can be cared for in their own homes and reduce the dependency of needy parents by promoting job preparation, employment, and marriage.³⁵ In Ohio, the TANF Program also supports Ohio Works First (OWF), the Prevention, Retention, and Contingency (PRC) program, Family Supports, and Other TANF-Funded Benefits and Services.

Ohio Works First (OWF) was established to provide time-limited cash assistance to eligible families through Ohio's TANF program and encourages self-sufficiency through employment. Cash assistance is provided to needy families for up to 36 months. For child-only cases, there are no time or earned income limits for cash assistance. At the end of 36 months, extensions may be granted by CCDJFS under certain circumstances. After 36 months of receiving cash assistance, a family must be off for two years before

³² Publication 972 (2017), *Child Tax Credit*. (2018, January).

³³ *Is My Child a Qualifying Child for the Child Tax Credit?* (2017, December).

³⁴ *Ohio*. (2016).

³⁵ *About TANF*. (2017, June 28).

trying to re-qualify. In order to re-qualify, a family must provide proof that an event prevented them from remaining self-sufficient. Adults are limited to a total of 60 months of OWF cash assistance.³⁶ OWF participants are eligible for SNAP, Medicaid, and Child Care Assistance automatically.

In Clark County, in order to be eligible for OWF benefits, all able-bodied adults are expected to work. Also, families must have at least one minor child or a pregnant woman in her 3rd trimester and meet annual earnings standards set by Ohio JFS, which are shown in Table 9. Additional eligibility requirements include provisions that children must reside with a parent, relative, or legal guardian, and unmarried minor parents and pregnant minors must be in an approved adult-supervised living arrangement, or live with a parent, legal guardian, or relative.

Families with earned income who do not currently participate in OWF, and have not participated at least one out of the previous four months, must meet a gross income test for eligibility to be determined. Gross monthly income includes all before-tax income. The gross income limit for a family is 50 percent of the FPL. For example, the gross monthly income limit for a family of 3 in 2016 was \$840. When a member secures employment, the gross income test does not have to be met by a participating family, or a family that has participated in at least one out of the last four months.

If a family of three has an income level of \$840, which includes earned income from full-time employment, and pays child care expenses, then up to \$200 of those expenses will be deducted for each child under two years old, and up to \$175 for children over two. If the employment is part-time, up to \$120 is deducted per child under two. Unearned income is deducted from the payment dollar-for-dollar. Currently, an Ohio Works first payment for a family of 3 is \$473 per month. If the family is not paying child care, they could earn up to \$1,050 in monthly gross income and qualify for \$10 in cash assistance.^{37, 38} The table below shows the maximum monthly income and benefits received per family size.³⁹

³⁶ *Cash Assistance - FAQs*. (n.d.).

³⁷ *Cash Assistance - Income, Resources & Disregards*. (n.d.).

³⁸ *Publications - Fact Sheets - Ohio Works First*. (2017, March).

³⁹ *Ohio Work First (OWF)*. (2018).

Table 9: 2018 Cash Assistance Earned Income Limits and Maximum Monthly Allotment

Family Size	Maximum Monthly Earnings	Maximum Monthly Benefit
1	\$495	\$282
2	\$668	\$386
3	\$840	\$473
4	\$1,013	\$582
5	\$1,185	\$682
6	\$1,358	\$759

Source: Ohio Works First (OWF). (2018).

Cash Assistance in Clark County

Clark County DJFS provided monthly data for individuals receiving cash assistance in Clark County, from January 2015 to January 2018. Demographic information such as gender, employment, education, race, age, marital status, and health insurance was also provided.

Table 10 below shows the average number of individuals enrolled in each year, as well as the average net amount the total number of recipients received each year.⁴⁰ The average amounts were adjusted for inflation and are expressed in 2016 dollars.

Table 10: Average Annual Number of Cash Assistance Recipients and Amount Awarded, 2015-2017

Year	Average Child	Average Adult	Average Total Recipients	Average Net Amount Awarded (2016\$)
2015	1,301	97	1,398	\$294,881
2016	1,261	96	1,357	\$280,669
2017	1,245	75	1,320	\$273,034

Source: Economics Center calculations using data provided by Clark County DJFS

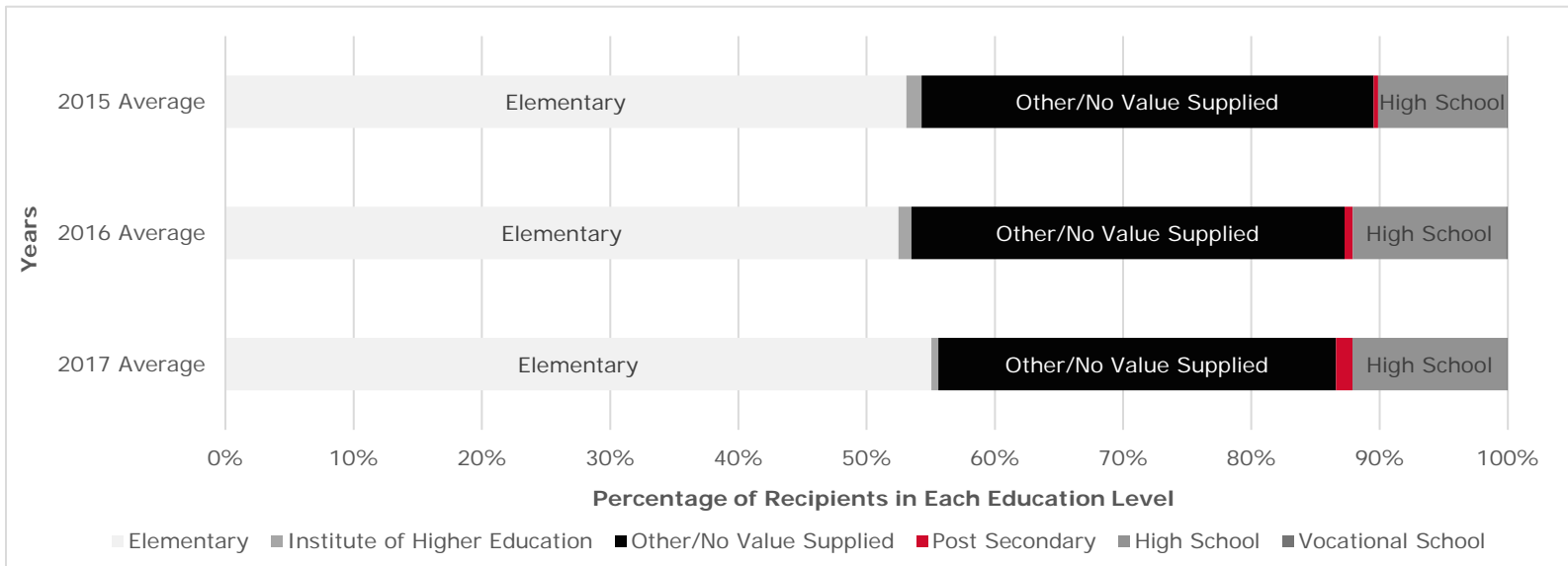
The majority of individuals receiving cash assistance in each year were under the age of 18, or child-only cases. In these instances, the guardian or parent receives the OWF assistance to help support the child, in child care assistance. In child-only cases, state-level Child Care Subsidies may also be applied for and received, in addition to OWF funds.

⁴⁰ Monthly data on the number of recipients were provided by CCDJFS, which was then averaged per year, to avoid counting duplicate individuals.

No individuals in Clark County over the age of 70 received cash assistance in the three calendar years for which data was provided. Additionally, the majority of individuals were Caucasian. Slightly more females than males receive cash assistance, and at least 97 percent of recipients each year did not have health insurance. Since the majority of recipients were under the age of 18, education level was skewed towards elementary school. Also, marital status was skewed towards single and employment status towards unemployed, due to the higher number of child-only cases.

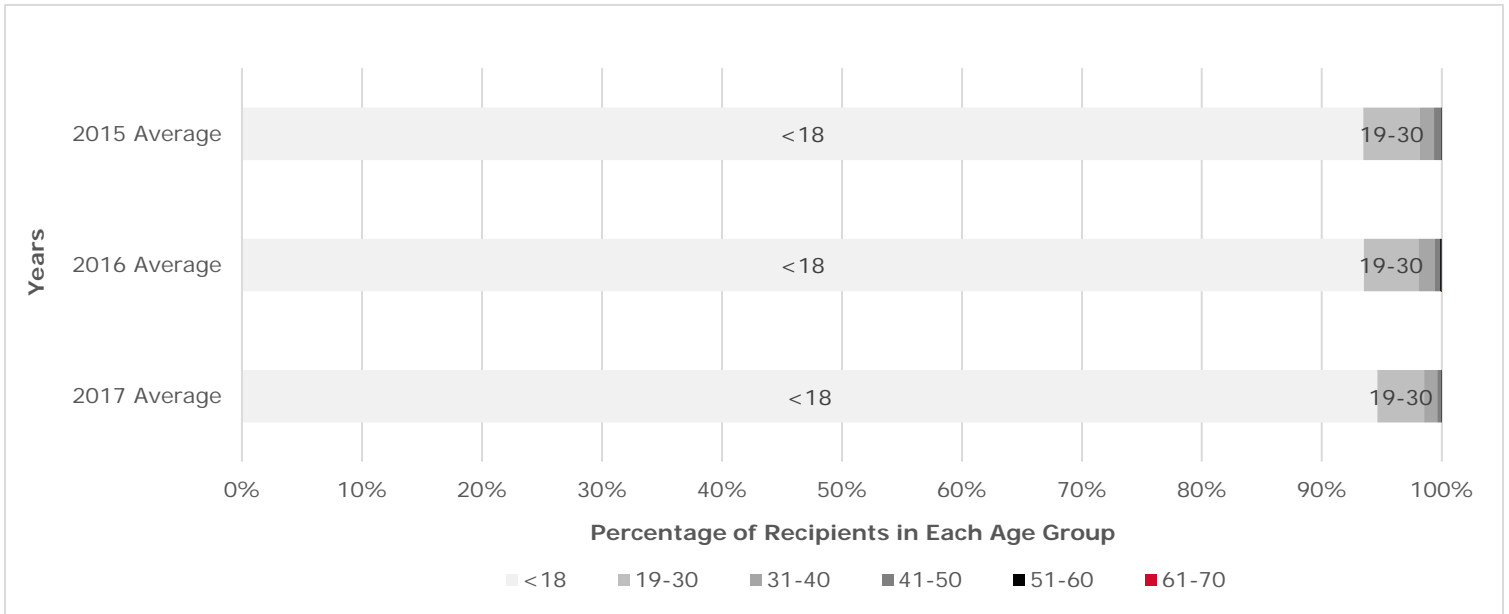
The charts below show the breakdown of individuals by age and education level for each available calendar year, 2015 to 2017. It can be seen that the age and education levels across the three years do not change greatly.

Figure 8: Average Education of Cash Assistance Recipients in Clark County, 2015-2017



Sources: Data provided by Clark County DJFS

Figure 9: Average Age of Cash Assistance Recipients in Clark County, 2015-2017



Source: Data provided by Clark County DJFS

As shown in Table 11, very few individuals receive cash assistance benefits in terms of the total population in Clark County.⁴¹ Each year, approximately 1 percent of all Clark County residents are receiving cash assistance. Approximately 1 percent of all individuals in the county have household earnings below 50 percent of the federal poverty level for their household composition, and are therefore receiving cash assistance.

⁴¹ U.S. Census Bureau. (2016). "Total Population", 2012-2016 American Community Survey 5-year estimates.

Table 11: Average Annual Number of Cash Assistance Recipients Compared to Total Population, 2015-2017

Year	Total Population	Average Number of Recipients (share of total population)
2015	136,827	1,398 (1%)
2016	136,175	1,357 (1%)
2017	134,557 ⁴²	1,320 (1%)

Source: Data provided by Clark County DJFS and the US Census Bureau.

Child Care Assistance

To become eligible for publicly funded child care, a family’s earned income must be below 130 percent of the FPL. After that, families may remain eligible unless their earnings become greater than 300 percent of the FPL. Families can be eligible for all or part of their monthly child care expenses. The program serves children of all ages who need care before and after school.⁴³ The Child Care Subsidy amount varies depending on household composition, earned income, and child care expenses paid. Those under 100 percent FPL are not required to pay any childcare fee, and are fully subsidized.

In Ohio, TANF funds may be used to support Ohio's state Child Care Subsidy program to aid OWF families and low-income employed families, with earnings that are at or below the income ceiling at the time of application, and at each redetermination of Child Care Subsidy services.⁴⁴ Parents who are employed, in school or training, or participating to meet the requirements of the Ohio Works First (OWF cash assistance) or Supplemental Nutrition Assistance Program (SNAP) can apply for help to pay for their child care in the county where they live.⁴⁵ County Departments of Job and Family Services oversees state Child Care Subsidy funds and determine applicant eligibility within the county.

OWF participants with children under 13 years old are eligible for subsidized child care, with the subsidies varying according to the annual earnings of the assistance group. Child care is guaranteed to OWF participants and to families who leave OWF for employment for up to one year, or until their earnings exceed 150 percent of the federal poverty level. All families with earned incomes up to the state established income ceiling may be eligible for non-guaranteed child care assistance.⁴⁶

⁴² U.S. Census Bureau. (2016). “Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2017.” 2017 Population Estimates.

⁴³ Publications - Fact Sheets – Child Care Assistance. (2017, March).

⁴⁴ Ohio Works First Directory - OHIO'S TANF STATE PLAN. (n.d.).

⁴⁵ ODJFS Online | Early Learning and Development. (n.d.).

⁴⁶ Ohio Works First Directory - OHIO'S TANF STATE PLAN. (n.d.).

Clark County DJFS allocates state subsidies to cover some of the cost of childcare for qualifying families.⁴⁷ The childcare benefit is paid directly to the childcare provider or center, and families are expected to pay a part of the cost based on earned income and family size.^{48, 49}

Child Care Assistance in Clark County

Monthly data for the total number of individuals receiving child care assistance (OWF children and non-OWF children combined) in Clark County was available for the calendar years of 2015, 2016, and 2017.⁵⁰ Many more non-OWF individuals receive child care assistance than OWF participants in the county, each year; as OWF earned income limit requirements are stricter (below 50% FPL) than child care assistance limits (below 130% FPL).

Data showed that on average 1,034 children were served in 2015. In 2016, 1,006 children on average, and 1,015 children on average in 2017 received child care assistance dollars.⁵¹

Table 12: Average Annual Number of Child Care Recipients, January 2015-January 2018

Year	Average OWF Children	Average Other Children	Average All Children
2015	23	1,010	1,033
2016	8	999	1,007
2017	4	1,011	1,015
Jan 2018	3	982	985

Source: Data provided by Clark County DJFS

Supplemental Nutritional Assistance Program (SNAP)

The Ohio Food Assistance Program, federally known as Supplemental Nutrition Assistance Program, SNAP, (also known as food stamps) is designed to raise nutritional levels, to expand buying power, and to safeguard the health and well-being of individuals in low-income households in Ohio.

A person may qualify for benefits if the household's gross monthly earnings is within 130 percent of the federal poverty guidelines and within 100 percent of the poverty level after

⁴⁷ Clark County DJFS oversees the state Child Care Subsidy funds and determine applicant eligibility within the county.

⁴⁸ *Childcare Services*. (n.d.).

⁴⁹ *Childcare Assistance*. (n.d.).

⁵⁰ Provided by CCDJFS.

⁵¹ Monthly data on the number of recipients were provided by CCDJFS, which was then averaged per year, to avoid counting duplicate individuals.

all allowable expenses, and if the person’s resources do not exceed \$2,000 (\$3,000 if a person is over 60 years old or disabled). Further, all able-bodied adults are also required to participate in work program activities. The resource limits do not apply if each person in the household receives income from any of the following programs: OWF, Ohio’s Disability Financial Assistance (DFA), Ohio’s Disability Medical Assistance (DMA) Program, and Supplemental Security Income (SSI).⁵² Table 13 shows maximum earned income levels, by household size, to qualify for SNAP benefits.⁵³

Table 13: SNAP Earned Income Limits

Household Size	FPL	Maximum Earnings (130% of FPL)
1	\$11,880	\$15,444
2	\$16,020	\$20,826
3	\$20,160	\$26,208
4	\$24,300	\$31,590

Source: Economics Center calculations using data from the Ohio Food Assistance Program and Computations for the 2016 Poverty Guidelines.

The allowable expenses SNAP reviews for eligibility includes medical expenses for those 60 years and older or those who are considered disabled, dependent care and child support expenses, and shelter costs such as rent, mortgage, property taxes, gas and electric. In special situations, resources such as cash, savings, and investments also are considered when determining whether an individual is eligible.

Depending on the household’s situation, a review (re-certification) of continued eligibility for assistance through the SNAP program is generally required every 6 to 12 months. Elderly and disabled households with no earned income will have a review of eligibility once every 24 months.

The benefits amount awarded to eligible households depends on family size and the family’s expected expenditures on food. Households receiving SNAP assistance are expected to spend approximately 30 percent of their own resources on food. The table below details the maximum SNAP benefits available for a household, by household size. Actual SNAP benefits awarded are calculated by multiplying the household’s monthly income by 0.3, and subtracting the result from the maximum monthly allotment for the respective household size.⁵⁴

⁵² *Food Assistance*. (n.d.).

⁵³ *Ohio Food Assistance Program*. (n.d.).

⁵⁴ *Supplemental Nutrition Assistance Program (SNAP)*. (2018, April).

Table 14: SNAP Maximum Monthly Allotment

Household Size	Maximum Monthly Allotment
1	\$192
2	\$352
3	\$504
4	\$640

Source: Economics Center calculations using Supplemental Nutrition Assistance Program (SNAP). (2018, April).

SNAP Assistance in Clark County

CCDJFS provided monthly data for individuals receiving food assistance in Clark County from the 2015 to 2017 calendar years. Demographic information such as gender, employment, education, race, age, marital status, and health insurance was also provided.

In 2015, the number of individuals receiving SNAP benefits averaged 26,000.⁵⁵ The number of recipients decreased in the years 2016 and 2017, as shown in the table below. Average benefit dollars awarded were adjusted for inflation and are expressed in 2016 dollars.

Table 15: Average Annual Number of SNAP Recipients and Average SNAP Benefits Awarded, 2015-2017

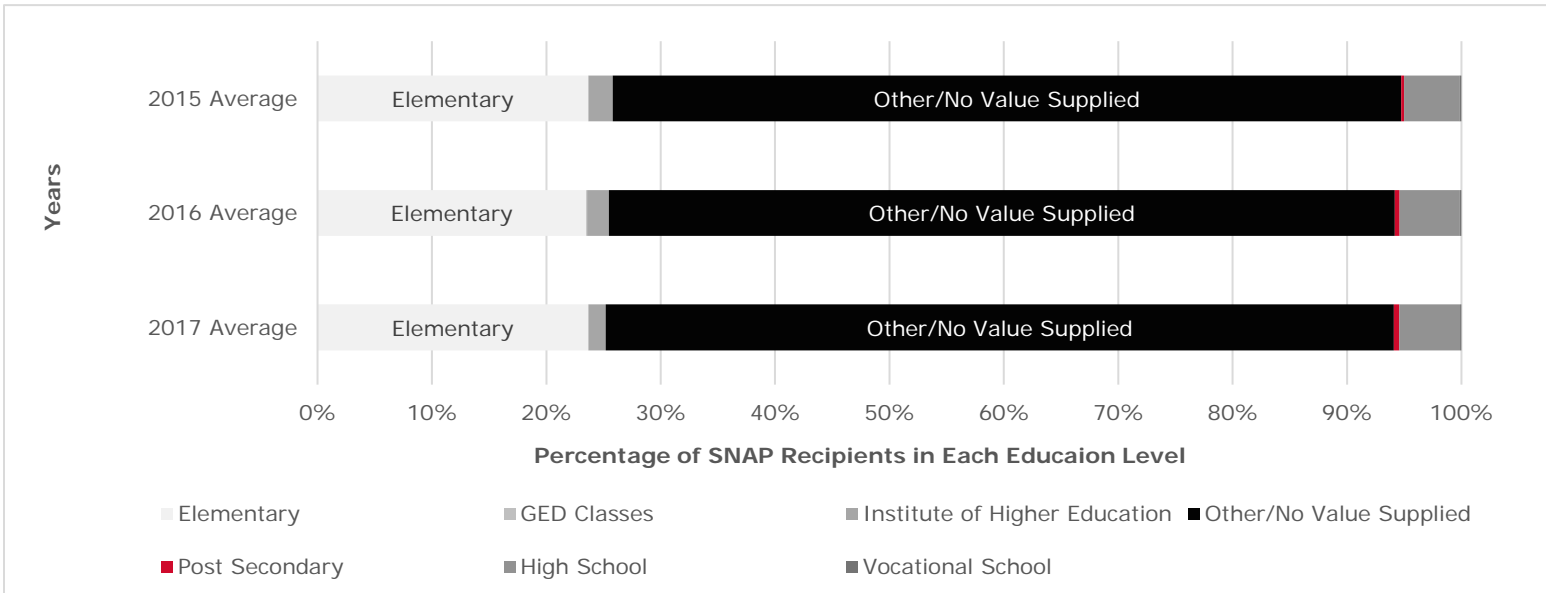
Year	Average Number of Recipients	Average Benefits (2016\$)
2015	26,354	\$3,229,831
2016	25,334	\$3,060,343
2017	23,321	\$2,737,513

Source: Data provided by Clark County DJFS

The charts below show the breakdown of individuals receiving SNAP assistance by age and education level for each available year, on average.

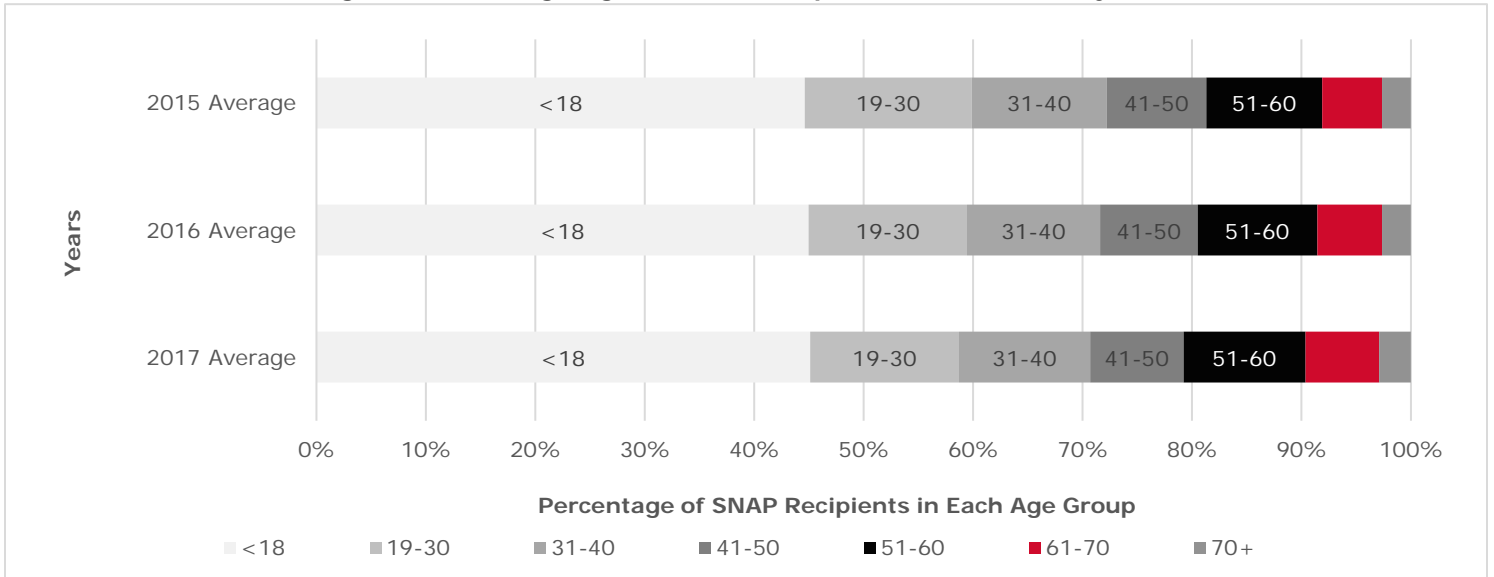
⁵⁵ Monthly data on the number of recipients were provided by CCDJFS, which was then averaged per year, to avoid counting duplicate individuals.

Figure 10: Average Education of SNAP Recipients in Clark County, 2015-2017



Source: Data provided by Clark County DJFS

Figure 11: Average Age of SNAP Recipients in Clark County, 2015-2017



Source: Data provided by Clark County DJFS

As shown in Table 16 below, nearly 20 percent of all individuals received cash assistance benefits in Clark County each year, from 2015 to 2017.⁵⁶ On average, 18.3 percent of all individuals in the County have household earnings below 130 percent of the FPL and are therefore receiving SNAP assistance.⁵⁷

Table 16: Average Annual SNAP Recipients as a Percentage of the Total Population, 2015-2017

Year	Total Population	Average Annual SNAP Recipients (share of total population)
2015	136,827	26,354 (19%)
2016	136,175	25,334 (19%)
2017	134,557 ⁵⁸	23,321 (17%)

Source: Data provided by Clark County DJFS and the US Census Bureau.

According to Census estimates, households that received food assistance through the SNAP program had an MHI of \$19,000 in 2016, compared to total households' MHI of \$44,000.⁵⁹ Of the 10,888 households receiving SNAP benefits in 2016, approximately half (52%) had annual earned incomes below 100 percent of the FPL.⁶⁰

Affordable Care Act (ACA)

Through the Affordable Care Act, enacted in 2010, individuals who do not have health insurance through an employer, Medicare, or Medicaid, can purchase individual insurance policies. Qualifying individuals include those who are U.S. citizens and legal immigrants with no other health insurance coverage and not incarcerated.

Individuals and families with earned incomes between 100 percent and 400 percent of the FPL are eligible to receive subsidies for premiums in the form of advanceable tax credits. The premium subsidies will vary with earned income and are structured so that the premium an individual or family pays does not exceed a specific percentage of annual earnings. Ohio expanded its Medicaid program to cover adults with earnings below 138

⁵⁶ U.S. Census Bureau. (2016). "Total Population", 2012-2016 American Community Survey 5-year estimates.

⁵⁷ It is possible, however, that more individuals in Clark County qualify for SNAP benefits but have not applied for or received them.

⁵⁸ U.S. Census Bureau. (2017). "Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2017." 2017 Population Estimates.

⁵⁹ U.S. Census Bureau. (2016). "FOOD STAMPS/Supplemental Nutrition Assistance Program (SNAP)." 2012-2016 American Community Survey 5-Year Estimates.

⁶⁰ U.S. Census Bureau. (2016). "Receipt of Food Stamps/Snap in the Past 12 Months by Poverty Status in the Past 12 Months for Households." 2012-2016 American Community Survey 5-Year Estimates.

percent of the FPL.⁶¹ For households with annual earnings between 138 percent and 400 percent FPL, health plans with lower monthly premiums and extra savings are available.

Those individuals that do not qualify for subsidized insurance policies either have annual earnings that are too high and can therefore afford unsubsidized insurance plans, or too low and receive coverage through Medicaid. Subsidies cover the associated costs of insurance premiums beyond the premium caps, which varies based on annual earnings as a percent of FPL.

Ohio Medicaid

Ohio Medicaid provides coverage to adults age 65 and older, children younger than age 19, families with children younger than age 19, people who are legally blind, people with disabilities, pregnant women, and adults up to age 64 with earned income at or below 138 percent of the FPL. Children are eligible for Medicaid benefits up to 200 percent FPL.

To qualify for Medicaid a person must be a U.S. citizen or meet Medicaid citizenship requirements, be an Ohio resident, have or obtain a Social Security Number, and meet certain financial requirements. In some cases, there are resource limits, such as bank accounts, investments, vehicles, and property in order to be eligible for Medicaid.⁶²

Table 17: Medicaid Annual Earned Income Limits

Household Size	Adult Earned Income Limits (138% FPL)	Children Earned Income Limits (200% FPL)
1	\$16,394	\$23,760
2	\$22,108	\$32,040
3	\$27,821	\$40,320
4	\$33,534	\$48,600

Source: Economics Center calculations using Computations for the 2016 Poverty Guidelines.

Families who participate in the Ohio Works First Cash Assistance Program are automatically covered by Medicaid. Families who leave OWF for employment are eligible for 6-12 months of coverage during that transition period.

Medicaid in Clark County

Monthly data for individuals on Medicaid in Clark County was available from July 2014 through March 2018, from CCDJFS. For 2015, 2016, and 2017, years for which twelve

⁶¹ *Affordable Care Act (ACA)* - HealthCare.gov Glossary. (n.d.).

⁶² *Medical Assistance*. (n.d.).

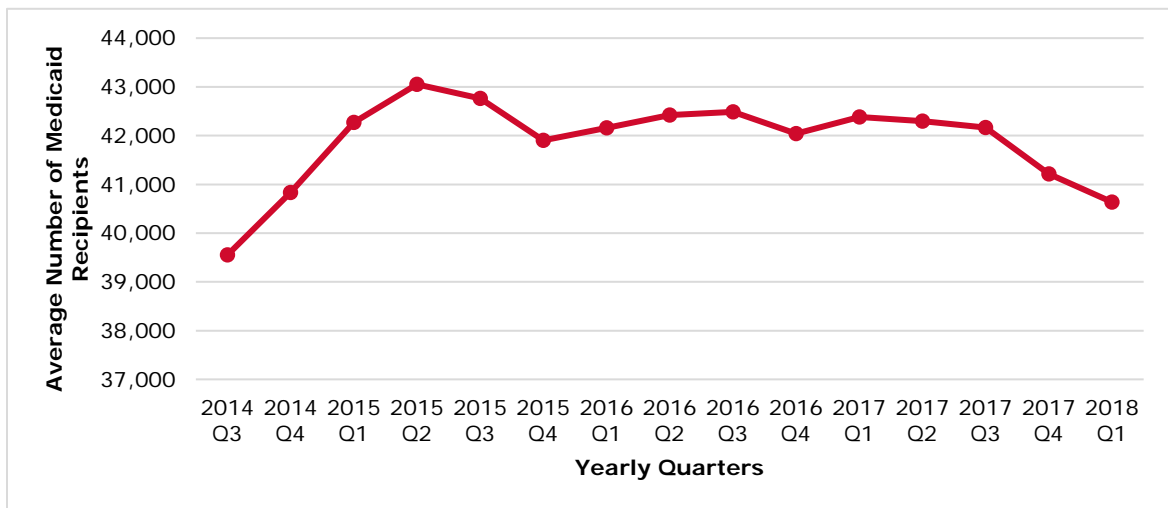
months of data were provided, there is a slight decrease in the monthly average number of individuals enrolled.⁶³

Table 18: Average Annual Number of Medicaid Recipients, July 2014 – March 2018

Year	Months	Average Annual Medicaid Recipients
2014	Jul-Dec	40,193
2015	Jan-Dec	42,498
2016	Jan-Dec	42,278
2017	Jan-Dec	42,014
2018	Jan-Mar	40,638
Jul 2014-Mar 2018	45 months	41,879

Source: Data Provided by Clark County DJFS

Figure 12: Average Number of Medicaid Recipients per Quarter, July 2014 – March 2018



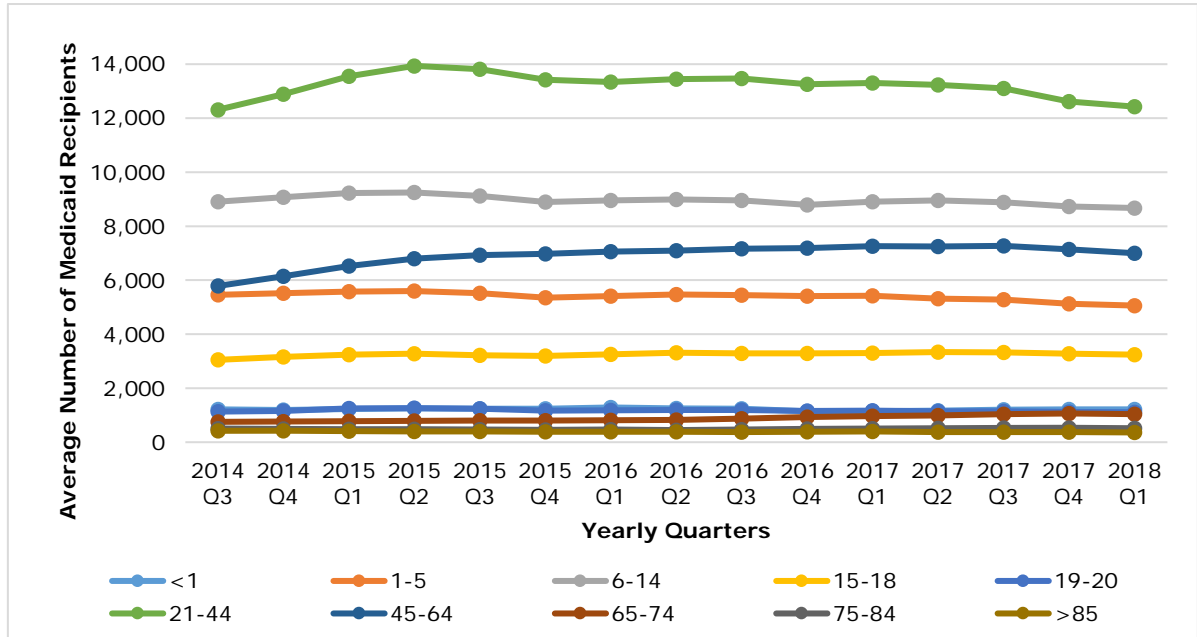
Source: Data provided by Clark County DJFS

The age ranges of Medicaid enrollees were also provided by CCDJFS. On average, each month, each year, the highest number of individuals on Medicaid in Clark County were between the ages 21 and 44. In 2015 13,683 individuals in this age category were enrolled in Medicaid, while in 2016 the number was 13,377, and 13,061 in 2017 on

⁶³ Monthly data on the number of recipients were provided by CCDJFS, which was then averaged per year, to avoid counting duplicate individuals.

average each month. The second highest enrollee age category was children ages 6 to 14 years old.

Figure 13: Average Ages of Medicaid Recipients per Quarter, July 2014-March 2018



Source: Data provided by Clark County DJFS

Further, slightly more females were enrolled in Medicaid than males each year. On average, approximately one-third of Clark County's population each year is receiving Medicaid benefits. Therefore, approximately 31 percent of all individuals living in Clark County have household earnings at or below 138 percent of the FPL and received Medicaid aid from 2015 - 2017.

Table 19: Average Annual Medicaid Recipients as a Percentage of the Total Population, 2015-2017

Year	Total Population	Average Annual Medicaid Recipients (share of total population)
2015	136,827	42,498 (31%)
2016	136,175	42,278 (31%)
2017	134,557 ⁶⁴	42,015 (31%)

Source: Data provided by Clark County DJFS and the US Census Bureau.

⁶⁴ U.S. Census Bureau. (2016). "Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2017." 2017 Population Estimates.

Home Energy Assistance Program (HEAP)

The Home Energy Assistance Program (HEAP) is a federally funded program that provides eligible Ohioans assistance with their home heating bills, and is administered by the Ohio Department of Development, Office of Community Service (OCS). HEAP provides a one-time payment for Public Utilities Commission of Ohio (PUCO) regulated utility customers for the winter heating season. Vouchers are issued to non-regulated utility customers, master-metered and other applicants who do not have a utility bill in their name. Both homeowners and renters are eligible for assistance.

In order to qualify for this program, applicants must be a resident of the State of Ohio and need financial assistance for home energy costs. A household applying for HEAP must report total gross household earnings for the past 90 days for all members age 18 and older.

A person who participates or has family members who participate in certain other benefit programs, such as SNAP, Supplemental Security Income (SSI), TANF, or certain Veterans benefits may be automatically eligible.⁶⁵ Ohioans with household earnings at or below 175 percent of the federal poverty guidelines are eligible for the program.⁶⁶

Table 20: HEAP Earned Income Limits

Household Size	FPL (\$2016)	Maximum Income (175% of FPL)
1	\$11,880	\$20,790
2	\$16,020	\$28,035
3	\$20,160	\$35,280
4	\$24,300	\$42,525

Source: Economics Center calculations using Computations for the 2016 Poverty Guidelines.

The assistance amount varies based on earned income. The average amount Ohio households received in 2015-16 ranged from \$88 to \$604 annually, with an average amount of \$226.

HEAP in Clark County

Approximately 5,000 households received HEAP assistance from July 2016 through June 2017. Median household income of households receiving assistance from HEAP was \$10,650. The total amount awarded in HEAP benefits for the 12 months was \$771,353 with each qualifying household receiving \$161, on average. Sixty-five percent of applicants were white, while 24 percent were black or African American. Eighteen percent

⁶⁵ *Ohio Home Energy Assistance Program (HEAP)*. (n.d.).

⁶⁶ *Individual | Energy Assistance Programs*. (n.d.).

of HEAP households had children under the age of 5, and 31 percent had elderly individuals 60 years old or over. The majority of households rented versus owned (69%). Household composition was also provided, with the greatest number of households being those with one individual, or single-person family composition. Nearly 2,000 households were single-resident households, while approximately 1,400 were single-parent households, and 581 were two-parent households.⁶⁷

Housing Assistance (Section 8)

The housing choice voucher program provides assistance to low- to extremely low-income families, the elderly, and the disabled to afford decent, safe, and sanitary housing. Housing can include single-family homes, townhouses, and apartments and is not limited to units located in subsidized housing projects.

Housing choice vouchers are administered locally by Public Housing Agencies (PHAs), which receive federal funds from the U.S. Department of Housing and Urban Development (HUD) to run the program. A family that is issued a housing voucher is responsible for finding a suitable housing unit of the family's choice where the owner agrees to rent under the program. A housing subsidy is paid to the landlord directly by the PHA on behalf of the participating family. The family then pays the difference between the actual rent charged by the landlord and the amount subsidized by the program.⁶⁸

Eligibility for a housing voucher is determined by the PHA, and is based on the total annual gross earnings and family size. Vouchers are limited to US citizens and specified categories of non-citizens who have eligible immigration status. In general, the family's earned income cannot exceed 50 percent of the median income for the county or metropolitan area in which the family chooses to live.⁶⁹ Median income levels are published by HUD and vary by location. The median income limit for Clark County was \$57,100.⁷⁰

⁶⁷ HEAP data was provided by the Ohio Development Services Agency.

⁶⁸ *Housing Choice Voucher Program (Section 8)*. (n.d.).

⁶⁹ *Housing Choice Vouchers Fact Sheet*. (n.d.).

⁷⁰ *Income Limits | HUD USER*. (n.d.).

Table 21: Housing Assistance Earned Income Limits

County	2016 Median Income	Income Category	Household Size (for >8, add 8% of the 4-person limit to the 8-person limit for each additional person)							
			1	2	3	4	5	6	7	8
Clark County	\$57,100	Low-Income (80%)	\$32,000	\$36,600	\$41,150	\$45,700	\$49,400	\$53,050	\$56,700	\$60,350
		Very Low-Income (50%)	\$20,000	\$22,850	\$25,700	\$28,550	\$30,850	\$33,150	\$35,450	\$37,700
		Extremely Low-Income (30%)	\$12,050	\$16,020	\$20,160	\$24,300	\$28,440	\$32,580	\$35,450	\$37,700

Source: *Income Limits | HUD USER. (n.d.)*

During the application process, the PHA will collect information on earnings, assets, and household composition. The PHA then verifies this information with other local agencies and will use the information to determine program eligibility and the amount of the housing assistance payment.⁷¹

The subsidy amount a household receives is based on Fair Market Rent (FMR) per number of units. Subsidies cover housing costs exceeding 30 percent of a household’s monthly earned income up to the FMR. The PHA calculates the maximum amount of housing assistance allowable. The maximum housing assistance is generally the lesser of the payment standard minus 30 percent of the family’s monthly adjusted income or the gross rent for the unit minus 30 percent of monthly adjusted income.⁷²

Overall Public Assistance in Clark County

The table below details the average number of individuals enrolled in each public assistance program mentioned in the previous sections. The greatest number of individuals were enrolled in Medicaid all three years for which data were available, followed by SNAP assistance.

⁷¹ *Housing Choice Vouchers Fact Sheet. (n.d.)*

⁷² *Housing Choice Vouchers Fact Sheet. (n.d.)*

Table 22: Average Number of Public Assistance Recipients in Clark County per Month, 2015-2017

Year	Total Population	Cash Assistance (% of total population)	Child Care Assistance – NonOWF Children (% of total population)	SNAP (% of total population)	Medicaid (% of total population)
2015	136,827	1,398 (1%)	1,010 (1%)	26,354 (19%)	42,498 (31%)
2016	136,175	1,357 (1%)	999 (1%)	25,334 (19%)	42,278 (31%)
2017	134,557	1,320 (1%)	1,011 (1%)	23,321 (17%)	42,015 (31%)

Source: Data provided by Clark County DJFS and the US Census Bureau.

Case Study Examples

In this section, three household compositions are analyzed and compared using data specific to Clark County, which includes a two-adult, two-child household, a single-parent household with two children, and a two-adult household with no children.⁷³ For adults in each household, it was assumed that all were working full-time hours for 50 weeks in the year.

The self-sufficiency standard in Clark County for a two-adult household with one preschooler and one school-aged child, in 2016, was \$48,745. For those programs that included tax filing status, it was assumed that the adults in the household were married and filing jointly (EITC and the Child Tax Credit). The first household composition column in Table 23 details earned income limits for the household, for each public assistance program or tax credit.

The self-sufficiency standard for a one-adult household with one preschooler and one school-aged child, in 2016, was \$39,626. For those programs that included tax filing status, it was assumed that the adult in the household was the head of the household (EITC and the Child Tax Credit). Earned income limits for each public assistance program and tax credit are shown in the second household composition column in Table 23.

For a two-adult household and no children, the self-sufficiency level 2016, was \$29,098. For those programs that included tax filing status, it was assumed that the two adults in the household were married and filing jointly (EITC). The Child and Dependent Care Tax Credit as well as the Child Tax Credit were not applicable, as the household does not have children. The third column in Table 22 shows earned income limits for this two-person household composition.

⁷³ The three household compositions in this report were chosen in accordance to guidance provided by Clark County's Department of Job and Family Services.

Table 23 shows that as the number of people in the household decreases so does the level of earnings needed to support the household, FPL, and the income eligibility limits across the public assistance programs.

Table 23: Annual Earned Income Eligibility Thresholds for Three Household Compositions in Clark County

Public Assistance Program Or Tax Credit	Household Composition/Type		
	2 adults 2 children	1 adult 2 children	2 adults 0 children
Clark County Self-Sufficiency Standard (\$2016)	\$48,745	\$39,626	\$29,098
Federal Poverty Level (\$2016)	\$24,300	\$20,160	\$16,020
Earned Income Tax Credit (Married Filing Jointly)	\$50,198	\$44,648	\$20,430
Child and Dependent Care Tax Credit	No Limit (Percent of expenses covered varies with income however)		N/A
Child Tax Credit (Married Filed Jointly)	Modified Adjusted Gross Income <\$110,000	\$75,000	N/A
TANF (50% FPL)	\$12,150	\$10,080	\$8,010
SNAP (130% FPL)	\$31,590	\$26,208	\$20,826
Medicaid (138% FPL for adults, 200% for Children)	\$33,534 for adults \$48,600 for children	\$27,821 for adults \$40,320 for children	\$22,108 for adults
ACA (400% FPL)	\$97,200	\$80,640	\$64,080
HEAP Utilities (175% FPL)	\$42,525	\$35,280	\$28,035
Housing (Section 8) (50% Median Income of Clark County)	\$28,550	\$25,700	\$22,850

Sources: Computations for the 2016 Poverty Guidelines (2016, July 16); The Self-Sufficiency Standard, Ohio. (2015); Ruggles, et al. (2017); 2016 EITC Income Limits, Maximum Credit Amounts and Tax Law Updates. (2018, March); Publication 503 (2016), Child and Dependent Care Expenses. (2016, December); Is My Child a Qualifying Child for the Child Tax Credit? (2017, December); Ohio Works First (OWF). (2018); Publications - Fact Sheets – Child Care Assistance. (2017, March); Ohio Food Assistance Program. (n.d.); Affordable Care Act (ACA) - HealthCare.gov Glossary. (n.d.); Medical Assistance. (n.d.); Individual | Energy Assistance Programs. (n.d.); and Income Limits | HUD USER. (n.d.).

Examining Support Program Gaps and Disincentives to Work: Cliff Effect Analyses and Household Examples

Methodological Notes

In this section, the three household compositions in Clark County are analyzed and compared across a range of earned income levels.⁷⁴ In each example, the household's range of total gross resources were compared to the equivalent self-sufficiency standard based on household composition. Again, the adults in each household example are assumed to work full-time for 50 weeks out of the year. Each household composition was assumed to be receiving maximum public assistance benefits. In other words, each example is considered the "best case scenario" in which the household is receiving the maximum amount of all benefits/credits available when eligible.⁷⁵

Information on each public assistance program was collected from a variety of resources. Federal Earned Income Tax Credit information was collected from the 2016 EIC calculator from Bankrate, LLC.⁷⁶ The Child Tax Credit was assumed to be the full amount of \$2,000 (\$1,000 maximum per child). TANF benefits were assumed to be 27.9 percent of the household's FPL, up to the 50 percent FPL earned income limit.⁷⁷ SNAP allotments were calculated assuming the household would spend 30 percent of monthly earnings on food, and were provided by the USDA.⁷⁸ Both information on ACA and Medicaid was provided by the Henry J Kaiser Family Foundation.^{79, 80} HEAP utility benefit dollars were provided by the State of Ohio⁸¹, and Section 8 housing voucher information by the U.S. Department of Housing and Urban Development.⁸² And finally, Child Care Subsidies were calculated using the total cost of child care for the household, household copayments, and

⁷⁴ The charts and graphs discussing each household example begin at minimum wage and end at each household compositions' 400 percent of the FPL. It is important to note, however, that in reality the household types could be earning income at any level between minimum wage and 400 percent FPL. Therefore the figures represent ranges of income and should not be interpreted as each household compositions' actual starting and ending earned incomes.

⁷⁵ This report assumes all three household examples are receiving the maximum benefits amount of every public assistance program that they are eligible for at the lowest level of earned income (the 2018 State of Ohio minimum wage at \$8.30 per hour).

⁷⁶ Earned Income Tax Credit Calculator - EIC. (2018).

⁷⁷ *TANF Cash Benefits Have Fallen by More Than 20 Percent in Most States and Continue to Erode.* (2017, October).

⁷⁸ *Supplemental Nutrition Assistance Program (SNAP).* (2018, April).

⁷⁹ *2016 Health Insurance Marketplace Calculator.* (2017, November).

⁸⁰ *Medicaid Spending Per Full-Benefit Enrollee.* (2017, June).

⁸¹ *HEAP 2011-2016 Actual Benefits and HEAP 2017 Projections.* (2016, October).

⁸² *Housing Choice Vouchers Fact Sheet.* (n.d.).

percentage of the total cost covered by the Child and Dependent Care Tax Credit.^{83, 84} For Child Care Subsidies, gross earned income is used to define the subsidy amount, which includes annual earnings as well as income from ACA/Medicaid, HEAP, and Section 8 housing, where applicable.

Using the defined earned income limits and other eligibility requirements for each program, cliff effect graphs were created to show the impact additional wages/annual earnings have on public assistance benefits received.⁸⁵ The single line graphs for each household example shows the self-sufficiency standard at zero dollars (benchmarked) to show the changes in the self-sufficiency surplus/deficit when annual earned income increases. Anything below zero dollars means that at that annual earnings level, the household does not meet the equivalent self-sufficiency standard (i.e. experiences a deficit). All three household examples, however, never fall below their respective self-sufficient equivalency, and always have surplus dollars.

Household with 2 Adults, 1 Preschooler, and 1 School-aged Child

The self-sufficiency standard for this household composition is \$48,745 (2016\$). Annual earned household income was assumed to range from \$33,200 to \$97,200, or from 137 percent to 400 percent of the FPL. Annual household earnings of \$33,200 imply that each adult is working full-time for 50 weeks out of the year, and each earning \$8.30 an hour.⁸⁶ The maximum annual earnings of \$97,200 represent both adults working full-time 50 weeks in the year and earning \$24.30 per hour. The 100 percent FPL for this four-person household example in 2016 was \$24,300.

Figure 13 below shows the difference (surplus or deficit) between annual total gross resources and the equivalent self-sufficiency standard for the household. There is a cliff effect when the household transitions from Medicaid to ACA. When the household's earned income reaches 138 percent of the FPL, or \$33,534, the two adults in the household lose Medicaid eligibility and benefits, decreasing the amount of the household's total gross resources as a result. The two children, however, continue to be enrolled in Medicaid until annual earnings reach 200 percent FPL or \$48,600.

For this household composition, there are disincentives to take a raise or earn more annually, as total gross resources are not greatly improved, and may in fact decrease as

⁸³ The total cost of full-time childcare for one preschooler and one school-aged child for 50 weeks out of the year was \$8,573.

⁸⁴ *Lawriter - OAC - 5101:2-16-41 Payment rates and procedures for providers of publicly funded child care.* (2016, December).

⁸⁵ As the various public assistance phase-outs occur at specific percentages of the FPL, the earned incomes axes in the figures and graphs may not be entirely consistent in terms of the rate of increase.

⁸⁶ \$8.30 per hour is the 2018 minimum wage in the State of Ohio.

annual earned income increases. For example, at the lowest annual earned income of \$33,200, the household has total gross resources of \$58,863. Increasing annual earnings \$8,800, to \$42,000 does not greatly increase the amount of total gross resources partially due to the Medicaid/ACA cliff effect. At \$42,000 the household's total gross resources are \$59,306, an increase of \$443.⁸⁷

As another example, when annual earned income is \$40,000, total gross resources are \$58,493. Increasing annual household earnings to \$50,000 (each adult earning \$2.50 more per hour) raises total gross resources to \$59,700. An annual earned income increase of \$10,000 for the household only increases total gross resources by \$1,207. This negates a substantial incentive for the working adults to earn more annual income, especially if these raises would be associated with additional education or workforce training programs.

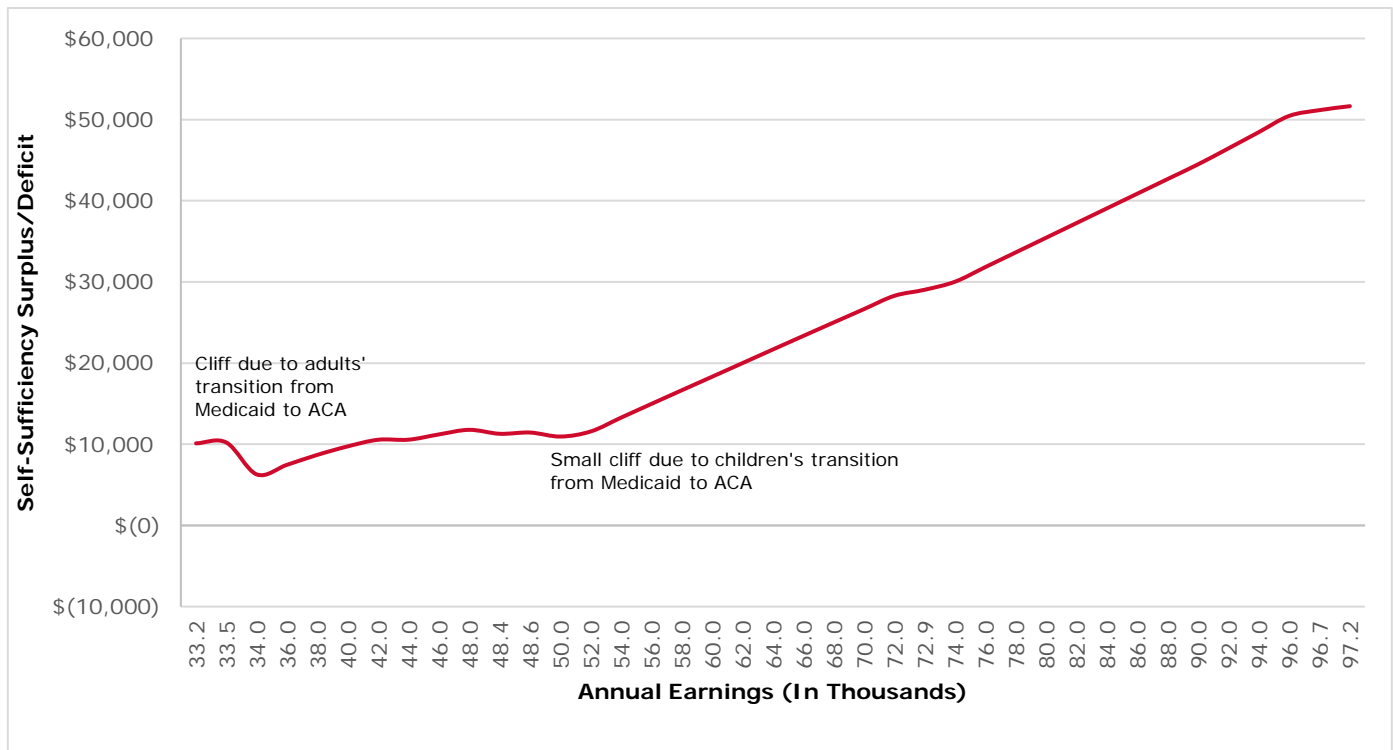
In other instances, as annual earnings increase, the household's total gross resources fall, due to the cliff effect. Increasing annual earnings by \$800 from \$33,200 to \$34,000⁸⁸, decreases total gross resources by \$3,832, due to the adults losing Medicaid benefits. Under this Medicaid cliff scenario, for every \$1.00 gained in earned income, total gross resources decrease by more than \$4.50 (\$4.79 to be exact). By increasing the household's earnings \$800 annually, \$4,632 is lost in public assistance benefits. For each \$1.00 increase in annual earnings, from \$33,200 to \$34,000, the household loses \$5.79 in public assistance benefits.

These two scenarios disincentivize the two adults to earn more annually as total gross resources are not greatly improved or may decline than if they would otherwise maintain lower earned incomes. In fact, until annual earned income reaches approximately \$52,000, total gross resources are relatively stagnant when compared to the growth rate of annual earned income. After the \$52,000 threshold is achieved, the household's total gross resources increase rather linearly with increases in annual earned income. In other words, from the starting wage of \$33,200 to \$52,000 the household's total gross resources are relatively stagnant. These annual earnings amounts translate to each full-time working adult in the household earning \$8.30 per hour to \$13.00 per hour. When both full-time working adults are earning minimum wage (or anything less than \$13.00 per hour), there is relatively little incentive to increase their annual earnings via promotion or working more hours, as their total gross resources barely change, until both adults are earning \$13.00 per hour.

⁸⁷ As earnings increase by \$8,800 or 27%, total gross resources only increase by 0.7% or \$433 from when annual earnings were lower.

⁸⁸ Note that the increase in annual earnings is arbitrary in representing the household exceeding the 138 percent FPL Medicaid eligibility threshold for the two adults.

Figure 14: Cliff Effects for a Household with 2 Adults, 1 Preschooler, and 1 School-aged child



Source: Economics Center calculations

When the household has annual earnings of \$33,534 (138% FPL), they receive \$25,425 in public assistance benefits and tax credits, giving the household total gross resources of \$58,959. When annual earned income increases to \$34,000, however, Medicaid eligibility for both adults is lost.⁸⁹ The adults then enroll in ACA, which contributes much less benefit dollars than Medicaid, and a cliff effect is seen. With this \$466 increase in annual earnings, the household receives \$21,031 in assistance, making total gross resources drop to \$55,031. With this increase in annual earnings (which translates to each adult receiving a \$0.12 hourly raise, from \$8.38 an hour to \$8.50 an hour), the household's total gross resources decrease by nearly \$4,000, or declines by \$8.43 for every \$1.00 gained in earned income. Furthermore, increasing annual earnings by \$466, or to \$34,000, the household loses more than four thousand dollars in public assistance benefits (approximately \$4,395). In addition to the adults losing Medicaid, the household also receives less public assistance dollars in EITC, Child Care Subsidies, HEAP, and the CCDCTC.

⁸⁹ Note that the increase in annual earnings is arbitrary in representing the household exceeding the 138 percent FPL Medicaid eligibility threshold for the two adults.

This situation creates a disincentive for the adults to earn higher wages, since as annual earned income increases, the amount of total gross resources dramatically decreases. The \$466 increase in annual earnings in no way offsets the loss of public assistance benefits incurred.

Table 24 shows the changes in annual earnings, benefit dollars received, and total gross resources before and after the adult Medicaid cliff effect.

Table 24: Adult Medicaid/ACA Cliff Effect for a Household with 2 Adults, 1 Preschooler, and 1 School-aged Child

Cliff Effects	Household Composition/Type		
	2 adults, 2 children		
Adults' Transition from Medicaid to ACA	Pre-Cliff	Post-Cliff	Change
Annual Earned Income	\$33,534	\$34,000	+\$466
Public Assistance/Tax Credit Benefits Received	\$25,425	\$21,031	-\$4,394
Total Gross Resources	\$58,959	\$55,031	-\$3,928
Self-Sufficiency Standard	\$48,745	\$48,745	-
Self-Sufficiency Surplus/Deficit	\$10,214	\$6,285	-\$3,929

Source: Economics Center calculations

Table 25 shows, as the household's earned income increases from \$33,534 to \$34,535, the change in the household's public assistance benefits received and the impact on total gross resources. For the additional dollar increase in annual earnings, the household receives more than four thousand dollars less in public assistance benefits, mostly due to the adult Medicaid/ACA cliff effect.⁹⁰ As the household's annual earnings exceed the Medicaid 138 percent FPL threshold, increasing \$1.00 from \$33,534 to \$33,535, the household loses \$4,253 in public assistance benefits. Once 138 percent FPL is reached, the household experiences a cliff effect in which the two adults lose their Medicaid eligibility.

⁹⁰ The full matrix table for this household composition is in the Appendix, as table A3.

Table 25: Benefits vs. Annual Earned Income Adult Medicaid/ACA Matrix for a Household with 2 Adults, 1 Preschooler, and 1 School-Aged Child

Annual Wage	% of FPL	Total Benefits Received	Total Gross Resources	Increase in Annual Earnings	Change in Benefits	Change in TGR	Cliff Effect
\$33,534	138%	\$25,425	\$58,959	N/A	N/A	N/A	
\$33,535	138%	\$21,172	\$54,707	\$1.00	-\$4,253	-\$4,252	Adult Medicaid/ACA Cliff

Source: Economics Center calculations

At higher annual earnings, there are other small cliffs for the household, representing larger amounts of benefits being lost when compared to the small one dollar increase in annual earned income. When annual earnings increase from \$42,525 to \$42,526 the household's HEAP benefits phase out. For each additional dollar increase in annual earnings, the household loses \$201 in benefits, once annual earnings exceed the 175 percent FPL threshold.

Table 26: Benefits vs. Annual Earned Income HEAP Matrix for a Household with 2 Adults, 1 Preschooler, and 1 School-Aged Child

Annual Wage	% of FPL	Total Benefits Received	Total Gross Resources	Increase in Annual Earnings	Change in Benefits	Change in TGR	Cliff Effect
\$42,525	175%	\$16,638	\$59,163	N/A	N/A	N/A	
\$42,526	175%	\$16,437	\$58,963	\$1.00	-\$201	-\$200	HEAP Benefits Cliff

Source: Economics Center calculations

Finally, the children's transition from Medicaid to ACA occurs once the household's annual earnings exceed 200 percent FPL. When annual earned income increases from \$48,600 to \$48,601 the household receives less in public assistance aid, as the children transition off of Medicaid. For the \$1.00 increase in earned income, \$714 less is received in public assistance benefits.

Table 27: Benefits vs. Annual Earned Income Child Medicaid/ACA Matrix for a Household with 2 Adults, 1 Preschooler, and 1 School-Aged Child

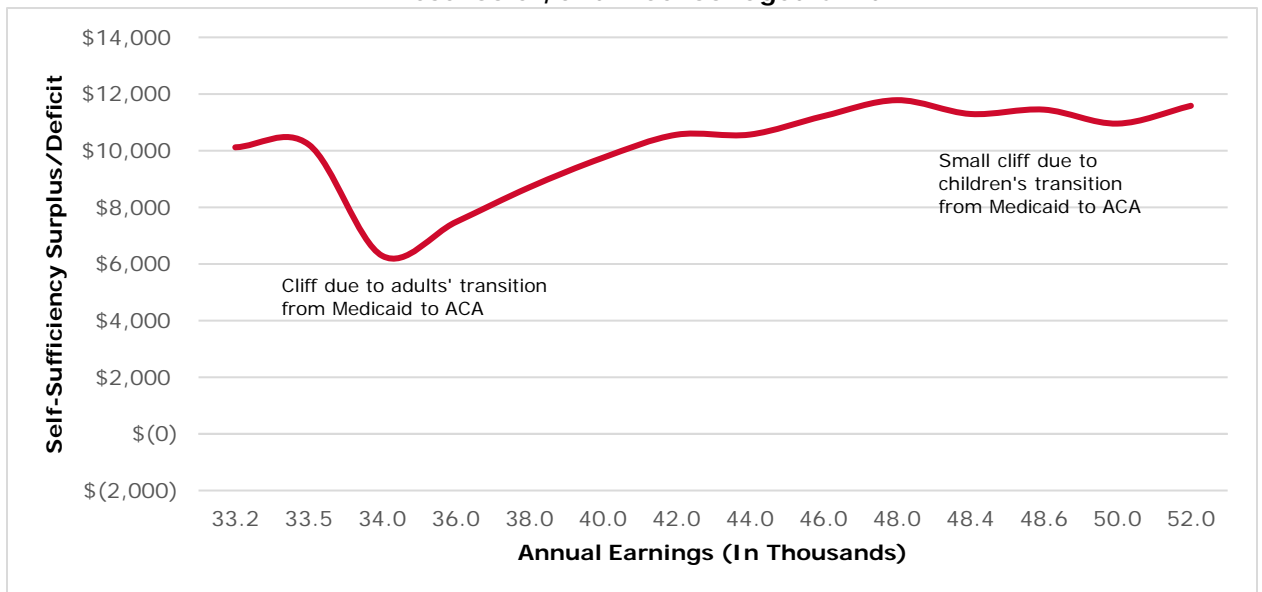
Annual Wage	% of FPL	Total Benefits Received	Total Gross Resources	Increase in Annual Earnings	Change in Benefits	Change in TGR	Cliff Effect
\$48,600	200%	\$11,593	\$60,193	N/A	N/A	N/A	
\$48,601	200%	\$10,879	\$59,480	\$1.00	-\$714	-\$713	Child Medicaid/ACA Cliff

Source: Economics Center calculations

Figure 15 shows the adults' Medicaid/ACA cliff effect in greater detail. Once annual earned income exceeds \$33,534, the transition occurs and the household's total gross resources drop. This in turn, causes the household to have fewer dollars in self-sufficiency surplus, or total gross resources above the self-sufficiency equivalent. To achieve a similar level of total gross resources before Medicaid benefits were lost, the household would have to attain annual earnings of approximately \$42,000. Increasing the household's annual earnings from \$33,534 to \$42,000 leaves them with a similar level of total gross resources when factoring in the adults' Medicaid to ACA cliff effect. In other words, the household would have to earn \$8,466 more annually, to reach the same level above self-sufficiency as before the ACA/Medicaid cliff effect.

An \$8,466 increase in annual earned income translates to each adult receiving a \$2.12 per hour raise (from \$8.38 to \$10.50 per hour) to achieve \$42,000 in earnings annually, in order to offset the cliff effect.⁹¹ If each adult were to be presented with an hourly raise of less than \$2.12, the total gross resources would shrink when Medicaid is lost, and the household would be worse off. Another small cliff occurs when the children's Medicaid benefits phase out at 200 percent FPL, or \$48,600.

Figure 15: Medicaid/ACA Cliff Effect for a Household with 2 Adults, 1 Preschooler, and 1 School-aged Child



Source: Economics Center calculations

⁹¹ Conversely, one adult could be offered a raise of \$4.24 while the other does not receive any raise, to achieve the same results.

Figure 16: Total Gross Resources Compared to the Self-Sufficiency Standard for a Household with 2 Adults, 1 Preschooler, and 1 School-aged Child



Source: Economics Center calculations

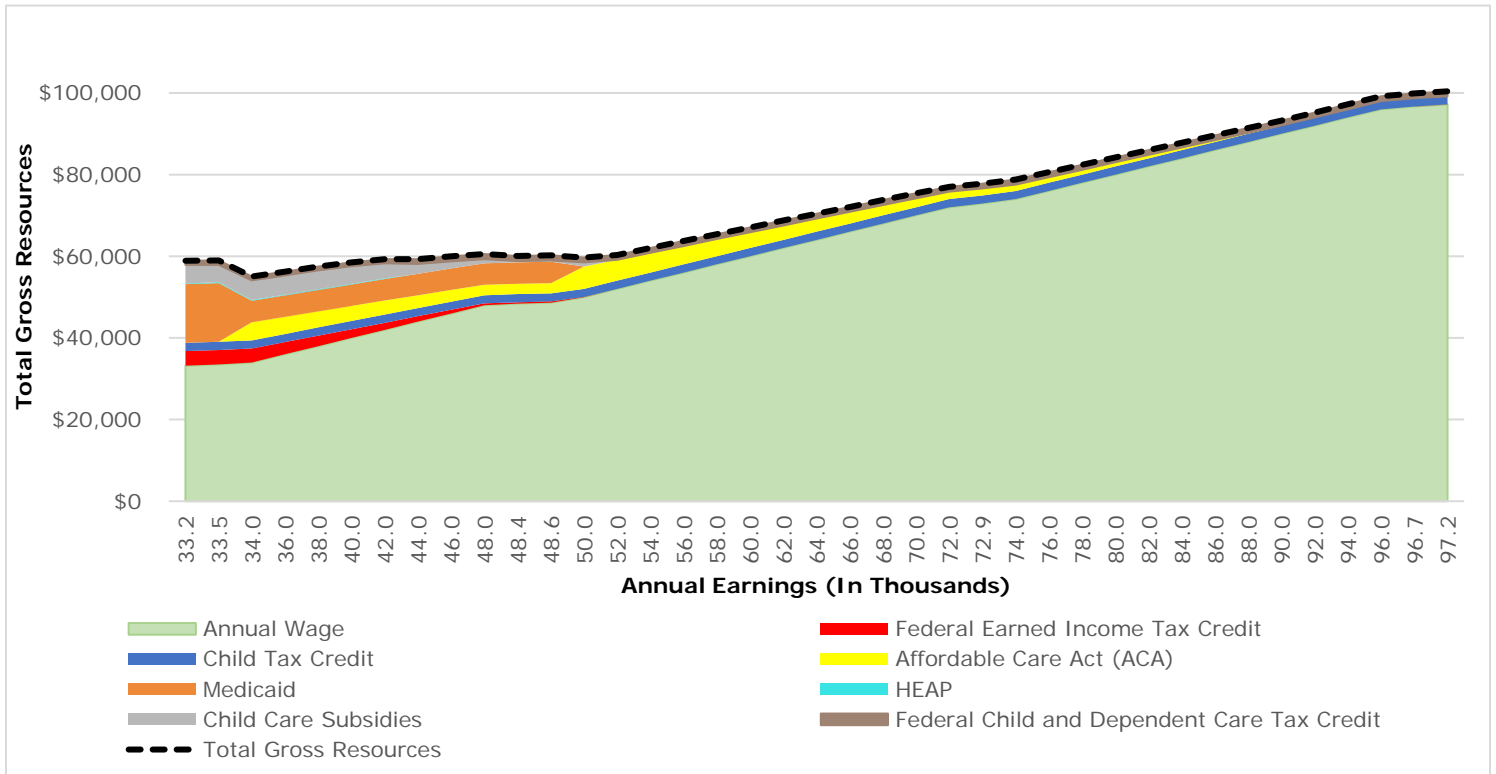
In the figure above, it can more easily be seen that full-time employment for this household composition, plus full public assistance benefits, allows the household to have dollars in self-sufficiency surplus, or total gross resources above the equivalent level of self-sufficient earnings (\$48,745). Annual earned income, alone, does not achieve the self-sufficiency standard, at lower levels of earnings as can be seen in green. The addition of public assistance benefits, however, allows the household to have income above the self-sufficient equivalency. Until each adult is earning \$12.19 per hour, annual earnings alone are below the self-sufficiency level. In other words, for this household composition to meet the self-sufficiency standard (while not receiving any type of public assistance), both adults would have to be employed full-time at \$12.19 per hour.

Even with the cliff effects, the household's income never drops below the self-sufficiency equivalent. If this fact is known to local businesses and employers, there is no incentive therefore to increase workers' wages. Employers may offer lower wages and assume that individuals will be applying and receiving public assistance. Employers, therefore, would be reluctant to offer higher wages if it is understood that at lower wages the household receives public assistance, and is above the self-sufficient equivalency. In other words, the existence of these public assistance programs may incentivize some businesses to offer lower wages, and keep them low. On the other hand, households are incentivized to keep their earned incomes lower in order to avoid such cliff effects. Disincentives on both

sides of the equation make this an extremely complex situation for households and employers in Clark County.

Figure 17 shows the changes in total gross resources across the household's range of annual earned income, and the amount received by each type of public assistance program or tax credit. Annual wages are shown in light green. Significantly, when the household's two adults are employed at minimum wage, or have annual earnings of \$33,200, public assistance dollars make up almost half (44 percent) of the total gross resources. As the level of earned income increases, public assistance benefits gradually decrease and phase out when the household is no longer eligible. As the household's annual earnings increase from \$33,200 to \$97,000, the loss of various public assistance and tax credits benefits can be seen. At the \$33,200 earned income level, the household receives EITC, the Child Tax Credit, Medicaid, HEAP, Child Care Subsidies, and the Child and Dependent Care Tax Credit (CDCTC). Federal Earned Income Tax Credits received are shown in red. The household no longer qualifies for the EITC once annual earnings exceed \$50,199. This can be seen in Figure 16 where the EITC phases out shortly after \$50,000 in annual earnings. The household in this example is always eligible for the \$2,000 Child Tax Credit, in dark blue, as annual earnings stay below the earned income limit of \$110,000. The household does not receive any TANF cash assistance as the earned income limit is 50 percent FPL and is also ineligible for SNAP assistance, as the starting minimum wage earnings are already above the 130 percent FPL limit for receiving SNAP assistance. At the lowest annual income threshold of \$33,200 in this example, the household has earnings of 137 percent FPL.

Figure 17: Total Gross Resources across a Range of Annual Earned Incomes for a Household with 2 Adults, 1 Preschooler, and 1 School-aged Child



Source: Economics Center calculations

The cliff effect from the adults' transition to ACA can be seen, when the household's annual income exceeds 138 percent FPL, or \$33,534. The second small drop in total gross resources occurs when the children Medicaid benefits phase out at 200 percent FPL, or \$48,600. HEAP utility assistance phases out at 175 percent FPL, when annual earnings exceed \$42,525, and is shown in light blue. Section 8 housing assistance is also not received as the household's starting earned income is already higher than the eligibility limit. For this household composition, fair market rent to receive Section 8 housing assistance, was assumed to be a two-bedroom unit at \$681 per month. Once 30 percent of the household's monthly earnings are equal to the rent amount of \$681, housing assistance is no longer provided.⁹² Child Care Subsidies, shown in grey, phase out when

⁹² For example, at \$20,000, the household earns \$1,667 per month. Assuming the household is spending 30 percent of monthly income on a 2-bedroom unit, the household would spend \$500 per month. With a 2-bedroom unit costing \$681, the household receives \$181 per month in section 8 housing assistance. Once the household's annual income reaches \$27,240, 30 percent of monthly income, of \$2,270, is equal to \$681, and zero dollars of section 8 assistance is received.

the household's gross earned income exceeds \$50,000.⁹³ And finally, shown in brown, the household is continually eligible to receive some dollars in tax credits from the CDCTC, as there is no earned income limit. The total amount of gross resources the household receives is shown by a black dotted line, representing the household's annual earned income as well as any public assistance benefits they receive.

Household with 1 Adult, 1 Preschooler, and 1 School-aged Child

The self-sufficiency standard for this single-parent household with one preschooler and one school-aged child is \$39,626 (2016\$). Annual earnings range from \$16,600 to \$80,640, or from 82 percent to 400 percent of the FPL. The annual earnings of \$16,600 equates to the single parent working full-time for 50 weeks out of the year, and each earning \$8.30 an hour. The maximum annual earnings of \$80,640 means the adult works full-time 50 weeks in the year and earning \$40.32 per hour. The 100 percent FPL for this three-person household in 2016 was \$20,160.

Figure 18 below shows the difference (surplus or deficit) between annual wages and self-sufficiency standard for the household. For this household composition, there are a total of two cliff effects. The first cliff effect is when the parent in the household transitions to ACA from Medicaid, and the third cliff effect is when the household's earnings exceed \$75,000 and the Child Tax Credit is lost. The separate cliff effects are further detailed below.

For this single-parent household, there are disincentives to take a raise or earn more annually, as their total gross resources are not greatly improved, and may in fact decrease as annual earned income increases. For example, when the household's annual earnings are \$25,000, their total gross resources total \$48,259. Increasing annual earned income to \$35,000 makes the household's total gross resources \$50,977. An annual increase of \$10,000 in earnings for the household only increases the amount of total gross resources by \$2,718. Furthermore, when annual earnings are increased from \$45,000 from \$25,000, total gross resources for the household only increase by \$3,735. A \$20,000 increase in annual earned income only gives the household almost four thousand dollars more in total gross resources, due to cliff effects. Even after the Medicaid/ACA cliff effect occurs, when earned income increases from approximately \$30,000 to \$45,000, there is little change in total gross resources. These small changes in the household's total gross resources when earned income largely increases negates a substantial incentive for the adult to earn more annual income, especially if these raises would be associated with additional education or workforce training programs.

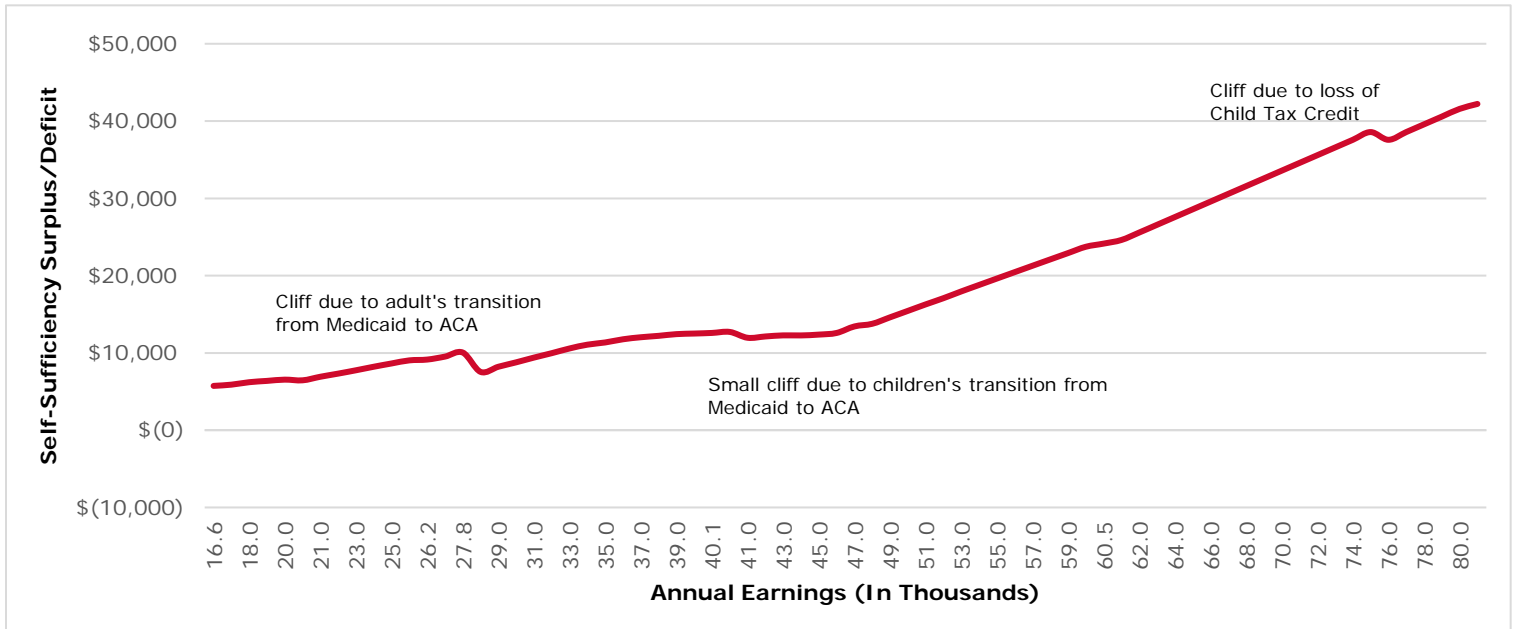
⁹³ For Child Care Subsidies, gross earned income includes annual income, as well as income from ACA/Medicaid, HEAP, and section 8 housing.

In some instances, the household's total gross resources actually decrease when earned income increases. A \$1,000 increase in earnings from \$27,000 to \$28,000, total gross resources decreases by \$1,980 due to the adult's loss of Medicaid. To further put this into perspective, for every additional \$1.00 in annual earned income, the household loses \$2.98 in public assistance benefits. Therefore, when the household's earnings increase by \$1,000, public assistance aid decreases by \$2,980, and effectively decreases the household's total gross resources by \$1,980.⁹⁴

These scenarios disincentivize the adult to earn more annually, as their total gross resources are not considerably larger, and may actually decrease, than if they maintain lower incomes. In fact, until earned income reaches approximately \$45,000, the household does not see strong increases in total gross resources compared to large increases in annual earnings. After \$45,000 in earned income is achieved, the household experiences more linear increases in total gross resources as earnings increase. From the minimum annual earnings of \$16,600 to \$45,000 the household's total gross resources are relatively stagnant and do not greatly improve. These annual earnings amounts translate to \$8.30 per hour to \$22.50 per hour. When the adult is earning minimum wage, or wages less than \$22.50 per hour, there is relatively little incentive to increase earnings, as the household's total gross resources are not largely improved. Once the full-time working adult reached \$22.50 per hour, however, more linear improvements in annual earnings and total gross resources can be seen.

⁹⁴ Note that the increase in annual earnings is arbitrary in representing the household exceeding the 138 percent FPL Medicaid eligibility threshold for the adult.

Figure 18: Cliff Effects for a Household with 1 Adult, 1 Preschooler, and 1 School-aged child



Source: Economics Center calculations

The tables below show as the household's annual earned income increases, less public assistance aid is received. The adult Medicaid/ACA cliff effect can be seen when the household's annual earnings increase from \$27,821 to \$27,822. For the additional dollar in annual earnings, \$2,522 is lost in public assistance benefits.

Table 28: Benefits vs. Annual Earned Income Adult Medicaid/ACA Matrix for a Household with 1 Adult, 1 Preschooler, and 1 School-Aged Child

Annual Wage	% of FPL	Total Benefits Received	Total Gross Resources	Increase in Annual Earnings	Change in Benefits	Change in TGR	Cliff Effect
\$27,821	138%	\$21,848	\$49,669	N/A	N/A	N/A	
\$27,822	138%	\$19,326	\$47,148	\$1.00	-\$2,522	-\$2,521	Adult Medicaid/ACA Cliff

Source: Economics Center calculations

The children's transition from Medicaid to ACA can be seen once the household's annual earnings exceed 200 percent FPL. When annual earned income increases from \$40,320 to \$40,321 the household receives less in public assistance aid. For the \$1.00 increase in annual earnings, \$1,196 is lost in public assistance benefits.

Table 29: Benefits vs. Annual Earned Income Child Medicaid/ACA Matrix for a Household with 1 Adult, 1 Preschooler, and 1 School-Aged Child

Annual Wage	% of FPL	Total Benefits Received	Total Gross Resources	Increase in Annual Earnings	Change in Benefits	Change in TGR	Cliff Effect
\$40,320	200%	\$12,018	\$52,338	N/A	N/A	N/A	
\$40,321	200%	\$10,822	\$51,143	\$1.00	-\$1,196	-\$1,195	Child Medicaid/ACA Cliff

Source: Economics Center calculations

Loss of Medicaid

The first cliff effect in this single-parent household example is the loss of Medicaid and the transition to the ACA. When the household's earned income reaches 138 percent of the FPL, or \$27,821, the adult loses Medicaid eligibility and benefits which causes a cliff effect. Additionally, when the household's annual earnings exceed \$40,320, both children are no longer eligible for Medicaid and another slight cliff is experienced.

When the household has annual earnings of \$27,821, they receive \$21,848 in public assistance benefits and tax credits, giving the household total gross resources of \$49,669. When annual earned income increases to \$28,000, however, Medicaid eligibility is lost for the parent. The adult then enrolls in the ACA, which contributes much less benefit dollars than Medicaid, and a cliff effect occurs. With this increased annual earnings, the household receives \$19,167 in assistance, making total gross resources drop to \$47,167. From a \$179 increase in annual earned income, which translates to the adult receiving a \$0.09 hourly raise (from \$13.91 an hour to \$14.00 an hour), the household's total gross resources decrease by \$2,502.

From the single parent receiving a \$0.09 hourly raise, adult Medicaid benefits are lost, receive less in income tax credits, HEAP, Child Care Subsidies, and CDCTC, which leaves them with significantly less gross resources than when their earned income was lower. This situation creates another disincentive for the single parent to earn higher wages since, as annual earned income increases, the amount of total gross resources actually decreases. The \$179 increase in annual earnings in no way offsets the loss of public assistance benefits incurred, the household experiences a drop in total gross resources.

The household experiences another slight drop in total gross resources when the two children lose Medicaid eligibility. When the household's annual earnings are \$40,320, total gross resources are \$52,338. When annual earnings increase to \$41,000 however, both children lose their Medicaid benefits and are enrolled in ACA. From this \$680 increase in annual income, the household's total gross resources are now \$51,582, dropping \$756.

Table 30 shows the changes in annual earned income, benefit dollars received, and total gross resources before and after the cliff effect for this single-parent household. Increasing the household's annual earnings by \$179 from \$27,821 to \$28,000 causes the household to lose \$2,681 in public assistance benefits. In this situation, for each additional \$1.00 increase in annual earnings, the household loses \$14.96 in public assistance aid.⁹⁵

Table 30: Medicaid/ACA Cliff Effect for a Household with 1 Adult, 1 Preschooler, and 1 School-aged child

Cliff Effects	Household Composition/Type		
	1 adult 2 children		
Adult Transition from Medicaid to ACA	Pre-Cliff	Post-Cliff	Change
Annual Earned Income	\$27,821	\$28,000	+\$179
Public Assistance/Tax Credit Benefits Received	\$21,848	\$19,167	-\$2,681
Total Gross Resources	\$49,669	\$47,167	-\$2,502
Self-Sufficiency Standard	\$39,626	\$39,626	-
Self-Sufficiency Surplus/Deficit	\$10,043	\$7,541	-\$2,502

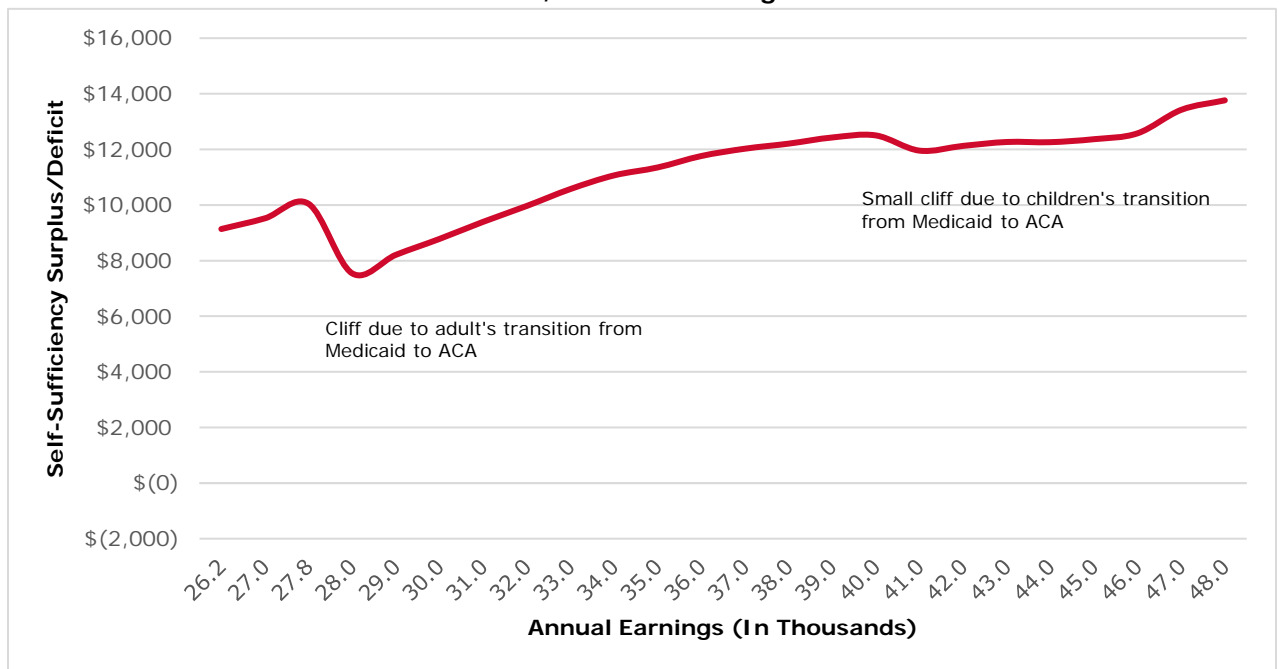
Source: Economics Center calculations

Figure 19 shows the Medicaid/ACA housing cliff effect for this household composition. Once annual earnings exceed \$27,821, the transition from Medicaid to ACA occurs for the adult and total gross resources fall. To achieve a similar level of total gross resources before Medicaid benefits were lost, the household would have to attain annual earnings of approximately \$32,000. Increasing the household's annual earnings to \$32,000 leaves them with a similar level of total gross resources when factoring in the Medicaid to ACA cliff effect and the loss of housing assistance. In other words, the household would have to earn \$4,179 more annually, to reach the same level above self-sufficiency, as before the cliff effect. Therefore, the single parent would have to receive a \$2.09 per hour raise to earn \$32,000 annually in order to offset the cliff effect (from \$13.91 an hour to \$16.00 an hour). If the parent was presented with an hourly raise of less than \$2.09, it is not likely they would accept it, as the adult's Medicaid benefits would be lost and a cliff effect experienced.

⁹⁵ Note that the increase in annual earnings is arbitrary in representing the household exceeding the 138 percent FPL Medicaid eligibility threshold for the adult.

When the children lose Medicaid eligibility, at \$40,320, the cliff effect seen is slightly greater in impact, in terms of 'bounce back' earned income required to achieve a similar level of pre-cliff total gross resources. To achieve a similar level of total gross resources as before the children's Medicaid was lost, the household would have to attain annual earnings of approximately \$46,000, an increase of \$5,680, compared to the \$4,179 increase required when the parent loses Medicaid. The child Medicaid loss in other words, is a less steep cliff effect as the household loses less total gross resources, but it requires slightly more annual earnings for the household to have the same level of total gross resources as before the cliff. This in part is due to requirements for the Child Care Subsidies, which take into account a household's assistance dollars from Medicaid, ACA, HEAP, and Section 8 housing assistance. As dollars from Medicaid are decreased when the parent and children lose eligibility, the amount in Child Care Subsidies increases.

Figure 19: Medicaid/ACA Cliff Effects for a Household with 1 Adult, 1 Preschooler, and 1 School-aged child



Source: Economics Center calculations

Loss of the Child Tax Credit

When the annual earned income of a single-parent household with one preschooler and one school-aged child exceeds \$75,000, the household is no longer eligible for the Child Tax Credit. This loss of \$2,000 in public assistance benefits creates a third cliff effect, albeit smaller than the previous two. At an annual earned income of \$75,000, the household receives the Child Tax Credit and the CDCTC, making total gross resources

\$78,200. Once the household's earnings increase to \$76,000, however, the Child Tax Credit phases out as the household is no longer eligible. At this new level of annual earnings, the household is only receiving the CDCTC. With the one thousand dollar increase in earnings, from \$75,000 to \$76,000, the household's total gross resources drop to \$77,200 with the loss of the Child Tax Credit.

Table 31 shows the changes in annual earned income, benefit dollars received, and total gross resources before and after the Child Tax Credit cliff effect for the household.⁹⁶

Table 31: Child Tax Credit Cliff Effect for a Household with 1 Adult, 1 Preschooler, and 1 School-aged child

Cliff Effects	Household Composition/Type		
	1 adult 2 children		
Loss of Child Tax Credit	Pre-Cliff	Post-Cliff	Change
Annual Earned Income	\$75,000	\$76,000	+\$1,000
Public Assistance/Tax Credit Benefits Received	\$3,200	\$1,200	-\$2,000
Total Gross Resources	\$78,200	\$77,200	-\$1,000
Self-Sufficiency Standard	\$39,626	\$39,626	-
Self-Sufficiency Surplus/Deficit	\$38,574	\$37,574	-\$1,000

Source: Economics Center calculations

Figure 20 shows the Child Tax Credit cliff effect. It can be seen once annual earnings exceed \$75,000, Child Tax Credit benefits are lost and a slight cliff effect occurs. To achieve the same pre-loss of Child Tax Credit total gross resources, the household's annual income would have to increase to \$77,000. This equates to a \$1.00 hourly raise, from \$37.50 to \$38.50 per hour.

The loss of the Child Tax Credit for the household, since it occurs at a much higher earned income level, is less harmful than the previous two cliff effects. For the Medicaid/ACA cliff effect, it was seen that the household would have to receive a \$2.09 hourly raise to attain the same level of total gross resources as before the cliff effect. The required raise increases to \$2.84 per hour, to offset the children's Medicaid/ACA transition, while a \$1.00 raise is required to offset the loss of the Child Tax Credit.

⁹⁶ Note that the increase in annual earnings is arbitrary in representing the household exceeding the \$75,000 eligibility threshold for the child tax credit.

Figure 20: Child Tax Credit Cliff Effect for a Household with 1 Adult, 1 Preschooler, and 1 School-aged child



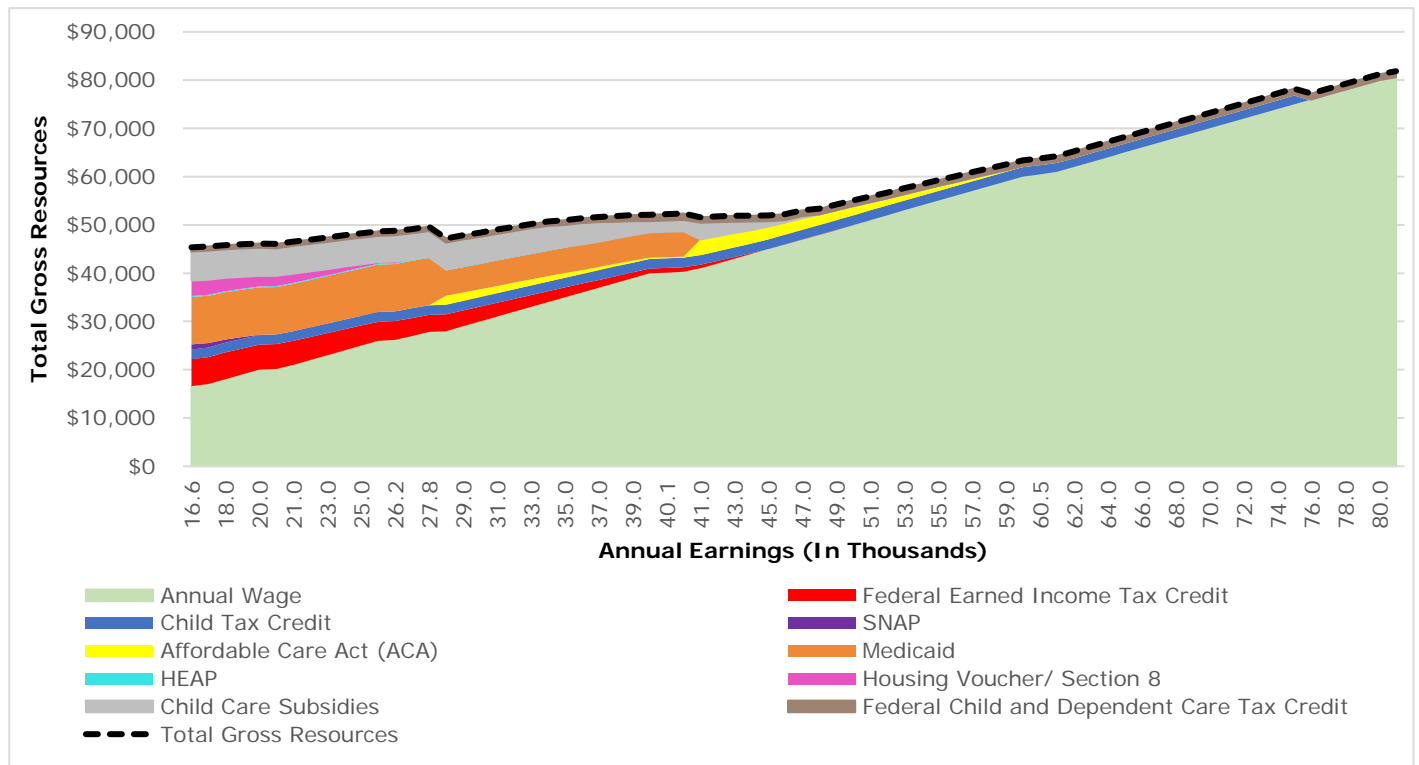
Source: Economics Center calculations

Like the previous household example, for this single-parent household composition, full-time employment plus full public assistance benefits allows the household to have dollars in self-sufficiency surplus, or total gross resources above the equivalent level of self-sufficient earnings (\$39,626). Until the single-parent is earning \$19.81 per hour, annual earnings alone are below the self-sufficiency level. In other words, for this household composition to meet the self-sufficiency standard (while not receiving any type of public assistance), the single adult would have to be employed full-time at \$19.81 per hour.

However, even with the cliff effects, the household never drops below the self-sufficient equivalency. If this fact is known, there is little incentive for local businesses and employers to increase low-income workers' wages. Employers may offer lower wages and assume that individuals will be applying and receiving public assistance aid. Companies, therefore, may be reluctant to offer higher wages if it is understood that at lower wages the household receives public assistance, and has dollars above the self-sufficient equivalency. In other words, the existence of these public assistance programs may incentivize some businesses to offer lower wages, and keep them low. On the other hand, households are disincentivized to increase earned incomes in order to avoid such cliff effects, which, especially at lower earned income levels, have large impacts to the household's total gross resources. Disincentives on both sides of the equation make this an extremely complex situation for both households and employers in Clark County.

Figure 21 shows the changes in total gross resources across the household's range of annual earned income, and the amount received by each type of public assistance program or tax credit. Annual wages are shown in light green. It can be seen that at the lowest level of earned income, two-thirds of the household's total gross resources is provided by public assistance benefits. As the household's annual earnings increase, the loss of various public assistance and tax credits benefits can be seen. At the \$16,600 earned income level, the household receives all public assistance benefits and tax credits, except TANF cash assistance. Federal Earned Income Tax Credits received are shown in red, which phase out once the household's annual earnings exceed \$44,500. The \$2,000 Child Tax Credit, in dark blue, is lost once annual earned income exceeds \$75,000. The household does not receive any TANF benefits, as the household's earned income exceeds the program's eligibility limits. SNAP benefits are seen in purple, but quickly phase out once earned income reaches approximately \$20,000. SNAP benefits are seen in purple, but quickly phase out once earned income reaches approximately \$20,000.

Figure 21: Total Gross Resources across a Range of Annual Earned Incomes for a Household with 1 Adult, 1 Preschooler, and 1 School-aged child



Source: Economics Center calculations

The cliff effect from the adult's transition to ACA occurs when annual earned income exceeds 138 percent FPL, or \$27,821. The second small cliff when children Medicaid benefits phase out occurs at 200 percent FPL, or \$40,320. Section 8 housing assistance,

shown in pink, is lost around the same time when the household's annual earnings reach more than \$27,000. ACA, in yellow, phases out once the household has an annual earned income above \$61,000. HEAP utility assistance phases out at 175 percent FPL, when earnings exceed \$35,280. For this household composition, fair market rent was again assumed to be a two-bedroom unit priced at \$681 per month. Once thirty percent of the household's monthly income is equal to the rent amount of \$681, housing assistance is no longer provided.⁹⁷ Child Care Subsidies, shown in grey, phase out when the household's earned income exceeds \$47,000. And finally, shown in brown, the household is continually eligible to receive some dollars in tax credits from the CDCTC, as there is no income limit. The total amount of gross resources the household receives is shown by the black dotted line, representing the household's annual income as well as any public assistance/credit benefits received.

Household with 2 Adults and No Children

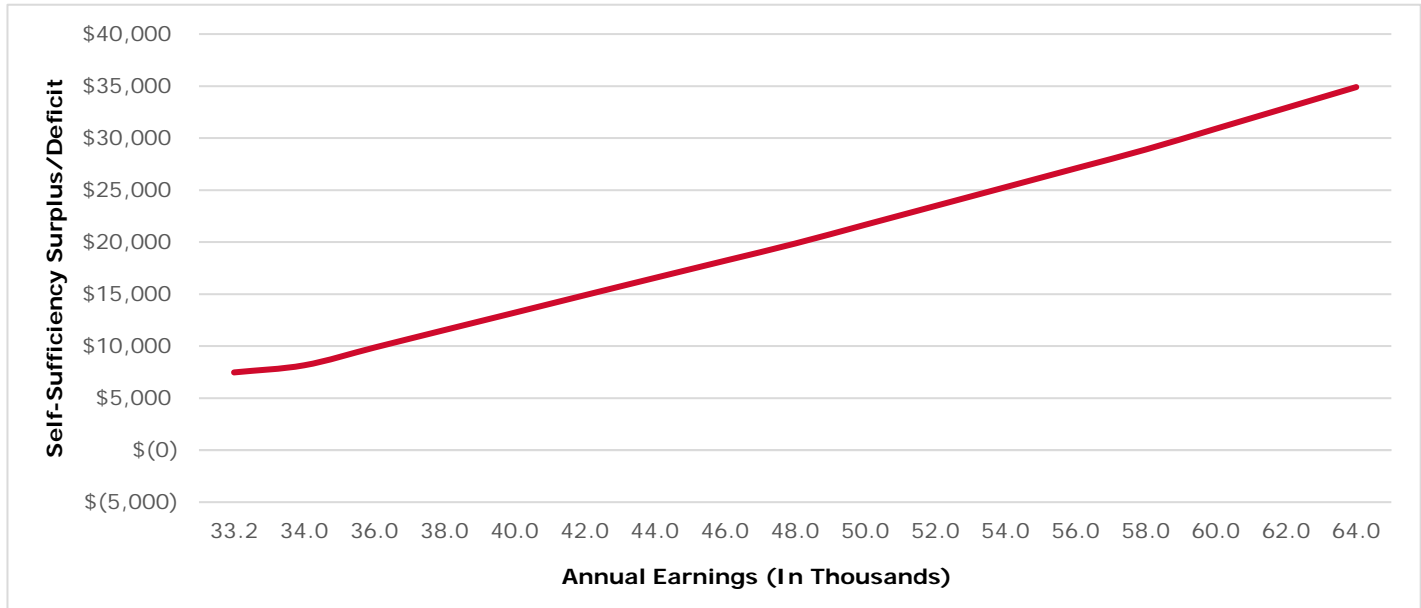
For a two adult household with no children in Clark County, the self-sufficiency standard is \$29,098 (2016\$). Annual earned income ranges in the household's example are from \$33,200 to \$64,000 (207% to 400% FPL). The annual earnings of \$33,200 equates to both adults working full-time for 50 weeks out of the year, and each earning \$8.30 an hour. The maximum annual earnings of \$64,000 represents each full-time working adult earning \$16.00 per hour. The 100 percent FPL for this two-person household in 2016 was \$16,020.

Figure 22 below shows the difference (surplus or deficit) between annual wages and self-sufficiency standard for this household. For this household composition, there are no cliff effects experienced. At the lowest possible income (both adults earning minimum wage), the household's earnings are greater than 138 percent FPL, and therefore are not eligible for Medicaid, and is immediately enrolled in ACA. Additionally, the household does not receive any EITC, TANF, SNAP, HEAP, or Section 8 housing assistance.

Unlike the other two household examples with children, the adults in the household fair better in terms of having minimal disincentives to work. Also, the household's annual earnings are always above the self-sufficiency standard, without public assistance aid. With the other household examples, large increases in annual earnings did not have the same effect on the total gross resources. For this two adult no children household, however, since they receive minimal public assistance benefits to begin with, total gross resources increase at a fairly similar rate with annual earnings.

⁹⁷ For example, at \$27,000, the household earns \$2,250 per month. Assuming the household is spending 30 percent of monthly income on a 2-bedroom unit, the household would spend \$675 per month. With a 2-bedroom unit costing \$681, the household receives \$6 in Section 8 housing assistance, or \$72 per year. Once the household's annual income reaches \$27,240, 30 percent of monthly income, is equal to \$681, and zero dollars of housing assistance is received.

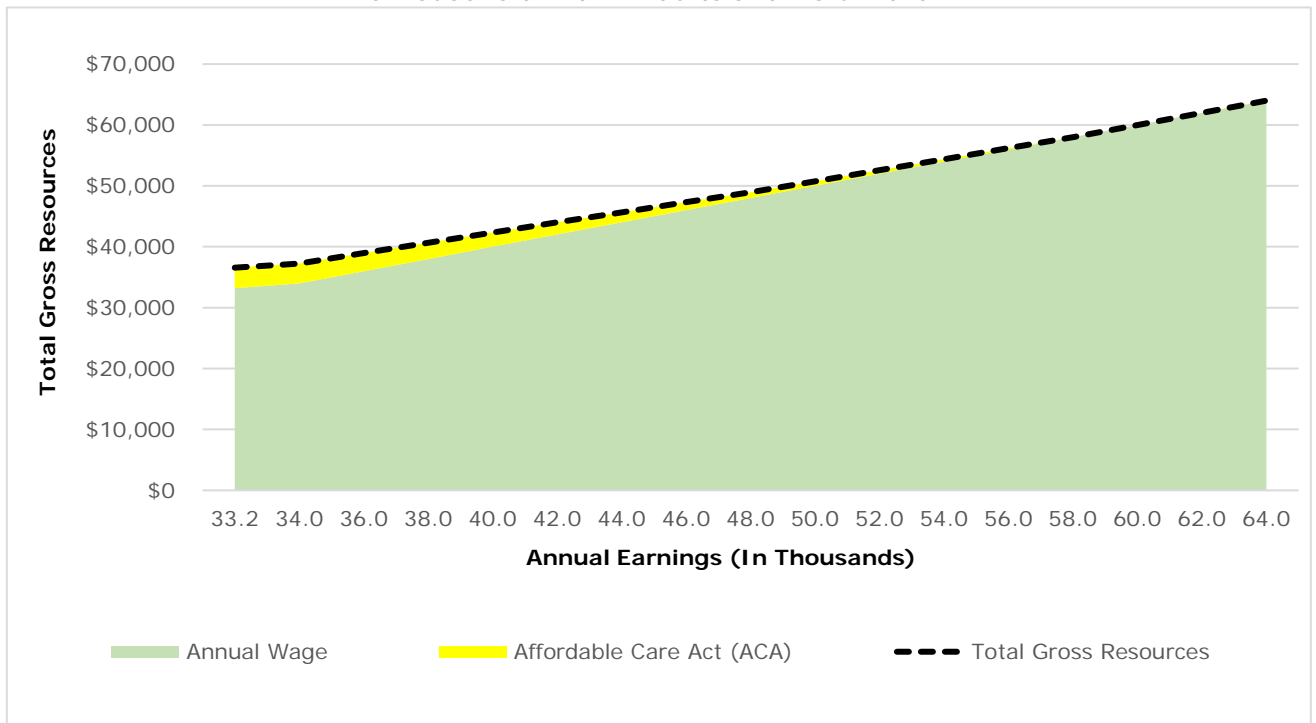
Figure 22: Cliff Effects for a Household with 2 Adults and No Children



Source: Economics Center calculations

Figure 23 shows the changes in total gross resources across the household's range of annual earned income, and the amount received by each type of public assistance program or tax credit. Annual wages are shown in light green, and ACA benefits in yellow. The household is no longer eligible for ACA, in yellow, once annual earned income is more than \$56,000. Again, the total amount of gross resources of the household is shown by a black dotted line, representing the household's annual earned income as well as any benefits received.

Figure 23: Total Gross Resources Across a Range of Annual Earned Incomes for a Household with 2 Adults and No Children



Source: Economics Center calculations

The “Just Above Poverty” Gap

The just above poverty gap is a hidden trap for households with annual earned incomes between 130 to 199 percent FPL, that are not eligible to apply for certain financial programs. This creates a hardship for these individuals, one that is not faced by other households with the same earned incomes, which were able to enroll in the programs when their earnings were lower.

Households that fall into this just above poverty gap do not qualify for Child Care Subsidy assistance if earned income is above 130 percent FPL at the time of application. For example, if a household has annual earnings amounting to 150% FPL when applying for child care subsidy assistance, they are ineligible, since the “at-time-of-application” threshold is 130% FPL. However, if a separate household, earning 175% FPL applied for child care subsidy assistance when their income was below 130% FPL, they are continually eligible for child care subsidy assistance. The second household, earning more annually, continues to receive child care subsidies while the first household, earning less, is not eligible to apply.

Additionally, these households are not eligible for TANF cash assistance, Section 8 housing, or SNAP benefits, as the earned income exceeds the minimum qualifying wages. Addressing this just above poverty gap issue is more complex, as it involves the structure of the programs. Expanding child care subsidy eligibility requirements at the time of application, especially, would greatly aid households falling into the just above poverty trap.

Just Above Poverty Household with 2 Adults, 1 Preschooler, and 1 School-aged Child

For this two-adult, two-child household, the just above poverty gap includes annual earned incomes between \$33,290 and \$48,357 (between 137% and 199% FPL).⁹⁸ Again, assuming both adults in the household are working full-time hours for 50 weeks out of the year, the annual earned income range equates to both adults earning between \$8.30 per hour and \$12.09 per hour.

Additional challenges are faced since the household is not eligible for full benefits. The just above poverty household has to pay the full annual cost of \$8,573 for childcare, as the household is not eligible for Child Care Subsidy assistance. However, the household is still able to apply for and receive tax credits from the CDCTC and the Child Tax Credit.

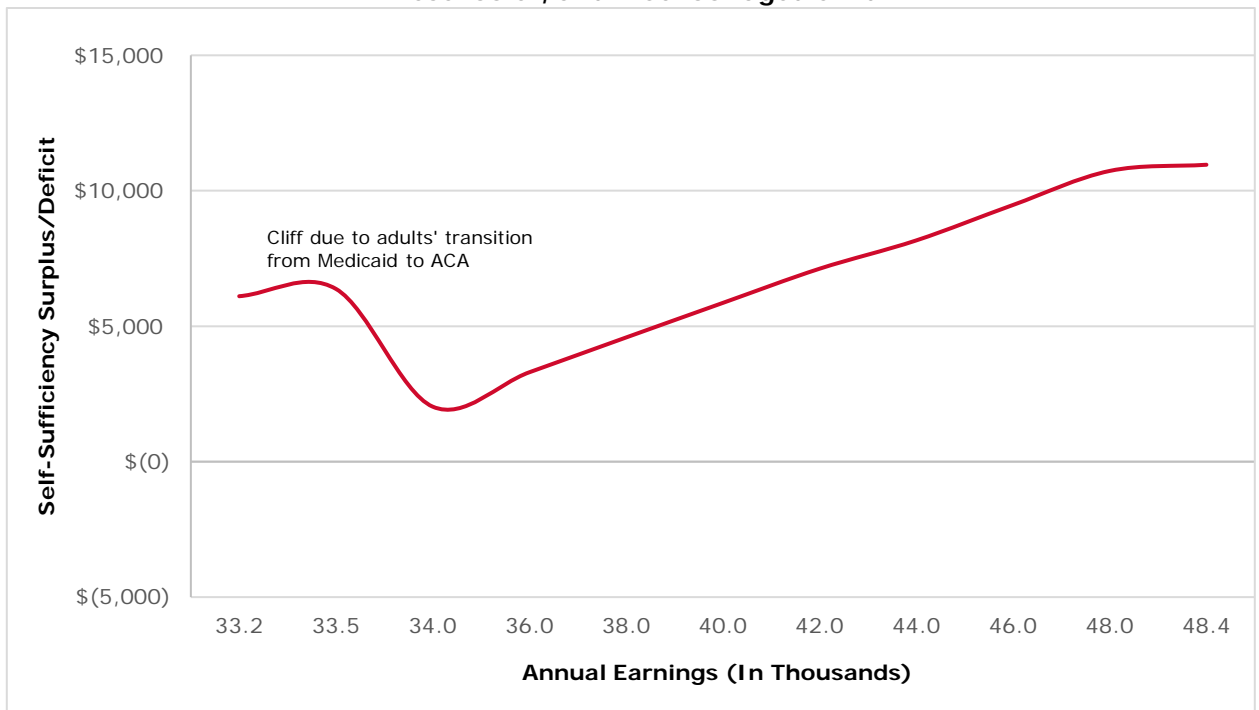
In the full-benefit household example, SNAP, TANF, and Section 8 housing assistance phase out once the household's annual earnings reach 130 percent FPL. The only difference is the just above poverty household does not receive Child Care Subsidy benefits, as the full-benefit household does.

The household encounters a small cliff effect when earned income exceeds 138 percent FPL for the adults' Medicaid eligibility, or \$33,534. To achieve the equivalent level of total gross resources as before Medicaid was lost, the household's annual earnings would have to increase to approximately \$41,000 in order to offset the cliff effect, slightly less than the previous full-benefit household amount of \$42,000. It would take slightly less of an increase in annual earnings for this just above poverty household to bounce back from the cliff effect, as they receive less public assistance dollars and therefore lose fewer dollars in total gross resources than the full-benefit household.

Figure 24 shows the difference (surplus/deficit) between annual wages and the self-sufficiency standard for this just above poverty household example.

⁹⁸ At the lowest possible income (2018 minimum wage) of \$8.30 per hour, or \$33,200, the household is at 137 percent FPL.

Figure 24: Cliff Effects for a Just Above Poverty Household with 2 Adults, 1 Preschooler, and 1 School-aged child



Source: Economics Center calculations

When the household has annual earnings of \$33,534, they receive \$21,589 in public assistance benefits and tax credits, giving the household total gross resources of \$55,123. When annual earned earnings increase to \$34,000, Medicaid eligibility is lost, and a cliff effect occurs. With this increased annual earned income, the household now receives \$16,777 in assistance, making total gross resources drop to \$50,777. From a \$466 increase in annual earnings (which translates to each adult receiving a \$0.12 hourly raise, from \$8.38 an hour to \$8.50 an hour), the household's total gross resources decrease by \$4,076. From a \$466 increase in annual earnings, the household receives almost \$5,000 less in public assistance benefits which decreases their total gross resources by approximately \$4,400. In this situation, for every dollar increase in annual earnings, total gross resources decrease by more than \$9.00.

From each adult receiving a \$0.12 hourly raise and increasing annual earnings to \$34,000 from \$33,534⁹⁹, adult Medicaid benefits are lost, the household receives less in income tax credits, HEAP, and CDCTC, leaving them with much less gross resources than at a lower annual earned income. This situation creates a disincentive to earn higher wages

⁹⁹ Note that the increase in annual earnings is arbitrary in representing the household exceeding the 138 percent FPL Medicaid eligibility threshold for the adults.

since, as annual earnings increase, the amount of total gross resources actually decreases. The \$466 increase in annual earnings does not offset the loss of public assistance benefits incurred, though the difference of \$466 is relatively small.

The amount of total gross resources for this just above poverty household also do not increase at a similar rate with annual earnings. At the lowest earned income level of \$33,200, the household has \$54,853 in total gross resources. At the highest level of annual earnings, in comparison, \$48,357, the household's total gross resources amount to \$59,706. Increasing annual earned income by approximately \$15,000 gives the household an additional \$5,000 in total gross resources. For every dollar increase in annual earned income across this range of earned income (130 to 199% FPL), the household's total gross resources only increase by \$0.32.

Table 32 details the change in annual earned income, benefit dollars received, and total gross resources when the transition from Medicaid to ACA occurs for this just above poverty household. The children in the household keep Medicaid benefits, as they are eligible until the household's annual earnings reach 200 percent FPL. When compared to the previous four-person household receiving full assistance benefits, the household in the just above poverty gap is slightly worse off, as the household receives less in public assistance and tax credits, and therefore has less total gross resources available.

Table 32: Adult Medicaid/ACA Cliff Effect for a Just Above Poverty Household with 2 Adults, 1 Preschooler, and 1 School-aged child

Cliff Effect	2 adults 2 children		
Adults' Transition from Medicaid to ACA	Pre-Cliff	Post-Cliff	Change
Annual Income	\$33,534	\$34,000	+\$466
Public Assistance/Tax Credit Benefits Received	\$21,589	\$16,777	-\$4,812
Total Gross Resources	\$55,123	\$50,777	-\$4,346
Self-Sufficiency Standard	\$48,745	\$48,745	N/A
Self-Sufficiency Surplus/Deficit	\$6,378	\$2,032	-\$4,347

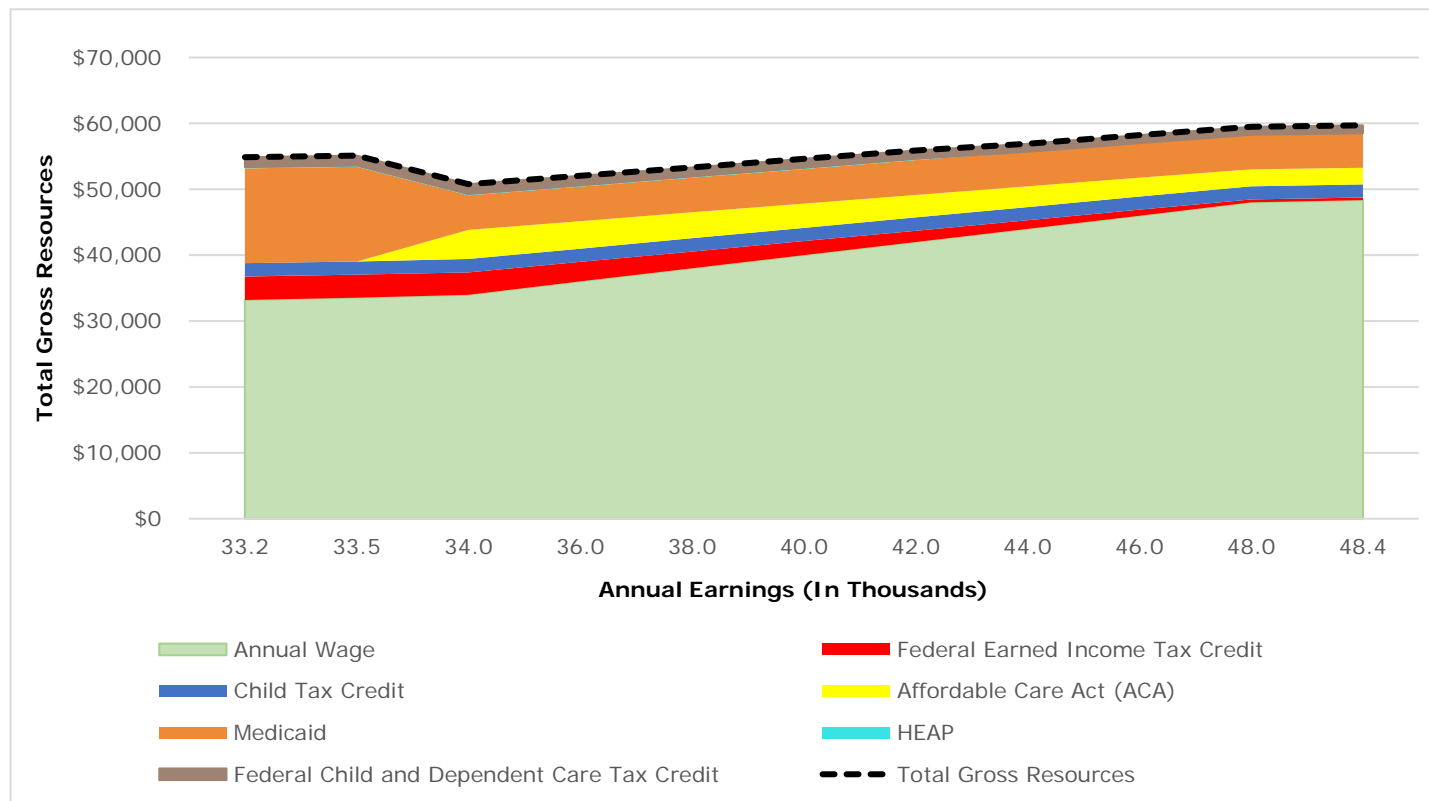
Source: Economics Center calculations

Figure 25 shows the changes in total gross resources across this four-person just above poverty household's range of annual earnings, and the amount received by each type of public assistance program or tax credit. At 137 percent of the FPL, the household is receiving EITC, Child Tax Credit, Medicaid, HEAP, and CDCTC dollars. At 199 percent of the FPL, the household receives EITC, Child Tax Credit, ACA, and CDCTC.

Annual wages are once again shown in light green. As the household's annual earnings increase, the loss of various public assistance and tax credits benefits can be seen. Federal Earned Income Tax Credits received are shown in red, for which this household

composition is continually eligible and receiving benefit dollars. The same can be said for the Child Tax Credit in dark blue, and the CDCTC in brown. The amount of EITC and CDCTC decreases of course as annual earnings increase, but the assistance dollars never completely phase out. The transition from Medicaid to ACA for the adults can be seen once the annual earned income exceeds 138 percent FPL. HEAP benefits in light blue phase out when the household's annual earnings reach 175 percent FPL.

Figure 25: Total Gross Resources across a Range of Annual Earned Incomes for a Just Above Poverty Household with 2 Adults, 1 Preschooler, and 1 School-aged Child



Source: Economics Center calculations

Just Above Poverty Household with 1 Adult, 1 Preschooler, and 1 School-aged Child

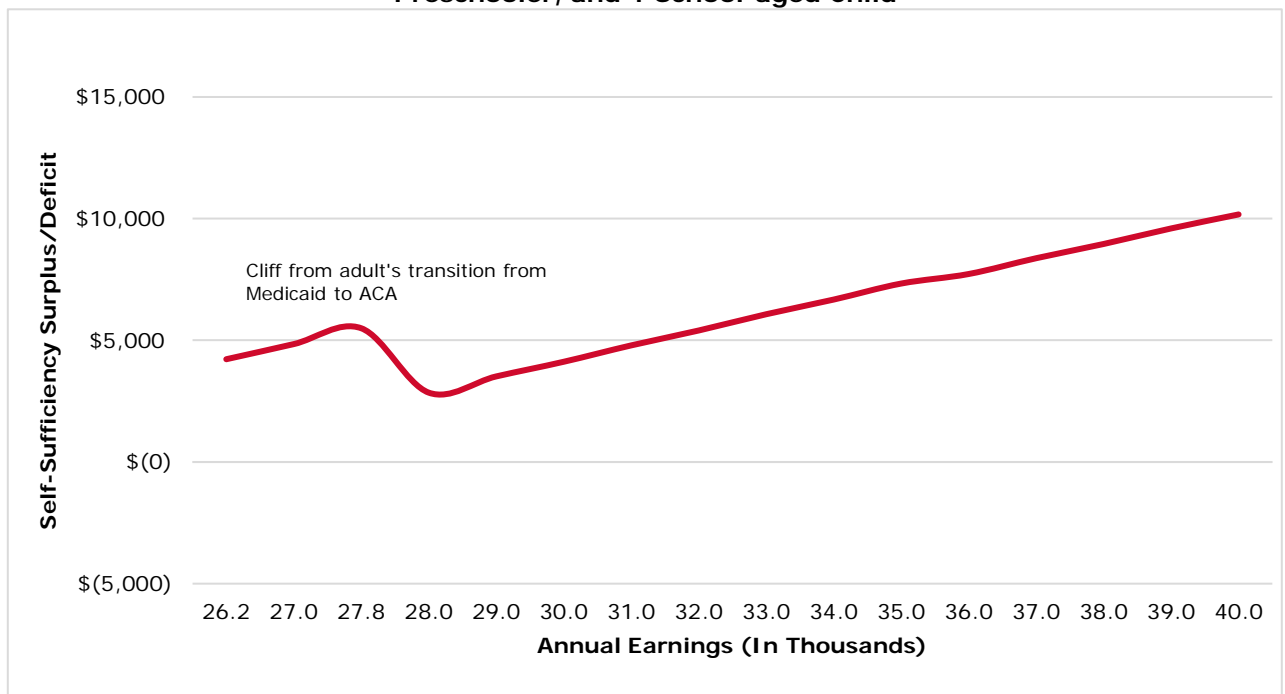
Annual earned income levels for this three-person household falling into the just above poverty gap includes annual earnings between \$26,208 and \$40,118 (130% to 199% FPL), or hourly earnings between \$13.10 and \$20.06. Additional challenges are faced since the household is not eligible for full benefits. The single-parent household now has

to pay the full annual \$8,573 cost for childcare, and receives no Child Care Subsidy assistance. However, again, the household is still able to apply for and receive tax credits from the CDCTC and the Child Tax Credit.

The household's only cliff effect occurs when annual earned income exceeds 138 percent FPL for the parent's Medicaid eligibility, or once annual earnings are greater than \$27,821. To achieve the equivalent level of total gross resources as before Medicaid was lost, the household's annual earned income would have to increase to roughly \$32,000 in order to offset the cliff effect, just as in the full-benefit household example previously.

Figure 26 shows the difference (surplus/deficit) between annual wages and the self-sufficiency standard for this just above poverty household example.

Figure 26: Cliff Effects for a Just Above Poverty Household with 1 Adult, 1 Preschooler, and 1 School-aged Child



Source: Economics Center calculations

When the just above poverty household has annual earnings of \$27,821, they receive \$17,301 in public assistance benefits and tax credits, giving the household total gross resources of \$45,122. When annual earnings increase to \$28,000, Medicaid eligibility for the adult is lost and a cliff effect occurs. With this increased annual earned income, the household now receives \$14,476 in assistance, making their total gross resources drop to \$42,476. From a \$179 increase in annual earnings (which translates to the adult receiving

a \$0.09 hourly raise (from \$13.91 an hour to \$14.00 an hour), the household's total gross resources decrease by \$2,646.

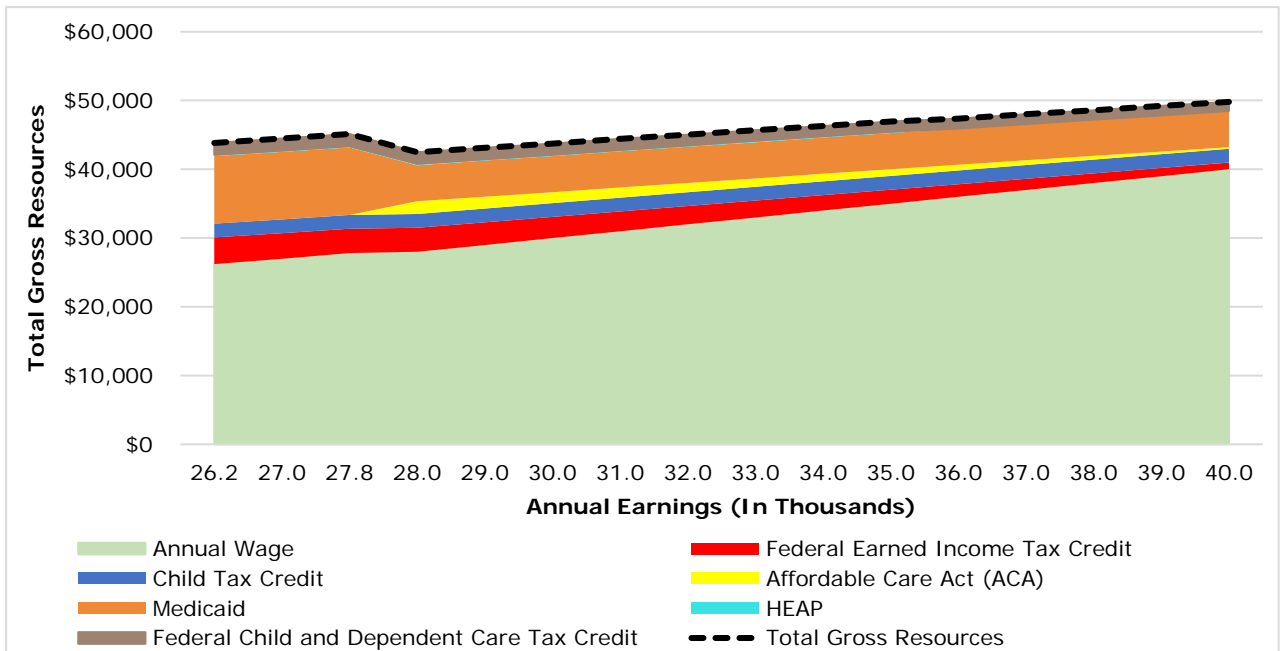
From the single parent receiving a \$0.09 hourly raise, Medicaid benefits are lost, they receive less in income tax credits, HEAP, and CDCTC, which leaves them with much less gross resources. The household would have greater total gross resources if they would turn down the raise, maintain lower earned incomes, and would therefore keep Medicaid and a higher level of public assistance dollars. This situation creates a disincentive to earn higher wages, since, as annual earnings increase, the amount of total gross resources actually decreases. The \$179 increase in annual earnings does not offset the \$2,825 loss of public assistance benefits incurred.

When compared to the previous single-parent household receiving full benefits, the household in the just above poverty gap is slightly worse off, as just above poverty household receives less in public assistance and tax credits, and therefore has less total gross resources available. In the full-benefit household example, SNAP and TANF already phase out once the household's annual earned income reaches 130 percent FPL. The only difference is the just above poverty household does not receive Section 8 housing nor Child Care Subsidy benefits.

Figure 27 shows the changes in total gross resources across this just above poverty household's range of annual earned income, and the amount received by each type of public assistance program or tax credit. At 130 percent of the FPL, the household is receiving EITC, Child Tax Credit, Medicaid, HEAP, and CDCTC dollars. At 199 percent of the FPL, the household receives EITC, Child Tax Credit, ACA, and CDCTC.

As annual earnings increase, EITC and CDCTC benefit dollars decrease slightly, but never completely phase out. The Child Tax Credit remains constant at \$2,000, shown in dark blue. The transition from Medicaid to ACA for the parent can be seen once the annual earned income exceeds 138 percent FPL, or \$27,821. And finally, HEAP benefits in light blue phase out when the household's annual earned income reaches 175 percent FPL, or \$35,280.

Figure 27: Total Gross Resources across a Range of Annual Earned Incomes for a Just Above Poverty Household with 1 Adult, 1 Preschooler, and 1 School-aged Child



Source: Economics Center calculations

Just Above Poverty Household with 2 Adults and No Children

For two-adult, no children household example, there is no just above poverty gap scenario as the lowest possible annual earnings for this household type is the minimum wage of \$8.30 per hour, which is 207 percent FPL.

More Concerns

On Cliff Effects

Cliff effects disincentivize individuals to keep their annual earned incomes low, in order to keep full public assistance benefits. These cliff effects negatively impact the labor market, and deter individuals from bettering their financial situation by accepting a raise or promotion, working more hours, or increasing their level of education or training.

To reach the same level of total gross resources before cliff effects occur, households have to increase their annual incomes/receive raises high enough to offset the loss of benefits dollars. Depending on the extent of the cliff effect, or how steep and long the cliff

is, households require varying increases in annual income to attain the same level of total gross resources. The steeper and shorter the cliff, the higher the rise in annual income required. The shallower/longer the cliff, the quicker the household can bounce back and achieve similar levels of total gross resources, as less is lost.

Education/Training

As discussed above, cliff effects sometimes require large hourly raises to offset the amount of benefits lost. Employers, however, may not feel that their employees have sufficient education or training to warrant this large increase in pay. In these instances, individuals are not able to earn more annual income due to their lack of education or training.

This lack of education or training is a complex issue, as it brings up the question of why a worker does not have a higher level of education. It could be that individuals are not able to afford to go to school and have financial limitations. Another reason could be having children at a young age and therefore not being able to finish their education. On the other hand, individuals may not be willing or able to take time off of work in order to attend school and attain a higher level of education. Certain public assistance programs like food and cash assistance require some form of work participation in order to receive benefits. If this requirement is not met, due to the individual working fewer hours per week to attend school or training, benefits may be lost.

Individuals additionally may not be willing to go through training or further education to earn more money, as increasing their annual earnings does not necessarily mean their total gross resources rise at a similar rate. There are minimal incentives for households to increase annual earned income, through additional education and training, as the corresponding level of total gross resources do not increase at the same rate as annual earnings, until certain earnings thresholds are reached. This disincentivizes individuals to increase their annual earnings by progressing along a career pathway, working additional hours, or accepting a raise, as total gross resources are relatively stagnant as annual earned income increases.

Employers

Some employers may be keeping offered wages low due to the existence of public assistance programs available to their employees. Employers may know that employees, at certain earnings thresholds, are eligible to receive public assistance benefits from federal or state levels, and therefore have no incentive to increase wages.

Additionally, an increase in employee wages often requires the employee to have completed additional training or education, which may be difficult for some individuals, as outlined above.

Public Assistance Office Accessibility

Individuals who do not have their own vehicle must use other means of transportation, such as public transportation to go to work, public assistance agencies, and the grocery store. Public transportation in some cases is not reliable or timely for workers receiving public assistance. Of workers age 16 and older in Clark County (58,685 individuals), 1,819 do not have a vehicle, according to 2016 US Census Bureau estimates. Of these no-vehicle-owners, 10 percent rely on public transportation.¹⁰⁰ Those who use public transportation in Clark County are shown to earn less annually than workers who drive or carpool, as well. Median annual earnings for public transit riders in 2016 was \$19,867, while drivers earned \$31,413 and carpoolers earned \$23,417 in median earnings.

Public transportation routes are often inconvenient and inefficient for riders as well. At times, depending on the route and bus-stop locations, riders are required to transfer buses and endure long ride times. In fact, one-third (32.9%) of public transit riders in Clark County had a commute-to-work time of 30 to 34 minutes. Approximately thirty-five percent of drivers, on the other hand, had commute times of 14 minutes or less.

Evaluating the Economic Benefits of Policy Revision

Self-Sufficiency and Cliff Effects

Overall, a better understanding and widespread knowledge of the concept of self-sufficiency is needed, and additionally how households in Clark County fair in comparison, based on their specific household type.

It would be beneficial for entities and employers in Clark County to have an understanding of self-sufficiency and what a self-sufficient level of earnings looks like for different households. Public assistance agencies therefore would gain an understanding of a household's total gross resources, and how it compares to the self-sufficient level of earned income for that household type. A greater understanding of self-sufficiency is necessary, to also therefore determine a household's well-being by comparing the amount of benefit dollars received to the equivalent self-sufficiency level.

Employers in Clark County would also benefit from understanding how wages and changes in wages impact their employees. Employers would benefit from knowing how many of their employees are currently receiving public assistance, and from a slight decrease in wages, how many additional employees would be eligible or would need to

¹⁰⁰ Only 180 individuals out of 1,819 no-vehicle-owners (10%) rely on public transportation. In Clark County, 495 individuals out of the total 58,685 working individuals (1%) rely on public transportation. Additionally, 3 percent of workers walk to work, and an additional 3 percent work from home.

apply for public assistance aid. Familiarizing employers with the concept of self-sufficiency and income cliff effects across their employees' various household compositions is crucial.

Ultimately, the goal of public assistance programs are to help households who truly need the assistance. Cliff effects negate this goal, and must be eliminated so that households do not have any incentive to keep public assistance when faced with a situation that could increase their annual earnings. Individuals behave rationally when faced with cliff effects, but intentionally staying on public assistance due to these cliff effects and other disincentives causes wide inefficiencies both in public assistance programs and the local labor market.

The next question would be how to eliminate income cliff effects. There are different options including increasing the minimum wage, expanding or changing public assistance program requirements, and subsidizing education and training programs. The state minimum wage could be increased from \$8.30 an hour, to increase the annual earned income of low-wage workers. Public assistance programs could expand or change their eligibility requirements and/or dollars in benefits provided, to help reduce or eliminate the impact of cliff effects. Employers and educational institutions could also play a role in helping individuals better their situations via advancing their careers. And finally, public assistance offices may influence program participation rates and target households that truly need the assistance, and in turn help to eliminate public assistance program inefficiencies. Further details on each are provided in the subsequent paragraphs.

Employers

Educating employers and business in Clark County about income cliff effects and the various disincentives households face would be beneficial to encourage employers to provide higher wages, even though their employees may be on public assistance and reaching the self-sufficiency equivalency. By understanding the various challenges their employees face, employers can make better business decisions and spur economic development by investing in their employees.

Some employers may already reimburse employees for a portion of their education expenses once the employee completes the training or education. However, individuals working less to attend educational or training programs earn less, and therefore would benefit from receiving some of the reimbursement while they are attending school or training. Employers providing continual aid to those attending school or receiving additional training would both incentivize workers to advance in their careers, as well as aid the individual financially while they are attending classes/training sessions. Subsidizing on the job training by local, state, or federal entities is a potential aspect, to help employers offset the cost of training and paying higher wages as a result of completed training/education.

By making it more feasible for individuals to advance in their career path and increase their annual earnings, the local economy also benefits by receiving additional tax revenue. By increasing their education and skill set, individuals thereby earn (and spend) more money annually. From the additional earnings and expenditures, the local economy would receive additional income and sales tax revenue from these workers. The local economy would also become more productive as the number of educated workers increases, as these individuals can more efficiently carry out various tasks requiring higher levels of education/training. Furthermore, attaining higher education/training decreases an individual's likelihood of living in poverty, as an increase in education and skills also usually means an increase in annual earnings.^{101, 102} Employers therefore can aid the local economy and labor market as well as their own businesses by providing financially struggling individuals with the means to advance their education and training.

Another aspect employers may influence is maternity and paternity leave. Working parents often require time off after they have had a child, which is most likely unpaid leave. This unpaid leave further burdens financially struggling households, and those on public assistance. It would be helpful to single-parent households, especially, if employers (or other county or state entities) were to help offset the financial impact of working less when a child is born.

Educational Institutions

Educational institutions as well, could play a part in helping individuals further their education. In understanding how households in Clark County compare to the self-sufficiency standard, local colleges and universities would have the opportunity to help those individuals attain higher levels of education and skills.

State, county, or even institution-level educational subsidies or grants could be created for households on public assistance in Clark County, in order to make it easier for these individuals to attend training and/or school to increase their education level. Subsidies or grant dollars would be based on the household's annual earned income and relationship (amount of surplus or deficit) to self-sufficiency level for the specific household type. Single-parent households, especially, would benefit from educational grants or subsidies to help offset the cost of childcare, since the parent would be working fewer hours in order to advance their level of education.

¹⁰¹ According to 2016 U.S. Census Bureau estimates, for individuals 25 years and over, the median annual earnings for high school diploma holders in Clark County was \$28,669. Conversely, median earnings for some college or an associate's degree was \$30,859, and \$43,135 for those who have attained a bachelor's degree.

¹⁰² U.S. Census Bureau. (2016). *Median Earnings in the Past 12 Months (In 2016 Inflation-Adjusted Dollars) By Sex By Educational Attainment For The Population 25 Years And Over*, 2012-2016 American Community Survey 5-year estimates.

Additionally, information on already existing educational grant programs, such as the PELL Grant, must be accessible to all. Individuals who are going back to school to further their education need full information on the various financial aid assistance available to them. Local colleges, universities, and businesses could create/support scholarships to support low-wage individuals in furthering their education or training. In doing so, businesses and educational institutions are investing in the local workforce, and potentially investing in their future employees.

Public Assistance Agencies

Collaboration between the county and state public assistance and benefits agencies is essential, in order to create a full picture of what types of benefits a household is receiving, amount of assistance dollars received, and if the household is eligible for additional assistance dollars that are not currently being received. This overall financial well-being picture of the households in Clark County would help public assistance offices in effectively and efficiently allocating resources and public assistance aid to the families most in need.

If not the case already, it would be beneficial if information on public assistance programs and program eligibility is readily available and accessible to all. Some individuals or households may not know they qualify for certain programs and therefore miss out on assistance dollars they are eligible for. This may cause households to have lower total gross resources than provided in this report.¹⁰³ If public assistance information is readily and freely available and accessible, then all households that need assistance would be able to receive all benefits they are eligible for.

Additionally, the process of applying for public assistance itself may be a barrier for low-income households, as the applications often require large amounts of paperwork and documentation to prove eligibility, and may prove to be, for some individuals, not worth the time it would take. Streamlining the application process would be extremely beneficial to individuals who need the assistance. Public assistance offices could potentially provide various programs' applications based on the household's composition, via some type of online eligibility calculator or survey, for example. Once the household's composition and earned income is known (as well as the self-sufficiency standard for that household type), then information and applications (or combined application) for every program the household is eligible for would be available to them. Making eligibility information clear, easily found/accessible, as well as easily understood is crucial to maximizing the impact of the public assistance dollars available to be allocated across households.

It is also important for public assistance offices to be easily accessible to everyone in the county, in terms of hours open and transportation to the office, such as being located

¹⁰³ In this analysis, it was assumed that each household example receives full benefits for which they are eligible, across all programs and tax credits.

along a bus route. If a low-wage worker works full-time hours during the week and needs to go to the office in person, the individual has to leave work to do so, foregoing money they could have otherwise earned. Extended or weekend hours would be extremely helpful to individuals in this situation. Also being accessible along a bus route for those reliant on public transportation is very important. Individuals who do not have their own vehicle must use other means of transportation, such as public transportation, which in some cases is not reliable or timely for workers. Of workers age 16 and older in Clark County, almost 500 rely on public transportation to get to and from their place of employment.¹⁰⁴ Public transportation routes are often inconvenient and inefficient for riders, with long ride times. Approximately 33 percent of public transit riders in Clark County had a commute-to-work time of 30 to 34 minutes. This is drastically longer than for individuals who choose/are able to drive. Approximately thirty-five percent of drivers had commute times of 14 minutes or less. By reducing these inefficiencies in the public transportation system, commuters who utilize public transportation would get to where they are going in a more timely and efficient manner. Improving long route times and tedious transfers for those who utilize public transportation around the county would minimize/reduce the opportunity costs of time experienced for these workers.¹⁰⁵

In understanding each household's overall well-being in terms of earnings, public assistance income, and the household's relative self-sufficiency level, public assistance offices are able to target the most in-need individuals in the county. By providing assistance to those who need it, and helping those who need the assistance attain higher education/training and earnings levels, public assistance offices support the programs' goal of lifting households out of poverty.

Job placement offices additionally must be coordinating with public assistance offices as well as local educational institutions and employers. By having an understanding of local employment, education, and industry trends, job placement offices can effectively match all workers (highly educated and not) to open available job positions in the county.

One institution or entity alone cannot eliminate all programs' inefficiencies; it takes effort in part from public assistance offices, educational institutions, and employers and businesses in the County. Communication between all entities (including households) and an overall understanding of self-sufficiency and household well-being in Clark County is essential to successfully achieving and maintaining all public assistance programs' goals.

¹⁰⁴ In Clark County, 495 individuals out of the total 58,685 working individuals (1%) rely on public transportation. Additionally, 3 percent of workers walk to work, and an additional 3 percent work from home.

¹⁰⁵ Although, the number of individuals solely relying on public transportation in Clark County is fairly small; 1% of all workers 16 years and older.

Public Assistance Programs

One option to reduce the impacts of cliff effects would be to extend the points at which the various assistance benefits phase out, thereby changing the programs' eligibility requirements. Most cliff effects impacting the household examples in this report stem from transitioning from Medicaid to ACA. This signals the need for some type of public assistance policy change to offset the cliff effect experienced, when households are making that transition. Additional funding to the ACA to help offset losing Medicaid is required, or tapering benefit dollars for Medicaid. This would involve an extreme policy overhaul at the federal level, in order to change the eligibility requirements and/or actual dollars provided for both ACA and Medicaid.

Select public assistance programs' eligibility requirements could be expanded, to further aid low-income households and lessen the impacts of cliff effects experienced. For those individuals receiving TANF and SNAP assistance, for example, taking time off work in order to attend training and attain a higher level of education, may not be feasible, as these two programs require work activities. In these situations, it would be extremely beneficial for TANF and SNAP recipients, if the programs' eligibility requirements also included being enrolled in an education or training program, or the number of hours of work required could be reduced if the individual is going back to school. If the eligibility requirements were expanded, these workers with lower levels of education, would be encouraged to advance their education or gain additional training without fear of losing SNAP and TANF aid. This would in turn promote area workforce development, while not penalizing those who receive food and cash assistance.

Furthermore, the concept of work requirements must also be analyzed. Work requirements assume that jobs are available for those participating and ensure individuals are not choosing to depend on assistance instead of work. However, this brings up the question of whether or not the available positions are also attainable by individuals who may have limited education or training and work experience. If the individual applying for TANF and SNAP assistance is not able to obtain a position due to their lack of education skills, and work experience, this further strengthens the argument to expand such work requirements to include education and training programs, or to even reduce the number of hours required to work if the individual is advancing in their educational attainment. If open available positions are not currently attainable by those with lower levels of education and skills, then aiding the workforce in attending education and training programs is necessary. On the other hand, open positions for those with higher levels of education and training must be available in the county. In other words, for individuals attaining a bachelor's degree for example, there must be open/available job positions for that individual to go into after graduation. If no higher education-level positions exist in the county, the worker will go elsewhere for employment. Additionally, it is not beneficial for lower-education workers to displace higher-education workers, once the lower-education workers advance their education/training. A few options could combat this

issue, including minimum wage increases and subsidies/grants for training. Moderate increases in the minimum wage would raise the earnings levels of workers without greatly reducing overall employment levels. Grants or tax credits could also be used to support higher wages through training, as detailed previously.

It is unlikely however that a “one-size-fits-all” policy change scenario can be achieved, however, as the income cliff effects experienced as well as the equivalent self-sufficiency standard vary depending on household composition. Most public assistance programs’ eligibility requirements look at household size and the FPL to determine program eligibility, and not household composition and relative self-sufficient level of earnings. This is yet another reason public assistance programs and agencies must include the concept of self-sufficiency and how various household compositions compare to get a full picture, not just in terms of household size and FPL.

Report Assumptions

Examples in this report assume each household composition in Clark County is receiving the maximum amount of public assistance benefits and tax credits. In reality, it is possible that households receive less than the maximum amount and therefore have less total gross resources than what this report depicts.

Full-benefits were also assumed, meaning that each household received public assistance dollars for each program they were eligible for (at minimum wage). However, if a household does not have complete information on all available programs, they could be missing out of some public assistance aid, and therefore also have less total gross resources. Additionally, a household making more than minimum wage may not be eligible for certain public assistance programs as they would have been if they applied when their incomes were lower, such as in the just above poverty trap. Ultimately, it is a household-by-household basis in terms of the amount of public assistance benefits received and from which programs.

The self-sufficiency standard for each household assumes that all adults work full-time at 40 hours per week. Part-time employment was not considered in this analysis.

It is also important to note that self-sufficiency standards change depending on the composition of the household. For this report, children in preschool and grade school were assumed, but if a household has an infant instead, for example, the level of earned income required to achieve self-sufficiency is greater, due to higher costs of raising an infant.

Additionally, the self-sufficiency standard does not include household spending on “luxury” items such as cable TV, internet, and telephone/cellphone. In reality, many households likely incur these monthly expenses, which further depletes their level of earned income. Therefore the self-sufficiency standard, if including these luxury items, would be slightly higher than what is reported in this analysis.

It is also important to recognize that the self-sufficiency standard in Clark County is different than surrounding counties/states, as the prices for various goods and services (such as housing) vary by geographical area.

Of course, many of the solutions and policy evaluations presented in this report would need to be implemented at the county level and thoroughly evaluated. Policymakers need to evaluate whether each solution would be cost-effective to implement and maintain.

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Appendix

Table A1: 2016 Federal Poverty Guidelines by Household Size

Household Size	% of Federal Poverty Level									
	50%	100%	125%	130%	150%	175%	200%	225%	250%	300%
1	\$5,940	\$11,880	\$14,850	\$15,444	\$17,820	\$20,790	\$23,760	\$26,730	\$29,700	\$35,640
2	\$8,010	\$16,020	\$20,025	\$20,826	\$24,030	\$28,035	\$32,040	\$36,045	\$40,050	\$48,060
3	\$10,080	\$20,160	\$25,200	\$26,208	\$30,240	\$35,280	\$40,320	\$45,360	\$50,400	\$60,480
4	\$12,150	\$24,300	\$30,375	\$31,590	\$36,450	\$42,525	\$48,600	\$54,675	\$60,750	\$72,900

Source: Economics Center calculations using Computations for the 2016 Poverty Guidelines (2016, July 16).

Table A2: Average Recipients of Cash Assistance, SNAP, Child Care Assistance, and Medicaid in Clark County per Month in 2015-2017

Year	Total Population	Cash Assistance (% of total population)	Child Care Assistance – NonOWF Children (% of total population)	SNAP (% of total population)	Medicaid (% of total population)
2015	136,827	1,398 (1%)	1,010 (1%)	26,354 (19%)	42,498 (31%)
2016	136,175	1,357 (1%)	999 (1%)	25,334 (19%)	42,278 (31%)
2017	134,557	1,320 (1%)	1,011 (1%)	23,321 (17%)	42,015 (31%)

Source: Data provided by Clark County DJFS and the US Census Bureau.

Table A3: Benefits vs. Annual Earned Income Matrix for a Household with 2 Adults, 1 Preschooler, and 1 School-Aged Child

Hourly Wage	Annual Wage	% of FPL	Total Benefits Received	Total Gross Resources	Increase in Annual Earnings	Change in Benefits	Change in TGR	For every dollar increase in annual wages, this amount is lost in Benefits	Notes
\$8.30	\$33,200	137%	\$25,663	\$58,863	N/A	N/A	N/A	N/A	
\$8.38	\$33,534	138%	\$25,425	\$58,959	\$334	-\$237.25	\$96.75	-\$0.71	
\$8.50	\$34,000	140%	\$21,031	\$55,031	\$466	-\$4,394.55	-\$3,928.55	-\$9.43	Adults' transition from Medicaid to ACA
\$9.00	\$36,000	148%	\$20,223	\$56,223	\$2,000	-\$807.38	\$1,192.62	-\$0.40	
\$9.50	\$38,000	156%	\$19,448	\$57,448	\$2,000	-\$774.97	\$1,225.04	-\$0.39	
\$10.00	\$40,000	165%	\$18,493	\$58,493	\$2,000	-\$955.86	\$1,044.14	-\$0.48	
\$10.50	\$42,000	173%	\$17,306	\$59,306	\$2,000	-\$1,186.07	\$813.93	-\$0.59	
\$11.00	\$44,000	181%	\$15,313	\$59,313	\$2,000	-\$1,993.84	\$6.16	-\$1.00	HEAP benefits phase out
\$11.50	\$46,000	189%	\$13,963	\$59,963	\$2,000	-\$1,350.00	\$650.00	-\$0.68	
\$12.00	\$48,000	198%	\$12,528	\$60,528	\$2,000	-\$1,435.00	\$565.00	-\$0.72	
\$12.09	\$48,357	199%	\$11,683	\$60,040	\$357	-\$844.50	-\$487.50	-\$2.37	Drop in Childcare Subsidy amount
\$12.15	\$48,600	200%	\$11,593	\$60,193	\$243	-\$90.00	\$153.00	-\$0.37	
\$12.50	\$50,000	206%	\$9,700	\$59,700	\$1,400	-\$1,893.10	-\$493.10	-\$1.35	Children's transition from Medicaid to ACA (All now on ACA)
\$13.00	\$52,000	214%	\$8,329	\$60,329	\$2,000	-\$1,371.00	\$629.00	-\$0.69	EITC and Child Care Subsidies phase out
\$13.50	\$54,000	222%	\$8,033	\$62,033	\$2,000	-\$296.00	\$1,704.00	-\$0.15	
\$14.00	\$56,000	230%	\$7,725	\$63,725	\$2,000	-\$308.00	\$1,692.00	-\$0.15	
\$14.50	\$58,000	239%	\$7,406	\$65,406	\$2,000	-\$319.00	\$1,681.00	-\$0.16	
\$15.00	\$60,000	247%	\$7,075	\$67,075	\$2,000	-\$331.00	\$1,669.00	-\$0.17	
\$15.50	\$62,000	255%	\$6,752	\$68,752	\$2,000	-\$323.00	\$1,677.00	-\$0.16	
\$16.00	\$64,000	263%	\$6,429	\$70,429	\$2,000	-\$323.00	\$1,677.00	-\$0.16	
\$16.50	\$66,000	272%	\$6,096	\$72,096	\$2,000	-\$333.00	\$1,667.00	-\$0.17	
\$17.00	\$68,000	280%	\$5,754	\$73,754	\$2,000	-\$342.00	\$1,658.00	-\$0.17	

Table A3 continued

Hourly Wage	Annual Wage	% of FPL	Total Benefits Received	Total Gross Resources	Increase in Annual Earnings	Change in Benefits	Change in TGR	For every dollar increase in annual wages, this amount is lost in Benefits	Notes
\$17.50	\$70,000	288%	\$5,401	\$75,401	\$2,000	-\$353.00	\$1,647.00	-\$0.18	
\$18.00	\$72,000	296%	\$5,039	\$77,039	\$2,000	-\$362.00	\$1,638.00	-\$0.18	
\$18.23	\$72,900	300%	\$4,886	\$77,786	\$900	-\$153.00	\$747.00	-\$0.17	
\$18.50	\$74,000	305%	\$4,780	\$78,780	\$1,100	-\$106.00	\$994.00	-\$0.10	
\$19.00	\$76,000	313%	\$4,587	\$80,587	\$2,000	-\$193.00	\$1,807.00	-\$0.10	
\$19.50	\$78,000	321%	\$4,393	\$82,393	\$2,000	-\$194.00	\$1,806.00	-\$0.10	
\$20.00	\$80,000	329%	\$4,200	\$84,200	\$2,000	-\$193.00	\$1,807.00	-\$0.10	
\$20.50	\$82,000	337%	\$4,007	\$86,007	\$2,000	-\$193.00	\$1,807.00	-\$0.10	
\$21.00	\$84,000	346%	\$3,814	\$87,814	\$2,000	-\$193.00	\$1,807.00	-\$0.10	
\$21.50	\$86,000	354%	\$3,621	\$89,621	\$2,000	-\$193.00	\$1,807.00	-\$0.10	
\$22.00	\$88,000	362%	\$3,427	\$91,427	\$2,000	-\$194.00	\$1,806.00	-\$0.10	
\$22.50	\$90,000	370%	\$3,234	\$93,234	\$2,000	-\$193.00	\$1,807.00	-\$0.10	
\$23.00	\$92,000	379%	\$3,200	\$95,200	\$2,000	-\$34.00	\$1,966.00	-\$0.02	ACA benefits phase out
\$23.50	\$94,000	387%	\$3,200	\$97,200	\$2,000	\$0.00	\$2,000.00	\$0.00	
\$24.00	\$96,000	395%	\$3,200	\$99,200	\$2,000	\$0.00	\$2,000.00	\$0.00	
\$24.18	\$96,714	398%	\$3,200	\$99,914	\$714	\$0.00	\$714.00	\$0.00	
\$24.30	\$97,200	400%	\$3,200	\$100,400	\$486	\$0.00	\$486.00	\$0.00	

Source: Economics Center calculations

Table A4: Benefits vs. Annual Earned Income Matrix for a Household with 1 Adult, 1 Preschooler, and 1 School-Aged Child

Hourly Wage	Annual Wage	Total Benefits Received	Total Gross Resources	Increase in Annual Earnings	Change in Benefits	Change in TGR	For every dollar increase in wages, this amount is lost in Benefits	Notes
\$8.30	\$16,600	\$28,755.75	\$45,355.75	N/A	N/A	N/A	N/A	
\$8.50	\$17,000	\$28,515.75	\$45,515.75	\$400.00	-\$240.00	\$160.00	-\$0.60	
\$9.00	\$18,000	\$27,833.98	\$45,833.98	\$1,000.00	-\$681.77	\$318.23	-\$0.68	
\$9.50	\$19,000	\$27,003.04	\$46,003.04	\$1,000.00	-\$830.93	\$169.06	-\$0.83	
\$10.00	\$20,000	\$26,164.93	\$46,164.93	\$1,000.00	-\$838.11	\$161.89	-\$0.84	
\$10.08	\$20,160	\$25,918.29	\$46,078.29	\$160.00	-\$246.64	-\$86.64	-\$1.54	SNAP Benefits phase out
\$10.50	\$21,000	\$25,541.03	\$46,541.03	\$840.00	-\$377.26	\$462.74	-\$0.45	
\$11.00	\$22,000	\$24,945.44	\$46,945.44	\$1,000.00	-\$595.58	\$404.42	-\$0.60	
\$11.50	\$23,000	\$24,377.55	\$47,377.55	\$1,000.00	-\$567.89	\$432.11	-\$0.57	
\$12.00	\$24,000	\$23,835.90	\$47,835.90	\$1,000.00	-\$541.66	\$458.35	-\$0.54	
\$12.50	\$25,000	\$23,259.50	\$48,259.50	\$1,000.00	-\$576.40	\$423.60	-\$0.58	
\$13.00	\$26,000	\$22,659.41	\$48,659.41	\$1,000.00	-\$600.09	\$399.92	-\$0.60	
\$13.10	\$26,208	\$22,555.01	\$48,763.01	\$208.00	-\$104.40	\$103.60	-\$0.50	
\$13.50	\$27,000	\$22,147.41	\$49,147.41	\$792.00	-\$407.60	\$384.40	-\$0.51	
\$13.91	\$27,821	\$21,848.26	\$49,669.06	\$820.80	-\$299.15	\$521.64	-\$0.36	Section 8 Housing Assistance phase out
\$14.00	\$28,000	\$19,167.20	\$47,167.20	\$179.20	-\$2,681.06	-\$2,501.86	-\$14.96	Adult's transition from Medicaid to ACA
\$14.50	\$29,000	\$18,834.20	\$47,834.20	\$1,000.00	-\$333.00	\$667.00	-\$0.33	
\$15.00	\$30,000	\$18,406.50	\$48,406.50	\$1,000.00	-\$427.71	\$572.29	-\$0.43	
\$15.50	\$31,000	\$18,020.73	\$49,020.73	\$1,000.00	-\$385.76	\$614.24	-\$0.39	
\$16.00	\$32,000	\$17,592.09	\$49,592.09	\$1,000.00	-\$428.64	\$571.36	-\$0.43	
\$16.50	\$33,000	\$17,200.15	\$50,200.15	\$1,000.00	-\$391.94	\$608.06	-\$0.39	
\$17.00	\$34,000	\$16,690.85	\$50,690.85	\$1,000.00	-\$509.30	\$490.70	-\$0.51	
\$17.50	\$35,000	\$15,976.85	\$50,976.85	\$1,000.00	-\$714.00	\$286.00	-\$0.71	
\$18.00	\$36,000	\$15,388.12	\$51,388.12	\$1,000.00	-\$588.73	\$411.27	-\$0.59	
\$18.50	\$37,000	\$14,651.04	\$51,651.04	\$1,000.00	-\$737.08	\$262.92	-\$0.74	

Table A4 Continued

Hourly Wage	Annual Wage	Total Benefits Received	Total Gross Resources	Increase in Annual Earnings	Change in Benefits	Change in TGR	For every dollar increase in wages, this amount is lost in Benefits	Notes
\$19.00	\$38,000	\$13,832.89	\$51,832.89	\$1,000.00	-\$818.15	\$181.85	-\$0.82	
\$19.50	\$39,000	\$13,054.17	\$52,054.17	\$1,000.00	-\$778.72	\$221.28	-\$0.78	
\$20.00	\$40,000	\$12,129.10	\$52,129.10	\$1,000.00	-\$925.07	\$74.93	-\$0.93	
\$20.06	\$40,118	\$12,090.10	\$52,208.50	\$118.40	-\$39.00	\$79.40	-\$0.33	
\$20.16	\$40,320	\$12,018.10	\$52,338.10	\$201.60	-\$72.00	\$129.60	-\$0.36	
\$20.50	\$41,000	\$10,582.06	\$51,582.06	\$680.00	-\$1,436.04	-\$756.04	-\$2.11	Children's transition from Medicaid to ACA
\$21.00	\$42,000	\$9,752.26	\$51,752.26	\$1,000.00	-\$829.81	\$170.20	-\$0.83	
\$21.50	\$43,000	\$8,892.50	\$51,892.50	\$1,000.00	-\$859.75	\$140.25	-\$0.86	
\$22.00	\$44,000	\$7,886.00	\$51,886.00	\$1,000.00	-\$1,006.50	-\$6.50	-\$1.01	EITC phase out
\$22.50	\$45,000	\$6,993.50	\$51,993.50	\$1,000.00	-\$892.50	\$107.50	-\$0.89	
\$23.00	\$46,000	\$6,205.00	\$52,205.00	\$1,000.00	-\$788.50	\$211.50	-\$0.79	
\$23.50	\$47,000	\$6,048.00	\$53,048.00	\$1,000.00	-\$157.00	\$843.00	-\$0.16	
\$24.00	\$48,000	\$5,391.00	\$53,391.00	\$1,000.00	-\$657.00	\$343.00	-\$0.66	Child Care Assistance phase out
\$24.50	\$49,000	\$5,227.00	\$54,227.00	\$1,000.00	-\$164.00	\$836.00	-\$0.16	
\$25.00	\$50,000	\$5,060.00	\$55,060.00	\$1,000.00	-\$167.00	\$833.00	-\$0.17	
\$25.50	\$51,000	\$4,900.00	\$55,900.00	\$1,000.00	-\$160.00	\$840.00	-\$0.16	
\$26.00	\$52,000	\$4,704.00	\$56,704.00	\$1,000.00	-\$196.00	\$804.00	-\$0.20	
\$26.50	\$53,000	\$4,578.00	\$57,578.00	\$1,000.00	-\$126.00	\$874.00	-\$0.13	
\$27.00	\$54,000	\$4,412.00	\$58,412.00	\$1,000.00	-\$166.00	\$834.00	-\$0.17	
\$27.50	\$55,000	\$4,244.00	\$59,244.00	\$1,000.00	-\$168.00	\$832.00	-\$0.17	
\$28.00	\$56,000	\$4,072.00	\$60,072.00	\$1,000.00	-\$172.00	\$828.00	-\$0.17	
\$28.50	\$57,000	\$3,898.00	\$60,898.00	\$1,000.00	-\$174.00	\$826.00	-\$0.17	
\$29.00	\$58,000	\$3,721.00	\$61,721.00	\$1,000.00	-\$177.00	\$823.00	-\$0.18	
\$29.50	\$59,000	\$3,541.00	\$62,541.00	\$1,000.00	-\$180.00	\$820.00	-\$0.18	
\$30.00	\$60,000	\$3,358.00	\$63,358.00	\$1,000.00	-\$183.00	\$817.00	-\$0.18	
\$30.24	\$60,480	\$3,287.00	\$63,767.00	\$480.00	-\$71.00	\$409.00	-\$0.15	
\$30.50	\$61,000	\$3,237.00	\$64,237.00	\$520.00	-\$50.00	\$470.00	-\$0.10	
\$31.00	\$62,000	\$3,200.00	\$65,200.00	\$1,000.00	-\$37.00	\$963.00	-\$0.04	ACA phase out

Table A4 Continued

Hourly Wage	Annual Wage	Total Benefits Received	Total Gross Resources	Increase in Annual Earnings	Change in Benefits	Change in TGR	For every dollar increase in wages, this amount is lost in Benefits	Notes
\$31.50	\$63,000	\$3,200.00	\$66,200.00	\$1,000.00	\$0.00	\$1,000.00	\$0.00	
\$32.00	\$64,000	\$3,200.00	\$67,200.00	\$1,000.00	\$0.00	\$1,000.00	\$0.00	
\$32.50	\$65,000	\$3,200.00	\$68,200.00	\$1,000.00	\$0.00	\$1,000.00	\$0.00	
\$33.00	\$66,000	\$3,200.00	\$69,200.00	\$1,000.00	\$0.00	\$1,000.00	\$0.00	
\$33.50	\$67,000	\$3,200.00	\$70,200.00	\$1,000.00	\$0.00	\$1,000.00	\$0.00	
\$34.00	\$68,000	\$3,200.00	\$71,200.00	\$1,000.00	\$0.00	\$1,000.00	\$0.00	
\$34.50	\$69,000	\$3,200.00	\$72,200.00	\$1,000.00	\$0.00	\$1,000.00	\$0.00	
\$35.00	\$70,000	\$3,200.00	\$73,200.00	\$1,000.00	\$0.00	\$1,000.00	\$0.00	
\$35.50	\$71,000	\$3,200.00	\$74,200.00	\$1,000.00	\$0.00	\$1,000.00	\$0.00	
\$36.00	\$72,000	\$3,200.00	\$75,200.00	\$1,000.00	\$0.00	\$1,000.00	\$0.00	
\$36.50	\$73,000	\$3,200.00	\$76,200.00	\$1,000.00	\$0.00	\$1,000.00	\$0.00	
\$37.00	\$74,000	\$3,200.00	\$77,200.00	\$1,000.00	\$0.00	\$1,000.00	\$0.00	
\$37.50	\$75,000	\$3,200.00	\$78,200.00	\$1,000.00	\$0.00	\$1,000.00	\$0.00	
\$38.00	\$76,000	\$1,200.00	\$77,200.00	\$1,000.00	-\$2,000.00	-\$1,000.00	-\$2.00	Child Tax Credit phase out
\$38.50	\$77,000	\$1,200.00	\$78,200.00	\$1,000.00	\$0.00	\$1,000.00	\$0.00	
\$39.00	\$78,000	\$1,200.00	\$79,200.00	\$1,000.00	\$0.00	\$1,000.00	\$0.00	
\$39.50	\$79,000	\$1,200.00	\$80,200.00	\$1,000.00	\$0.00	\$1,000.00	\$0.00	
\$40.00	\$80,000	\$1,200.00	\$81,200.00	\$1,000.00	\$0.00	\$1,000.00	\$0.00	
\$40.32	\$80,640	\$1,200.00	\$81,840.00	\$640.00	\$0.00	\$640.00	\$0.00	

Source: Economics Center calculations

Table A5: Benefits vs. Annual Earned Income Matrix for a Household with 2 Adults and No Children

Hourly Wage	Annual Wage	Total Benefits Received	Total Gross Resources	Increase in Annual Earnings	Change in Benefits	Change in TGR	For every dollar increase in wages, this amount is lost in Benefits	Notes
\$8.30	\$33,200.00	\$3,370.00	\$36,570.00	N/A	N/A	N/A	N/A	
\$8.50	\$34,000.00	\$3,256.00	\$37,256.00	\$800.00	-\$114.00	\$686.00	-\$0.14	
\$9.00	\$36,000.00	\$2,958.00	\$38,958.00	\$2,000.00	-\$298.00	\$1,702.00	-\$0.15	
\$9.50	\$38,000.00	\$2,643.00	\$40,643.00	\$2,000.00	-\$315.00	\$1,685.00	-\$0.16	
\$10.00	\$40,000.00	\$2,312.00	\$42,312.00	\$2,000.00	-\$331.00	\$1,669.00	-\$0.17	
\$10.50	\$42,000.00	\$1,992.00	\$43,992.00	\$2,000.00	-\$320.00	\$1,680.00	-\$0.16	
\$11.00	\$44,000.00	\$1,656.00	\$45,656.00	\$2,000.00	-\$336.00	\$1,664.00	-\$0.17	
\$11.50	\$46,000.00	\$1,306.00	\$47,306.00	\$2,000.00	-\$350.00	\$1,650.00	-\$0.18	
\$12.00	\$48,000.00	\$960.00	\$48,960.00	\$2,000.00	-\$346.00	\$1,654.00	-\$0.17	
\$12.50	\$50,000.00	\$767.00	\$50,767.00	\$2,000.00	-\$193.00	\$1,807.00	-\$0.10	
\$13.00	\$52,000.00	\$574.00	\$52,574.00	\$2,000.00	-\$193.00	\$1,807.00	-\$0.10	
\$13.50	\$54,000.00	\$380.00	\$54,380.00	\$2,000.00	-\$194.00	\$1,806.00	-\$0.10	
\$14.00	\$56,000.00	\$187.00	\$56,187.00	\$2,000.00	-\$193.00	\$1,807.00	-\$0.10	
\$14.50	\$58,000.00	\$0.00	\$58,000.00	\$2,000.00	-\$187.00	\$1,813.00	-\$0.09	ACA Benefits phase out
\$15.00	\$60,000.00	\$0.00	\$60,000.00	\$2,000.00	\$0.00	\$2,000.00	\$0.00	
\$15.50	\$62,000.00	\$0.00	\$62,000.00	\$2,000.00	\$0.00	\$2,000.00	\$0.00	
\$16.00	\$64,000.00	\$0.00	\$64,000.00	\$2,000.00	\$0.00	\$2,000.00	\$0.00	

Source: Economics Center calculations

Table A6: Paperwork Matrix for Public Assistance Programs

Public Assistance Program or Tax Credit	Requirements																
	Paperwork Needed	Tax Filing Status	Valid SSN & Driver's License	Number of (qualifying) children	Ages of Children/ Householders	Household Size	Annual Earnings/ Investments	Childcare Expenses	Food Expenses	Utility Bills	Housing Info	Disability/ Mental Illness Info	% of FPL	Work Reqs	Benefits Time/ Month Limit	Continued Eligibility	Notes
Federal EITC		X	X	X	X Less than 19 years old, or less than 24 and a full-time student.		X Investments must be \$3,400 or less for the year.										Permanently and totally disabled children are exempt from age requirements and automatically qualify. Children must reside with the applicant for at least half of the year.
Section 8 Housing						X	X				X		X				
ACA			X		X	X	X					X	X				
Child Care Subsidy				X	X	X	X	X					X	X		Every 12 months	
Federal Child Tax Credit		X	X	X	X Under 17		X										

	Paperwork Needed	Tax Filing Status	Valid SSN & Driver's License	Number of (qualifying) children	Ages of Children/ Householders	Household Size	Annual Earnings/ Investments	Childcare Expenses	Food Expenses	Utility Bills	Housing Info	Disability/ Mental Illness Info	% of FPL	Work Reqs	Benefits Time/ Month Limit	Continued Eligibility	Notes
Child And Dependent Care Tax Credit		X	X	X	X Under 13		X	X May not be more than \$3,000 (for one qualifying person) or \$6,000 (for two or more).						X Applicants may claim CDCTC if paid for the care of a qualifying individual to enable the applicant (and spouse, if filing a joint return) to work or actively look for work.			A qualifying individual is defined as a dependent child who is under age 13 when the care is provided, the applicant's spouse who is physically or mentally incapable of self-care and lived with the applicant for more than half of the year, or an individual who is physically or mentally incapable of self-care, lived with applicant for more than half of the year, and either is a dependent or could have been a dependent except that he or she has gross income that equals or exceeds the exemption amount.
HEAP			X			X	X Earnings for the past 90 days for all members age 18 and older.			X	X Previous evictions		X				Individual/ family members who participate in other benefit programs: SNAP, SSI, TANF, or Veterans may be automatically eligible.

	Paperwork Needed	Tax Filing Status	Valid SSN & Driver's License	Number of (qualifying) children	Ages of Children/ Householders	Household Size	Annual Earnings/ Investments	Childcare Expenses	Food Expenses	Utility Bills	Housing Info	Disability/ Mental Illness Info	% of FPL	Work Reqs	Benefits Time/ Month Limit	Continued Eligibility	Notes
TANF	Driver's License, SS card, Birth Certificates, Current Mortgage/ Rent Verification, Current Utility Bills, Verification of last 30 days of income		X	X	X	X	X	X Taken into account to determine benefits allotment		X	X		X	X	X 36 months. Extensions may be granted by CCDJFS. After 36 months, a family must be off cash assistance for 24 months before trying to re-qualify; then must provide proof of event that prevented them from remaining self-sufficient. Over lifetime, adults are limited to a total of 60 months.		
Medicaid	" "		X		X	X	X			X	X	X	X				
SNAP	" "		X			X	X Investments may not exceed \$2,000. (\$3,000 for 60+ years old or disabled)	X	X 30% of monthly earnings	X	X		X	X		Every 6 to 12 months; Elderly and disabled with no earned income, every 24 months.	Income/ resource limits do not apply if each person in household receives income from: OWF, DFA, DMA, SSI

Source: Economics Center calculations and data from CCDJFS, IRS, Ohio JFS.