SummerWorks Impact Report

KYSTATS

KENTUCKIANAWORKS

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Table of Contents

List of Figures

List of Maps

Summary of Findings

This evaluation was commissioned by KentuckianaWorks to examine the impacts of the SummerWorks program on youth in Jefferson County, Kentucky. The SummerWorks program is a Summer Youth Employment Program (SYEP) designed to provide job skills and experience for Louisville's young people. Since the beginning of the program over 25,000 youth have participated in summer jobs in the county.

This evaluation sought to answer four main research questions:

1) How have employers helped participants build social capital and networks?
2) Are participants in the program more likely to graduate from high school?
3) Are participants in the program more likely to attend higher education institutions?
4) Are participants in the program more likely to find employment after graduating from high school?

To prepare this evaluation, we examined both internal and external records of the SummerWorks program. This included partnering with the Kentucky Center for Statistics (KYSTATS) to use data from the Kentucky Longitudinal Data System (KLDS) to examine the long-term impacts of SummerWorks program participation. Assessing the impact of SummerWorks participation was broken down by participant location in the education workforce pipeline at the time of participation in SummerWorks.

The main findings of this evaluation are:

- The SummerWorks program has been very effective in building ties with local area employers who overall, are happy with the program.
- During school, outcomes for SummerWorks participants including GPA and absences are not different than for non-participants with similar demographic backgrounds.
- SummerWorks participants are more likely to graduate from high school than non-participants with similar demographic backgrounds.
- SummerWorks participants are more likely to enroll and stay enrolled in post-secondary institutions than non-participants with similar demographic backgrounds.
- SummerWorks participants are more likely to be employed and stay employed after high school graduation than non-participants with similar demographic backgrounds.

The remaining evaluation is divided into two substantive parts. Firstly, we provide background and context on Summer Youth Employment Programs and the SummerWorks program in Louisville. Next, we evaluate the impact of the SummerWorks program both in terms of employer participation and participant outcomes.

Literature Review

Summer youth employment programs (SYEPs) provide many benefits to young people. They serve to help participants develop social networks, improve skills, and increase their income. For low-income youth, especially those who lack knowledge of career options, SYEPs provide an important avenue for learning about new possibilities and developing positive relationships with adults and peers. Young people are more likely to succeed in the workplace when they have supportive adults guiding them and are given the ability to be exposed to different careers (Lippman & Keith, 2009). Participants also learn important soft skills such as responsibility, accepting feedback, learning when to seek assistance, and punctuality. Additionally, earning a wage over the summer provides a benefit for low-income youth and their communities (Ross & Kazis, 2016).

Summer youth employment programs have become a popular way to reach disadvantaged youth. A recent Conference of Mayors report found that 115,766 young people were placed in summer jobs in 2015 (U.S. Conference of Mayors, 2016). However, it is difficult to assess the efficacy of SYEPs because a summer work experience is often short and limited. Several studies have shown among particularly disadvantaged youth, very intensive training programs are needed to improve labor market outcomes (Heckman et al., 1999; Henrich & Holzer, 2011, LaLonde, 2003). There is some question as to what populations are being served by SYEPs and whether or not they reach the most vulnerable and disconnected youth.

Some studies have shown that participating in a SYEP increases academic achievement. In a study of a SYEP in New York City, participating in the summer job program increased the likelihood of passing the statewide "Regents" exam, a test designed to assess performance in a variety of high school subjects including mathematics, sciences, English, and history. Participation in the program also increased the average score on the exams and participation in the SYEP for multiple years resulted in even higher scores (Schwartz et al., 2015). In a related study, the New York City program was found to improve the likelihood of passing the exam and school attendance. Increases in school attendance were especially notable for students with a high level of educational risk (Leos-Urbel, 2014). An analysis of the SYEP in Detroit found participants were more likely to stay in school, graduate, and take the SAT, and less likely to be absent from school (JPMorgan Chase, 2015).

Studies examining the impact of summer jobs programs on future employment are far more mixed. Some studies have found working has a positive impact on being employed the next year (Sum et al., 2014). In evaluating the SYEP in Philadelphia, employment for summer job participants increased by 10% six months after completion of the program (Malka et al., 2015). However, a different study of the same program found there was no positive impact on employment rates for participants after they left the program (McClanahan et al.,2004). Participation in a work-based learning activity was found to increase a young person's salary up to eight years after high school (Holzer, 2008). Other studies have shown for older African-American males, both employment and wages are higher after participating in a SYEP (Modestino et al., 2017).

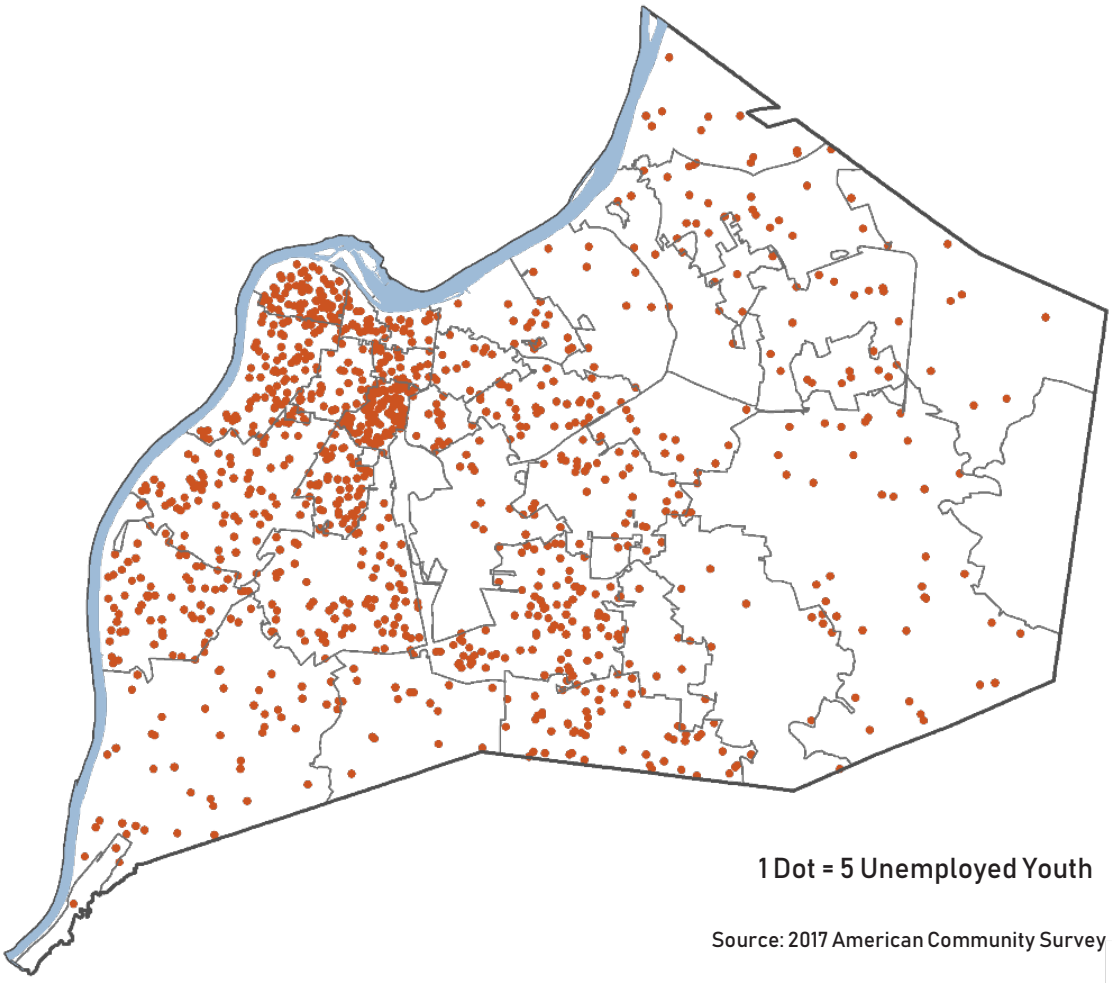
Some researchers have found summer jobs programs reduce crime. In two randomized control trials of youth summer employment programs in Chicago, the summer jobs program led to a reduction in violent crime arrests in the year after participation in the program (Davis & Heller, 2017). A study of the SYEP program in Boston showed that participants had fewer arraignments for violent and property crimes in the 17 months following the summer job program (Modestino, 2017). Other studies have shown SYEP participants are less likely to engage in violent or risky behaviors, including using alcohol, and selling or using illegal drugs (Sum et al., 2013).

Other studies have found one of the beneficial impacts of summer jobs programs may be an improved outlook. In an evaluation of the SYEP in Boston, participants were found to have additional job readiness skills, higher academic aspirations, and a more positive attitude towards their community than non-participants. (Modestino & Nguyen, 2016). Employment programs serve as useful tools for informing young people about career and educational options and informing them about the connection between their schooling and work (Whalen et al., 2003). Having real-world experiences that connect work and school may serve as an important component in keeping students from dropping out of school. They also offer young adults the ability to build confidence in the skills they have learned in the classroom (Kelly et al., 2010).

The benefits of SYEPs are not limited to the youth themselves, but also benefit businesses who need a workforce with education, training, and experience. SYEPs help support training efforts for young people that employers will not have to provide in the future (Sachdev & McDonnell, 2011). SYEPs help to build a broader pipeline of workers by connecting businesses with underrepresented populations they might not otherwise engage (Lerman et. al, 2009).

Research on the impact of summer jobs is limited. However, high school students and young adults with little job experience, who are unlikely to find a job on their own, and have limited connections to employment opportunities appear to be best served by youth summer employment programs. Most studies have not been able to determine if SYEPs have long-term impacts on education, employment, or earnings (Valentine, 2017).

Map 01: Unemployed Youth Age 16 to 21 by ZIP Code



Source: 2017 American Community Survey

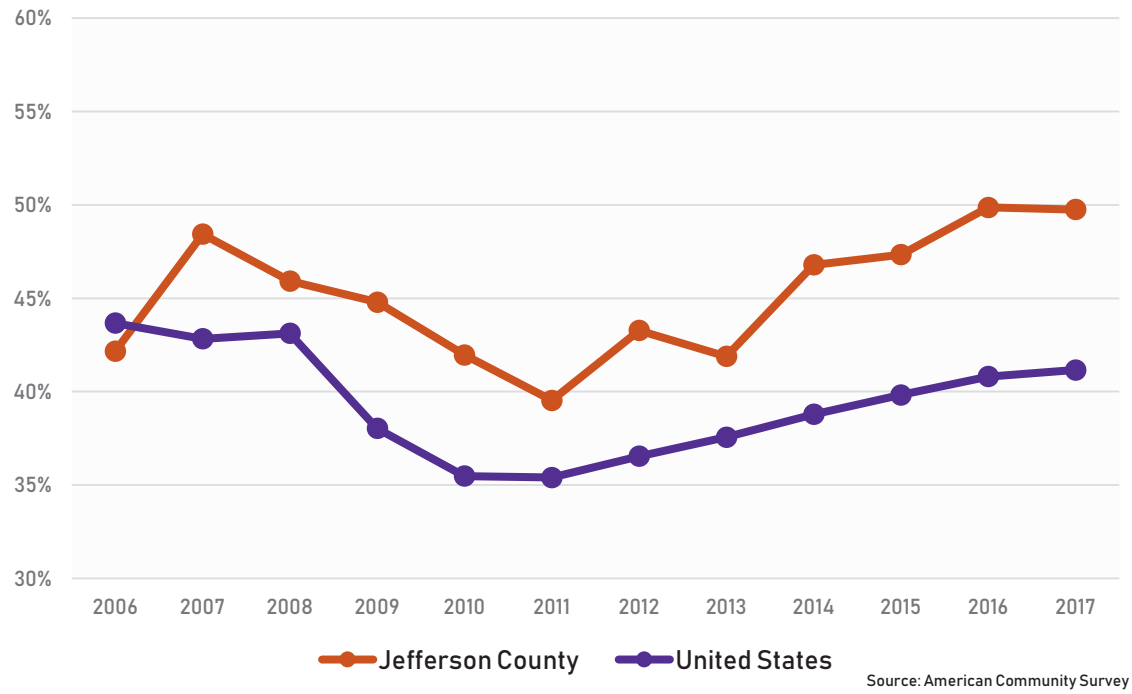
The Youth Labor Market in Louisville

The current economic conditions in the Louisville region are better than they have been in many years. The unemployment rate stands at a 15-year low, and total employment is higher than it has been since at least 1990. Despite these positive trends in the Louisville labor market, not all residents are experiencing the same economic prosperity. The unemployment rate for teens and young adults age 16 to 21 is triple the unemployment rate of workers over 21 (ACS, 2017).

As demonstrated in Map 01, youth unemployment rates are not evenly distributed throughout the county. ZIP codes in the northwest portion of the county have the highest youth unemployment rates while youth unemployment rates are lowest in eastern Jefferson County. Among black youth seeking work, over a quarter are not working, more than double the rate for white youth.

As shown in Figure 01, the percentage of youth ages 16 to 21 who are working has increased significantly since reaching a low in 2011. In 2017, half of young people were employed in Jefferson County, a rate nine points higher than the United States, and ten points higher than the youth employment rate in 2011. This exceeds the pre-recession level of youth employment in Jefferson County.

Figure 01: Youth Employment to Population Ratio



Source: American Community Survey

Figure 02: Total SummerWorks Participants

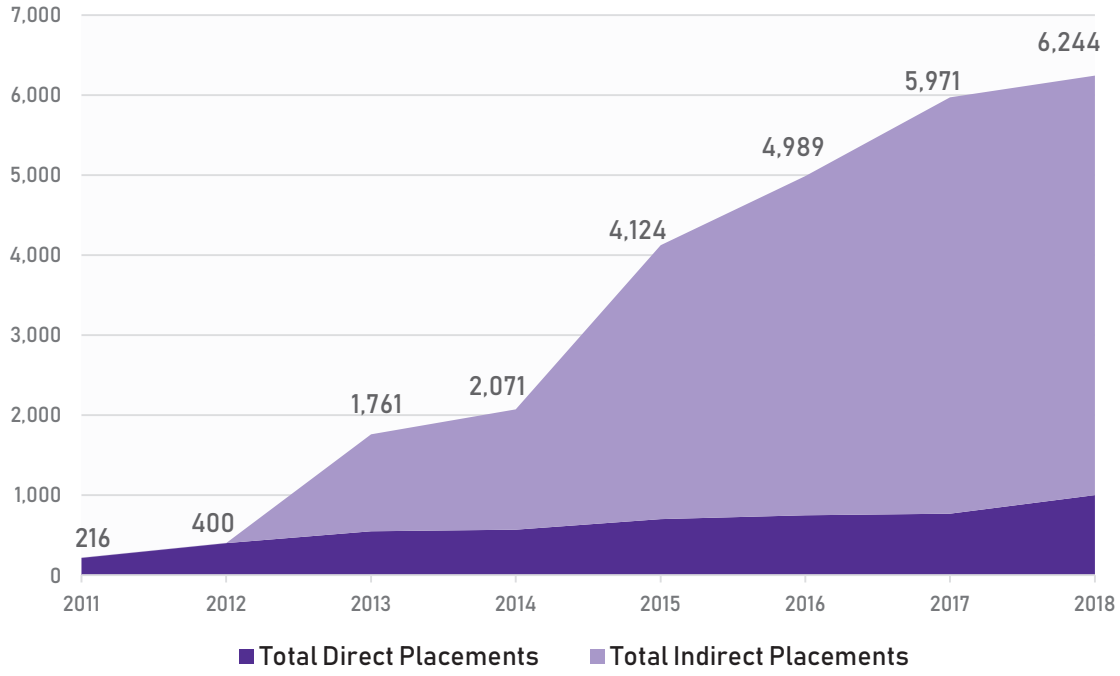
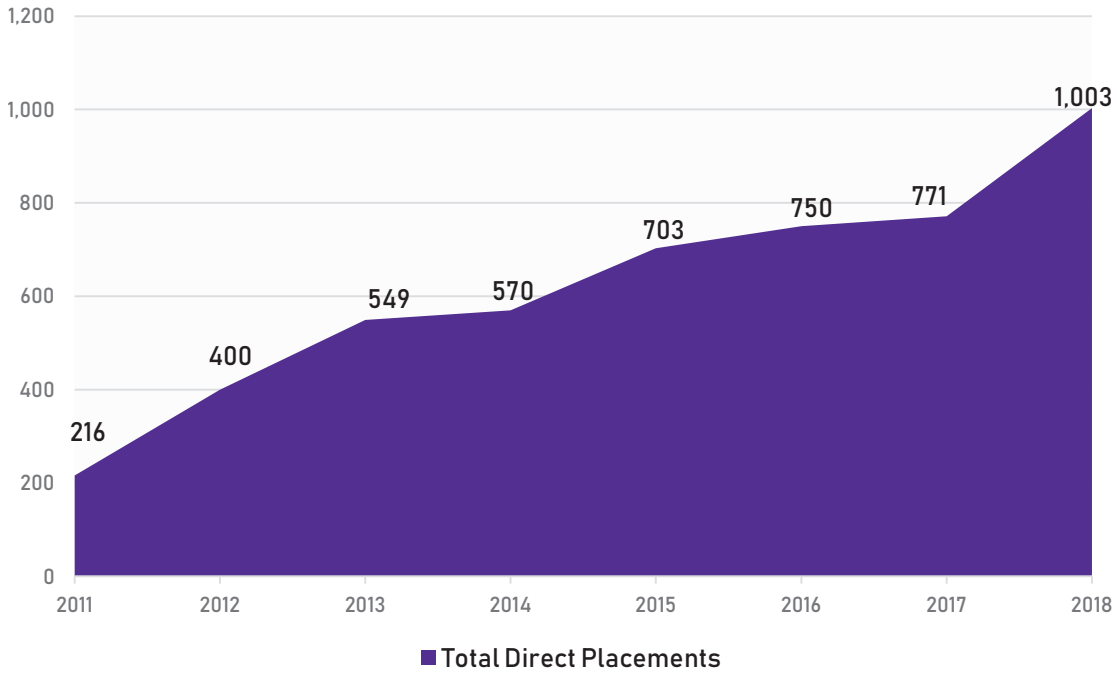


Figure 03: SummerWorks Direct Placements



The SummerWorks Program in Louisville

As part of the American Recovery and Reinvestment Act following the Great Recession, Congress appropriated $1.2 billion dollars nationally for youth employment programs along with strong encouragement for states to implement summer jobs programs. This was the first federal funding appropriated for summer youth employment since 1998 when the Workforce Investment Act (WIA) eliminated dedicated federal funding for youth summer jobs programs (Harris, 2007).

Following the end of the stimulus, dedicated federal funding for summer job programs again disappeared leaving states and cities to fill in the gap if they wished to continue such programs. In 2011, following his election as Mayor of Louisville Metro, Greg Fischer instituted the SummerWorks program funded through the city, as well as from many philanthropic and corporate supporters. The SummerWorks program is administered through KentuckianaWorks, the region's workforce development board. As Figure 02 shows, in the first year, 216 young people were placed in jobs through the SummerWorks program; by 2018, the program had grown to 6,244 participants.

SummerWorks is funded through a mixture of private and public monies. In 2014, SummerWorks was one of 14 programs to be nationally selected in the "New Skills at Work" program administered through JPMorgan Chase & Co. which provided additional funding to SummerWorks to expand its program. The James Graham Brown Foundation, the Diaz Family Foundation, The Community Foundation of Louisville, the PNC Foundation, the Gheens Foundation, the Cralle Foundation, and a number of private citizens have also provided funding for the program.

Administration of the SummerWorks program involves many moving parts. The current contractor for the program is YouthBuild, a non-profit organization which provides education, counseling, and job skills to unemployed young adults. In the late fall, marketing for SummerWorks begins within Jefferson County Public Schools. Representatives from YouthBuild, school counselors, and teachers work to pre-register students for the SummerWorks program. While this is occurring, staff from KentuckianaWorks and Greater Louisville Inc., the metro chamber of commerce, work to recruit employers to participate in the program.

In the first year, 216 young people were placed in jobs through the SummerWorks program; by 2018, the program had grown to 6,244 participants.

Official registration for SummerWorks begins in late winter. While potential participants are not expected to have a completed resume at this time, within a month of registration they are highly encouraged to have a finished resume to show to employers.

Potential participants are given the opportunity to learn how to craft a resume through their school, as well as resume workshops held by YouthBuild. Once registered, potential participants are matched with employers based on their interests, as well as the stated needs of employers. Once a participant is matched, employers conduct interviews of participants. While both the employer and participant are guaranteed matches, participants are not guaranteed a job, as that is left up to the discretion of the employer.

SummerWorks Participants

The SummerWorks program counts both direct and indirect placements. Demographic information on participants is only available for direct placements. Information on direct placements was obtained through participant registration records. The manner in which the data was collected varies by year, with some years allowing potential participants to skip filling in information and some years requiring all fields to be completed. For most years, demographic information is complete for direct placements with a response rate of 93.9% for the program overall.

The SummerWorks program is open to all Jefferson County youth between the ages of 16 and 21. The median age for participants throughout the program has been 18. As Figure 04 shows, the age distribution of participants began skewing older in 2014 and as of 2018, there were more 18-21 year olds enrolled in the program than 16-17 year olds. Age appears to have an impact on the type of industry an individual is hired into during the program. Retail businesses, governmental organizations, hospitality, non-profit organizations, religious organizations, and entertainment and recreation venues hire younger workers. Manufacturers, healthcare employers, and employment service firms are more likely to hire older workers.

Overall, the gender distribution in the SummerWorks program has been fairly equitable, with women slightly outnumbering men in the later years of the program. Throughout the program, women have comprised 53.3% of participants, while men have comprised 46.7% of participants. Choice of SummerWorks assignment is not strongly determined by gender with a few notable exceptions. Women are more likely to be employed in healthcare and entertainment and recreation jobs. Men are more likely to be employed at governmental organizations and in retail businesses.

As Figure 06 shows, the majority of individuals (84.7%) that participated in the SummerWorks program were enrolled in school. The remaining participants were either in a GED program (2.5%) or out-of-school (12.7%). Out of those enrolled in school, 84.8% were enrolled in high school and 15.2% were enrolled in college.

One of the primary objectives of the SummerWorks program has been to recruit individuals from areas of the city with high unemployment rates and fewer job opportunities. SummerWorks has been quite successful in achieving this goal, with roughly 8 out of 10 (79.7%) participants enrolling from ZIP codes with unemployment rates above the average unemployment rate for the Louisville MSA. As Map 02 shows, the greatest concentration of SummerWorks participants has come from individuals who live in west Louisville, an area that has historically faced

Figure 04: SummerWorks Participants by Age

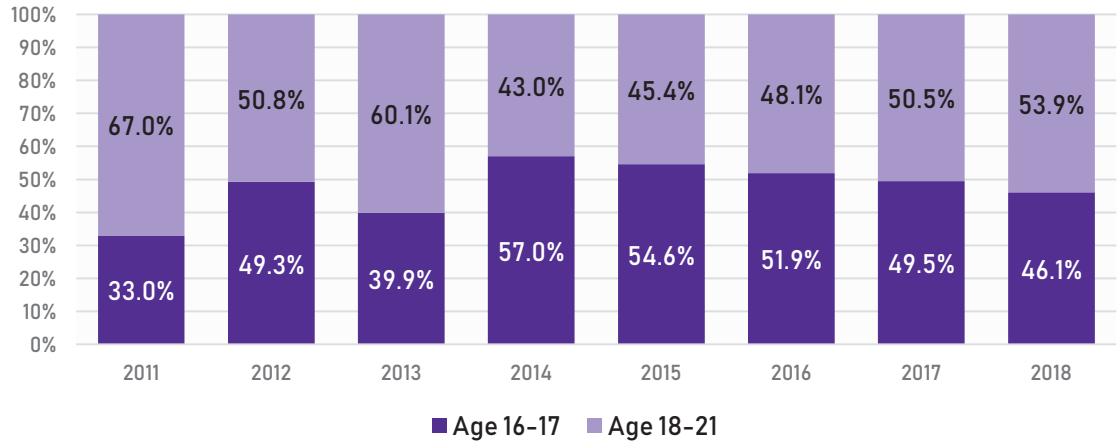


Figure 05: SummerWorks Participants by Gender

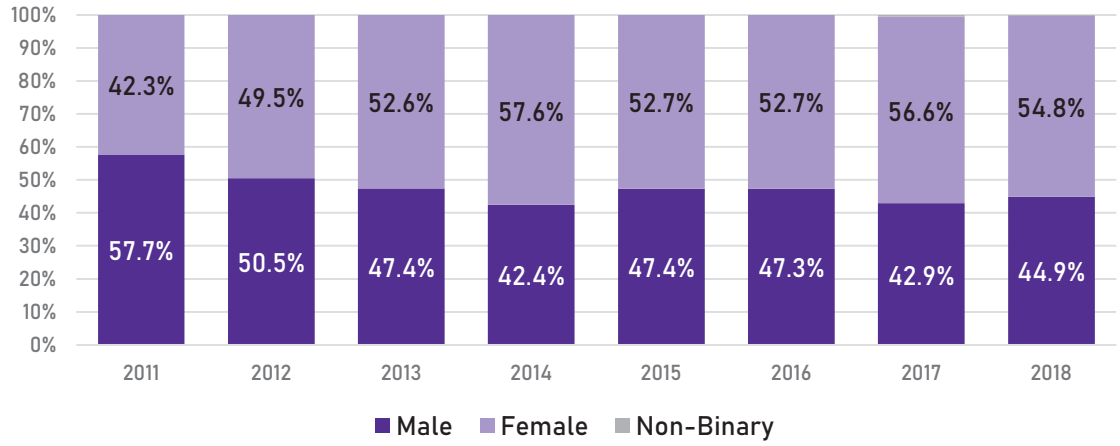
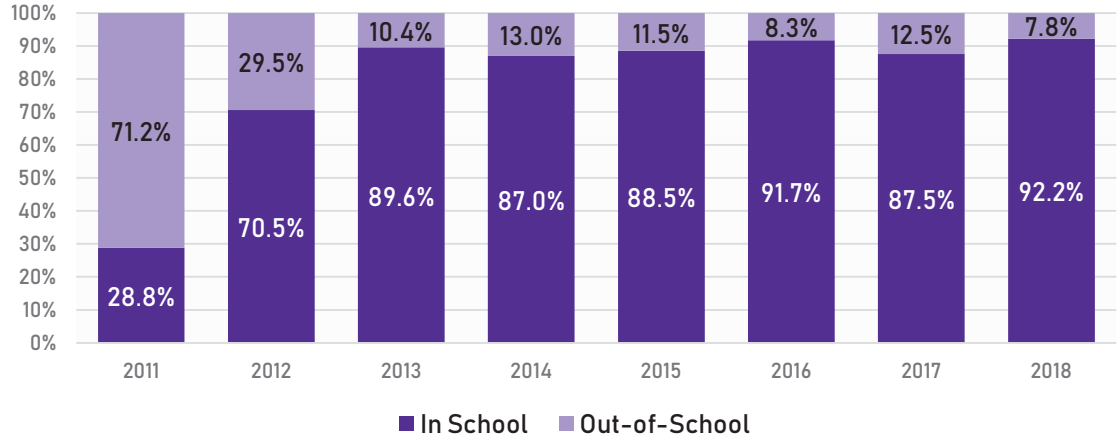


Figure 06: SummerWorks Participants by School Enrollment



Map 02: SummerWorks Direct Placements by ZIP Code Program Year 2018

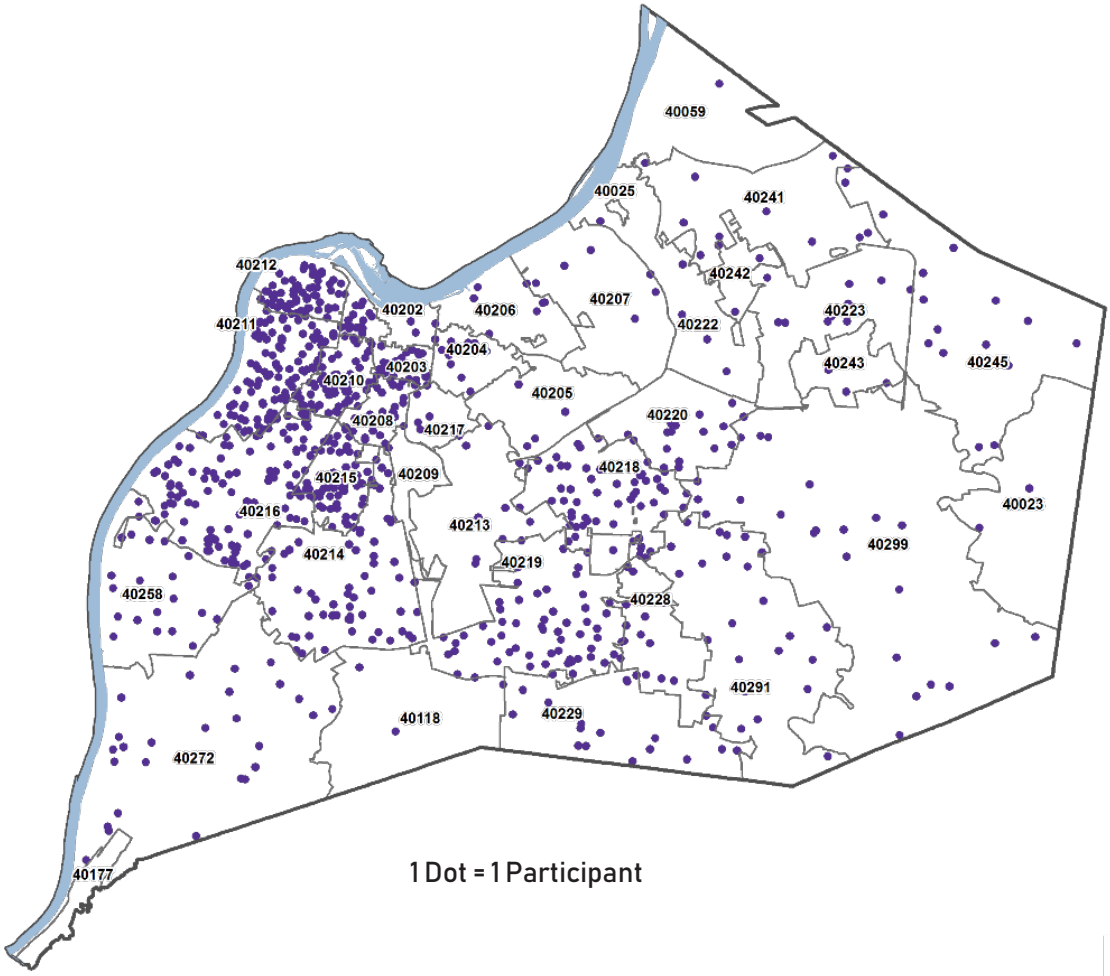
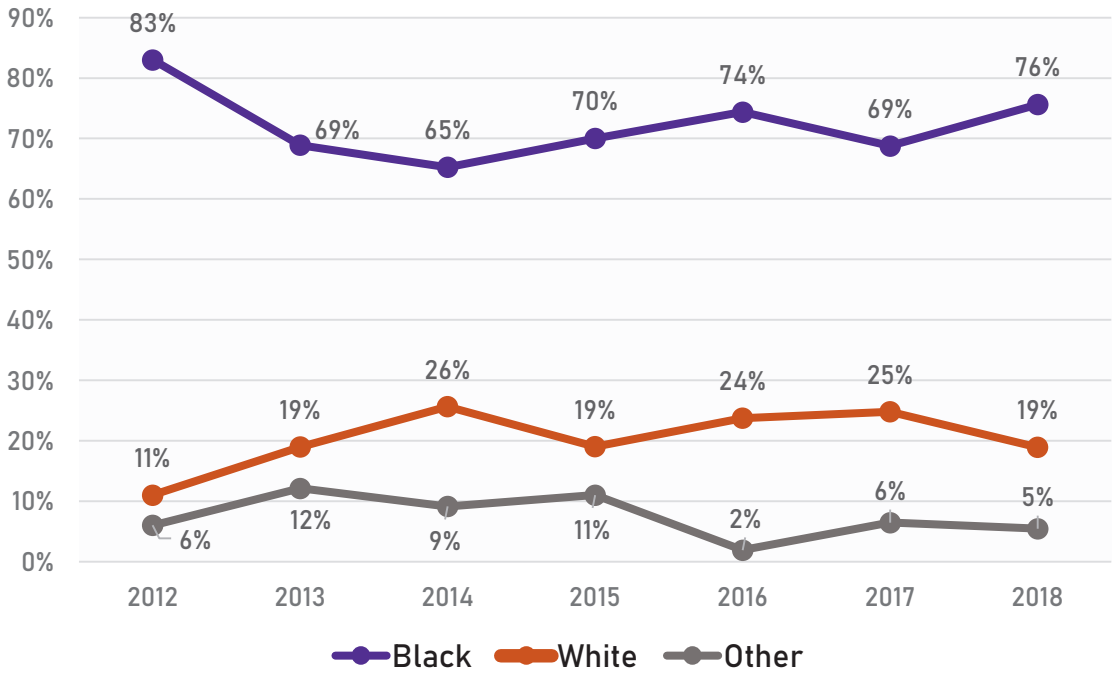


Figure 07: SummerWorks Participants by Race



high levels of poverty. However, nearly all ZIP codes in Jefferson County have been represented by SummerWorks participants.

Partially as a result of the targeted geographic recruitment of individuals into the program, the racial composition of SummerWorks participants is far different than that of the city. While only 27.4% of individuals 16 to 21 in Jefferson County are black, 71.6% of SummerWorks participants are black. This pattern has held relatively steady across time, with white participants representing 20.7% of total SummerWorks participants. Individuals who are Asian, Alaskan/American Indian, Hawaiian/Pacific Islander, or identify as "Other" comprise the remaining 7.7% of program participants.

Goals and Objectives of the SummerWorks Program

The primary goals of the SummerWorks program are to encourage youth to have a meaningful summer job experience and to improve education and workforce outcomes for participating youth. Within these goals are four primary objectives:

- **Objective 01:** Employers help participants build social capital and networks. (Short-term)
- **Objective 02:** Participants stay in school through completion of their high school degree. (Long-term)
- **Objective 03:** Participants attend higher education institutions. (Long-term)
- **Objective 04:** Participants find employment after high school graduation. (Long-term)

The remaining report looks at how effective the SummerWorks program was in achieving the stated objectives.

Data Sources and Data Collection

Data for the analysis was obtained from a variety of sources. The primary data for the study came from internal record keeping of direct placements for the SummerWorks program. Direct placements are operationalized as participants that obtained employment with Champion Employers with the help of SummerWorks staff. Data for the SummerWorks program has been housed in a variety of different servers and systems through the years. For the 2011 to 2015 cohorts, data was kept within the "Client Track" system, for 2016, the data was kept in the "Zoho" system, and for 2017 and 2018, the data was recorded in "Salesforce." All three systems were used by KentuckianaWorks to gauge the progress of individuals through the program. They also provide basic demographic data on the individual.

Data was also provided by the Kentucky Center for Statistics (KYSTATS) which maintains the Kentucky Longitudinal Data System (KLDS), a statewide longitudinal data system that integrates data from the Kentucky Department of Education (KDE), the Council on Postsecondary Education (CPE), and the Kentucky Education and Workforce Development Cabinet, among others. With access to the administrative records of the state, KYSTATS was able to provide an analysis of school and workforce outcomes for SummerWorks participants.

Methodology

For the evaluation of employer participation, program records were reviewed to assess the quantity of employers from year-to-year, as well as their duration in the program. For participant outcomes, this study utilized a matched-pair analysis to determine the impact of participation in the SummerWorks program. Matched pair analysis is a type of quasi-experimental design in which a control group is selected based on specific criteria of similarity. The goal of matched-pairing is to achieve a comparable group that is similar in the same manner a randomly assigned group would be similar.

KYSTATS first found data records on program participants within the Kentucky Longitudinal Data System (KLDS). KYSTATS was able to successfully pull data on 65% of SummerWorks direct placements. Program participants were then matched to a control group from the KLDS based on demographic and school characteristics. Participants between 16 and 18 were matched on age, academic year, race, ethnicity, school, gender, free or reduced lunch status, and age. School was not used as a matching variable for the 19 to 21 year olds because it was not available. Participants were matched on criteria specific to them in the year before SummerWorks participation. Outcomes for participants were measured in the year following SummerWorks participation. Participants were matched using the optmatch package in R. Matching has the benefit of reducing statistical noise lending confidence to the results being attributable to the SummerWorks program. Matched pair t-tests were used to determine if the means between the control and SummerWorks group

were statistically different. Values determined to be "statistically significant" mean that we can say with 95% certainty that they did not occur by random chance. This 95% confidence interval is considered the "gold standard" in academic research. (For a more detailed methodology, please see Appendix A)

As Table 01 shows, the SummerWorks participants and the control group are almost identical on the criteria upon which they were matched. Each participant was matched with only one other control person giving us a 1:1 match rate. The sample remains very similar to the reported demographics for the SummerWorks program, despite not being able to fully match all participants in the population.

Table 01: Summary Statistics of Matched Pairs

Matching Criteria	Control Group	SummerWorks Group
Median Age	18	18
Age 16-18	56.3%	56.8%
Age 19-21	43.7%	43.2%
9th Grade	3.7%	3.5%
10th Grade	15.5%	15.4%
11th Grade	26.1%	26.1%
12th Grade	24.7%	25.0%
Young Adults	30.0%	30.0%
Black	66.3%	66.8%
White	26.2%	25.6%
Asian	2.0%	2.0%
Other	5.6%	5.6%
Hispanic	4.2%	4.3%
Not Hispanic	95.8%	95.7%
Female	51.5%	51.5%
Male	48.5%	48.5%
Free Lunch Status	65.8%	65.8%
Reduced Lunch Status	6.6%	6.6%
Paid Lunch Status	26.8%	26.7%

Employer Participation

In order for participants to complete the 7-week summer work experience, there must be employer participation in the program. For employers, there are two types of direct placements through the SummerWorks program: subsidized sponsored placements and unsubsidized private direct placements. Subsidized sponsored placements are paid for through dedicated SummerWorks funding and are only available to public and not-for-profit agencies. Unsubsidized placements are funded through the business or non-profit directly hiring the SummerWorks participant. Employers that participate in SummerWorks are designated "Champion Employers" because of their dedication to helping young people gain experience through summer jobs. While the direct placements are coordinated through the SummerWorks program and staff, when other young people go to work for Champion Employers for the summer, they are considered to have received an indirect placement through the SummerWorks program.

Since the beginning of SummerWorks, a total of 240 local employers have hired young people through the program. As Figure 08 shows, the number of employers participating in the SummerWorks program has increased significantly over the past 8 years. On average, employers participate in the program for 2.16 years. This number is largely influenced by a handful of consistent employer partners. Out of participating employers, only 28.3% have done so for two years or more.

Over the course of the program, each employer has received an average of 9.5 direct placements per summer. This number

Figure 08: Total SummerWorks Employers

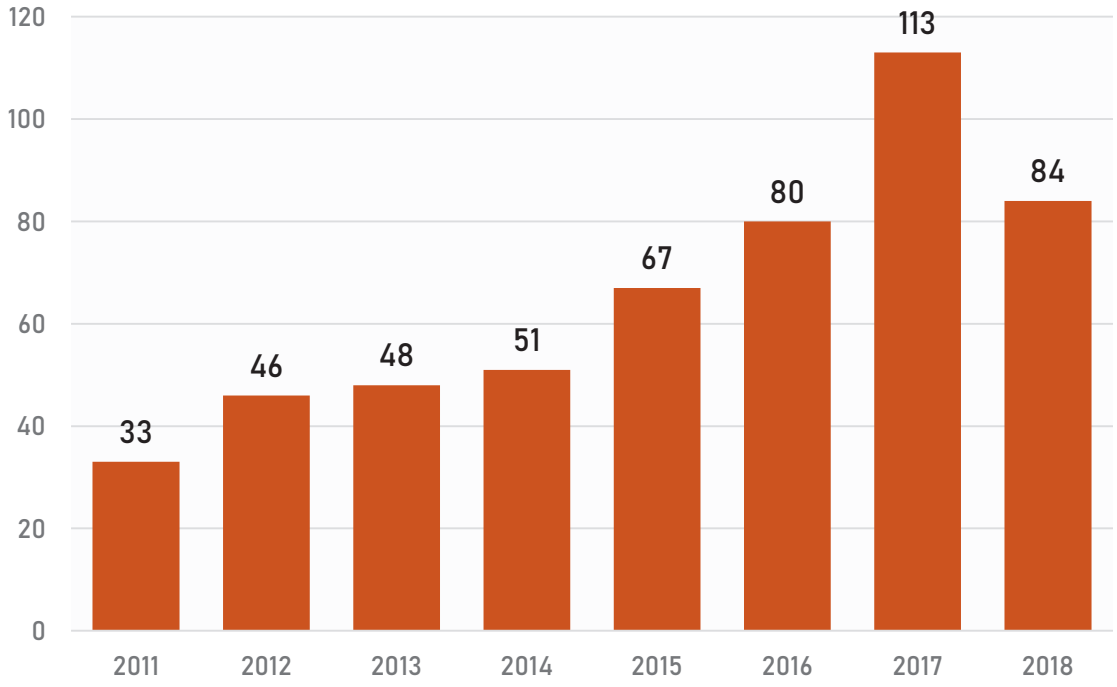
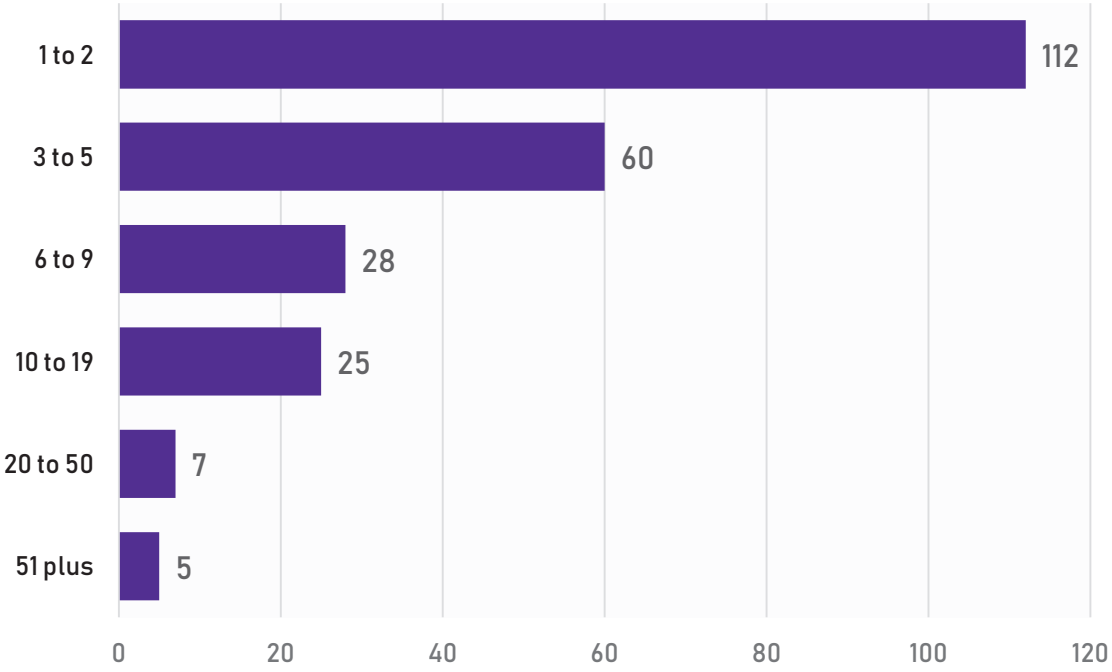


Figure 09: Average SummerWorks Direct Placements per Employer per year



is skewed by a small number of employers (2.1%) that have had over 50 SummerWorks direct placements in a given year. As Figure 09 shows, most employers tend to have fewer than five SummerWorks direct placements, with the median number of direct placements per employer being three.

Since the beginning of SummerWorks, a total of 240 local employers have hired young people through the program.

In order to participate as a Champion Employer for SummerWorks, an employer must first register with KentuckianaWorks. Employers must create both a job description and provide a job title for the position in which the participant will be placed. This title and description are used by SummerWorks staff to match SummerWorks participants to the listed positions. Each qualified employer registering for SummerWorks is guaranteed a match through this process. Champion Employers are expected to provide participants of the program a wage for their work, on-site supervision, sufficient work to do during the day, and a work week of between 30 and 40 hours.

One area employers report having difficulty with is follow-up from SummerWorks participants once staff refers the participant to the employer. Although employers are guaranteed a match, potential participants do not always respond to employers for interviews and in some cases have skipped scheduled interviews all together. This has led to employers hiring young people who the SummerWorks team may not necessarily be seeking to place directly.

Based on evaluations of the 2018 cohort, employers were overall happy with their participation. The majority of employers (94.7%) indicated they would participate in SummerWorks next year, while all employers that answered the survey (100%) said they would recommend SummerWorks to other employers. The majority of employers (84.2%) indicated they felt SummerWorks was beneficial to their company. Over one-third of employers (36.8%) hired a SummerWorks participant to work for them after the conclusion of the program.

Among the 2018 SummerWorks employer cohort:

- **100% would recommend SummerWorks to other employers**
- **84.2% agreed that SummerWorks was beneficial to their company**
- **36.8% hired a SummerWorks participant to work for them after the conclusion of the program**

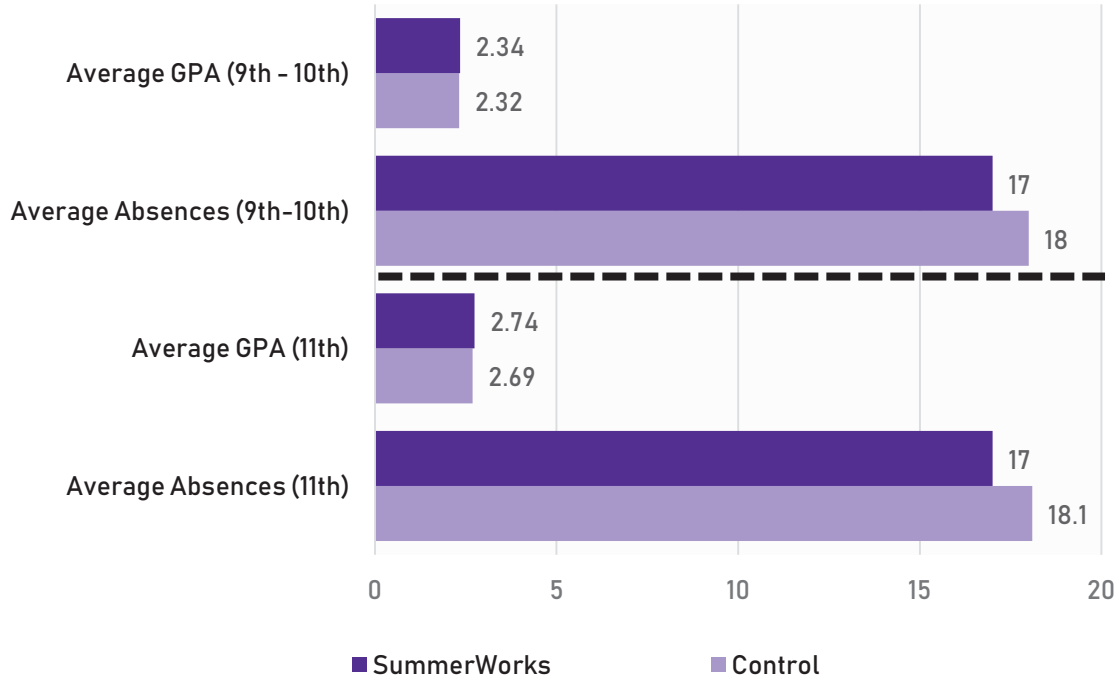
Participant Outcomes

To assess the outcomes of participants in SummerWorks, we examined the program's impact on youth across two primary domains based on the goals of the program. Firstly, we studied in-school outcomes including GPA, absences, and high school graduation rate to evaluate if the program had any impact on students while still enrolled in high school. Next, we examined the effectiveness of SummerWorks on post-graduation outcomes including enrollment in post-secondary institutions and employment. We describe the findings in each of the domains below.

Overall, the results of the t-tests show interesting outcomes for SummerWorks participants. Regarding the first domain, we find there is no statistically significant difference in absences or GPA between the SummerWorks participants and the control group during their years in high school. This indicates that both groups had similar results while enrolled in school.

Where the outcomes for SummerWorks participants begin to manifest are in the longer term goals of the program. SummerWorks participants are 6.9% more likely to graduate high school than the control group. After graduation, SummerWorks participants are 11.2% more likely to be enrolled in post-secondary education one year later, and 11.7% more likely to be enrolled in post-secondary education 1 to 2 years later. In terms of employment, SummerWorks participants are 9.9% more likely to be employed one year later than the control group.

Figure 10: In-School Outcomes for High Schoolers



SummerWorks participants in high school are:

- **6.9% more likely to graduate high school**
- **11.2% more likely to be enrolled in post-secondary education one year later**
- **11.7% more likely to be enrolled in post-secondary education one to two years later**
- **9.9% more likely to be employed after graduation**

Figure 11: High School Graduation Rate for Incoming Seniors

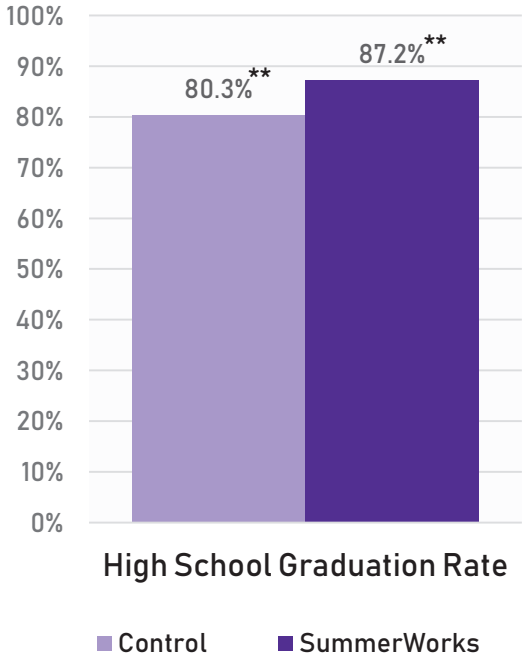
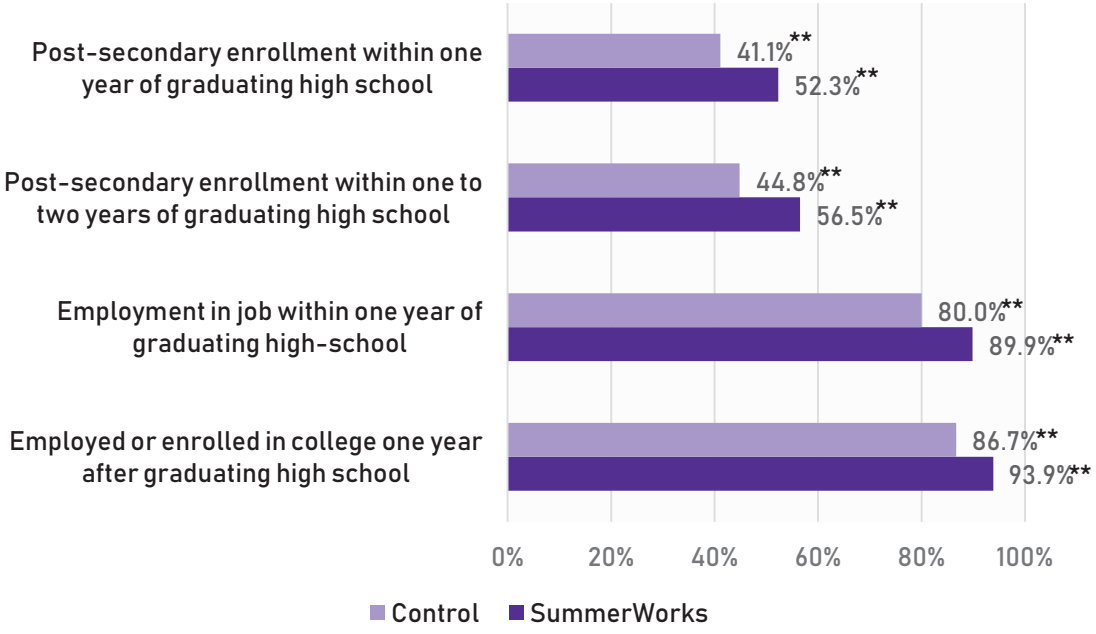


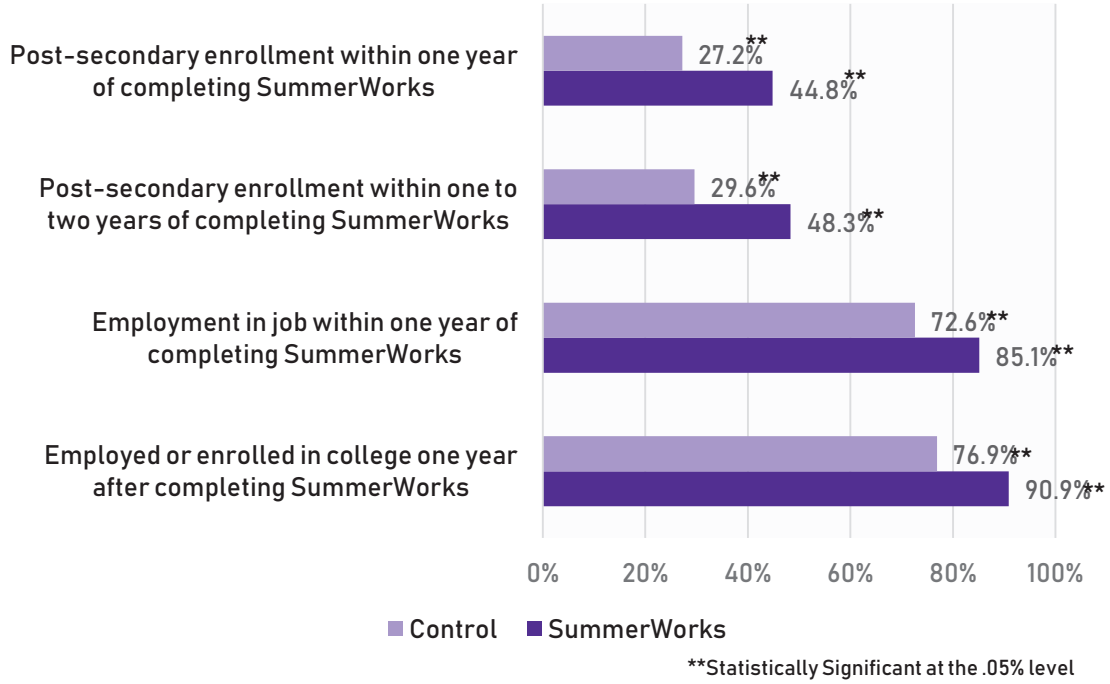
Figure 12: Post-Graduation Outcomes for Out-Going Seniors



**Statistically Significant at the .05% level

Similar outcomes are found for young adults (19-21) enrolled in the SummerWorks program. Young adults who participate in SummerWorks are 17.6% more likely to be enrolled in a post-secondary institution after completing the program and 18.7% more likely to be enrolled in a post-secondary institution 1 to 2 years after completing the program. When it comes to employment 1 year after the program, SummerWorks participants are 12.5% more likely to be employed than the control group.

Figure 13: Post-Participation Outcomes for Young Adults

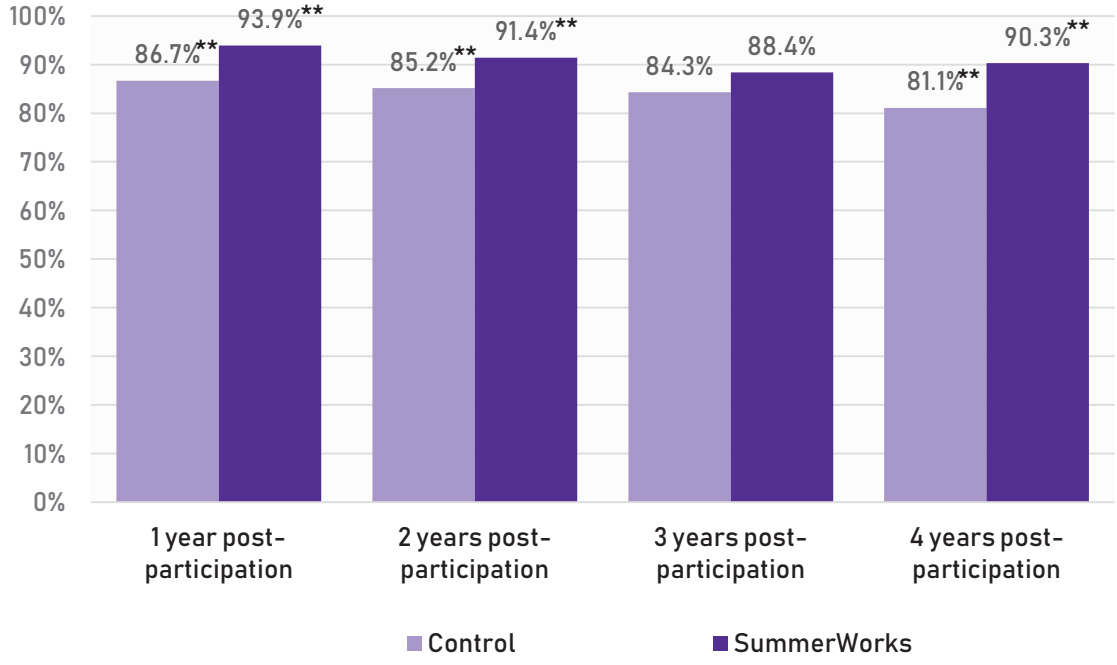


**Statistically Significant at the .05% level

SummerWorks participants out of high school are:

- **17.6% more likely to be enrolled in post-secondary education one year later**
- **18.7% more likely to be enrolled in post-secondary education one to two years later**
- **12.5% more likely to be employed one year later**

Figure 14: Employment or Post-Secondary Enrollment for Out-Going Seniors



**Statistically Significant at the .05% level

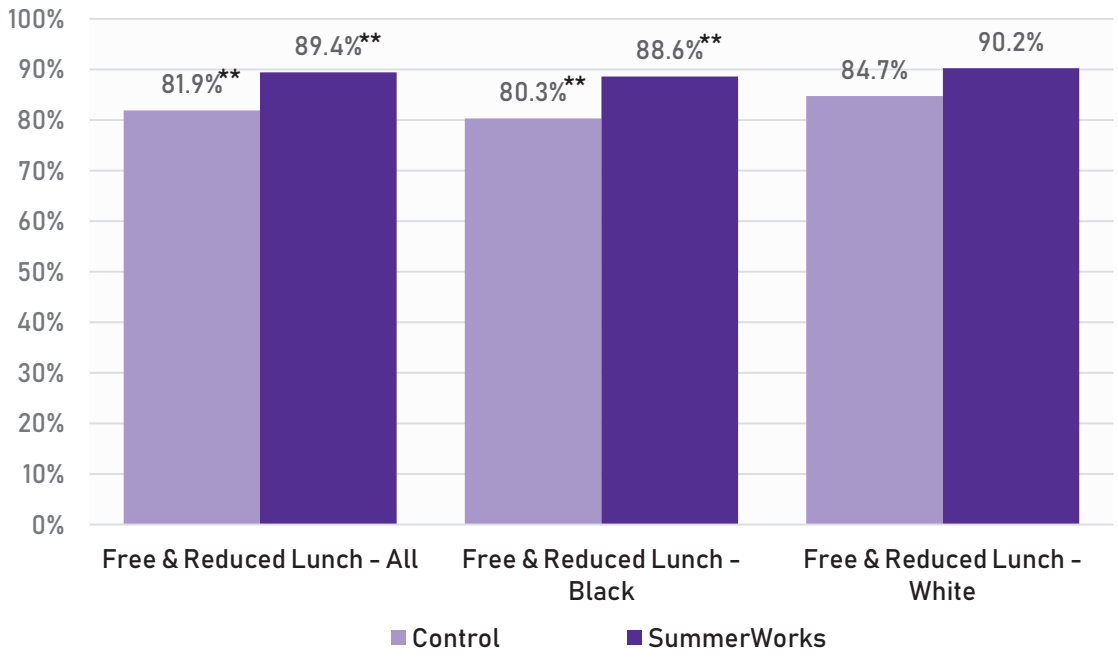
SummerWorks participants continue to achieve higher levels of post-secondary enrollment and employment over time compared to the control group. In the first year following completion of SummerWorks, participants are 7.2% more likely to be employed or enrolled in a post-secondary program. By year 4, participants are 9.2% more likely to be employed or enrolled in a post-secondary program. This finding would suggest SummerWorks participants are more likely to see beneficial long-term outcomes in employment and education than non-participants.

SummerWorks participants who have finished high school are:

- **7.2% more likely to be employed or enrolled in post-secondary education one year after completing the program.**
- **6.2% more likely to be employed or enrolled in post-secondary education two years after completing the program.**
- **9.2% more likely to be employed or enrolled in post-secondary education four years after completing the program.**

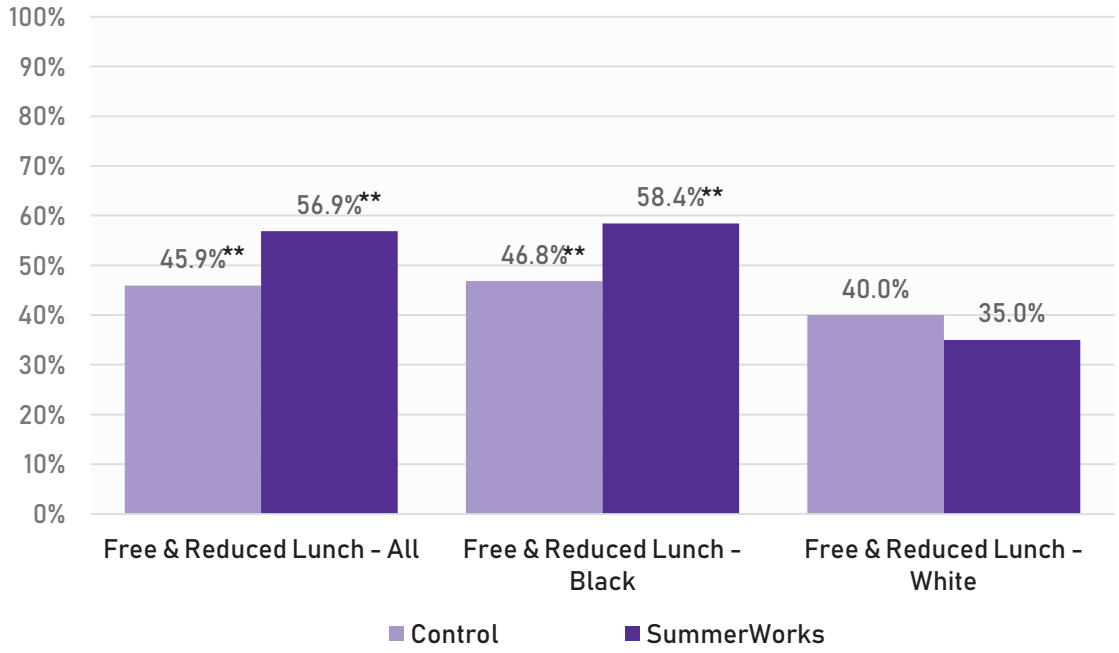
Individuals from disadvantaged backgrounds appear to particularly benefit from the SummerWorks program. Individuals receiving free or reduced lunch who participated in SummerWorks are 7.5% more likely to graduate high school than individuals who receive free or reduced lunch and did not participate in SummerWorks. After graduation, SummerWorks participants who received free or reduced lunch continue to demonstrate positive outcomes. Participants with free or reduced lunch status are 11.0% more likely to be enrolled in a post-secondary institution 1 to 2 years after graduation, and 10.3% more likely to be employed after graduation than individuals who received free or reduced lunch and did not participate in SummerWorks. The impact of SummerWorks is even greater for black individuals receiving free or reduced lunch. Black youth who received free or reduced lunch and participated in SummerWorks are 8.3% more likely to graduate high school than black individuals with free or reduced lunch status that did not participate in SummerWorks. Black participants who received free or reduced lunch are 11.6% more likely to enroll in a post-secondary institution 1 to 2 years after graduation and 10.4% more likely to be employed after graduation than black individuals receiving free or reduced lunch who did not participate in SummerWorks.

Figure 15: High School Graduation for Incoming Seniors receiving Free or Reduced Lunch



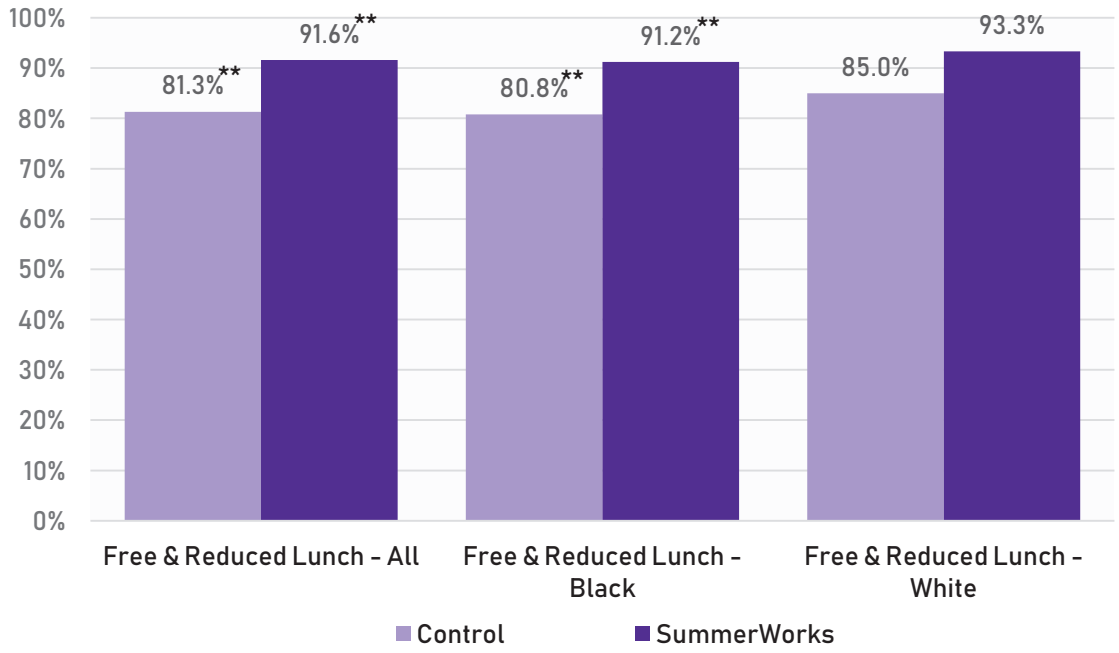
**Statistically Significant at the .05% level

Figure 16: Post-Secondary Enrollment 1 to 2 Years after Graduation for Out-Going Seniors receiving Free or Reduced Lunch



**Statistically Significant at the .05% level

Figure 17: Employment after Graduation for Out-Going Seniors receiving Free or Reduced Lunch

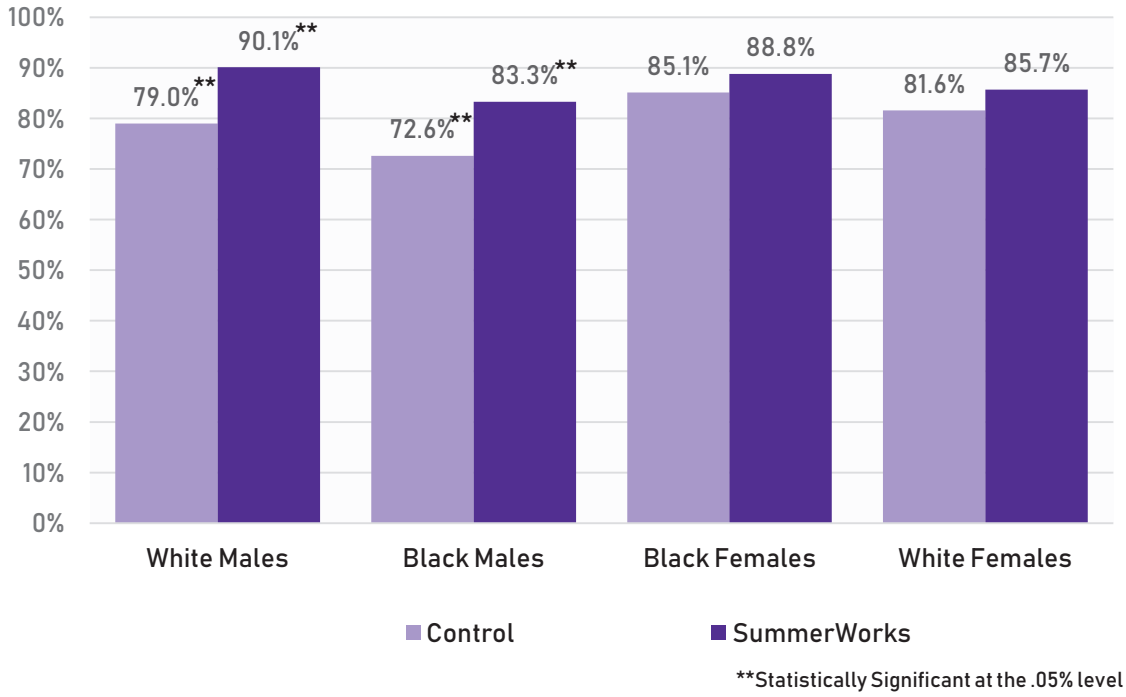


**Statistically Significant at the .05% level

The benefits of SummerWorks participation appear to have larger impacts when examined by demographic group. White males who participated in SummerWorks are 11.1% more likely to graduate high school than white males that did not participate in SummerWorks. Additionally, black males that participated in SummerWorks are 10.7% more likely to graduate high school than black males that did not participate in SummerWorks.

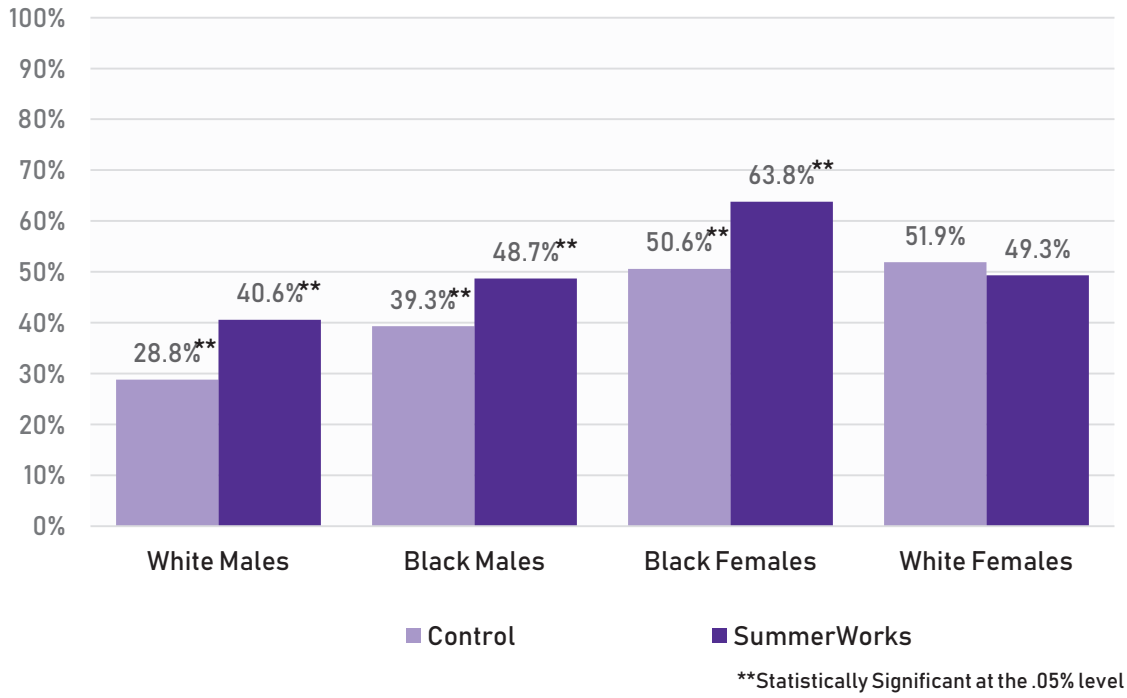
Post-graduation outcomes are similarly constructed across demographic lines with white male SummerWorks participants enrolling in post-secondary education at a rate 11.8% higher than white male non-participants, black male SummerWorks participants enrolling in post-secondary education at a rate 9.4% higher than black male non-participants, and black female SummerWorks participants enrolling in post-secondary education at a rate 13.2% higher than non-participants. Additionally, employment one year after graduation is influenced by demographics, with black male SummerWorks participants employed at a rate 9.5% higher than non-participants and black female SummerWorks participants employed at a rate 10.4% higher than non-participants.

Figure 18: High School Graduation for Incoming Seniors by Race



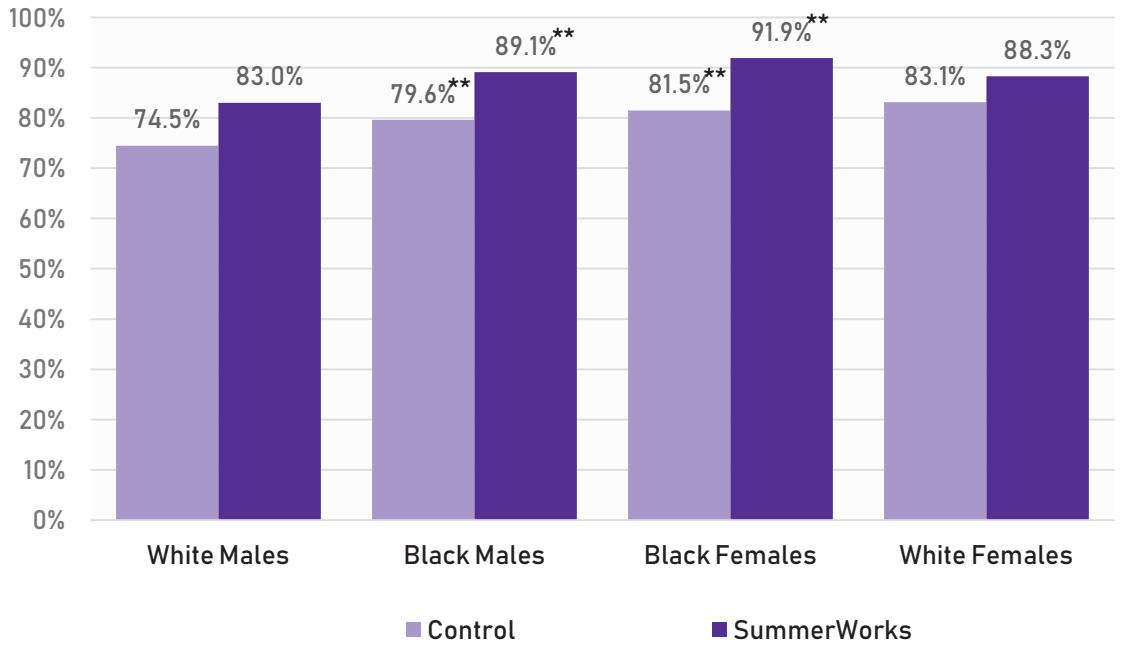
**Statistically Significant at the .05% level

Figure 19: Post-Secondary enrollment 1 to 2 years after Graduating High School by Race



**Statistically Significant at the .05% level

Figure 20: Employment after Graduating High School by Race



**Statistically Significant at the .05% level

Conclusion and Findings

Summer youth employment programs (SYEP) provide many advantages for young people. In the short-run, this includes helping participants develop positive relationships with adults and peers, improving both soft and specific skills, gaining knowledge of career opportunities, and boosting income. In the long-run, this includes improved academic achievement and employment opportunities. This evaluation of the SummerWorks program in Louisville shows that participation is associated with improved outcomes in high school graduation, post-secondary enrollment, and employment.

Overall, the primary goal of the SummerWorks program is to encourage youth to have a meaningful summer job experience, and to improve education and workforce outcomes for participating youth. In order to assess the impact of the program, we evaluated several different outcomes.

Objective 01: Employers help participants build social capital and networks.

This evaluation found the SummerWorks program has been very effective in building ties with local area employers. Employers have overall been happy with their participation in the program and the long tenure and repeat participation of many employers signals the program is serving its goal of helping place participants in jobs that grow their skills.

Objective 02: Participants stay in school through completion of their high school degree.

This evaluation found that despite showing no differences in GPA or absences, SummerWorks participants are 6.9% more likely to graduate from high school than the control group. Black men who participate in SummerWorks are 10.7% more likely to graduate than black men who do not participate in SummerWorks. White men who participate in SummerWorks are 11.1% more likely to graduate than white men who do not participate in SummerWorks. Individuals receiving free or reduced lunch who participate in SummerWorks are 7.5% more likely to graduate than non-participants receiving free or reduced lunch.

Objective 03: Participants attend higher education institutions.

This evaluation found SummerWorks participants are more likely to enroll and stay enrolled in post-secondary institutions than the control group. Individuals receiving free or reduced lunch who participate in SummerWorks are more likely to enroll in a post-secondary institution than those receiving free or reduced lunch that do not participate in SummerWorks. Additionally, white men, black men, and black women who participate in SummerWorks are more likely to be enrolled in post-secondary institutions than their demographic counterparts who did not participate in SummerWorks. Over time, SummerWorks participants are more likely to attend higher education institutions than the control group.

Objective 04: Participants find employment after high school graduation.

This evaluation found SummerWorks participants are more likely to be employed after high school graduation than the control group. Black individuals receiving free or reduced lunch who participated in SummerWorks are 10.4% more likely to be employed following graduation than black individuals receiving free or reduced lunch who did not participate in SummerWorks. Additionally, both black men and black women are more likely to be employed after high school graduation than non-SummerWorks participants. Over time, SummerWorks participants are more likely to be employed than the control group.

The SummerWorks program has been shown to be a valuable addition to youth employment services in the city. It is associated with long-term increases in educational attainment and employment for its participants. Overall, the program serves as a beneficial tool for helping young people in Louisville learn the skills needed to thrive in today's workplace.

Works Cited

Davis, J. M., & Heller, S. B. (2017). Rethinking the benefits of youth employment programs: The heterogeneous effects of summer jobs. Review of Economics and Statistics, 1-47.

Heckman, J. J., LaLonde, R. J., & Smith, J. A. (1999). The economics and econometrics of active labor market programs. In Handbook of labor economics (Vol. 3, pp. 1865-2097). Elsevier.

Heinrich, C. J., & Holzer, H. J. (2011). Improving education and employment for disadvantaged young men: Proven and promising strategies. The Annals of the American Academy of Political and Social Science, 635(1), 163-191.

Holzer, H. J. (2008). Workforce training: What works? Who benefits. In Wisconsin Family Impact Seminars.

JP Morgan Chase. (2015). Expanding Economic Opportunity for Youth through Summer Jobs.

Kelly, M.E., Walsh-Blair, L.Y., Blustein, D.L., Bempechat, J. & Seltzer, J. (2010) "Achievement motivation among urban adolescents: Work hope, authonomy support, and achievement-related beliefs." Journal of Vocational Behavior, 77, 205-212.

LaLonde, R. J. (2003). Employment and training programs. In Means-tested transfer programs in the United States (pp. 517-586). University of Chicago Press.

Leos-Urbel, J. (2014). What is a summer job worth? The impact of summer youth employment on academic outcomes. Journal of Policy Analysis and Management, 33(4), 891-911.

Lerman, R. I. (2013). Are employability skills learned in US youth education and training programs?. IZA Journal of Labor Policy, 2(1), 6.

Lippman, L. & Keith, J. (2009). A developmental perspective on workplace readiness: Preparing high school students for success. Washington, DC: Child Trends.

Malka, A., Moore, R., Rubino, C., Bedi, A., & Falley, S. (2015). Do Summer Jobs Matter? An Evaluation of the Los Angeles City and County Summer Youth Employment Program. Northridge Consulting Group.

McClanahan, W. S., Sipe, C. L., & Smith, T. J. (2004). Enriching Summer Work: An Evaluation of the Summer Career Exploration Program. Public/Private Ventures.

Modestino, A. S. (2017). How can summer jobs reduce crime among youth?. Metropolitan Policy Program at Brookings.

Modestino, A.S. and Nguyen, T. (2016) "The Potential for Summer Youth Employment Programs to Reduce Inequality: What Do We Know?" (Boston: Federal Reserve Bank of Boston).

Ross, M., & Kazis, R. (2016). Youth Summer Jobs Programs: Aligning Ends and Means. Washington, DC: Brookings Institution.

Works Cited - Continued

Sachdev, N. & McConnell, K. (2011) Summer Youth Employment Program Evaluation Report.

Sum, A. Trubskyy,M. & McHugh, W. (2013) "The Summer Employment Experiences and the Personal/Social Behaviors of Youth Violence Prevention Employment Program Participants and those of a Comparison Group," (Center for Labor Market Studies, Northeastern University, Boston, MA).

U.S. Conference of Mayors. (2016). "Financial Education and Summer Youth Programs."

Valentine, E. J., Anderson, C., Hossain, F., & Unterman, R. (2017). An Introduction to the World of Work: A Study of the Implementation and Impacts of New York City's Summer Youth Employment Program.

Whalen, S., DeCoursey, J. & Skyles, A. (2003). Preparing youth for the workforce: Exploring employer engagement in the Chicago region. Chicago, IL: Chapin Hall Center for Children.

APPENDIX A

Technical Notes on Summer Works Matched Pair Analysis

Using data sent from KentuckianaWorks we were able to match in 4,680 SummerWorks participants into the Kentucky Longitudinal Data System of the individuals that were received from KentuckianaWorks. Matching was restricted to individuals from the same geographic area of Jefferson County who matched on critical characteristics with match characteristics differing dependent on the classification of the participant. Participants were classified as either high school or WIOA participants. Matches were made in R using the 'pairmatch' function from the optmatch library in R. We set the same seed to be able to run the functions multiple times with the same results.

Using the full population of Jefferson County Public School high school students, we filtered the data by Academic Year and matched SummerWorks participants to non-SummerWorks participants using information from the year prior to the intervention. Specifically individuals identified as in grades 9 through 12 were matched on the following variables: Grade Level, Gender, Ethnicity, Race, High School, and Free or Reduced Price Lunch status. WIOA participants presented unique difficulties in matching as they are identified through age at the time of intervention, specifically individuals of age 19 through 21, who were not enrolled in high school the academic year prior to participation in the Summer Works program. As such, WIOA participants lacked recent high school information. WIOA participants were matched to similar individuals in Jefferson County who were 19 to 21 years old during the comparable pre-intervention academic year and presented the best match based on Gender, Ethnicity, and Race. Although the data used for matching necessarily differed based on the information available for different participant types, the general matching and modeling followed the structure described below:

Basic Structure	Matching (t - 1)	Intervention (t0)	Outcomes (t + 1, t + 2, ...)
Example	*Information from AY 2015-16*	*Summer 2016*	*Information from AY 2016-17 and forward*

The SummerWorks program and the temporal nature of the analysis necessitated special consideration in matching. The vast preponderance of the sample participated only once, requiring only that the best matched pair was not a future participant in SummerWorks: this requirement was designed to prevent contamination of longer term outcomes. For individuals that participated in Summer Works multiple times we took their most recent participation, then noted their participation over the years. 90.3% of participants only participated 1 year, while the rest participated multiple years. For the small subset of individuals that participated multiple times, earlier years of participation were removed from the matched pair as duplicate

records were problematic in the analysis. For individuals who had an age, calculated by taking year of participation – birth year, less than 15 and more than 22 were dropped due to the fact that it would be impossible to take part in SummerWorks. These individuals met the criteria to be matched into the KLDS, however do not pass a reasonableness test. The final group of SummerWorks participants that were used in the analysis included 2,568 individuals.

Using the unique match data we wrote a custom function to be able to perform a descriptive analysis of the matched pairs. This function accounted for the count of individuals in the data, mean, median, standard deviation, standard error, Student's T-Test p-value, Students T-Test estimate, Wilcox Test p-value, and Wilcox Test statistic. We included wages as reported to UI and inflation adjusted wages per KentuckianaWorks request.

The Kentucky Center for Statistics (KYSTATS) collects and links data to evaluate education and workforce efforts in the Commonwealth. This includes developing reports, responding to research requests, and providing statistical data about these efforts so policymakers, agencies, and the general public can make better informed decisions.

https://www.kystats.ky.gov/

KentuckianaWorks is the Workforce Development Board for the Louisville region, which includes Bullitt, Henry, Jefferson, Oldham, Shelby, Spencer, and Trimble counties.

We are funded primarily by the U.S. Department of Labor and the Workforce Innovation and Opportunity Act (WIOA) (through the Kentucky Education Workforce Development Cabinet) and Louisville Metro Government.

We operate a regional network of Kentucky Career Center services that includes job and career counseling, training, resume-building and direct referral to employers.

https://www.kentuckianaworks.org/