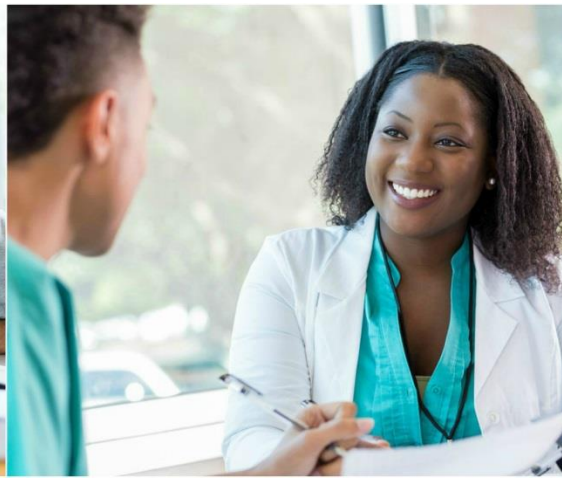
Helping Dropout Youth Find Education and Employment

Final Impact Report for the Evaluation of the Los Angeles Reconnections Career Academy (LARCA) Program





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Abstract

The Los Angeles Economic and Workforce Development Department (EWDD) created the Los Angeles Reconnections Career Academy (LARCA) program as a means of addressing the extensive education and employment needs of the city's sizable out-of-school youth population. Funded by a $12 million Workforce Innovation Fund (WIF) grant from the U.S. Department of Labor, the LARCA program provided chronically absent and dropout youth, ages 16 to 24, with education, training and employment services, alongside case management and other supportive services, using a career pathways model. The program operated from 2013 to 2015 and served over 1,000 youth.

To evaluate the LARCA program, EWDD contracted with Social Policy Research Associates (SPR). This report presents the findings from the evaluation's random assignment impact study and cost study. Using administrative data from multiple state and local agencies, the impact study found that LARCA program participants re-enrolled in secondary and postsecondary education, and earned secondary education credentials and college credit at a higher rate than did control group members for up to two years after the point of random assignment. While the evaluation did not find impacts on employment, a longer follow-up period may have yielded different results. The report also presents the findings from the evaluation's cost study and cost-effectiveness analysis, which found that the LARCA program spent more per participant to achieve the gains it produced than was spent on the WIA services that were available to the control group. These findings are likely due to LARCA being a new program with higher start-up and infrastructure costs as well as the evaluation's relatively short follow-up window in which to observe program impacts.

Overall, the findings in this report contribute to the knowledge base of what works for out-of-school youth, especially given that the LARCA program showed positive impacts in a city where the workforce system prioritizes out-of-school youth and offers a rich array of services that control group youth could easily access. This evaluation helps inform how to serve this population, and, more specifically, to address the increased emphasis placed on serving out-of-school youth under the Workforce Innovation and Opportunity Act (WIOA).

Keywords: career pathways, cost-effectiveness analysis, high school dropout, disconnected youth, Los Angeles Economic and Workforce Development Department (EWDD), Los Angeles Unified School District (LAUSD), out-of-school youth, postsecondary education, randomized control trial, secondary education, Social Policy Research Associates (SPR), Workforce Innovation Fund (WIF), Workforce Investment Act (WIA), Workforce Innovation and Opportunity Act (WIOA).

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Executive Summary

The number of youth dropping out of high school each year presents a significant, national public policy problem of considerable magnitude. In Los Angeles, the challenge is no different. The Los Angeles Unified School District (LAUSD) reported a 17.4 percent dropout rate during the 2013-2014 school year (California Longitudinal Pupil Achievement Data System [CALPADS], 2015c). To address this problem, the US Department of Labor (DOL) awarded the Los Angeles Economic Workforce Development Department (EWDD) a $12 million Workforce Innovation Fund (WIF) grant to fund the Los Angeles Reconnections Career Academy (LARCA), which provided more than 1,000 dropout youth with access to education and employment programs using a career pathways model, alongside case management services and other supports.

As a part of the WIF grant, EWDD awarded Social Policy Research Associates (SPR) a contract to evaluate the LARCA program's implementation, assess its impacts using a random assignment impact study design, and assess its costs. The findings from the implementation study were presented in an interim report (Geckeler et al., 2015). This final report for the evaluation presents and discusses findings from the random assignment impact study and the cost study. It details the many successes the program had in increasing secondary and postsecondary enrollment and the earning of diplomas and college credit by program participants and provides recommendations for policy makers, practitioners, and future research.

LARCA Program Model and Key Services

EWDD managed the LARCA program, providing oversight and grant management as well as coordinating the delivery of services by both system-level partners and the program's six provider agencies: the Coalition for Responsible Community Development, Los Angeles Conservation Corps, Youth Opportunity Movement—Boyle Heights, Youth Opportunity Movement—Watts, Youth Policy Institute—San Fernando Valley, and Youth Policy Institute—Pico Union. Program enrollment lasted 22 months from January 2013 through October 2014 and the program operated in full until October 2015, offering follow-up services to completed participants up through April 2016. The following is a summary of LARCA program services.

- **LARCA participants had access to robust secondary education services.** Providers offered tutoring services and worked to re-enroll participants in programs leading to a high school diploma or equivalent certification.

- **Providers placed participants into construction, green technology, and health care training.** Training providers included the LARCA providers themselves, proprietary training programs, and public and private colleges and universities. Training programs offered the possibility of earning college credit and industry recognized credentials.

- **Providers helped participants enroll in postsecondary education at local colleges, especially Los Angeles Community College District (LACCD) colleges.** Participants enrolled in LACCD colleges as part of the LARCA program's vocational training component, but also to complete additional training or other college-level courses.

- **Program group members received employment services from the LARCA program.** Program group received paid work experiences and employment search and placement services, provided or arranged by the LARCA program.

- **The LARCA program provided participants with a variety of services designed to support education, training, and employment services.** Program services included case management, assessments, supportive services, financial literacy training, and work readiness training.

Impact Study Findings

The study team worked with EWDD and the six LARCA program providers to implement a random assignment impact study design that began with the opening of program enrollment in January 2013. According to the design, all interested and eligible individuals who consented to participate in the study had a 50-percent chance of being assigned to the program group and a 50-percent chance of being assigned to the control group. Program group members were enrolled in the program and control group members were referred to other programs and services in the community. The study team tracked outcomes for members of both groups in the areas of secondary education, training and postsecondary education, employment, and criminal justice system involvement and used these data to estimate the impacts of the LARCA program. The study treated as confirmatory, the impact analyses of enrollment in and completion of secondary education, enrollment and credit attainment in postsecondary education, employment, and earnings. All other impacts, including those related to criminal justice system involvement and subgroup analyses, were considered exploratory. To conduct the baseline and impact analyses, the evaluation team used data from study participants' program application forms and administrative data from both California state and local Los Angeles government agencies. Findings from the impact study are as follows.

Results of Random Assignment

- **During the intake period, LARCA program providers enrolled 2,078 individuals into the impact study.** Although some providers exceeded their individual enrollment goals, overall the study fell short of the enrollment goal of 2,400 individuals (1,200 program participants). The final study sample included 1,066 program group members and 1,012 control group members.[1] The composition of the study sample was as anticipated given the eligibility criteria and the focus on dropout youth in the greater Los Angeles area.

- **Random assignment was successful.** Program and control group members did not differ significantly from one another across baseline characteristics. The study team was therefore able to assume that these two groups were identical along observable and

[1] LARCA program providers enrolled 1,071 individuals into the program, but five of these individuals were removed from the study sample (but continued in the program) due to consent/eligibility issues.

unobservable measures, meaning that differences in outcomes between the two groups were due to participation in the program.

- **WIA adult and youth programs offered a strong alternative to LARCA, but only about a quarter of control group members received WIA services.** Despite being eligible for and having easy access to both WIA adult and youth programs, relatively few control group members took advantage of these services. Control group members did, however, enroll in secondary and postsecondary education, either on their own or through the support of other programs.[2]

Impacts on Secondary Education

- **Program group members re-enrolled in secondary education programming at higher rates than members of the control group.** Within one year of random assignment, approximately 60 percent of program group members re-enrolled, while only 48 percent of control group members did so. Within two years after random assignment, 64 percent of program group members re-enrolled in secondary education, compared with 52 percent of control group members.

- **Program group members received secondary education credentials at higher rates than control group members.** Within one year of random assignment, approximately 13 percent of program group members—but only 8 percent of control group members—received a high school diploma or equivalent. Within two years after random assignment, approximately 25 percent of program group members received a high school diploma or equivalent, compared with 16 percent of control group members. Among those that received a secondary education credential, nearly all did so with a high school diploma; only five participants across both program and control groups completed secondary education with an HSET credential.

- **Outcomes for key subgroups mirrored those for the full sample, but there were no significant differences in outcomes between subgroup pairs.** Nearly all the individual subgroup analyses show program group members re-enrolling in secondary education programs and receiving secondary education credentials at significantly higher rates than control group members at both one and two years past random assignment, but none of the program–control differentials between subgroups were statistically significant.

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[2] WIA was replaced by the Workforce Innovation and Opportunity Act (WIOA), signed into law in July of 2014, with WIOA provisions taking effect in July of 2015. Because WIOA went into effect well after the end of study intake and nearly at the end of the grant, this report uses the term "WIA" to refer to all youth and adult program services control group members received, even if some individuals may have enrolled in these services as funded under WIOA rather than WIA.

Impacts on Vocational Training and Postsecondary Education

- **LARCA participants enrolled in LACCD colleges at a higher rate than control group members.** Twenty-seven percent of the program group enrolled in LACCD colleges within one year of random assignment as compared to 17 percent of the control group. Within two years, this gap had widened, with 40 percent of the program group as compared to 24 percent of the control group having enrolled. Enrollment included both credit and non-credit classes, and all the differences between the program and control groups around enrollment were significant at both one and two years after random assignment. Enrollment in postsecondary education was likely higher than what the study reported for both program and control groups since some participants sought out training at (and some providers partnered with) institutions not part of LACCD.

- **Program group members attempted more credits, and, at least within the first year after RA, earned more credits than control group members.** However, program group members' credit success rate (credits earned/attempted) was the same as that of control group members, and control group members who did enroll were less likely to drop out than program group members.

- **The LARCA program had a greater impact on enrollment and credit completion for some subgroups.** Impacts on LACCD enrollment were greater for older youth, males, non-Hispanics, and those enrolled earlier in the program than they were for younger youth, females, Hispanics and those enrolled later in the program. Also, older youth completed more credits than did younger youth. Enrollment differences between these subgroups for these measures only held true for one year after RA.

Impacts on Employment

- **Program participants fared slightly worse in employment outcomes than control group members.** Within one year of random assignment, program group members were less likely to be employed than control group members, although their total quarters employed and total earnings for this period were comparable. Within two years of random assignment, program group members were no less likely to be employed than control group members, but they did earn less. The absence of positive employment impacts was somewhat expected, given that many LARCA participants would forgo employment, in the short-term, to participate in the program's education and training services. The negative impacts may even have been mitigated through paid work experience and employment assistance.

- **Outcomes for key subgroups mirrored those for the full sample and impacts did not differ between subgroup pairs.** Consistent with the findings for the full sample, the subgroup analysis indicates that the program group fared worse than the control group in terms of employment and earnings-related outcomes across nearly all subgroups and both within one year of random assignment and within two years of random

assignment. The analysis also found that program impacts did not differ between subgroups within a category.

- **LARCA's long-term impacts on employment cannot be fully assessed, given the limited timeframe of the analysis**. Continued examination of program outcomes over time is needed to determine if long-term employment outcomes improve for LARCA participants following completion of education or training.

Impacts on Criminal Justice System Involvement

- **The LARCA program had no impact on program participants' rates of arrest, conviction, or incarceration in Los Angeles County jails.** Program group members were just as likely as control group members to be involved with the criminal justice system. This finding holds true at both one year and two years from random assignment.

- **The LARCA program had no impacts on the types of arrest or conviction or the type of release from jail.** LARCA program participants and control group members had comparable numbers of arrests and convictions for felonies, misdemeanors, violent crimes, property crimes, drug crimes, and public order crimes in the two years following random assignment. Their terms of release from jail (i.e., release to supervision, direct discharge, or other release) were also similar.

- **For both LARCA program and control group members, the rates of involvement in the criminal justice system were about the same two years after random assignment as they were two years prior to random assignment.** During the two years after random assignment, about 20 percent of the program group and 22 percent of the control group were arrested, about ten percent of both groups were convicted of a crime, and about eight percent of the program group and seven percent of the control group were incarcerated in a Los Angeles County jail. There were similar rates of criminal justice system involvement for both groups in the two years prior to random assignment.

Findings from the Cost Study

The cost study consisted of a descriptive analysis of LARCA program costs and a cost-effectiveness analysis. To conduct the cost study, the study team gathered cost reports and WIA activity reports from EWDD. Key findings are as follows.

- **Overall, EWDD's system-level costs per actual participant enrolled were not much different from what the costs per participant would have been if all planned-for participants had enrolled.** The relatively small difference between planned and actual costs per participant indicates that system-level costs are fairly fixed.

- **Providers supplemented the WIF grant by leveraging resources from community partners and other grants.** LARCA providers leveraged over $750,000 in other grants and in-kind donations from community partners, and generally did so to support

delivery of key program services such as vocational training, educational services, and supportive services.

- **At the provider level, costs per participant varied widely and appeared to be more related to infrastructure and relationships than to enrollment.** Providers with on-site WIA youth programs (which enabled them to draw on existing services) had lower costs per participant regardless of enrollment, as did providers that were city agencies (which drew on a centralized administrative structure rather than absorbing administrative costs internally).

- **Staffing represented the main provider-level cost of operating LARCA, which is consistent with the intensive service model and the high-need population for which it was designed.** Salaries and fringe benefits—which allowed providers to staff the functions of program management, recruitment, case management, and employment services—accounted for over half (and in most cases nearly three-quarters) of total costs.

- **The LARCA program spent large amounts to achieve the enhanced educational outcomes enjoyed by the program group.** The study found that for each percentage-point increase in the composite educational outcome of participants (earning a secondary degree or equivalent or enrolling in postsecondary education) the LARCA program spent more than $500,000. However, this finding should be interpreted with some caution because of possible under-estimation of the cost of serving the control group, inclusion of startup costs in the calculation of program costs, an inability to examine costs by service delivery area, and an evaluation time-frame too short to detect any longer-term impacts that might have accrued from LARCA involvement.

Implications for Future Policy and Research

The findings in this report contribute to the knowledge base of what works for out-of-school youth in two key ways.

First, they may prove valuable in discussions that have arisen around how best to design services to address the changes imposed on youth programming under the Workforce Innovation and Opportunity Act (WIOA), which replaced WIA in July of 2015.[3] There are two key changes to youth workforce services under WIOA (as compared to WIA) that focus attention on the findings from this report. Under WIA, workforce investment areas were required to spend a minimum of 30 percent of their youth program funds on out-of-school youth (as compared to in-school youth), but now WIOA requires them to spend 75 percent on

[3] MDRC recently released a working paper that provides a detailed discussion of strategies for serving out-of-school youth under WIOA (Hossain, 2015).

these youth.[4] In addition, WIA considered out-of-school youth to be those between 14 and 21 years of age, whereas WIOA now defines out-of-school youth as individuals ages 16 to 24. In other words, WIOA places a much greater emphasis on serving the same type of youth that LARCA did. Thus, those designing and operating WIOA services for out-of-school youth may have an interest in learning about LARCA's service model and the ways in which it reached its goals and fell short.

Second, this report also contributes to the ever-growing body of research in this field and points to the need for some additional research. Other recent studies of similar programs found impacts on education and training, but unlike the LARCA evaluation, also found some impacts on employment. Together, these evaluations help confirm the effectiveness of programs that target education and employment services for disconnected youth and shed some light on which services may best help to re-connect this population. However, some further research is warranted to (1) better identify service elements that help re-connect youth to education and employment and reduce their likelihood of criminal justice system involvement and (2) ensure the use of methods and designs that allow for the effective measuring of all relevant impacts.

Overall, the LARCA program was effective for the youth it served. Moreover, the effectiveness of the model was robust enough to show positive impacts on secondary and postsecondary education for dropout youth in a city where the workforce system both prioritized out-of-school youth and offered moderately rich array of similar services that control group youth could easily access. The evaluation notes that some additional research may still be warranted but that the findings affirm the value of the LARCA program features, providing evidence for their inclusion in the design of future programs targeting out-of-school youth.

[4] While EWDD did not meet the requirements of WIOA prior to it being enacted, the agency did prioritize out-of-school youth; it had a soft goal of trying to use 70 percent of WIA youth program funds to serve out-of-school youth.

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I. Introduction

The number of youth dropping out of high school each year presents a national public policy problem of considerable magnitude. The National Center for Education Statistics estimated that across the U.S. in 2013 approximately 2.6 million young people between the ages of 16 and 24—6.8 percent of the people in that age band—had dropped out of high school (U.S. Department of Commerce, Census Bureau, 2015). While the dropout rate has been decreasing nationwide, falling from around 12 percent of all 16- to 24-year-olds in 1990 to around seven percent in 2013, within California—and Los Angeles in particular—the dropout rate has been and continues to be higher than the national average (U.S. Department of Education, National Center for Education Statistics, 2015).[1] During the 2013–2014 school year, California had 56,756 dropouts, or a rate of 11.5 percent (California Longitudinal Pupil Achievement Data System [CALPADS], 2015a).[2] In the Los Angeles Unified School District (LAUSD) County, the dropout rate for that same school year was slightly higher, at 17.4 percent (California Longitudinal Pupil Achievement Data System [CALPADS], 2015c).[3]

Against this backdrop, in 2012 the US Department of Labor (US DOL) awarded the Los Angeles Economic Workforce Development Department (EWDD) a $12 million Workforce Innovation Fund (WIF) grant to implement a program designed to address the education and employment needs of high school dropouts between the ages of 16 and 24 within the City and County of Los Angeles. This program, known as the Los Angeles Reconnections Career Academy (LARCA), aimed to provide more than 1,000 dropout youth with access to education and employment programs using a career pathways model, alongside case management services and other supports. EWDD, in turn, awarded Social Policy Research Associates (SPR) a contract to conduct a multi-year evaluation of the LARCA program consisting of an implementation study, a random assignment impact study, and a cost study. The findings from the implementation study were presented in an interim report (Geckeler et al., 2015). This final report for the evaluation presents and discusses findings from the random assignment impact study and the cost study and provides recommendations for policy makers, practitioners and future research.

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[1] This rate is referred to as a "status" dropout rate and defined as the percentage of people in a specific age range neither in school and who have not received a high school diploma or equivalent completion certificate (Stark et al., 2015). This rate looks at the overall age group rather than the students in the school system. Another commonly used rate is the "event" dropout rate, which refers to the percentage of high school students who left school in the period between the beginning of two consecutive school years without receiving a diploma or equivalent completion certificate. Event dropout rates are used to monitor dropout behavior on an annual basis, whereas status dropout rates are used to look at the general population trends.

[2] This four-year dropout rate refers to the rate of students in a four-year cohort that leave school within grades 9-12, do not remain enrolled after the fourth year, and do not receive a diploma or equivalent completion certificate. This rate is measured differently than the status dropout rate cited above.

[3] This is a four-year dropout rate.

Summary of the Problem Being Addressed by the LARCA Program

There are several reasons why the size of the dropout population presents such a significant public policy challenge.[4] Foremost is that dropouts have poor economic outcomes. Individuals without a diploma or equivalent degree earn many thousands of dollars less every year than high school graduates, and this deficit adds up to many hundreds of thousands of dollars over a lifetime.[5] It is also harder youth without a diploma or degree to find work than it used to be. In 2016, the share of all 16- to 24-year-olds with employment during the summer months was 53 percent. While this percentage has come up since falling to a low point in 2010, it is still much lower than the rate of 63 percent that prevailed in 2000 (Bureau of Labor Statistics, U.S. Department of Labor, 2016). In Los Angeles specifically, high school dropouts have been shown to have lower rates of employment, lower hourly wages, and lower lifetime earnings than those with a high school diploma (Dickson et al. 2009). These poorer employment outcomes mean less economic stability for these individuals. Compared to individuals with diplomas or an equivalent degree, these individuals will have higher rates of public assistance uptake and are far more likely to end up in jail or prison (Harlow, C. W. 2003).

Another reason why dropouts present an important public policy challenge is that a disproportionate number of dropouts are from low-income backgrounds and are people of color. Nationwide, dropout rates tend to be about four-and-a-half times higher for youth in low-income families than they are for youth in high-income families and about one and a half times as high as they are for middle-income families (Stark et al., 2015). In terms of race and ethnicity, the national dropout rate was 4.3 percent for White youth, 7.5 percent for Black youth, and 12.7 percent for Hispanic youth in 2012 (Stark et al., 2015).[10] In California, African-Americans and Hispanics tend to graduate at a rate of about 60 percent, compared to a rate of 80 percent for Whites (Rumberger & Rotermund, 2009).[11] Within Los Angeles, where the majority of youth are non-white, another study found that more Black and Hispanic youth (21 percent) are disconnected—not engaged in either school or work—than are White youth (18 percent) (Harrington et al., 2009).[12] LAUSD staff members reported to SPR that the high

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4 "Dropout population" is defined broadly from this point forward as consisting of those individuals who do not complete high school and do not earn a diploma or alternative certification.

5 One report found that median annual earnings are approximately $21,000 lower for individuals without a diploma, which amounts to approximately $670,000 over a lifetime (Stark et al., 2015). Another report found a lifetime earnings difference of approximately $400,000 (Kena et al., 2014). A third report found that dropouts earned approximately $9,200 less per year and nearly $1 million less over a lifetime than those with a diploma (Doland, 2001). No matter the specific estimate used, the differences in earnings between those with diplomas and those without are staggering.

number of immigrants in the district is a significant challenge as these youth frequently face numerous other issues that disrupt the completion of their education. This observation is reflected in national statistics, which show that approximately 25 percent of dropouts are born outside the United States or come from first-generation families (Stark et al., 2015).

Addressing the complex needs presented by the dropout population is a challenge for both the education system and the public workforce system. Already stretched thin, the education system often cannot afford to make re-engaging these former students a priority, especially given their high need for numerous supportive services. Instead, school systems often must focus on maintaining a safe and engaging environment for the students they still have. Nor is it easy for the workforce system to assist these individuals with obtaining employment. To qualify for many jobs, they need additional education, but the adult basic education system has limited resources and is often not set up to provide the supportive services that many youth need to be successful in completing education or training programs. In short, a gap in services between the educational system and the workforce system often leaves many dropout youth with unaddressed needs.

National Responses to the Dropout Issue

Across the US, responses to the dropout issue have differed based on the implementing entity and have met with differing levels of success. Providing pathways to high school diploma completion has been undertaken by local educational agencies and school as well as independent and non-profit entities. One of the challenges facing local educational agencies and school is a lack of complete student-level data to identify dropout youth. By managing and using data more efficiently, school systems can find these youths more easily, determine the courses they need, and appropriately target strategies. A second challenge schools grapple with is the limited availability of alternative certificate options. In response, school systems around the country have made efforts to enhance the quality and standards within alternative high schools and provide flexible credit recovery options within traditional high schools. A third and major challenge is the lack of funding for various reengagement efforts. School districts have met this challenge by restructuring the finance system based on student needs or on numbers of at-risk and dropout youth. Additionally, California has enjoyed some success on this issue by raising the maximum age of students served by public schools and establishing grant-funded programs to find and work with dropout youth specifically (Reyna, 2011).

Many private and nonprofit programs around the United States also currently provide education, employment, and training supports designed to address the challenges raised by dropout youth. The programs with some of the greatest impacts are those that systemically address the challenges youth face, rather than establish several isolated programs that separately strive to mediate single issues (Edelman et al., 2013). Consistent with this conclusion, an evaluation of the nonprofit program YearUp described the need to support disconnected youth in flexible ways, striking a balance between high expectations for student

achievement and providing the support necessary for youth to continue participating (Roder et al., 2011).

Additionally, evaluations of programs for disconnected youth show that an emphasis on education and vocational training can have an impact on employment and earnings. An evaluation of the Job Corps program, for example, found that the program increased participants' receipt of GED and vocational certificates (Heinrich et al., 2010), as well as their earnings and employment (Gritz et al., 2001).[6] Similarly, the previously mentioned study of the YearUp program, which provided workforce training and wraparound services to low-income youth, found that participating members received 32 percent higher earnings than those in the control group (Roder et al., 2011; Roder et al., 2014).[7]

Similar to LARCA, some programs serving disconnected youth used an oversight entity to set the parameters for eligibility and service delivery, with services then carried out by local organizations, often customized to the location or population (Gan et al., 2011). Evaluation results from two of these programs show mixed results in terms of employment-based outcomes. Although participants self-reported having an advantage in job search, there is little evidence that participants had better outcomes than members of a similar comparison group. In one such program, Youth Corps, three-quarters of participants reported having a job-search advantage because of participation; however, the impact evaluation did not find short-term impacts on educational attainment or the likelihood of participants' continuing employment (Gan et al., 2011). Another similar program, Project Rise, delivered a range of services by way of independent nonprofit organizations to out-of-school youth in three cities. These organizations provided case management, high school equivalency instruction, work readiness training, and a paid internship. The evaluation of Project Rise did not include an impact study or follow participants beyond the program period. However, during the twelve-month program period, Project Rise outcomes show that only about a quarter of participants found unsubsidized employment, enrolled in post-secondary education, or both. Additionally, about a quarter of participants received their high school equivalency certificate within twelve months of enrolling in Project Rise (Manno et al., 2015).[8]

Recent public efforts have also refocused attention on the out-of-school population. In July 2015, new federal legislation, the Workforce Innovation and Opportunity Act (WIOA), went into effect, requiring local workforce investment areas nationwide to serve a much higher

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[6] The authors of the evaluation acknowledged the need for a longer follow-up period to fully understand how participants fared in the long run.

[7] A notable difference between this program and others serving similar populations is that Year-Up requires students to enter the program with a high school diploma or GED.

[8] These are self-reported outcomes and 40% of program participants left the program before it was over.

percentage of out-of-school youth, as compared to in-school youth, than was required under the previous legislation. These changes occurred only towards the end of the implementation of the LARCA program, and the Los Angeles area already prioritized services geared towards out-of-school youth.[9] Still, these changes speak to the larger public need to address the problems presented by dropout youth and to the relevance of any findings from the LARCA program; WIOA requirements call for existing and future program providers to develop strong methods for not only engaging out-of-school youth, but also meaningfully sustaining their participation in the programs (Hossain, 2015).

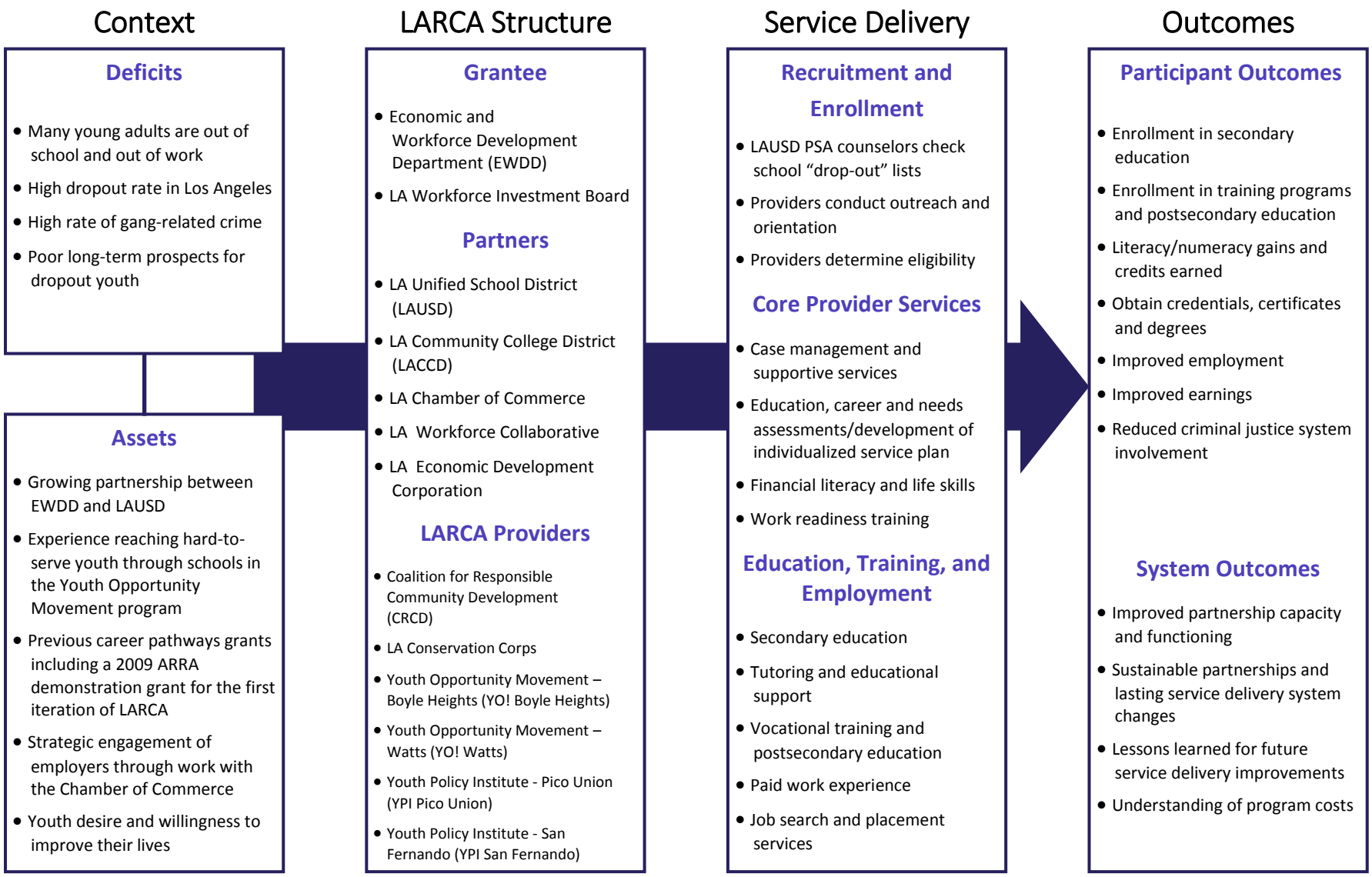
Overall, research has found that disadvantaged and disconnected youth come from a variety of backgrounds and have a broad assortment of needs that are not easily remedied by a single program model (Hossain, 2015). Many of the more recent and innovative programs that have sought to address these needs have not been rigorously evaluated; thus, the impact evaluation of the LARCA program greatly contributes to the evidence base. The LARCA program is different from many previous programs operated nationally and by the City of Los Angeles in that it exclusively focuses on out-of-school youth, tries to provide them with both secondary and post-secondary educational opportunities as well as employment assistance, and does so with a career pathways perspective. It also does this with a wide network of partners who bring to the table an extensive reservoir of skills and experience.

The LARCA Program

With the LARCA program, EWDD drew upon prior research and past practices to address the challenges presented by dropout youth in the greater Los Angeles area. The program enrolled participants from January 2013 through October 2014 and served them until October 2015, offering follow-up services to completed participants through April 2016. The program's logic model, which shows how the LARCA program planned to serve dropout youth, is illustrated in Exhibit I-1. The left-hand portion of the model illustrates how the program was designed to respond to a context—a set of related problems such as high unemployment, crime, and dropout rates in Los Angeles, particularly among youth—by drawing upon a set of *assets*—the experiences, knowledge, and collaborative relationships gained or established through the implementation of similar past programs. The program's management structure and services are discussed in greater detail below.

[9] WIOA requires that 75% of youth funds be spent on out-of-school youth. While the previous Workforce Investment Act (WIA) legislation only required that 30% of youth funds be spent on out-of-school youth, the Los Angeles Workforce Investment Board had adopted the target of spending 70% of funding on out-of-school youth prior to the passage of WIOA.

Exhibit I-1: LARCA Program Model



Management and Program Organization

As the WIF grantee, EWDD managed the LARCA program. This effort included overseeing the delivery of LARCA program services by the six provider agencies listed in "LARCA Program Providers" box.

EWDD selected these partners based upon their experience in working with the dropout population, their experience delivering services like those prescribed by the LARCA program, and their combined coverage of priority neighborhoods in the Los Angeles metropolitan area. Summaries of each of the six providers are included in Appendix A.

EWDD also coordinated the contributions of several city-level partners, including the Los Angeles Unified School District (LAUSD), the Los Angeles Workforce Investment Board (WIB), and the Los Angeles Chamber of Commerce. These three partner organizations had previously worked with EWDD on other efforts to serve disconnected youth, and played key roles in driving system-level changes critical to implementing many LARCA services. These system-level changes included the partnerships between LAUSD and the provider agencies that allowed LAUSD to place staff members at those agencies and the partnership with the Los Angeles Chamber of Commerce that supported the development of the work readiness curriculum used by the providers. Additional partnerships were also important to program operations. The Los Angeles Community College District provided a layer of oversight for, and helped support, the partnerships that individual providers had with specific community colleges that provided training, education, and other services to participants. Also, the Los Angeles Economic Development Corporation and the Los Angeles Workforce Systems Collaborative (convened by the Workforce Investment Board) provided EWDD with labor market information.

LARCA Program Providers

- The Coalition for Responsible Community Development (CRCD)
- Los Angeles Conservation Corps (LA Conservation Corps)
- Youth Opportunity Movement – Boyle Heights (YO! Boyle Heights)
- Youth Opportunity Movement – Watts (YO! Watts)
- Youth Policy Institute – San Fernando Valley (YPI San Fernando)
- Youth Policy Institute – Pico Union (YPI Pico Union)

Service Delivery Model

The LARCA program model included the delivery of the following services:

- **case management,** delivered by an individual assigned to each youth and designed to support and guide participants through the program and keep them on track;

- **assessments** that helped staff members gauge participants' academic preparedness, career interests and overall needs and goals and which could be used in developing service delivery tools;

- **supportive services** (e.g., transportation assistance, clothing, housing, child care, mental health, and legal services) designed to help meet participants' basic needs while they were in the program;

- **financial literacy and life skills workshops,** including workshops on financial literacy and conflict resolution and opportunities to serve on youth councils or represent the program at conferences;

- **work readiness training** consisting of a standard curriculum designed by the Los Angeles Chamber of Commerce and culminating in the issuance of a work readiness certificate;

- **educational services**, including high school coursework or training courses leading to a high school diploma or high school equivalency degree;

- **vocational training and placement in post-secondary education** at local community colleges and private programs, which included training in health care, conservation and green technology, and construction fields; and

- **employment services**, including paid work experience and search and placement assistance, ideally in a job consistent with a career pathway identified through the career planning and assessment process.

EWDD and the program providers hoped that delivering these services to LARCA program participants would help them complete their secondary education credentials, get training, enroll in higher education, and obtain and retain employment.

Evaluation Design

The evaluation was designed to assess how well the LARCA program re-engaged youth in education and training and helped them find employment. To accomplish this goal, the evaluation carried out three main studies: 1) an implementation study, 2) a random assignment impact study, and 3) a cost study.

Implementation Study

The implementation study sought to address the following research questions by collecting qualitative data during two rounds of multi-day site visits in Fall 2013 and Fall 2014.

- What services were provided? How were these services coordinated with various partner organizations? How did these services vary across provider organizations? What was their overall quality, intensity, and duration?

- What partnerships and linkages did EWDD and each of the providers develop and how did these partnerships aid in delivering services? Who were these partners and in what ways did they work with the primary providers of the program?
- How did the services received by program group members compare to those received by control group members?
- What system-level outcomes were achieved as a result of LARCA implementation (e.g., new partnerships, greater efficiency in the delivery of services and their quality, strong cooperation between programs and funding streams, new recruitment strategies and new uses of technology)?
- What implementation challenges did the program experience? Did implementation of the program reveal any methods or approaches that might be classified as best practices? What are the lessons learned for other organizations that wish to implement and scale-up similar programs?

During the site visits, the study team conducted three types of qualitative data collection activities: 1) conducting semi-structured interviews of program administrators, LARCA provider staff members, partner organization staff members and program participants; 2) making detailed observations of program services such as orientation, classroom teaching, and training; and 3) reviewing planning and program documentation at both the system-wide and organization levels.

After each round of data collection, the study team analyzed the data through a two-stage process. During the first stage, the team shaped the "raw" data—i.e., notes and materials gathered from site visits and from the various LARCA program organizations—into detailed write-ups. These write-ups grouped information according to the different geographic levels at which the program operated (i.e., EWDD and other city-level organizations on the one hand and the six program providers on the other) and the different types of program services (i.e., case management services, education services, employment services, etc.). These write-ups highlighted effective program practices and challenges encountered. In addition, the study team collated close-ended data about each of the six program providers gathered during site visits, using a tool built for this process that allowed high-level comparison of program elements. These modified data sources then formed the basis for the second analysis stage, whereby the study team grouped providers according to the services they offered, identified key themes and trends across providers, and considered how different program structures or context affected specific service delivery strategies and decisions.

Random Assignment Impact Study

The random assignment impact study—one of the two key topics of this report—was designed to show the extent to which the LARCA program improved the outcomes of program participants over and above an otherwise identical group of individuals who did not participate in this program. Enrollment for the impact study took place from January 2013 to October

2014.[10] During that time, the six LARCA providers identified individuals who were both interested and eligible to participate in the LARCA program and would agree to participate in the study. Study participation was formalized by the signing of an informed consent form. Providers then used an online computer system, developed by the study team, to randomly assign candidates to either the program group or the control group. Program group members could access the full array of LARCA program services. Control group members became ineligible for LARCA program services (provided by any of the six providers), but could still access any other services for which they were eligible, including other programs operated by the six providers and by contractors of EWDD, such as Workforce Investment Act (WIA) youth or adult program services.[11] Over this period of time, providers enrolled 2,078 youth into the study: 1,066 program group members and 1,012 control group members.[12] As Chapter II will illustrate, this process created two equivalent groups of youth, the necessary basis for obtaining an unbiased estimate of the impact of the LARCA program.

Impact Study Research Questions

The impact study was designed to address the following research questions.

- How did participation in the LARCA program affect the likelihood of secondary school re-enrollment and attainment of a high school diploma or high school equivalency credential?
- How did participation in the LARCA program affect the likelihood of enrollment in other training activities, such as occupational skills training and post-secondary education credits and credentials?
- How did participation in the LARCA program affect employment outcomes such as finding employment, retaining employment, and average earnings?

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[10] The first participant was randomly assigned on January 10, 2013 and the last participant was randomly assigned on November 3, 2014 (this last participant was an exception—all others were randomly assigned by October 31, 2014).

[11] WIA was replaced by the Workforce Innovation and Opportunity Act (WIOA), signed into law in July of 2014, with WIOA provisions taking effect in July of 2015. Because WIOA went into effect well after the end of study intake and nearly at the end of the grant, this report uses the term "WIA" to refer to all youth and adult program services control group members received, even if some individuals may have enrolled in these services as funded under WIOA rather than WIA.

[12] The impact study randomly assigned 2,105 youth. However, as is discussed in Chapter II, 27 of these individuals were not included in the final study sample. The reasons for these 27 withdrawals were varied: some turned out to be ineligible for the program (discovered after random assignment); some did not provide adequate parental consent (for those under 18 at the time of random assignment); some revoked consent; some were later determined to be duplicate assignments due to incorrect identification of participants. After these records were removed, the study was left with 2,078 study participants.

- To what extent did participation in LARCA reduce involvement with the criminal justice system in the form of arrests, convictions, and incarcerations?
- Did any of these impacts differ for key subgroups (defined by age, ethnicity, gender, educational background, etc.)?

Impact Study Data Collection

For the impact study, SPR collected two types of data on both program and control group members. First, the study team gathered baseline data on study participants to describe the study population and affirm the integrity of randomization. These data included: 1) identifying information such as name, date of birth, social security number, and address, which the study team used to link data sources; and 2) demographic information such as gender, race, use of public benefits, disabilities, housing status, parenting status, educational history, employment history, and history of involvement in criminal justice system. These baseline data came from study participants' program application forms (see Appendix C) that were completed shortly before random assignment. Additional baseline data came from administrative data collected by public agencies (described below).

Second, the study team gathered outcome data for both program participants and members of the control group. These administrative data came from several different agencies.[13]

- The Los Angeles Unified School District (LAUSD) provided secondary education data on school enrollment, credit attainment, and completion of certifications such as diplomas or high school equivalency tests.
- The California Department of Education (CDE) provided secondary education data on school enrollment and completion of certifications such as diplomas or high school equivalency tests.
- The Los Angeles Community College District (LACCD) provided data on enrollment and credit attainment.
- The California Employment Development Department (EDD) provided data on quarterly earnings and unemployment insurance payments.
- The California Department of Justice (CA DOJ) provided data on arrest and conviction records.
- The Los Angeles County Sheriff's Department (LASD) provided data on incarcerations in the Los Angeles County Jail system.

[13] Further discussions of each data source and the data used in the analysis, including key measures and limitations, are provided in the subsequent chapters.

- The Los Angeles Economic and Workforce Development Department (EWDD) provided data on enrollment in WIA adult and youth programs in the city's WorkSource and YouthSource centers and participation data (for program group members only) in the LARCA program.

SPR collected these data at a point in time that allowed the team to assess impacts at up to one year past random assignment for all study participants and up to two years past random assignment for approximately half the study participants. A longer period of follow-up would have been preferable, as participants were often enrolled in their programs for at least a year, and, in some cases, up to two years. The relatively short follow-up period is not unreasonable for measuring outcomes the program aimed to achieve while individuals were still enrolled, such as secondary and post-secondary achievements. It could be too short a period, however, to fully assess employment outcomes. Nevertheless, constraints on the overall timeline imposed by the WIF grant, the program intake timeline, and the service delivery model did not allow additional time for program follow-up.

Impact Study Analysis

Because the impact study uses a random assignment design, the program group was not expected to differ in any systematic way from the control group except in that program group members received the treatment, which is receipt of LARCA services. To confirm this expectation, as is discussed further in Chapter II, the study team conducted tests of baseline equivalency and did not find significant differences in observable characteristics (e.g., gender, age, educational background, etc.) between the program and control groups. The lack of differences between the two groups was presumed to extend to unobservable characteristics (such as motivation) as well. Due to this equivalency, the study team used simple statistical methods to infer causal relationships between program participation and outcomes.[14] These methods involved testing the differences in means between program and control group members for key outcomes and determining whether this difference was, probabilistically, due to random chance, i.e., whether it was statistically significant. Since the program and control groups are not meaningfully different from one another at baseline except in exposure to the treatment, results of hypothesis testing should produce unbiased estimates of the program's effects. The primary analyses in this report relied on unweighted comparisons between these two groups. Weighting was not necessary, because the rate of assignment to the program group was constant across all providers and over time. Additionally, because the analysis relied on administrative data and was not limited by issues of non-response bias, post-stratification weights were not applied.

[14] By contrast, alternative approaches under the broad category of quasi-experimental methods often use complex statistical adjustments to define a comparison group to which the outcomes of the program group can be compared. Their disadvantage is that one cannot confidently rule out the possibility that any observed difference in outcomes between the groups is due to unobserved pre-existing differences rather than being the effect of the intervention.

SPR implemented additional statistical models as part of the impact analysis with the intent of conducting sensitivity analysis of the findings included in this report. In addition to testing the difference in means, the study team examined evaluation outcomes using regression analysis and a hierarchical linear modeling (HLM) approach. Regression analysis is beneficial because the inclusion of covariates allows for the control of observable characteristics, explaining greater variance in the data and improving estimation precision. HLM further accounts for the nested nature of the data (individuals are nested within the six sites providing services), accounting for site-level variation that may influence outcomes and further refining estimates. Neither of the alternative approaches to the analysis yielded results that differed meaningfully from those produced by the more basic approach of calculating the difference in means. Therefore, the main body of the report presents results from the simpler tests. Results from the more complex models are detailed in the Technical Appendix (Appendix B).

The analyses on the full analytic sample were also replicated for subgroups. The study team defined subgroups, *a priori*, as those of interest to policy makers and readers of this report, although subgroup definition was also informed by implementation study findings. The subgroups examined in this report were differentiated based on the following variables.

- *Gender.* Males and females often have different priorities and different barriers to completing their education and gaining employment. Females often face pregnancy and parenting issues, while males, especially males of color, are at higher risk of involvement within the criminal justice system, which might prevent them from completing a program like LARCA. For these reasons, LARCA providers may have been more effective at working with one gender over the other.

- *Age.* While the LARCA program only targeted those between 16 and 24 years of age, there may be substantial differences between those at different ends of this age spectrum. Older youth have typically been out of the educational system for longer but may also be more focused or determined. Also, the alternative models may be different. A key alternative program (discussed more in Chapter II) is the Workforce Investment Act (WIA) youth program which only served people ages 16 to 21. Youth 22 and older would have had to enroll in the WIA adult program, which had less of a focus on education. SPR examined impacts for youth ages 16 to 21 and those 22 to 24.

- *Ethnicity.* As discussed above, dropout youth are disproportionately people of color and specifically those who identified as Hispanic. Furthermore, certain providers served neighborhoods that were more Hispanic than others. The study compared those participants who indicated that they were Hispanic to those who did not indicate this ethnic identity.[15]

[15] As explained further in Chapter II, the report provided race data for non-Hispanics only. Because the sample sizes for non-Hispanics were low overall, the study team deemed it infeasible to look at race as a subgroup.

- *Period of Enrollment.* The implementation study showed that providers faced several challenges in implementing different phases of their programs. Many of the placement and employment services were not functioning until later in the program cycle and in some cases, for newer providers, even other services were slow to get started. At the same time, the program ended at the end of the grant and research suggests that this can sometimes lead to programs serving participants less well as staff transition to new programs and services (Wiegand & Sussell, 2015). Also, enrollment was slow to ramp up, with more people enrolling in the latter half of the intake period than the first half. These factors could lead to individuals being served less well as time went on. For the subgroup analyses, SPR divided study participants into those randomly assigned early, during the first 12 months (January through December 2013) and those randomly assigned later, in the last 10 months (January through October 2014).

- *Baseline Educational Progress.* The LARCA program identified participants at baseline as either *Back on Track* (120 credits or fewer, out of the 210 needed for graduation) or *Fast Track* (more than 120 credits). This designation informed case planning for program participants. Because this designation was not available for control group participants, SPR approximated this measure by determining the median credits earned by all study participants in LAUSD schools prior to the school year of random assignment (95 credits) and then dividing participants into those at or below the median or above it.

- *Employment History.* The study team hypothesized that employment history could have some bearing on participants' eventual success at finding work. While employment history is likely to be highly correlated with age, the study team divided study participants into those with any employment history prior to random assignment as compared to those with no employment history.

The results of the subgroup analyses should be interpreted with caution because the size of the analytic sample is reduced in subgroup analyses.[16] Although the law of large numbers promotes equivalence between the program group and control group it may not do so for the subgroups (Strube, 1991). Verification that program and control group participants are equivalent for these subgroups is discussed in the respective chapters. In addition, the smaller analytic sample limits statistical power and weakens detection of effects.

Another issue is the problem of multiple comparisons. The complexity of evaluating the impact of LARCA on program participants necessitated an array of outcome measures. However, with a comprehensive examination of outcomes, for the full sample as well as for subgroups, multiple comparisons may elicit increased probability of type I errors—or detecting a significant program effect when it does not exist. One method to address this drawback of multiple comparisons is

[16] The study team considered providers as a subgroup, i.e., looking at impacts by provider. While this analysis is of interest, especially given some of the findings from the implementation study (Geckeler et al., 2015), the study team deemed it to be infeasible to look at provider subgroups because the sub-sample sizes of these subgroups would have been too small.

to make the thresholds for determining statistical significance more stringent. Consequently, however, statistical power is reduced and the potential for type II errors (that is, failing to detect a significant program effect when it exists) increases. In this study, instead the study team took the recommended approach of treating the key outcomes as confirmatory and the remaining outcomes, including the subgroup analyses, as exploratory (Schochet, 2008). In addition, adjustments to correct for multiple comparisons (reported in Appendix B) were made across key outcomes. The key outcomes are the following:

- Enrollment in secondary education
- Completion of secondary education (i.e., high school diploma or HSET credential)
- Enrollment in postsecondary education
- Credit attainment during postsecondary education
- Employment
- Earnings

Subsequent chapters describe these key outcomes and explain the exploratory outcomes explored as a part of the impact study.

Cost Study

The study team designed the cost study to answer the following research questions:

- How did EWDD and the six provider organizations spend grant funds, at both the city-level, for the whole system of program partners, and at the provider level?
- What resources did LARCA providers leverage to supplement the WIF grant?
- How did grant expenditures and cost per participant calculations vary by provider and provider type?
- How cost-effective was the LARCA program compared with the WIA youth and adult programs that control group members accessed?

To answer these questions, the study team collected detailed cost data from EWDD. Data sources include reports on EWDD's LARCA program costs, LARCA program cost reports for each of the six program providers, and cost reports for EWDD's WIA adult and youth program providers, all for Fiscal Years 2012-2013, 2013-2014, and 2014-2015 (i.e., those years that most aligned with LARCA program delivery). Cost data also include reports on the leveraged resources that LARCA providers used to supplement their LARCA services. The study team placed each reported line item into one of the following categories: administrative staff and program service delivery staff costs (both direct and indirect); materials and supplies; partner provider services costs, including their labor and other costs; administrative/overhead; direct

payments for things like supportive services, education, or training; payments to participants such as stipends or incentive payments; and leveraged resources (including grants, donations and in-kind contributions).

The cost study analysis has two parts. The first part describes the costs of operating the LARCA program—how EWDD and the individual providers allocated and used WIF funds and leveraged funds. It provides a rundown of the aggregate, system-level costs (i.e., overall costs of program implementation) as well as costs for individual providers. This part of the analysis considers how and why costs varied by provider, knowing that each provider had somewhat different enrollment, infrastructure, and capacity to leverage funds.

The second part of the cost study analyzes the cost-effectiveness of LARCA by examining the impacts of the program in relation to program expenditures and by comparing LARCA's cost-effectiveness to that of the WIA services available to control group members.[17] This part of the cost study is informed by, and uses findings from, the impact study and the descriptive portion of the cost study. Further information on the cost study methodology and the results are described in Chapter VII.

Overview of the Report

Subsequent chapters of this report communicate the results and conclusions of the evaluation as follows. Chapter II describes the recruitment and enrollment process across the six providers, presents an overview of the study population, describes the non-education and non-employment services provided to participants, and described the alternative programs control group participants pursued. Chapters III, IV, V, and VI present the findings from the impact analysis, describing the LARCA program's impacts on secondary education enrollment and completion, vocational training and postsecondary education, employment and earnings, and criminal justice system involvement. Chapter VII presents the analyses of program costs and cost-effectiveness. Chapter VIII concludes the report with a discussion of the findings presented in prior chapters and the implications of this research for future program and policy planning. The report also includes several important appendices: Appendix A contains brief descriptions of the six LARCA program providers; Appendix B provides additional technical information about statistical methods and data analysis; and Appendix C includes the study's program application form, which was used to collect baseline data.

[17] As Chapter VII explains in greater detail, SPR used WIA services and their costs to form the control group counterfactual.

II. Foundations for Analysis of Impact Study Data

The impact study is focused on determining the impacts of the LARCA program's education, training, and employment services, which can be considered the core of the initiative because they constituted the direct interventions designed to make a difference in the lives of the disengaged youth targeted for participation in the program. However, the analysis of the data used to measure these impacts and the interpretation of the estimated impacts rely on an understanding of the: 1) elements of the LARCA program other than its core services; 2) aspects of LARCA implementation and its results (e.g., enrollment); and 3) the service environment in which the program existed. This chapter provides relevant information on all the topics within these three categories. These topics include the recruitment and enrollment process, the study enrollment process, the characteristics of the study population, confirmation of the success of random assignment, the services delivered by case managers, the assessments used in case management, the supportive and work-readiness services provided to participants, the Workforce Investment Act (WIA) services and other program alternatives available to control group members, and the extent to which LARCA participants and control group members accessed non-LARCA services.

Key Findings

- **LARCA program providers enrolled 2,078 individuals into the impact study.** LARCA program providers implemented various recruitment strategies and procedures for checking program eligibility. Although some providers exceeded their individual enrollment goals, overall, the study fell short of the enrollment goal of 2,400 individuals (1,200 program participants). The sample included 1,066 program group members and 1,012 control group members.

- **The composition of the participants (at baseline) looked similar to what was anticipated given the eligibility criteria and the focus on dropout youth in Los Angeles.** Participants were split evenly along gender with the typical participant 18 to 19 years old, Hispanic or black, and characterized as having numerous barriers to employment. About half of all participants were on public assistance and had at least some employment experience. About 19 percent had been arrested with fewer having been convicted or incarcerated. Surprisingly, about 18 percent had been enrolled in a Los Angeles community college.

- **Random assignment was successful.** Program and control group members did not differ significantly from one another across baseline characteristics. The study team was therefore able to assume that these two groups were identical along observable and unobservable measures, meaning that differences in outcomes between the two groups were due to participation in the program.

- **The LARCA program provided participants with a variety of services in addition to those focused on education, training, and employment.** Program services included case management, assessments, supportive services, and financial literacy and work readiness training. Some of these services were received by nearly all LARCA participants, others by smaller proportions.
- **WIA adult and youth programs offered a strong alternative to LARCA, but only about a quarter of control group members received these services.** Despite being eligible for and having easy access to both WIA adult and youth programs, relatively few control group members took advantage of these services. Control group members did, however, enroll in some secondary and postsecondary education, either on their own or through the support of other programs.

Recruitment and Enrollment

The key steps involved in meeting enrollment goals were recruitment, eligibility determination, completion of study forms, and random assignment to either the program or control group.

Recruiting Participants

Because the six LARCA providers had long-standing histories of identifying and working with at-risk youth within their communities, they were well-situated to recruit participants. Providers used multiple practices to attract youth to the LARCA program. Provider staff members discussed several practices in implementation study interviews: increasing word-of-mouth outreach by providing incentives for referrals; community outreach (e.g., public events, shopping areas, etc.); school-based outreach led primarily by the Pupil Services and Attendance (PSA) counselors that the Los Angeles Unified School District (LAUSD) placed at each provider and using LAUSD-provided "drop-out lists"; and community-based, supportive service agency referrals. Providers' recruitment efforts were greatly facilitated by their locations and status in their communities. Each provider was located within a low-income neighborhood within Los Angeles, had been present in its community for years, and had a strong reputation for providing youth-related services. Provider staff members commented on how their proximity to low-income housing, community-based organizations, churches, and schools all contributed to referrals. Staff members, likewise, were often personally well-integrated within these communities and often lived in them

Determining Eligibility

Before a provider could enroll a person into the program, staff members had to determine program eligibility. EWDD established that to be eligible for LARCA, a candidate had to be

- 16 to 24 years old;

- a resident of Los Angeles County;
- a high school dropout or student designated as "chronically absent" and performing below grade level (the latter designation was added by EWDD in August 2014); and
- low-income, eligible to work in the United States, and otherwise eligible for WIA youth services.[18]

While these criteria broadly describe the population providers had traditionally worked with and recruited for other programs, the LARCA eligibility determination process confronted providers with requirements they were unaccustomed to. First, some of the LARCA criteria were more restrictive than providers may have otherwise used. For instance, some providers were not used to requiring that program participants be eligible for work (since they had not run government-funded employment programs). Second, some of the documentation required to demonstrate eligibility was often new to many provider staff members. Learning what documentation participants needed to provide and have on file required ongoing assistance and support from EWDD staff members, and mistakes led to the occasional issue where a participant was later found to be ineligible (and subsequently withdrawn from the study). Youths determined to be ineligible were typically provided with a referral list that usually included local WIA programs, other programs operated by the LARCA providers, or other programs within the community.

Completing Study Forms

For the study, LARCA candidates had to complete two forms (they also completed other forms used specifically by the program). The consent form indicated that the candidate (or parent, if the candidate was a minor) agreed to participate in the study, including going through the process of random assignment and allowing the study team to collect data for the evaluation. As a part of ensuring that the consent process was informed, provider staff members showed participants a video that explained the study and provided them opportunities to ask questions about it. The program application form (See Appendix C) asked for personal and demographic information; it was designed by the program but modified by the study team to collect additional information that could be used for baseline analysis of program participants.

[18] TEGL 12-01 states: "To be eligible for youth services under the WIA, young people must be between the ages of 14 and 21, low-income, and meet at least one of the six specified barriers to employment (e.g., deficient in basic skills; a school dropout; homeless; a runaway, or a foster child; pregnant or parenting; an offender; or require additional assistance to complete their education or secure employment." (United States Department of Labor, 2002.)

Conducting Random Assignment

After determining eligibility and collecting the completed study paperwork, provider staff members randomly assigned each person. This process involved entering key identifiers for each participant into the online random assignment system, which was developed and managed by the study team. The system placed each eligible participant, at random, into either the program or control group, thus enrolling that person into the study. Each person had a 50 percent chance of being placed into the program group and 50 percent chance of being placed into the control group. Providers then communicated these results to study participants. EWDD considered all youth assigned to the program group as enrolled in the LARCA program. Providers were expected to serve these youth as LARCA program participants. Control group members were not allowed to participate in the LARCA program. Instead, they received referrals and lists of other programs and services in the area.

Study Enrollment

EWDD initially set the target for LARCA program enrollment at 1,200, with each provider responsible for enrolling 200 program participants. Since an equivalent number of individuals would be randomly assigned to the control group, target enrollment for the impact study was approximately double that of program enrollment, or 2,400 individuals. However, the study team expected the final study enrollment number to be slightly higher or lower than 2,400 since assignment was random and anchored to program enrollment (i.e., providers only had to, at minimum, achieve their program enrollment targets).

Over the 22-month enrollment period, from January 2013 through October 2014, the providers randomly assigned 2,105 individuals.[19] However, the study team had to remove 27 individuals from the overall sample: some of these individuals were discovered after random assignment to be ineligible for the program; a few did not provide adequate consent; a few later revoked consent; and a few were determined to be duplicate enrollments due to incorrect identification of participants by provider staff members. Therefore, the final study sample included 2,078 individuals: 1,066 in the program group and 1,012 in the control group.[20] Exhibit II-1 shows the number of program and control group members from the final study sample who were enrolled by each provider.

[19] The first study participant was randomly assigned on January 10, 2013. Random assignment officially ended on October 31, 2014. However, one participant was randomly assigned on November 3, 2014.

[20] The actual number of people served by the program was 1,071.

Exhibit II-1: LARCA Impact Study Enrollment, by Provider

LARCA Provider	Program Group	Control Group	Total Study Sample
CRCD	137	146	283
LA Conservation Corps	200	160	360
YO! Boyle Heights	157	148	305
YO! Watts	203	180	383
YPI Pico Union	143	144	287
YPI San Fernando	226	234	460
Total Study Sample	**1,066**	**1,012**	**2,078**

SOURCE: The LARCA Study Random Assignment System

Exhibit II-1 also shows the extent to which the different providers could meet their enrollment goals. Three providers—YPI San Fernando, LA Conservation Corps, and YO! Watts—met or exceeded their program enrollment goal of 200 even though control group numbers for two of these providers fell slightly short of the desired 200 individuals. The other three providers did not reach their enrollment targets for either the program or the study. While these lower-than-desired enrollment numbers had some effect on the study's ability to detect impacts, they also raise questions about the recruitment process. SPR's interim report offered several explanations for why enrollment may have fallen short of the target, especially at these three providers (Geckeler et al., 2015).

- *Recruitment and enrollment was delayed and shortened.* The LARCA program's relatively compressed startup period, a product of the WIF grant timeline, gave providers less time to prepare for and carry out their recruitment and enrollment efforts than may have been ideal. Originally, providers were to have 24 months of intake, beginning in November 2012, but EWDD pushed enrollment back to January 2013 to make more time for (necessary) program implementation. One provider did not begin enrolling until March 2013. Since the end of the evaluation was fixed, this shorted the enrollment period to 22 months.

- *Staffing was inadequate at some of the providers*. Recruitment staff members at the providers that did not meet their enrollment goals often had many other program responsibilities, leading them to feel stretched thin. In contrast, the providers that met their enrollment goals had dedicated recruitment staff members.

- *Providers had overly optimistic expectations*. Providers may have initially overestimated the ease with which they would recruit eligible youth. The ramifications of having a specific focus on dropout youth, specific eligibility determination requirements imposed by the program, and a need to oversubscribe for random assignment may not have been fully understood by providers at the time they initially agreed to their recruitment goals.

- *Providers encountered large numbers of ineligible youth*. Several of the providers were in areas with a high proportion of undocumented youth, who were ineligible for work and thus ineligible for the LARCA program. Staff members at one provider estimated that about 70 percent of students on the LAUSD provided dropout lists (used for recruitment) were undocumented students.

Study Participant Characteristics

To examine the composition of the sample and to check the validity of the random assignment process, the study team reviewed baseline information on study participants (i.e., from at or before random assignment) taken from the LARCA program application form and from administrative data sources. Due to random assignment, the program and control groups should have been very similar in all respects. Indeed, the analysis of their characteristics showed that both groups were essentially indistinguishable; the only statistically significant difference between program and control group members occurred among those who did not specify race or ethnicity. The baseline data for study participants are shown in Exhibit II-2.

Overall, the composition of the study group was as follows.

- There were slightly more females than males.
- Those in the 18-to-19 age band made up a disproportionate amount of the study group. There were also relatively few minors (i.e., 16- to 17-year olds).
- About three quarters of the study participants identified as Hispanic/Latino. Of the non-Hispanic participants, most identified as black.
- About one-fifth of the participants reported that their families regularly spoke a language other than or in addition to English.
- Around one-third of the participants were pregnant or parenting.
- Close to one-fifth of the participants said that they had one of the following other barriers to employment: being disabled, being a runaway, being a youth offender, being a foster child, having limited English proficiency, or being homeless.
- Over half of the participants had participated in the free lunch program at school and over half came from a family receiving some form of public benefit such as CalWorks (the California version of multiple federal aid programs including TANF and SNAP) or the Los Angeles General Assistance program.

Exhibit II-2: Baseline Characteristics of the Program and Control Groups

Characteristics	Program	Control	Difference
Gender			
Male (%)	46.8	49.2	-2.3
Female (%)	53.2	50.8	2.3
Age[1]			
16-17 (%)	13.8	11.8	2.0
18-19 (%)	37.4	41.0	-3.6
20-21 (%)	24.8	23.8	1.0
22-24 (%)	24.0	23.4	0.6
Race and Ethnicity			
Hispanic/Latino (%)	76.8	74.3	2.6
White, non-Hispanic (%)	0.6	0.7	-0.1
Black, non-Hispanic (%)	20.2	22.2	-2.0
Other, non-Hispanic[2] (%)	0.3	0.8	-0.5
Multiple Race, non-Hispanic (%)	1.7	0.8	0.9
Race or Ethnicity not specified (%)	0.4	1.4	-1.0*
Primary Home Language			
English (%)	77.7	80.1	-2.4
Spanish (%)	11.4	9.3	2.1
Other or multiple languages (%)	10.9	10.6	0.3
Barriers to Employment			
Parenting or pregnant (%)	30.9	33.9	-3.0
Other Barriers[3] (%)	20.9	20.6	0.3
Public Assistance			
In free lunch program at school (%)	55.0	54.7	0.3
Family received other public assistance[4] (%)	56.6	54.6	2.0
Secondary Education[5]			
Median credits completed before RA	95	95	0.0
Postsecondary Education (two years before RA)[6]			
Enrolled in LACCD (%)	18.7	16.6	2.1
Credits attempted	0.7	0.6	0.1
Credits earned	0.3	0.3	0.0

Characteristics	Program	Control	Difference
Employment (two years before RA)[6]			
Employed (%)	43.6	44.2	-0.6
Average quarters employed	1.6	1.5	0.1
Total wages[7]	$4027	$3965	$62
Criminal Justice System Involvement (two years before RA)			
CA arrests (%)	18.7	19.9	-1.2
CA convictions (%)	7.3	7.8	-0.5
LA jail admission (%)	5.1	5.0	0.1

SOURCE: Data on "secondary education" come from LAUSD. Data on "vocational training and postsecondary education" come from LACCD. Data on "employment" come from EDD. Data on "arrests" and "convictions" come from CA DOJ. Data on "LA jail admissions" come from LASD. All other data come from the LARCA Program Application form.

NOTES: Some items in the exhibit have sample sizes of less than the full sample for different reasons based on the data source. Sample sizes for the following LARCA Application form items are less than the full sample because participants omitted any answer for these items. Gender: N=1,059 (program) and N=1,007 (control). Race and Ethnicity: N=967 (program) and N=929 (control). Primary Home Language: N=1,045 (program) and N=989 (control). Parenting or Pregnant: N=975 (program) and N=931 (control). In Free Lunch Program at School: N=977 (program) and N=928 (control). Family Received Public Assistance: N=1,002 (program) and N=948 (control). Secondary education data are less than the full sample because they only include participants ever enrolled in an LAUSD school: N=883 (program) and N=828 (control). Employment data exclude participants whose consent material did not meet specific EDD standards: N=1,021 (program) and N=971 (control). LA jail admission data at two years prior to random assignment include only about half the full sample due to the storage procedures at LASD: N=552 (program) and N=542 (control).

[1]The "16-17" age band includes one participant who was 15 at the point of random assignment. The "22-24" age band includes three participants who were 25 at the point of random assignment. The program determined these youth to be eligible and so they were included in the study.

[2]"Other" race/ethnicity includes "Asian, non-Hispanic," "Alaska Native/American Indian, non-Hispanic," and "Pacific Islander, non-Hispanic."

[3]"Other" barriers include "disabled," "runaway," "youth offender," "foster child," "limited English," or "Homeless."

[4]Forms of "other public assistance" include CalWorks, LA General Relief, Food Stamps (i.e., SNAP)

[5]Educational background was calculated looking at secondary education credit completion data prior to the school year or interim period in which the person was randomly assigned.

[6]Because data were provided by quarter for LACCD and EDD data, the two-year period prior to random assignment is defined as the eight-quarters prior to the quarter of random assignment.

[7]Wages reflect the total wages earned in the two-year period and have been adjusted to reflect 2016 dollar values.

*The difference between the program and control groups is statistically significant at the .05 level

- The median participant completed 95 credits towards the 210 needed for high school graduation in the years prior to the school year of RA. This threshold, used in creating subgroups (described in Chapter I) is slightly lower than the 120 credits that EWDD defined as the cutoff for someone being designated as either "Back on Track" or "Fast Track" for the educational assessment, but it also does not include the credits earned by some participants in the school year in which they were randomly assigned.
- Even though no study participants held a high school diploma or equivalent credential, about 19 percent had enrolled in a Los Angeles Community College in the two years prior to random assignment. On average, across all study participants, they attempted about two thirds of a credit and earned just about half that.
- In the two years prior to random assignment, nearly half the participants had been employed. However, they had been employed for only about one and a half quarters on average during that two-year period. On average, participants earned just over $4,000 in this two-year period.
- Close to one-fifth of participants had been arrested. However, only about eight percent had been convicted and about five percent had spent time in a Los Angeles County jail.

LARCA Program Services in Support of Education and Employment

As the logic model in Chapter I shows, Exhibit I-1 EWDD designed the LARCA program to deliver different types of services to improve the educational and employment outcomes of out-of-school youth, but were not themselves education or employment-related services. These services included assessments to help guide participant interests and plan their activities, case management and supportive services to help participants through the program, training in financial literacy and work readiness to prepare participants for eventual independence, secondary education, training and postsecondary education, and employment search and placement assistance. Among these various services, secondary education, training, postsecondary education, and employment services made up the core of the LARCA program and were also the services for which the study team measured outcomes and analyzed impacts. For these reasons, these services and their associated outcomes are discussed in detail in subsequent chapters. This chapter describes the other services that provider staff members coordinated or delivered.

Exhibit II-3 provides data on program group members' participation in these non-education, non-training, non-employment-related services. These data come from the program's own management information system. Below is further discussion about each category of service.

Exhibit II-3: Program Group Participation Rates in LARCA Program Services, Excluding Education, Training, and Employment Services

Service Category	Program Group
Case Management	
Received any case management services (%)	89.2
Average case management sessions per participant	15.2
Assessments	
Received an educational assessment (%)	84.6
Participated in any InnerSight activity (%)	70.4
Supportive Services	
Received any supportive service (%)	51.8
Average number of supportive services received per participant	4.8
Financial Literacy	
Attended financial literacy workshop or received a financial literacy certificate (%)	49.0
Work Readiness	
Received any work readiness training (%)	37.6
Received a work readiness certificate (%)	28.0

SOURCE: The LARCA Program Management Information System

NOTES: Percentages are based on the 1,056 program group members who had data in the LARCA MIS.

Case Management

As discussed in SPR's Interim Report, LARCA case management services were a key component of the program, offering one-on-one and group support to help participants plan for their futures and overcome barriers to completing their education or gaining employment (Geckeler, et al., 2015). The importance of case management is evident in the information presented in Exhibit II-3, which shows that around 90 percent of participants received case management services at some point while enrolled and that the average participant had just over 15 case management sessions during his or her enrollment. Typically, case management helped participants set personal, educational, and career goals; obtain needed supportive services such as housing, transportation, mental health services, and substance abuse treatment services; and access work readiness, life skills, and youth development workshops.

As described in the LARCA Interim Report, the case management models used by the LARCA providers had both similarities and differences (Geckeler et al., 2015). Providers typically had two or three staff members providing case management services to LARCA participants. In addition to their LARCA case management responsibilities, these individuals often had other

organizational responsibilities such as recruitment and enrollment or case management for other, non-LARCA programs. Across providers, based on case managers' estimates, caseloads ranged from between about 30 participants to over 60 participants. Case managers met with participants on different schedules depending on the provider. While each of the providers was supposed to meet with participants shortly after their enrollment to begin the planning process, providers set different schedules for meeting with participants after that point, with frequencies ranging from weekly to quarterly—although staff members reported that unscheduled drop-in meetings were common and case managers often sought out participants for discussion of particular issues. The length of case management sessions also varied. Staff members reported that meetings tended to last about 15 to 30 minutes on average, but may have been much shorter or longer, depending on the issue and with some variation across providers.

Assessments

One of the key assessments used in guiding participants' plans was the educational assessment, which began when the PSA counselors reviewed participants' academic records to determine how many and what types of credits they needed to obtain a diploma. PSA counselors met with all LARCA program applicants prior to random assignment to verify their dropout status and to begin gathering relevant student records to determine their educational background. Because they were employees of LAUSD, PSA counselors could access LAUSD transcripts, which included grades and accumulated credits. However, PSA counselors sometimes also needed to work with students who had transcripts from schools outside the district, which required additional effort to obtain. Based on these records, PSA counselors then assessed all program group members (after random assignment occurred) and determined whether a program participant should be designated as "Fast Track" (if the student had completed more than 120 credits out of the 210 required to graduate) or "Back on Track" (120 credits or less). Provider staff then used this designation to guide program participants' educational planning. As is indicated in Exhibit III-3, the participant MIS showed that about 85 percent of participants received an educational assessment. Since the assessment was one of the first services participants received, it is unclear why more participants did not receive this assessment. Either providers did not manage to connect with these youth or their information was not recorded.

Also, following random assignment, a provider staff member met with each program group member to conduct a General Needs Assessment designed to determine the participant's supportive service needs and to better define their goals. This assessment process was the first step towards completing the individual service strategy (ISS) form, used by the providers to delineate tasks for case managers and participants and to guide the overall delivery of services. Staff members generally updated the ISS on a quarterly basis.

A majority of participants completed the InnerSight Preference Inventory, a psychosocial assessment that matches a person's occupational interests and demonstrated learning styles to potential career fields. The assessment includes both an online testing component and a 3-hour group session (known as the InnerSight Experience) facilitated by an InnerSight employee, who

interprets the results of the inventory and discusses how career options and work-style preferences align with test results. Providers used the results of the InnerSight assessment to help youth identify and reflect on their career goals and subsequently to help decide what training and employment options a participant should pursue.

The implementation study found that each of the providers administered both the CASAS reading assessment and the CASAS math assessment, which they used to help determine participants' academic needs, including the need for remediation classes or other additional academic support. Some providers also used the TABE test for similar purposes and others used various other career inventories to help determine participants' interests and needs.

Supportive and Other Services

More than half of program participants received some form of supportive service. On average, participants received nearly five such services. Providers coordinated the delivery of these supportive services to help minimize any barriers participants might face in completing their program goals. From the program's MIS and case manager interviews conducted during the implementation study, the study team identified the following services as the ones most commonly utilized (Geckeler et al., 2015).

- About one-third of all LARCA participants utilized **transportation assistance**. This assistance primarily consisted of bus tokens or monthly transit passes, which participants used to travel to the program offices, education, training or work. Other forms of transportation assistance included driver's education courses or supplementing participants' driver's license application fees.

- Several other categories of supportive services were utilized, but not as frequently as transportation assistance: assistance for acquiring **clothing**, such as work clothes or uniforms participants needed for a job; assistance in finding **housing**, typically in transitional housing facilities; **child care services**, seemingly important given the high number of participants who were parenting or pregnant; and **food vouchers**.

- The MIS indicated that about 17 percent of participants utilized unspecified "other" services. Data from the implementation study visits suggest that these services consisted mainly of staff members helping participants obtain mental health services via referrals to community health agencies, legal support (for issues such as child custody, record expungement, or removing fines to clear the way for driver's licenses), referrals to substance abuse treatment services, and various forms of public assistance. Included within this "other" service category was the counseling provided on-site by the PSA counselors, who all had social work and counseling degrees.

Financial Literacy and Life Skills

Nearly half of all participants received some sort of financial literacy training. The implementation study found that each of the providers used financial literacy curricula or

collaborated with other organizations to deliver financial literacy and budgeting workshops (Geckeler et al., 2015). Through these trainings, LARCA participants learned about money management, earnings and asset building, credit cards and the credit system, and savings and checking accounts. At some providers, LARCA participants had to complete financial literacy and budgeting training before receiving their vocational training stipends.

Although it wasn't specifically recorded in the MIS, the implementation study found that LARCA providers also offered classes and workshops focusing on broader life skills. The topics of these classes and workshops included conflict resolution and anger management, sexual health, and health and wellness. The frequency and intensity of these courses varied across providers, but overall, the study team found that this "life skills" training tended to be one of the less well developed components; this was likely because life skills training was not a prescribed component of LARCA but rather something providers had offered prior to LARCA and continued to deliver to LARCA participants because they saw value in it.

Work Readiness

To help participants adapt to and succeed in the workplace, the LARCA program model required that providers offer work readiness training. Rather than have providers develop their own trainings, EWDD collaborated with the Los Angeles Chamber of Commerce to develop a youth-centered, eight-hour work readiness training and certificate that would help participants master workplace social and professional skills. Staff members at each of the providers were trained in this curriculum, which covered topics such as professionalism and communication, soft skills development, job search and retention strategies, resume and cover letter development, and interviewing techniques. Providers delivered work readiness training at different points in the program and sometimes supplemented the Chamber of Commerce course with their own work readiness curriculum or additional courses provided by outside contractors. Other training aside, the Chamber of Commerce course culminated with the earning of a work readiness certificate. As noted in Exhibit II-3, participation in this activity may have been less extensive than desired, with only about 38 percent of LARCA program participants receiving some form of work readiness training and only 28 percent receiving a work readiness certificate. It is possible that actual participation in work readiness training was somewhat higher than these figures indicate due to lack of documentation by the providers. Nevertheless, the implementation study detected some challenges with the work readiness training that may in part account for the relatively low rate of participation in this component: some providers had limited computer space in which to administer parts of the training, providers sometimes had difficulty keeping work readiness activities engaging and interactive, and the mock interview component proved to be too challenging for some participants.

Services Received by Control Group Members

Control group members could not enroll in LARCA, but they were free to seek out other programs and services in the community and were in fact referred to these services and programs upon being notified of their random assignment to the control group. To

meaningfully compare the outcomes of program group members with those of the control group—and thereby estimate the impacts of LARCA—it is necessary to fully understand these other programs and services available in the community and how they differed from those of LARCA. It also necessary to understand the extent to which control group members accessed these other services. The more that control group members received services like those offered by LARCA, the less likely it is for the study to see impacts.

WIA Adult and Youth Programs

While the greater Los Angeles area has many programs and services designed to help dropout youth, the Workforce Investment Act (WIA) adult and youth programs were both close in design to LARCA and likely candidate programs for control group members to have pursued in lieu of the LARCA program.[21] Like LARCA, the WIA adult and youth programs were funded by the U.S. Department of Labor, managed by EWDD, and, in some cases, operated by LARCA providers. The adult and youth programs also provided a set of comprehensive services similar to those of the LARCA program, including case management, work readiness training, education, training, and employment services. Both LARCA and WIA programs provided supportive services and had on-site PSA counselors to help provide educational assessments. Finally, WIA adult and youth programs were easily accessible to LARCA participants; as noted above, anyone eligible for LARCA was also eligible for WIA and many LARCA providers either ran a WIA program or included WIA programs on the referral lists they gave to control group members.

The key difference between LARCA and the WIA programs had to do with the LARCA program's singular focus on out-of-school youth and its particular combination of secondary education, training, postsecondary education, and employment services. In contrast, the WIA youth program tended to focus on just secondary education and the adult program on training and employment services. Furthermore, LARCA programs were more intensive, often lasting upwards of a year or more, whereas WIA programs were shorter and involved less regular contact between participants and case managers and provider staff members.

While control group members would have been able to access either the adult or youth WIA programs, the youth program was more comparable to LARCA. In addition to serving in-school youth, the WIA youth program also targeted out-of-school youth, ages 16 to 21, and focused on helping them make progress towards completing their secondary school education.[22] Control

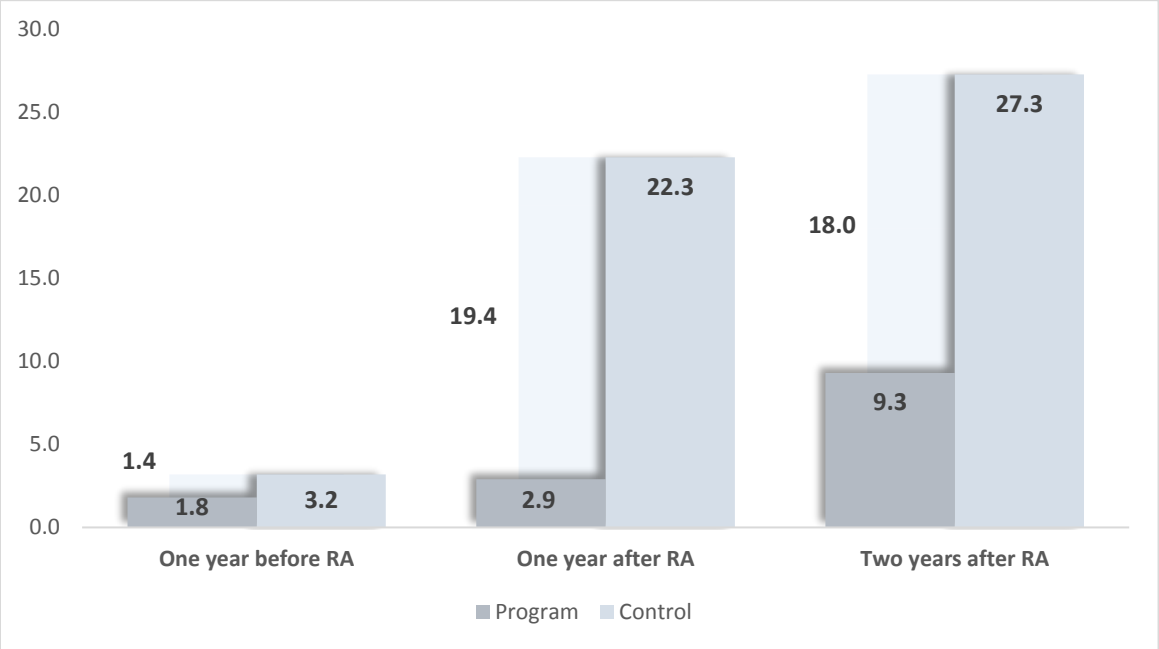
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[21] WIA was replaced in July 2015 by the Workforce Innovation and Opportunity Act (WIOA). This means that anyone enrolling in the adult or youth programs in or after July of 2015 would have been enrolling in the WIOA-funded programs rather than the WIA-funded programs. While the transition from WIA to WIOA involved some changes, the basic service delivery model did not change all that much. As such, the study views the WIA adult and youth programs as more or less comparable to the WIOA adult and youth programs. The report uses the WIA designation interchangeably for both programs unless otherwise specified.

[22] The WIA youth program also served in-school youth ages 14 to 21.

group members who were older than 21 at the time of WIA enrollment would not have been eligible for the WIA youth program, but they could have enrolled in the adult program, which served individuals 18 or older.[23] Based on data received from EWDD's Jobs LA system, which tracks the delivery of WIA (and WIOA) services, the study team was able to determine that about 87 percent of control group members receiving WIA services received youth rather than adult services.

Exhibit II-4: Percentages of LARCA Study Participants Engaged in WIA Adult and Youth Programs, Before and After Random Assignment



SOURCE: Jobs LA System

NOTES: Percentages are based on the full study sample: N=1,066 (program) and N=1,012 (control). Since WIA data were supplied in September 2016, percentages for "Two years after RA" likely undercount true WIA enrollment since the study team had slightly less than two full years of data for anyone randomly assigned in September or October of 2014.

To examine the extent to which LARCA participants received WIA (or WIOA) adult or youth program services, the study team analyzed EWDD's Jobs LA system data. Exhibit II-4 shows that neither program nor control group members received many WIA services in the one-year period prior to random assignment. However, in the one-year period following random assignment, 22.3 percent of control group members received WIA (or WIOA) adult or youth program services while only 2.9 percent of program group members did, a difference of 19.4

[23] To further complicate matters, WIOA changed the youth program eligibility criteria. Starting in July 2015, the upper bound on eligibility for the youth program changed from 21 to 24 years old. So any LARCA study participant seeking to enroll in the WIOA youth program would have been eligible for it so long as he or she was still under 25 years old at the point of enrollment.

percent. At two years past random assignment, 27.3 percent of control group members had received a WIA service while only 9.3 percent of program group members had. The data in the exhibit reflect the expected dynamic: program group members, enrolled in the LARCA program after random assignment, did not for the most part seek other services while control group members often did. As time progressed and program group members found their way out of LARCA, they began to seek additional services. Even though control group members participated in WIA adult and youth services at much higher rates than program group members, however, their participation was not particularly high in absolute terms. Fewer than one third of control group members received these services, so many of them were either accessing services elsewhere or receiving few services.

Secondary and Postsecondary Education Alternatives

Of course, control group members may have enrolled in programs or accessed services provided by any number of other agencies or organizations. The estimation of impacts is most sensitive to programs offering services like those offered by the LARCA program or which might improve participant outcomes along the measures being studied. Two other types of services that control group members may have availed themselves of are those provided by (1) various types of secondary schools and High School Equivalency Test (HSET) providers (see the definition of HSET in Chapter III) and (2) post-secondary educational institutions.

The LARCA implementation study found that many LARCA candidates often came to the LARCA program because they wanted to complete their high school education or earn their HSET certification (Geckeler et al., 2015). Returning to a traditional high school, seeking out an alternative or adult school, or finding a separate HSET program were all possible paths that control group members seemed likely to pursue in lieu of getting into the LARCA program. While these alternatives to LARCA would not likely have delivered case management, supportive, training, or employment services like those provided to LARCA participants, sufficient numbers of control group members participating in these services might reduce the impacts of the LARCA program on education services. In Chapter III, the study team explores enrollment by control group members in secondary education programs using enrollment data from the California Department of Education and the LA Unified School District, and Chapter IV explores control group members' enrollment in education or training services through Los Angeles Community College District colleges.

Summary and Conclusion

This chapter has covered a broad range of topics including the LARCA program's recruitment and enrollment procedures, the study enrollment numbers and recruitment challenges, the composition of the study sample, key LARCA program services, and programs and services that control group members were likely to pursue instead of LARCA. The chapter found that:

- LARCA program providers enrolled 2,078 individuals (1,066 program group members and 1,012 control group members) into the impact study.

- The composition of the participants (at baseline) looked similar to what was anticipated given the eligibility criteria and the focus on dropout youth in Los Angeles.
- Random assignment was successful.
- The LARCA program provided participants with a variety of services in addition to those focused on education, training, and employment.
- WIA adult and youth programs offered a strong alternative to LARCA, but only about a quarter of control group members received these services.

The findings in this chapter have two important implications for the analysis in subsequent chapters. First, because the program and control groups do not differ statistically, the study can assume that random assignment was successful and that any impacts observed through simple differences in means are likely because of program participation. Second, because participation by the control group in WIA services was somewhat lower than what might be expected given the similarity of this program to LARCA and the ease with which control group members could access these services, any lack of observed impacts is not obviously due to high take-up in this program. Later chapters discuss the rate of take-up in other alternative educational services, which provides further insight into the findings of those chapters.

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III. Impacts on Secondary Education

The literature review in Chapter I discussed how earning a high school diploma is strongly associated with improved employment and earnings and is the first step towards more advanced training and education. Accordingly, one of the LARCA program's key objectives was to help participants re-enroll in school or a High School Equivalency Test (HSET) preparation program and earn a high school diploma or HSET credential.[24] This chapter examines the secondary education services the LARCA program provided and describes the impact the program had on participants' re-enrollment in secondary education and receipt of a diploma or equivalent. It examines these impacts for both the full study sample and for key subgroups.

Key Findings

- **LARCA participants had access to robust secondary education services.** All providers worked to re-enroll participants in a program leading to a high school diploma or equivalent. Providers also offered supplemental tutoring and homework assistance to support participants' reconnection to and success in school.

- **Program group members re-enrolled in secondary education programming at higher rates than the control group.** Within one year of random assignment, approximately 60 percent of program group members re-enrolled, while only 48 percent of control group members did so. Within two years after random assignment, 64 percent of program group members re-enrolled in secondary education, compared with 52 percent of control group members.

- **Program group members received secondary education credentials at higher rates than control group members.** Within one year of random assignment, approximately 13 percent of program group members—but only 8 percent of control group members—received a high school diploma or equivalent. Within two years after random assignment, approximately 25 percent of program group members received a high school diploma or equivalent, compared with 16 percent of control group members. Among those that received a secondary education credential, nearly all did so with a

[24] Throughout this chapter, the term High School Equivalency Test (HSET) refers to any of three exams in operation within the State of California that lead to receipt of a high school equivalency certificate: the General Educational Development (GED) exam, the Test Assessing Secondary Completion (TASC) exam, or the High School Equivalency Test (HiSet).

high school diploma; only five participants across both program and control groups completed secondary education with an HSET credential.

- **Outcomes for key subgroups mirrored those for the full sample, but there were no significant differences in outcomes *between* subgroup pairs.** Nearly all the individual subgroups show program group members re-enrolling in secondary education programs and receiving secondary education credentials at significantly higher rates than control group members at both one and two years past random assignment, but none of the program-control differentials within subgroups were statistically significant.

LARCA Secondary Education Services

The LARCA program provided three education services to LARCA participants: assessment of participants' educational background, connection to a secondary education program, and tutoring services to support achievement.[25]

As discussed in Chapter II, the Pupil Services and Attendance (PSA) counselors, who were employees of the Los Angeles Unified School District (LAUSD), began the educational assessment process prior to random assignment by collecting and reviewing past school records and transcripts (for determination of dropout status). Once individuals were randomly assigned, PSA counselors then designated all program participants (i.e., program group members) as either as "Fast Track" (if the student had completed more than 120 credits out of the 210 required to graduate) or "Back on Track" (if the student had 120 credits or less).

At that point, PSA counselors, in coordination with provider staff members, helped participants reconnect to secondary education in the form of classes leading to a high school diploma, typically at charter school, or preparation for an HSET. As indicated in Exhibit III-1, two providers enrolled all participants into a charter school program leading to a high school diploma. The other four providers also enrolled most participants in charter schools but also provided youth with the option to either pursue an HSET through a charter school or attend another program designed to help them pass their HSET. Depending on the provider and the secondary education program accessed, services were either offered on-site or through a partner organization in the community.

Overall, LARCA providers prioritized the acquisition of a high school diploma over an HSET, recognizing that it provided the best preparation for students in pursuing postsecondary

[25] Case management and the many of the other supportive services discussed in Chapter II also likely aided students throughout their participation in secondary education services.

education and training and often led to improved employment and earnings.[26] The providers that offered connection to HSET preparation classes believed that this was the best option for certain participants, such as those who needed the scheduling flexibility of an HSET program due to personal or work obligations, or those who were missing enough credits that a diploma-based program would simply have taken too long to complete. According to the LARCA program Management Information System (MIS), 17 percent of program group youth pursued HSET preparation classes.

Exhibit III-1: Secondary Education Services by Provider

LARCA Provider	Type of High School Diploma Program Provider (Location)	HSET Program Provider (Location)
CRCD	Charter School (off-site)	None
LA Conservation Corps	Charter School (on-site)	None
YO! Boyle Heights	Charter School (on-site)	LAUSD Adult Schools (off-site), Charter School HSET Prep Class (on-site)
YO! Watts	Charter School (on-site)	LAUSD Adult Schools and other community providers (off-site)
YPI Pico Union	Charter School (on-site)	Alternative School HSET prep class (on-site)
YPI San Fernando	Charter School (on-site)	Alternative School HSET prep class (on-site)

SOURCE: LARCA Implementation Study

Unsurprisingly, given that participants had struggled with (and ultimately dropped out of) traditional academic programs in the past, providers noted during the implementation study that many participants lacked the foundational knowledge needed to succeed in high school. Even though they were motivated to learn, participants often had skill deficiencies. According to staff members, participants often tested at relatively low reading or math levels and they also often lacked basic study skills. Providers dealt with this issue by offering supplemental support, such as tutoring and placement in workshops on topics such as study habits and time management. The LARCA MIS data showed that approximately 19 percent of LARCA program participants took advantage of tutoring services.[27]

[26] Prior research has shown that a GED may lead to earnings in the long term for some groups (Heckman et al., 2010). However, GED attainment alone seems to provide little return on earnings in the labor market for dropout youth, and only tends to have value when it leads to postsecondary training as compared to off-the-job training (Murnane et al., 1999).

[27] This relatively low take-up rate for tutoring services may also reflect inconsistent recording of service activities by providers in the program's MIS.

Impacts of LARCA Services on Secondary Education Outcomes

To determine the impact that the LARCA program had on participants' secondary educational outcomes, the study team examined differences between the program and control group members on two key measures: re-enrollment in secondary education programs and attainment of a secondary education credential. The impact analysis examines these findings at one and two years after random assignment.

Data Sources and Limitations

The study team conducted the impact analysis using student-level records from the California Department of Education (CDE). CDE provided student-level data for both program and control group members, beginning in the 2002–2003 school year (when the oldest sample members would have been in 9th grade) and ending with the 2015–2016 school year. These data allowed the study team to determine, for each study participant, the status of the following parameters:

- re-enrollment in secondary education—whether, after the date of random assignment, a participant either re-enrolled in a California public school or had a documented transfer to another diploma/HSET granting institution or program, and
- secondary education completion—whether a participant received a secondary education credential or not, and what type of secondary education credential was awarded.[28]

The study team also obtained data on credit attainment, attendance, enrollment, and completion from the Los Angeles Unified School District (LAUSD), and used the credit attainment data (for the time prior to random assignment) to create the educational background subgroup.[29] However, the study team was unable to use the LAUSD data for the impact analysis because most study participants did not appear in LAUSD records after random assignment.[30]

Due to the time frame of the evaluation relative to random assignment, data availability for different analytic periods varies. The impact analysis reports findings within one and two years after random assignment. However, since data were only available through the end of the

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[28] CDE data only record HSET attainment (any of the three tests under the umbrella of HSET) for the 2015-2016 school year and after. Prior to that, CDE data only record GED attainment.

[29] As described in Chapter I, the study team used credits obtained before random assignment, as reported in the LAUSD data, to determine the median credits earned in LAUSD schools before random assignment and divide youth into those at or below the median and those above the median for the purposes of subgroup analysis.

[30] The absence of these records is likely due to the fact that the types of secondary education programs in which study participants enrolled—namely, charter schools and other alternative schools—are not required to report student-level data to LAUSD and instead report their data only to CDE. The impact analysis therefore relies on CDE data, which includes records from all public K-12 local educational agencies in the state, including charter and alternative schools.

2015–2016 school year (due to the need to collect these data and conduct the analysis before the end of the evaluation period), individuals randomly assigned starting in July 2014 onwards are not included in the two-year impacts. The one-year impacts include the full study sample.

The following are several limitations of the data sources and sample that should be considered in interpreting the findings in this chapter.

- **Most, but not all, of the study participants matched to CDE's records.** Of the 2,078 study participants, 2,014 (1,038 in the program group and 976 in the control group) have education records from CDE during the period for which CDE provided data (9th grade through completion of high school, as available). The 64 study participants who did not appear in the data from CDE could be missing from the data for two reasons: they might not have attended schools in California during the time period covered by the data pull (beginning of 9th grade through the 2015–2016 school year), or they might have attended institutions that do not report data to CDE (parochial schools, non-public therapeutic schools, private schools, and public institutions outside of the education system—such as libraries and other community organizations offering HSET preparation classes). The study team conducted a series of checks to explore the implications of the absence of data for these individuals. This process involved confirming that the proportion of individuals missing CDE data was similar for program and control groups, running tests of baseline equivalence with and without these missing individuals (which yielded similar estimates), and running all impact analyses reported in the chapter with and without these missing individuals (which again yielded similar estimates). Overall, the results of these checks led the study team to conclude that the lack of data for these 64 individuals does not compromise the findings presented herein.

- **The data may understate both enrollment in HSET preparation classes and HSET credential attainment**. Control group members, as discussed in the previous chapter, were free to seek out other programs and services in the community and LARCA staff members even provided referrals to these agencies. Because youth often applied to LARCA with a goal of completing their high school education, provider referral lists often included programs such as adult schools, charter schools, YouthBuild, WIA Youth programs, and HSET preparation classes offered by community-based organizations. However, as noted earlier, while some of these services (specifically, charter school enrollments and adult school enrollments leading to an HSET credential) would be captured in the administrative data analyzed for the impact analysis, others (such as HSET preparation classes offered by community-based organizations) would not. The data available to the study team may therefore understate re-enrollment by control group members if they chose to enroll in such community-based HSET preparation classes, and for any program group members that attended HSET preparation classes at non-educational institutions in the community (which was an option available to program group youth at one of the provider agencies). Relatedly, only five participants (two control group members and three program group members) had any HSET credential attainment records in the CDE data. The impact analysis therefore does not

examine HSET credential attainment as a standalone outcome, and instead looks at receipt of any secondary education credential (i.e., a diploma or HSET credential).

- **The impact analysis does not examine credit attainment.** The initial conceptual framework for the evaluation included examining participants' credit attainment after random assignment to determine the extent to which participants made progress towards a diploma or other secondary education credential even if they did not obtain one. As described earlier, however, CDE data did not contain credit attainment data at all and most study participants did not have LAUSD records for the period after random assignment. However, the study team was able to use credit attainment prior to random assignment to develop the educational history subgroups.

Impacts for the Full Sample

The impact analysis compares the outcomes for program and control group members on two key measures captured by the CDE data—rate of re-enrollment in secondary education programs and rate of receipt of a secondary education credential (that is, a high school diploma or equivalent). Exhibit III-2 shows this analysis within the scopes of both one and two years after random assignment.

Exhibit III-2: Impact of LARCA on Secondary Education Outcomes

Outcome	Program	Control	Difference
Within one year of RA			
Re-enrolled in secondary education (%)	60.3	48.7	11.6***
Received any secondary education credential[a] (%)	12.8	7.9	4.9***
Within two years of RA			
Re-enrolled in secondary education (%)	64.8	52.7	12.2***
Received any secondary education credential[a] (%)	24.9	16.3	8.6***

SOURCE: CDE student-level data

NOTES: Within one year of RA, estimates were calculated using the full sample: N=1,066 (program) and N=1,012 (control). Within two years of RA, estimates are calculated using study participants for whom the study had two full years of data: N=837 (program) and N=764 (control).

[a]"Credential" includes high school diploma or any HSET credential.

*/**/*** The difference between the program and control groups is statistically significant at the .05/.01/.001 level

As shown in the exhibit, program group members had better secondary education outcomes than did control group members. Within one year of random assignment, more program group members re-enrolled in secondary education than did control group members (about 60 percent of program group members compared to about 49 percent of control group members), and this difference was statistically significant. Similarly, program group members received

secondary education credentials at higher rates than control group members, and this difference was statistically significant Within two years of random assignment, these impacts were still significant and somewhat larger.

While the LARCA program showed clear impacts on program group members' re-enrollment and credential attainment, the analysis raises the question as to whether the rates of enrollment (64.8% after two years) and credential attainment for the program group (24.9% after two years) could have been higher, given the goals of the program. As noted earlier, the appearance of low re-enrollment rates may be due to participants pursuing secondary education options not captured in the administrative data, including both diploma-based programs that do not report to CDE and HSET preparation courses. The LARCA MIS data, while not used for the impact analysis, indicates that 71 percent of program group members re-enrolled in high school after random assignment, and 17 percent attended HSET preparation classes. Increasing credential completion rates (out of those who did re-enroll) might involve one of several approaches: services that were not offered, additional take-up of existing services (e.g., tutoring) or better targeting of existing services. While the evaluation did not explore these options, these are all possible areas to explore in future program designs and any related research.

Impacts for Key Subgroups

To further explore the extent of LARCA's impacts on secondary education outcomes, the study team also examined impacts by the key subgroups described in Chapter I: age, gender, ethnicity, prior employment history, timing of random assignment (early versus late), and educational background (i.e., below the median or at or above the median credits earned in LAUSD schools prior to the year of RA). Exhibits III-3a and III-3b present results for these subgroup analyses. Numbers in the exhibits represent impact estimates—that is the difference between the mean outcomes for the program group compared to the mean outcomes of the control group for each subgroup listed. The study team also formally tested whether the difference in impacts between subgroups within a category was statistically significant.

Overall, the subgroup analysis shows patterns within groups similar to those for the full sample: nearly all of the individual subgroups show program group members re-enrolling in secondary education programs and receiving secondary education credentials at significantly higher rates than control group members at both one and two years past random assignment.[31] However, the primary purpose of conducting these subgroup analyses was to explore whether there were significant differences in outcomes *between* subgroup pairs. As shown in the exhibit, no significant differences were found between the subgroup pairs.

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[31] One exception to this pattern is for non-Hispanic youth. While non-Hispanic program group members appeared to re-enroll and earn credentials at higher rates than non-Hispanic control group members, this difference was only significant for earning a credential within one year of random assignment. This anomalous result may reflect an inability to detect small impacts due to the relatively small size of this subgroup or it may reflect a genuine lack of difference.

Exhibit III-3a: Impact of LARCA on Secondary Education Outcomes for Demographically-Defined Subgroups[a]

	Age		Gender		Ethnicity	
	16-21	22-24	Male	Female	Hispanic	Non-Hispanic
Within one year of RA						
Re-enrolled in secondary education (%)	10.6***	15.3***	13.6***	9.9**	13.6***	7.4
Received any credential[b] (%)	4.2**	7.1**	6.4**	3.2	4.1*	6.1*
Within two years of RA						
Re-enrolled in secondary education (%)	12.4***	15.2**	14.4***	11.6***	15.4***	9.0
Received any credential (%)	5.9**	9.2**	8.1**	5.3*	6.6**	4.6

SOURCE: CDE student-level data

NOTES: Numbers in the exhibit represent the impact estimates— that is, the difference within each subgroup between the mean value for the program group versus the control group. A positive number denotes that the mean value is higher for the program group than for the control group. A negative number denotes that the mean value is higher for the control group.

[a]Subgroups are described in Chapter I. Sample sizes for each calculation can be found in Exhibit B-3a in Appendix B.

[b]"Credential" includes high school diploma or any HSET credential.

*/**/*** The difference between the program and control groups is statistically significant at the .05/.01/.001 level

†The difference in the impact of LARCA between subgroups is statistically significant at the .05 level (the symbol is placed by the impact estimate of the first group of the subgroup pair if significant).

Exhibit III-3b: Impact of LARCA on Secondary Education Outcomes for Other Subgroups[a]

	Employment History		Timing of RA		Educational Background	
	Employed	Not Employed	Early	Late	At or Below Median	Above Median
Within one year of RA						
Re-enrolled in secondary education (%)	15.3***	9.6***	12.7***	10.6***	9.2**	14.5***
Received any credential[b] (%)	5.8**	4.1*	3.9*	5.8**	3.2*	6.7**
Within two years of RA						
Re-enrolled in secondary education (%)	15.3***	11.3***	14.2***	10.0*	12.6**	14.5***
Received any credential (%)	8.6**	4.6	6.6**	6.8*	5.3*	6.8*

SOURCE: CDE student-level data

NOTES: Numbers in the exhibit represent the impact estimates— that is, the difference within each subgroup between the mean value for the program group versus the control group. A positive number denotes that the mean value is higher for the program group than for the control group. A negative number denotes that the mean value is higher for the control group.

[a]Subgroups are described in Chapter I. Sample sizes for each calculation can be found in Exhibit B-3b in Appendix B.

[b]"Credential" includes high school diploma or any HSET credential.

*/**/*** The difference between the program and control groups is statistically significant at the .05/.01/.001 level

†The difference in the impact of LARCA between subgroups is statistically significant at the .05 level (the symbol is placed by the impact estimate of the first group of the subgroup pair if significant).

Summary and Conclusions

One of the LARCA program's key services was helping participants re-enroll in and complete their secondary education, earning a diploma or equivalent certification. The impact analysis found that program group members re-enrolled in secondary education and received credentials at higher rates than control group members and these differences were statistically significant during both time periods examined—up to one year after random assignment and up to two years after random assignment. Thus, the study team can conclude that LARCA was successful in achieving its goals around secondary education.

There are two issues for further research. One is how a program like this might improve the rate of credential attainment by those who re-enroll thus increasing the likelihood of future employment and earnings gains. Another, related point is that few participants in either the program or the control group received an HSET credential (too few to conduct impact analyses separately for this outcome). Given that providers both referred control group members to HSET preparation classes, and, in some cases, offered HSET preparation assistance to program group members as well, it would be of interest to policy makers to understand the impact of programs like LARCA on HSET credential attainment. While the HSET is likely to yield fewer long-term employment and higher education benefits than a diploma, it may represent a more realistic outcome than a high school diploma for some disconnected youth.

IV. Impacts on Training and Postsecondary Education

According to the LARCA program theory of change, program participants need more than just the case management and other services described in Chapter II and the secondary education services described in Chapter III to be successful in the workplace. If participants are to advance along a career pathway and secure employment with higher earning potential, they also need vocational training and postsecondary education. This chapter examines LARCA's success in this area. The chapter begins with an overview of the vocational training and postsecondary education services provided by the LARCA program and then examines the impact the program had on enrollment and credit completion in the ten colleges within the Los Angeles Community College District (LACCD) for both the full sample and key subgroups.

Key Findings

- **Providers placed participants into construction, green technology and healthcare training.** Training providers varied by organization type and included the providers themselves, proprietary training programs, and public and private colleges and universities; these training providers were often located in the communities that providers served. The training programs offered the possibility of college credit and industry recognized credentials.
- **Providers helped participants enroll in postsecondary education at local colleges, especially LACCD colleges.** Participants enrolled in LACCD colleges as part of the LARCA program's vocational training component, but also to seek out additional training or other college-level classwork.
- **LARCA participants enrolled in LACCD colleges at a higher rate than control group members.** Twenty-seven percent of the program group enrolled in LACCD colleges within one year of random assignment as compared to 17 percent of the control group. Within two years, this gap had widened, with 40 percent of the program group as compared to 24 percent of the control group having enrolled. Enrollment included both credit and non-credit classes, and all the differences between the program and control groups around enrollment were significant at both one and two years after random assignment (RA). Furthermore, enrollment in postsecondary education was likely higher than what the study reported for both program and control groups since some participants sought out training at (and some providers partnered with) institutions not part of LACCD.
- **Program group members attempted more credits, and, at least within the first year after RA, earned more credits than control group members.** However, program group members' credit success rate (credits earned/attempted) was the

same as that of control group members, and control group members who did enroll were less likely to drop out than program group members.

- **The LARCA program had a greater impact on enrollment and credit completion for some subgroups.** Impacts on LACCD enrollment were greater for older youth, males, and non-Hispanics than they were for younger youth, females, and Hispanics. Also, older youth completed more credits than did younger youth. Enrollment differences between these subgroups for these measures only held true for one year after RA.

- **The LARCA program had a greater impact on LACCD college enrollment and credit completion for participants enrolled earlier in the enrollment cycle.** In fact, there were no impacts on enrollment or credit completion for those enrolled later in the enrollment cycle (at one year from RA). The study cannot determine why there were no impacts for those enrolled later, but it may be due to these services occurring later and thus the study having insufficient time to track them for this subgroup. It could also have to do with over-taxing of staff members, the winding down of the program, or changes in enrollment standards. Further research is needed to explore this finding.

Overview of Training and Postsecondary Education Services

Through the LARCA program, providers offered vocational training from a variety of institutions that often led to industry-recognized certificates. In addition, providers encouraged participants to enroll in postsecondary education courses at colleges and universities. Participants were given the opportunity to complete certificates while enrolled in vocational training and postsecondary education. These services were designed to improve participants' skills and knowledge, increase their suitability for employment, and prepare them for advancement along a career pathway.

Vocational Training

The type of organizations that provided vocational training varied across the six providers. Most providers relied on community colleges within the LACCD for at least some of their vocational training; in these programs, participants often earned college credit (notable since in some cases training may have occurred through non-credit courses). Providers also used adult schools, occupational training centers, and proprietary schools. LA Conservation Corps designed and provided its own training, though this provider was unique in using this approach.

The types of vocational training offered to LARCA participants varied both across and within providers. Some providers connected all participants to the same type of training, while others allowed participants more independence to decide which training to complete based on their

interests. Participants typically received a provider's primary vocational training offering regardless of their long-term career interests. While the training may not have been exactly what participants initially thought they wanted to pursue, providers explained during the implementation study visits that many of the core skills taught in these primary trainings easily translated to a wide range of employment opportunities. Some providers also offered the opportunity to complete additional training in areas of personal interest, typically through another educational provider that they worked with participants to identify.

Vocational training introduced LARCA program participants to the in-demand fields of healthcare, construction, and green technology, with different providers offering different types of training. Some providers focused on one area of study. For example, YO! Watts provided trainings solely in the field of healthcare. Others offered a range of program areas. YPI San Fernando offered programs in construction, conservation, healthcare, and child development. Exhibit IV-I describes each provider's vocational training program, indicating the organization that provided the training and the type of training program it offered.

Exhibit IV-1: Vocational Training Providers and the Types of Training and Training Fields they Offered to LARCA Participants, by LARCA Provider

LARCA Provider	Primary Vocational Training Provider(s)	Type(s) of Training Program(s)
CRCD	Los Angeles Trade-Technical College (LATTC)	LATTC construction and carpentry class; some green building topics covered
LA Conservation Corps	Los Angeles Conservation Corps	Green construction and conservation training
YO! Boyle Heights	East Los Angeles College	Health Information Technology training, other health-related trainings
YO! Watts	Proprietary school, Los Angeles Unified School District (LAUSD) adult schools, Los Angeles community colleges, and state colleges	CNA training, alternative health trainings for those with academic credentials
YPI San Fernando	Los Angeles community colleges and a proprietary school	Range of programs in construction, conservation, and healthcare plus child development and culinary arts
YPI Pico Union	Los Angeles community colleges and LAUSD occupational centers	Range of programs in health, automotive, conservation, and construction

SOURCE: LARCA Implementation Study Interviews

Postsecondary College Placement

In addition to offering primary vocational training programs, LARCA providers encouraged program participants to pursue additional postsecondary courses. These included more

advanced training courses and coursework leading to an Associate's or Bachelor's degree. To pursue this additional training and education, program participants may have enrolled in training provided by any of the types of training providers mentioned above, but often would have enrolled in Los Angeles community colleges or public or private four-year colleges or universities. The emphasis on placement into postsecondary education and training, and its associated focus on long-term outcomes for participants, increased in importance over the life of the program. Specifically, partway through implementation of the program, EWDD began encouraging providers to promote additional enrollment in vocational training or postsecondary education, to further help develop participants' career readiness and strengthen their long-term employability. To assist with these placements, all providers helped participants complete college applications and financial aid forms, and all but one organized college visits for participants. Most providers also operated at least one LARCA education or training component on a local college campus. Provider staff members explained that holding events on college campuses offered participants valuable exposure to college environments, allowing them to become more comfortable with the concept of higher education. Several providers also held college readiness classes, which covered topics like accessing financial aid and obtaining letters of recommendation.

Certificates

LARCA program participants were given the opportunity to earn various types of industry-recognized certificates throughout their vocational training, such as an Occupational Safety and Health Administration (OSHA) safety certificate.[32] Additionally, across providers, completion of vocational training often resulted in some form of certificate or degree; among these were certificates in the Home Builders Institute Pre-Apprenticeship Certificate Training (HBI-PACT), Certified Nursing Assistant (CNA), Phlebotomy, Preschool Associate Teacher, and Auto and Related Technology-Adjunct: Tune-up. Participants could earn additional certificates or degrees upon completion of postsecondary education. Exhibit IV-2 describes the rate at which LARCA participants received a variety of certificates and shows that overall, about one-third of program participants earned at least one of these industry-recognized certificates.

[32] Participants typically earned the OSHA-10 Certificate.

Exhibit IV-2: Industry Recognized Certificates Received by LARCA Program Participants

Type of Certificate	Program
HBI-PACT (%)	7.2
OSHA (%)	6.1
CNA (%)	10.1
Other certificates (%)	30.1
Earned at least one certificate (%)	33.1

SOURCE: LARCA Program MIS Data

NOTES: Percentages are based on the portion of the full program group sample identified in the LARCA program MIS (N=1,056). Participants may have earned more than one of the certifications in the first five rows.

Impacts of LARCA Services on Training and Postsecondary Education

The impact analysis looks at the LARCA program's influence on program group members' vocational training and postsecondary education outcomes, considering enrollment in and credits earned at LACCD colleges. The following sections look at the data source and its limitations and the impacts of the LARCA program on both the full sample and key subgroups of interest.

Source and Limitations of the Data

The study team collected administrative data from the Los Angeles Community College District (LACCD), which includes records from nine community colleges in the greater Los Angeles area, many of which partnered with LARCA program providers and served the same geographic areas as the providers.[33] LACCD provided data for the full study sample with information grouped by term (i.e., winter, summer, fall and spring) of enrollment, from the fall term of 2000 to the fall term of 2015. The data covered enrollments in credit and non-credit classes; credits earned and credits attempted; unsuccessful enrollment (which might occur if an individual applied to an LACCD college but never enrolled or enrolled but did not continue enrollment past the penalty drop date); and credential attainment.

The data have several limitations that affected how the study team conducted and interpreted the impact analysis.

[33] LACCD includes the following nine colleges: East Los Angeles College, Los Angeles City College, Los Angeles Harbor College, Los Angeles Mission College, Los Angeles Pierce College, Los Angeles Southwest College, Los Angeles Trade-Technical College, Los Angeles Valley College, and West Los Angeles College.

- The LACCD data were reported by term but term dates varied slightly by college and had gaps in between them; thus, random assignment may have fallen in-between terms. To correct for this possibility, the study team used the LACCD district calendar for each school year to standardize term dates and to identify the first full term after each participants' date of random assignment. Impacts were then based on outcomes for terms occurring after the term (or interim period) in which a participant was randomly assigned.

- Because participants were randomly assigned up through October 2014 and the data provided by LACCD only include records up through the fall term of 2015, the study team had more data for participants who enrolled in the study earlier than it did for participants that enrolled later. As a result, the impact analyses for up to one year after random assignment (technically the first four terms after the term of random assignment) includes the full sample (N=2,078) while the impact analyses for up to two years after random assignment includes only about half of the full sample (N=1,041).

- Data on credential attainment (i.e., certificates and degrees) showed that only four individuals received credentials. Since the numbers of earned credentials tracked by EWDD in the program's MIS was considerably higher, either LACCD did not track these same credentials or many participants earned their credentials through another type of institution. Either way, the numbers in the LACCD data were too small to use to draw meaningful conclusions, so the study team did not include credential attainment from LACCD colleges in the impact analysis.

- The data used in the impact study do not include information on all postsecondary training or education that program or control group members may have enrolled in; they only include outcomes for study participants at the nine LACCD colleges. This limitation does not mean these colleges were not a suitable group of institutions to examine: EWDD had a strong partnership with LACCD (LACCD was a named supporter of the WIF grant); many of the individual providers had partnerships with local LACCD colleges; and these nine community colleges serve the neighborhoods in which LARCA participants tended to live and go to school—all which means that both program and control group participants had easy access to and likely knew about these institutions. However, they do not comprise the full range of institutions that study participants accessed. As discussed above, some LARCA providers partnered with other types of institutions such as proprietary training programs or referred participants to colleges other than the LACCD colleges. Control group members also may have found their way to some of these other types of institutions. Therefore, it is important to note that the impact analysis likely under-reports both training and postsecondary education by both program and control group members.

Impacts for the Full Sample

To determine the impact of LARCA participation on LACCD training and postsecondary education outcomes, the analysis compared average outcomes for program and control group members on two confirmatory measures: successful enrollment in LACCD courses (including credit and non-credit courses) and credit completion (including credits earned and attempted). The analysis also explored unsuccessful enrollment (including attempted but failed enrollment) in LACCD courses as well as aspects of enrollment such as why types of courses participants enrolled in (e.g., credit vs. non-credit) as well as credits attempted and credit success rate. The study team conducted these analyses at one and two years after random assignment and the results can be seen in Exhibit IV-3.

As can be seen in Exhibit IV-3, participation in the LARCA program had significant impacts on enrollment at LACCD colleges for program group members.[34] Within one year of random assignment, nearly 27 percent of program group members enrolled in LACCD courses as compared to about 17 percent of control group members. This nearly 10-percentage-point difference was statistically significant and increased to a 16-percentage-point difference by the second year after random assignment. The differences between the program and control groups were also significant for enrollment in both credit and non-credit courses within both one and two years after random assignment.

The study also found that LARCA had a significant impact on the credits that participants attempted and earned. Within one year following random assignment, program group members attempted 0.5 more credits than control group members, on average, and earned 0.3 more credits, on average, than control group members. However, after two years following RA, program group members no longer earned more credits than control group members, even though they did attempt more. Also notable was that the credit success rate was not significantly better for the program group as compared to the control group.

[34] The study team observed some provider-level variation in postsecondary enrollment, which was likely related to different levels of partnerships with LACCD colleges by the different providers, i.e., the fact that some colleges referred participants to LACCD colleges more than others. Limited sample sizes prohibited further analysis but this variation may be a topic of interest in additional research.

Exhibit IV-3: Impact of LARCA on LACCD Enrollment and Credit Completion

Characteristics	Program	Control	Difference
Within one year of RA			
Successful enrollment			
Enrolled in any course (%)	26.7	16.9	9.8***
Enrollment in a credit-bearing course (%)	19.9	13.5	6.4***
Enrollment in a non-credit course (%)	11.0	5.2	5.7***
Unsuccessful enrollment			
Applied but did not enroll (%)	4.1	3.7	0.5
Did not stay enrolled past the drop date (%)	7.2	4.6	2.7**
Credit completion			
Mean credits earned (#)	0.6	0.3	0.3**
Mean of credits attempted (#)	1.1	0.6	0.5**
Credit success rate (credits earned/attempted)[a] (%)	57.7	50.9	6.8
Within two years of RA			
Successful enrollment			
Enrolled in any course (%)	40.0	24.0	16.0***
Enrollment in a credit-bearing course (%)	31.1	18.9	12.3***
Enrollment in a non-credit course (%)	19.9	10.5	9.4***
Unsuccessful enrollment			
Applied but did not enroll (%)	6.4	6.2	0.2
Did not stay enrolled past the drop date (%)	14.3	8.3	5.9**
Credit completion			
Mean credits earned (#)	1.4	0.9	0.5
Mean of credits attempted (#)	2.9	1.8	1.1**
Credit success rate (credits earned/attempted)[a] (%)	50.9	46.0	4.9

SOURCE: LACCD student level data.

NOTES: Within one year of RA, estimates were calculated using the full study sample: N=1,066 (program) and N=1,012 (control). Within two years of RA, estimates are calculated using study participants for whom the study had two full years of data: N=533 (program) and N=504 (control).

[a]This is a conditional outcome, with the results restricted to those who had attempted credits (N = 235 in year one and N=220 in year two) in the relevant period. Therefore, the random assignment design does not ensure equivalence in baseline characteristics between the program and control groups, and differences in outcomes between the groups are only suggestive of true estimates of impacts.

*/**/*** The difference between the program and control groups is statistically significant at the .05/.01/.001 level

The study team also explored the LARCA program's impact on the rate of unsuccessful enrollment for program group members. The study shows that LARCA program group had a higher dropout rate than the control group. Specifically, about three percentage points more program group members than control group members at one year after random assignment and about six percentage points more at two years after random assignment failed to stay enrolled after the penalty drop date. One explanation for this result is that the control group members who did enroll were a more motivated group since they did so without the help of the LARCA program. Whatever the cause, the higher dropout rate for program group members combined with the earlier finding that LARCA had no impact on the credit completion rate suggests that providers could improve outcomes for participants by focusing more on student success and improving the rate at which youth stay enrolled and earn the credits for courses in which they initially enrolled.

Impacts for Key Subgroups

To further explore the extent of LARCA's impacts on postsecondary education outcomes, the study team also examined impacts by the key subgroups described in Chapter I: age, gender, ethnicity, prior employment history, timing of random assignment (early versus late), and educational background (i.e., below the median or at or above the median credits earned in LAUSD schools prior to the year of RA). Exhibits IV-4a and IV-4b present results for these subgroup analyses. Numbers in the exhibits represent impact estimates—that is the difference between the mean outcomes for the program group compared to the mean outcomes of the control group for each subgroup listed. The study team also formally tested whether the difference in impacts between subgroups within a category was statistically significant. There were two findings of interest.

First, while impacts for each subgroup nearly all align with the impacts for the full sample (i.e., the LARCA program improved the rate of enrollment and increased the number of credits earned by LARCA program participants in LACCD colleges), this was not true for participants who enrolled later in the period of enrollment. The differences between the program and control groups for this subgroup were not significant for any measure related to postsecondary education. One reason for this finding may be that postsecondary enrollment occurs later in the sequence of services—after completion of secondary education and some initial training—and thus the period of assessment is too short. Other possible reasons why there might not be impacts on enrollment and credit attainment for this subgroup could be that the increasing numbers of participants taxed staff capacity, recruitment pressures lowered enrollment standards, or the programs experienced decreased effectiveness due to the winding-down of the program. This finding is interesting because it runs contrary to the greater emphasis on postsecondary enrollment that EWDD implemented later in the program and suggests an area for further research.

Exhibit IV-4a: Impact of LARCA on LACCD Outcomes for Demographically-Defined Subgroups[a]

	Age		Gender		Ethnicity	
	16-21	22-24	Male	Female	Hispanic	Non-Hispanic
Within one year of RA[b]						
Successful enrollment						
Enrollment in any course (%)	7.4***†	15.9***	13.7***†	5.7*	10.0***	6.1
Enrollment in a credit-bearing course (%)	4.3**†	10.3***	8.1***	3.8	5.1**	7.0*
Enrolled in a non-credit course (%)	5.7**	8.6**	9.3***	4.0*	7.3***	2.3
Unsuccessful enrollment						
Applied but did not enroll (%)	0.6	0.2	0.0	1.4	1.2	-0.4
Did not stay enrolled past the drop date (%)	2.3*	3.8	4.0**	1.1	2.2	4.2
Credit completion						
Mean credits earned (#)	0.2†	0.6**	0.4***	0.2	0.2*	0.3*
Mean credits attempted (#)	0.3*†	1.1***	0.6***	0.4*	0.5**	0.5
Credit success rate (credits earned/attempted)[c] (%)	6.4	9.7	14.4	-0.8	4.0	16.0
Within two years of RA[b]						
Successful enrollment						
Enrollment in any course (%)	14.7***	19.2***	19.2***	13.2***	17.4***	10.1
Enrollment in a credit-bearing course (%)	7.7**	14.3**	12.7***	6.7*	9.0**	9.6*
Enrolled in a non-credit course (%)	11.9***	13.1**	12.8**	11.9**	14.9***	2.6
Unsuccessful enrollment						
Applied but did not enroll (%)	0.1	0.1	1.5	-1.2	0.9	-0.1
Did not stay enrolled past the drop date (%)	4.6*	9.9*	6.2*	5.8*	6.6**	5.1

	Age		Gender		Ethnicity	
	16-21	22-24	Male	Female	Hispanic	Non-Hispanic
Credit completion						
Mean credits earned (#)	0.4	0.8	0.5	0.5	0.4	0.6
Mean credits attempted (#)	0.8	2.1*	1.0	1.2*	1.0*	0.8
Credit success rate (credits earned/attempted)[c] (%)	4.1	6.7	15.1	-3.2	0.0	0.2

SOURCE: LACCD student level data.

NOTES: Numbers in the exhibit represent the impact estimates— that is, the difference within each subgroup between the mean value for the program group versus the control group. A positive number denotes that the mean value is higher for the program group than for the control group. A negative number denotes that the mean value is higher for the control group.

[a]Subgroups are described in Chapter I. Sample sizes for each calculation can be found in Exhibit B-3a in Appendix B.

[b]Years before or after random assignment are defined as the four-quarter intervals before or after the quarter of random assignment.

[c]This is a conditional outcome, with the results restricted to those who had attempted credits (N = 235 in year one and N=220 in year two) in the relevant period. Therefore, the random assignment design does not ensure equivalence in baseline characteristics between the program and control groups, and differences in outcomes between the groups are only suggestive of true estimates of impacts.

*/**/*** The difference between the program and control groups is statistically significant at the .05/.01/.001 level.

†The difference in the impact of LARCA between subgroups is statistically significant at the .05 level (the symbol is placed by the impact estimate of the first group of the subgroup pair if significant).

Exhibit IV-4b: Impact of LARCA on LACCD Outcomes for Other Subgroups[a]

	Employment History		Timing of RA		Educational Background	
	Employed	Not Employed	Early	Late[C]	Below Median	At/Above Median
Within one year of RA[b]						
Successful enrollment						
Enrollment in any course (%)	12.1***	7.9**	14.7***†	4.1	7.2**	11.8***
Enrollment in a credit-bearing course (%)	7.9***	4.7**	9.7***†	1.8	5.4***	7.1*
Enrolled in a non-credit course (%)	7.5**	5.7*	9.8***†	2.9	5.8*	7.3**
Unsuccessful enrollment						
Applied but did not enroll (%)	-0.6	1.5	0.0	1.0	-0.5	1.7
Did not stay enrolled past the drop date (%)	3.9*	0.3	3.1*	2.3	3.9**	2.2
Credit completion						
Mean credits earned (#)	0.4	0.2	0.4**	0.2	0.2*	0.3
Mean credits attempted (#)	0.9***	0.3	0.8***†	0.2	0.4*	0.6*
Credit success rate (credits earned/attempted)[d] (%)	0.0	0.1	9.3	4.5	14.8	8.4
Within two years of RA[b]						
Successful enrollment						
Enrollment in any course (%)	17.4***	14.3***	16.0***	--	12.2**	20.4***
Enrollment in a credit-bearing course (%)	12.5***	7.7**	9.4***	--	9.2**	12.2**
Enrolled in a non-credit course (%)	13.5***	10.9**	12.3***	--	10.6**	15.0***
Unsuccessful enrollment						
Applied but did not enroll (%)	-1.3	2.2	0.2	--	-0.7	2.0
Did not stay enrolled past the drop date (%)	6.4	5.6*	5.9**	--	9.2*	4.4

	Employment History		Timing of RA		Educational Background	
	Employed	Not Employed	Early	Late[c]	Below Median	At/Above Median
Credit completion						
Mean credits earned (#)	0.8	0.4	0.5	--	0.6**	0.6
Mean credits attempted (#)	1.7**	0.7	1.1**	--	1.4**	1.2
Credit success rate (credits earned/attempted)[d] (%)	2.7	0.1	4.9	--	7.2	7.6

SOURCE: LACCD student level data.

NOTES: Numbers in the exhibit represent the impact estimates— that is, the difference within each subgroup between the mean value for the program group versus the control group. A positive number denotes that the mean value is higher for the program group than for the control group. A negative number denotes that the mean value is higher for the control group.

[a]Subgroups are described in Chapter I. Sample sizes for each calculation can be found in Exhibit B-3b in Appendix B.

[b]Years before or after random assignment are defined as the four-quarter intervals before or after the quarter of random assignment.

[c]Data are not available for the "late" enrolled subgroup for findings within two years of RA due to the reduced sample size for this period of analysis.

[d]This is a conditional outcome, with the results restricted to those who had attempted credits (N = 235 in year one and N=220 in year two) in the relevant period. Therefore, the random assignment design does not ensure equivalence in baseline characteristics between the program and control groups, and differences in outcomes between the groups are only suggestive of true estimates of impacts.

*/**/*** The difference between the program and control groups is statistically significant at the .05/.01/.001 level.

†The difference in the impact of LARCA between subgroups is statistically significant at the .05 level (the symbol is placed by the impact estimate of the first group of the subgroup pair if significant).

Second, the analysis shows that within one year of RA, the impact of the LARCA program on LACCD enrollment and credit attainment was greater for some subgroups than others. The impacts on enrollment (overall and in both types of courses) were greater for older youth, males and those enrolled earlier in the program than they were for younger youth, females, and those enrolled later in the program. Likewise, the impacts on credits earned were greater for older youth as compared to younger youth. These findings suggest that that it could be more beneficial to target LARCA or LARCA-like services towards the groups showing the largest impacts. Looked at another way, these findings suggest that the groups showing lesser impacts may need additional supports in programs designed to encourage greater involvement in training and post-secondary education

Summary and Conclusion

This chapter examined the LARCA program's impact on LACCD college enrollment, credit completion, and unsuccessful enrollment. The analysis found that LARCA program participants enrolled more often in LACCD colleges than control group members at both one and two years from random assignment. The analysis also found that the program increased enrollment for some subgroups more than others; these subgroups included older youth, males, and those enrolled in the earlier half of the enrollment period. In this regard, the LARCA program succeeded in one of its key goals – increasing postsecondary enrollment. Forming partnerships with postsecondary educational institutions and then either requiring or encouraging postsecondary education enrollment clearly paid off, even with a population that might not otherwise be expected to be college-bound.

The analysis shows that the program was also somewhat successful in getting participants through postsecondary education coursework. The program group had a higher credit completion rate than the control group within one year of random assignment. Also, older youth as compared to younger youth did better with regard to credit completion. While completing credits is not the same as earning a certificate or a degree, it is an accomplishment and may very well translate into additional benefits to these youth later in their lives; it can lead to additional educational accomplishments and eventual improvements in employment and earnings. Certainly, the LARCA program moved participants along a career pathway.

While LARCA's success in improving postsecondary education outcomes should be emphasized, it needs to be viewed in context with the other findings. The finding that control group members, once they enrolled in LACCD courses, stayed enrolled at a higher rate than program group members deserves attention. Although LARCA's performance on this outcome may be related in part to its success (as discussed above, program group members attempted more credits than control group members and thus had a greater risk of failing to complete them) it nevertheless suggests ways in which LARCA could have improved its impact. Providing additional help for participants to stay enrolled and support for them in completing these courses is one way that staff members may have been able to further improve the observed impacts. It may have been beneficial as well to consider ways to more effectively identify who

should enroll in LACCD courses and what courses to enroll in; enrolling in courses that are too difficult to complete and then failing or dropping them can be detrimental to a participant's higher education career and self-confidence.

The analysis also raises a question: why did enrollment and credit completion drop off considerably for those enrolled in the second half of the program? The study team has suggested possible reasons for this observation, but it may be important to investigate further the extent to which the drop-off in impact was related to features of program design as opposed to limitations of implementation and measurement.

Finally, all the findings reported in this chapter should be interpreted in light of the fact that the analysis considers only LACCD data. The study team was not able to access other types of postsecondary education data in a way that would track both program and control group members. Some providers worked with institutions other than LACCD colleges and thus the findings reported here for postsecondary education enrollment and credit completion likely under-report the true levels of postsecondary training and education for both the program group and the control group.

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V. Employment Impacts

The ultimate objective of the LARCA program was to get youth employed and keep them employed in jobs along a career pathway. To meet this objective, providers offered participants the many services described in prior chapters. The work readiness services discussed in Chapter II were designed to improve participants' "soft" skills and prepare them for the job search process. The secondary education services discussed in Chapter III were critical for employment success as youth in Los Angeles without a high school diploma have lower employment rates, hourly wages, and overall lifetime earnings than those with high school-equivalent education (Dickson et al., 2009). The training and postsecondary education services discussed in Chapter IV positioned participants for employment opportunities with greater earning potential. This chapter discusses the impacts of these services (and the additional employment-related services described in this chapter) on LARCA participants' employment.

Key Findings

- **Many program group members received employment services from the LARCA program.** Around 41 percent of the program group received paid work experiences provided or arranged by the LARCA program. This service likely contributed to the relative employment stability of program group members. Program group members also participated in work readiness training and took advantage of employment assistance services offered by the program.
- **Program participants fared slightly worse in employment outcomes than control group members.** Within one year of random assignment, program group members were less likely to be employed than control group members, although their total quarters employed and total earnings for this period were comparable. Within two years of random assignment, program group members were no less likely to be employed than control group members, but they did earn less.
- **Outcomes for key subgroups mirrored those for the full sample and impacts did not differ between subgroup pairs.** Consistent with the findings for the full sample, the subgroup analysis indicates that the program group fared worse than the control group in terms of employment and earnings-related outcomes across nearly all subgroups and both within one year of random assignment and within two years of random assignment. Program impacts did not differ between subgroups within a category.
- **LARCA's long-term impacts on employment cannot be fully assessed, given the limited timeframe of the analysis**. The study's lack of impacts is somewhat expected, given that many LARCA participants would forgo employment, in the

short-term, to participate in the program's education and training services. These negative impacts may even have been mitigated through paid work experience and employment assistance. Continued examination of program outcomes over time is needed to determine if long-term employment outcomes improve for LARCA participants following completion of education or training.

Overview of LARCA Employment Services

In addition to the work readiness training discussed in Chapter I, the LARCA program provided opportunities for paid work experience and employment search and placement services.

Work Experience

All six providers offered paid work experience. Work experienced served two functions: 1) to provide participants with hands-on and related experience to help build their resumes and 2) to give participants a source of income while in the program. The implementation of the work experience component of the program varied by site and largely depended on the relationships with employers that providers had established prior to the beginning of LARCA. As described below, some providers (e.g., LA Conservation Corps) provided employment to program participants directly whereas others (e.g., YO! Watts) used partnering employers to provide work experience. Despite reported challenges in establishing work experience programs, 41 percent of all program participants received paid work experience through their providers.

Establishing work experience opportunities was easier for the providers that offered paid work experience directly. For example, LA Conservation Corps designed the work experience to be an integral component of its vocational training program and offered participants jobs working on city projects, like community gardening or river revitalization, that it was already involved in.

Employment Services – Work Experience

Among the 1,066 program participants, 433 (41 percent) received paid work experience through their provider.

Providers that partnered with employers to offer work experience had more challenges. Uptake of paid work experience opportunities was low for these providers, and the experience was often less central to the providers' program designs—perhaps because the providers had difficulty convincing employers to participate.

Employment Placement Services

The original LARCA program design emphasized employment placement services as the final program element. These services included finding employment through internet searching, WIA YouthSource visits, job fairs, and provider connections following completion of secondary schooling or vocational training. As time went on, most LARCA providers—encouraged by

EWDD—began to shift towards a model that gave equal emphasis to employment services and postsecondary education. Since most providers began encouraging postsecondary education, they had less need for traditional job search and placement services than originally planned. However, even these providers still helped participants find part-time jobs, often unrelated to their vocational training, so that they could earn money while in school. For many program participants, concurrent placement in postsecondary education and employment became the goal. Participants enrolled with YO! Watts were exceptions because this provider strongly emphasized finding training-related employment for participants instead of encouraging them to pursue postsecondary education.

Impacts of LARCA Services on Employment

The impact analysis examined the LARCA program's influence on participants' employment, earnings, and UI benefits following random assignment. The subsequent sections discuss the source of the data used for the analysis and the limitations of those data, the employment-related findings of the impact study, and the analysis conducted on participant subgroups.

Data Source and Limitations

The study team obtained wage and unemployment insurance (UI) data from California's Employment Development Department (EDD). The data included quarterly earnings and UI claims data from the first quarter of 2011 through the first quarter of 2016.[35] Out of the full sample of 2,078 study participants, EDD provided records for 1,992 individuals.[36] The study team re-ran the baseline analysis in Chapter II for this sub-sample and determined that program and control group members did not vary significantly on any baseline characteristics.

Due to the timing of the end of the study relative to program implementation and lags in the availability of employment data, the study team was only able to obtain EDD data through the first quarter of 2016. As a result, the study looked at employment impacts for up to one year after random assignment for all 1,992 members in the employment data sub-sample, but only 1,247 of these individuals were included in the analysis of employment impacts at two years past RA. A second baseline equivalency test of just study members with two complete years of employment data indicate that the program and control groups did not notably differ in any baseline characteristics.

One minor limitation of the EDD data is it does not include certain categories of employment, such as self-employment, or employment records from outside the state of California. As the LARCA program was based in Los Angeles, the assumption is that most study participants would

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[35] All data in units of dollars have been adjusted to represent 2012-equivalent dollars.

[36] EDD reviewed consent forms for all study participants. Their criteria to determine participant consent was more stringent than for other administrative data agencies from which the study team acquired data, resulting in the removal of 86 study participants and leading to the final number of 1,992 in the EDD sub-sample.

find employment locally or at least within the state and most were not seeking self-employment. To the extent that study participants found employment outside of California or sought non-reported forms of employment, the rate of this occurrence should not differ between program and control group members, avoiding biased estimates in the impact analysis. Nevertheless, it should be noted that these situations are not captured in the analysis.

Impacts for the Full Sample

As shown Exhibit V-1, the impact analysis found that the LARCA program had no positive impacts on employment or earnings within one or two years following random assignment (RA). There were some significant differences between program and control group outcomes on some measures, but the differences were all negative, meaning that control group members fared slightly better than program group members in employment. Program group members were employed for fewer quarters than control group members and had lower total earnings in the two years following random assignment. A slightly larger percentage of program group members received UI benefits during the first year following random assignment. This indicates that a small number of program group members who were unemployed and eligible to receive UI benefits were able to supplement earnings through this financial assistance program.

Exhibit V-1: Impact of LARCA on Employment Outcomes

	Program	Control	Difference
Within one year of RA			
Ever employed (%)	54.0	60.6	-6.6**
Quarters employed (#)	1.4	1.5	-0.1
Total earnings[a] ($)	3,547	3,974	-427
Ever received UI benefits (%)	2.4	1.1	1.2*
Within two years of RA			
Ever employed (%)	72.9	76.1	-3.2
Quarters employed (#)	3.1	3.4	-0.4*
Total earnings[a] ($)	8,568	10,405	-1,837*
Ever received UI benefits (%)	4.5	4.7	-0.2

SOURCE: California EDD wage and UI data

NOTES: Within one year of RA, estimates were calculated using the full EDD sub-sample: N=1,021 (program) and N=971 (control). Within two years of RA, estimates are calculated using the full EDD sub-sample for those study participants for whom the study had two full years of data: N=649 (program) and N=598 (control).

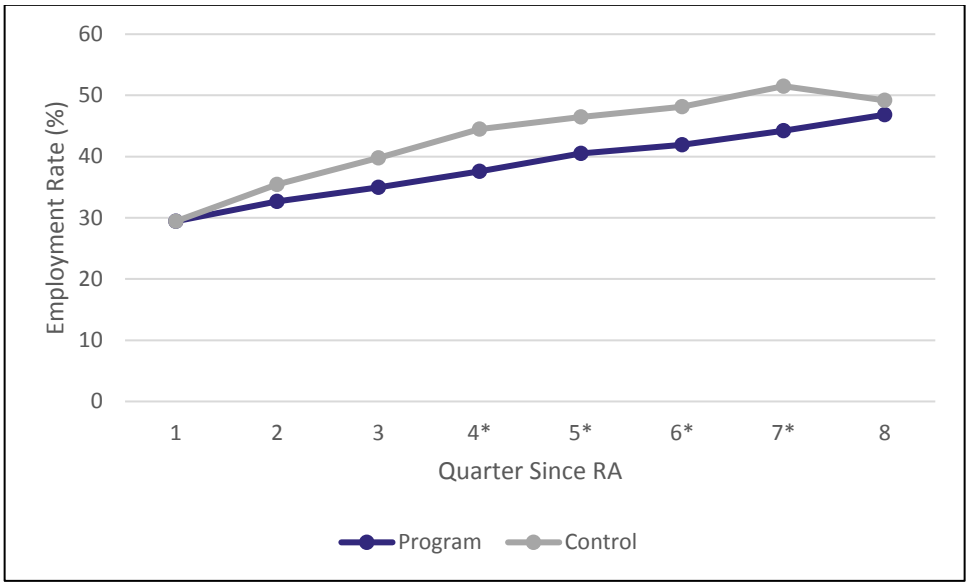
[a]Earnings have been adjusted to reflect 2012 dollar values.

*/**/*** The difference between the program and control groups is statistically significant at the .05/.01/.001 level

To further explore the finding that control group members fared slightly better than program group members when it came to employment and earnings, the study team conducted a

quarter-by-quarter comparison between the program and control groups. The results of this analysis are illustrated in Exhibits V-2 and V-3.

Exhibit V-2: Employment Rate After Random Assignment, by Quarter



SOURCE: California EDD wage and UI data

NOTES: Only participants with two years of employment data are included.

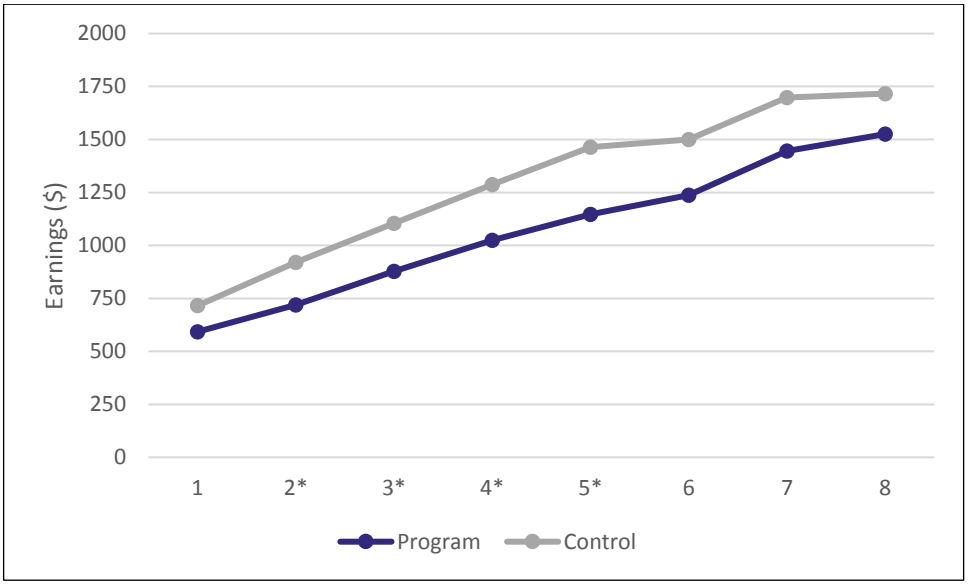
*/**/*** The difference between the program and control groups is statistically significant at the .05/.01/.001 level

Exhibit V-2 shows that the employment rate for the program and control groups did not differ significantly in the first three quarters following RA but that the control group had higher employment rates in the fourth, sixth, and seventh quarters following RA. Given the comprehensive and intensive services provided by the LARCA program, lower employment rates were expected in the earlier quarters for the program group (Trause & Weeks, 2012). One reason there may not be significant impacts in these quarters could be due to the paid work experience provided by the program or perhaps other employment assistance the program provided in helping participants find part time work while otherwise pursuing their educations. By the eighth quarter, LARCA participants and control group members no longer had different employment rates—potentially indicating that employment rates for the program group could exceed those for the control group given more time. However, with no data for any quarters beyond the eighth following RA, it is impossible to determine if the program group might have better employment outcomes in the long term.

The quarter-by-quarter analysis of the earnings of program participants and control group members (see Exhibit V-3) shows that program participants earned slightly less than control group participants in every quarter following RA, but this difference was significant in only four of the eight quarters. The gap in earnings appeared to narrow in the final three (sixth through

eighth) quarters after RA, allowing for the possibility of LARCA participants making up the earnings shortfall in the longer term.

Exhibit V-3: Earnings After Random Assignment, by Quarter



SOURCE: California EDD wage and UI data

NOTES: Only participants with two years of employment data are included. Earnings have been adjusted to reflect 2012 dollar values.

*/**/*** The difference between the program and control groups is statistically significant at the .05/.01/.001 level

Impacts for Key Subgroups

The study team also conducted exploratory analyses of the key subgroups discussed in Chapter I: those distinguished on the basis of age, gender, ethnicity, prior employment history, timing of RA (early versus late), and educational background at the time of RA (i.e., below the median or at or above the median credits earned in LAUSD schools prior to the year of RA). Exhibits V-4a and V-4b present results for these subgroup analyses. Numbers in the exhibits represent impact estimates—that is the difference between the average response of the program group compared to the control group for each subgroup. The study team also formally tested whether the difference in impacts between subgroups within a category was statistically significant.

Consistent with the findings for the full sample, the subgroup analysis indicates that the program group fared worse than the control group in terms of employment and earnings-related outcomes across nearly all subgroups and both within one year of random assignment and within two years of random assignment. In many cases, individual subgroup impact estimates were significant but also negative and even when they were not significant, the direction of the estimate still mirrors what was seen in the analysis of the full sample. The analysis also found that program impacts did not differ between subgroups within a category.

Exhibit V-4a: Impact of LARCA on Employment Outcomes for Demographically-Defined Subgroups[a]

	Age		Gender		Ethnicity	
	16-21	22-24	Male	Female	Hispanic	Non-Hispanic
Within one year of RA						
Ever employed (%)	-8.3**	-1.4	-7.6*	-6.3*	-4.9	-14.6**
Quarters employed (#)	-0.1	0.0	-0.2	-0.1	-0.1	-0.1
Total earnings[b] ($)	-343	-750	-577	-318	-495	161
Ever received UI benefits (%)	0.9	2.2	0.6	1.8*	1.8**	0.6
Within two years of RA						
Ever employed (%)	-2.4	-5.4	-4.6	-1.9	-1.6	-10.9
Quarters employed (#)	-0.3	-0.4	-0.4	-0.4	-0.4	-0.5
Total earnings[b] ($)	-1,320	-3,211	-1,302	-2,630**	-2,254*	-461
Ever received UI benefits (%)	0.7	-2.9	-0.4	-0.1	-0.4	0.8

SOURCE: California EDD wage and UI data

NOTES: Numbers in the exhibit represent the impact estimates— that is, the difference within each subgroup between the incidence or mean value for the program group versus the control group. A positive number denotes that the incidence or mean value is higher for the program group than for the control group. A negative number denotes that the incidence or mean value is higher for the control group.

[a]Subgroup categories are described in Chapter I. Sample sizes for each calculation can be found in Exhibit B-3a in Appendix B.

[b]Earnings have been adjusted to reflect 2012 dollar values.

*/**/*** The difference between the program and control groups is statistically significant at the .05/.01/.001 level

†The difference in the impact of LARCA between subgroups is statistically significant at the .05 level (the symbol is placed by the impact estimate of the first group of the subgroup pair if significant).

Exhibit V-4b: Impact of LARCA on Employment Outcomes for Other Subgroups[a]

	Employment History		Timing of RA		Educational Background	
	Not Employed	Employed	Early	Late	Below Median	At or Above Median
Within one year of RA						
Ever employed (%)	-5.9*	-7.1*	-5.3	-7.9*	-2.7	-10.2**
Quarters employed (#)	-0.1	-0.1	-0.2	-0.1	0.0	-0.2*
Total earnings[b] ($)	-408	-387	-912*	54	-154	-801
Ever received UI benefits (%)	0.0	2.8*	0.5	1.9*	1.1	0.2
Within two years of RA						
Ever employed (%)	-3.8	-1.9	-2.3	-7.3	-4.9	-0.8
Quarters employed (#)	-0.3	-0.4	-0.4*	-0.2	-0.2	-0.4
Total earnings[b] ($)	-1291*	-2313	-2,043*	-1,079	-1520	-1930
Ever received UI benefits (%)	-0.7	0.6	-0.2	-0.4	0.8	-3.1

SOURCE: California EDD wage and UI data

NOTES: Numbers in the exhibit represent the impact estimates— that is, the difference within each subgroup between the incidence or mean value for the program group versus the control group. A positive number denotes that the incidence or mean value is higher for the program group than for the control group. A negative number denotes that the incidence or mean value is higher for the control group.

[a]Subgroup categories are described in Chapter I. Sample sizes for each calculation can be found in Exhibit B-3b in Appendix B.

[b]Earnings have been adjusted to reflect 2012 dollar values.

*/**/*** The difference between the program and control groups is statistically significant at the .05/.01/.001 level

†The difference in the impact of LARCA between subgroups is statistically significant at the .05 level (the symbol is placed by the impact estimate of the first group of the subgroup pair if significant).

Summary and Conclusion

This chapter reviewed the employment services provided through the LARCA program and discussed the extent to which the program as a whole had any impact on participants' employment and earnings. The following are the key findings.

- **Many program group members received employment services from the LARCA program.** Around 41 percent of the program group received paid work experiences provided or arranged by the LARCA program. This service likely contributed to the relative employment stability of program group members. Program group members also participated in work readiness training and took advantage of employment assistance services offered by the program.

- **Program participants fared slightly worse in employment outcomes than control group members.** Within one year of random assignment, program group members were less likely to be employed than control group members, although their total quarters employed and total earnings for this period were comparable. Within two years of random assignment, program group members were no less likely to be employed than control group members, but they did earn less.

- **Outcomes for key subgroups mirrored those for the full sample and impacts did not differ between subgroup pairs.** Consistent with the findings for the full sample, the subgroup analysis indicates that the program group fared worse than the control group in terms of employment and earnings-related outcomes across nearly all subgroups and both within one year of random assignment and within two years of random assignment. Program impacts did not differ between subgroups within a category.

There are several possible reasons why the study team did not observe positive impacts on employment and earnings. A lack of employment impacts could be due, in part, to challenges in developing and maintaining partnerships with employers during program implementation, but the implementation study findings in the interim report do not suggest this was the case (Geckeler, 2015). Another possibility is that LARCA participants were doing what has been observed for other individuals like them: delaying their entry into the workforce while participating in a training program (Trause & Weeks, 2012). Since LARCA program services tended to last a long time (sometimes well more than a year), and involved multiple types of education and training, it is likely to have encouraged delayed workforce entry. Also, as per guidance from EWDD, the program had an increasing focus on postsecondary educational placement, sometimes in lieu of employment. In fact, an important consideration is why employment outcomes for the program group were as close to the control group as they were. Negative impacts may have been mitigated through paid work experience and employment assistance provided by the program. Also important to consider was the fact that baseline levels of employment and earnings were already quite low for both groups at baseline, as was shown in Chapter II. Overall, the focus on education in LARCA was intended to have positive impacts on employment in the long term. With these factors in mind, it is reasonable to expect

that, for many participants, the impact of LARCA participation would not show up in measurable employment outcomes for several years. In other words, the evaluation period may have simply been too short to fully assess employment impacts. A longer follow-up period is recommended if the goal is to determine if LARCA had any long-term impacts on employment.

VI: Impacts on Criminal Justice System Outcomes

Reducing involvement in the criminal justice system, such as arrests, convictions, and incarcerations, was not a stated goal of the LARCA program. Nevertheless, other studies (discussed further below) suggest that LARCA participants, as high school dropouts, were at greater risk of criminal justice system involvement than youth who had obtained a diploma, GED, or equivalent degree. There is also reason to suppose that LARCA, as a program designed to address the disengagement of dropout youth, might help to reduce arrests, convictions, and incarcerations among its participants. Due to the high financial and social costs associated with criminal justice system involvement, any impacts in this area, while unintended, would have substantial implications for society as well as for the individual participants. For these reasons, and because criminal justice data for study participants were available, the study team conducted an exploratory analysis to determine if participation in LARCA had an impact on involvement with the criminal justice system. This chapter describes the analysis and its results.

Key Findings

- **The LARCA program had no impact on program participants' rates of arrest, conviction, or incarceration in Los Angeles County jails.** Program participants were just as likely as control group members to be involved with the criminal justice system. This finding holds true at both one year and two years from random assignment (RA).
- **The LARCA program had no impacts on the types of arrest or conviction or the type of release from jail.** LARCA program participants and control group members had comparable numbers of arrests and convictions for felonies, misdemeanors, violent crimes, property crimes, drug crimes, and public order crimes in the two years following random assignment. Their terms of release from jail (i.e., release to supervision, direct discharge, or other release) were also similar.
- **For both LARCA program and control group members, the rates of involvement in the criminal justice system approximately the same two years after RA as they were two years prior to RA.** Two years after RA, about 20 percent of the program group and 22 percent of the control group had been arrested, about ten percent of both groups had been convicted of a crime, and about eight percent of the program group and seven percent of the control group had been incarcerated in a Los Angeles County jail. There were similar rates of criminal justice system involvement for both groups two years prior to RA.

- **The LARCA program's lack of impacts on criminal justice system involvement despite positive educational impacts might be due to the program not specifically targeting this area with related services.**

Background on Criminal Justice System Issues

Research strongly suggests that high school dropouts have a much greater risk of involvement with the criminal justice system than youth who have obtained a diploma, GED, or equivalent degree. For instance, one national study found that about 41 percent of inmates in State and Federal prisons and local jails in 1997 had not earned a high school diploma or a GED, compared to about 18 percent of the general population 18 or older (Harlow, 2003). A separate study found that 6.3 percent of youth between the ages of 16 and 24 who had dropped out of high school were institutionalized (including being housed in a jail, prison, or juvenile detention center) as compared to fewer than one percent of those with high school diplomas, GEDs, or higher degrees (Sum et al., 2009).

Certain types of youth without educational credentials—males and males of color—face especially high rates of involvement with the criminal justice system. One report found that "nearly 1 of every 10 young male high school dropouts was institutionalized on a given day" (Sum et al., 2009). The same study notes that black males without high school diplomas face higher incarceration rates than white, Asian, or Latino males without high school diplomas. Similarly, a Brookings Institute report found that male African Americans without a high school diploma have a "70 percent cumulative risk of imprisonment" and a higher chance of being in prison than being employed (Kearney et al., 2014).

Research also suggests that having a criminal record hinders individuals' future employment prospects. This is both because of the associated low educational attainment rates, and because of the stigma connected to having a criminal record (Raphael, 2014). A 2010 study found that out of 652 men who were surveyed seven months after release from prison, 54 percent remained unemployed and 71 percent of those who had looked for a job reported that their criminal record made the search more difficult (Visher et al., 2010).

Because the LARCA program targeted dropout youth and served significant percentages of youth of color, this body of research would suggest that high levels of criminal justice system involvement are likely for LARCA study participants. Indeed, as highlighted in Chapter II, in the two years prior to random assignment, about 20 percent of LARCA study participants had been arrested, about seven percent had been convicted of a crime, and about five percent had served time in the Los Angeles County Jail.

While it was not a stated goal of the LARCA program to influence criminal justice outcomes, the study team hypothesized that the program's emphasis on providing secondary education, postsecondary education, and employment assistance might also lead to reduced involvement in the criminal justice system. If so, the program might have significant, unanticipated social and economic benefits, including reduced harm and personal costs to crime victims and savings from reduced incarceration rates.

Impacts of LARCA Services on Criminal Justice System Outcomes

The impact analysis in this chapter examines the LARCA program's influence on participants' arrest, conviction, and incarceration rates following random assignment. The following sections discuss the data sources used and their limitations, then cover the impact study findings.

Data Sources and Limitations

The study team collected arrest and conviction records on study participants from the California Department of Justice (CA DOJ). That agency identified all arrest and conviction records for LARCA study participants, including dates of arrest, dates of conviction, and arrest and conviction types (e.g., felony, misdemeanor, violent crime, property crime, drug crime, or public order crime). The data included all historical records (e.g., an individual's very first arrest or conviction within California, including juvenile records) and any records up through February 23, 2016. In addition, through a public records act request, the study team obtained Los Angeles County jail incarceration records from the Los Angeles Sheriff's Department (LASD) for all individuals from January 2012 through February 2016.[37] The records indicate the date of jail incarceration, the length of incarceration, and the type of release (e.g., release to supervision, direct discharge, or other release) from Los Angeles County jails for all individuals 18 and older.[38]

One feature of the data is that they are limited by time frame. As noted earlier in the report, data collection occurred as late as possible within the overall Workforce Innovation Fund (WIF) grant period. This was important given that study enrollment was scheduled to occur up through October 2014. To capture a full year or more of outcome data, SPR could not collect data until early 2016. Given these constraints and the dates of enrollment, the study reports on criminal justice system outcomes for one full year from random assignment for all study participants and up to two years for a little over half of the study sample. Furthermore, in addition to being less than the full sample, due to the different sources of the administrative data and the dates the data were obtained, the numbers of study participants are different for the two-year arrest and conviction data and the two-year jail incarceration data.[39]

The data also have several limitations that affect how the study team calculated and interpreted impacts. First, because the LASD did not give SPR access to juvenile incarceration records (i.e., those for youth under 18), the rates of Los Angeles county jail incarceration reported in this chapter may undercount total incarceration rates. It is likely that some study participants had juvenile jail incarcerations. Second, while the CA DOJ data include arrest records for juveniles, there may be other forms of criminal justice system involvement for this

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[37] Due to LASD policies on jail data privacy and record keeping, the study team could not obtain jail records for periods earlier than January 2012.

[38] The LASD did not give SPR access to juvenile incarceration records.

[39] The study team conducted a baseline equivalency test of just study members with two complete years of arrest and conviction or Los Angeles county jail incarceration data and found that the means of program and control group members' baseline characteristics were not significantly different from one another.

age group, such as participation in juvenile diversion programs, that did not result in CA DOJ arrest records. Involvement in any such programs is not included in the study team's analysis. In addition, juvenile arrest records can be sealed, which means that the study team would not have had access to them. In California, as of January 1, 2015, records for certain less serious juvenile offenses are automatically sealed after an individual turns 18 (Sealing Juvenile Records, 2017). Due to these reasons, the study team may undercount criminal justice system involvement for youth under 18.

Finally, SPR removed four study participants from the jail incarceration analyses due to concerns about the validity of the jail records for these individuals. While these four study participants matched to LASD records, data indicated that they were randomly assigned into the LARCA study while they were incarcerated, which was not consistent with LARCA program enrollment policies. Before removing these study participants, SPR compared Los Angeles county jail incarceration impacts with and without these individuals and found no effect on overall jail incarceration impacts.

Impact of the LARCA Program on Criminal Justice System Outcomes

As shown below in Exhibit VI-1, the LARCA program had no significant impacts on criminal justice system outcomes for program participants. The rates of arrests and convictions within the California and the rate of incarcerations within the Los Angeles County jail system were not significantly different between program and control group members at either one year or two years out from random assignment.

SPR also conducted impact analyses on the type of arrest or conviction (i.e., felony, misdemeanor, violent crime, property crime, drug crime, or public order crime) and the terms of release from jail (i.e., release to supervision, direct discharge, or other release). The study team found that there were no significant differences between program and control group members on any of these parameters either one or two years from random assignment.

The level of involvement with the criminal justice system for both the program and control group members grew over time. For example, as displayed in Exhibit VI-1, about 13 percent of each group had been arrested within one year of random assignment, but about 20 percent of each group had been arrested within two years. Similar trends appear for conviction and incarceration rates. However, as shown in Chapter II, 19 percent of program group members and 20 percent of control group members were arrested in the two years prior to random assignment, which means that overall, the rates of criminal justice activity are relatively equal for both groups in the two years following random assignment as compared to the two years prior to random assignment.

Exhibit VI-1: Impact of LARCA on Criminal Justice System Outcomes

Criminal Justice System Involvement	Program	Control	Difference
Within one year of RA			
CA arrests (%)	12.8	13.3	-0.5
CA convictions (%)	4.7	4.9	-0.2
LA Jail admissions (%)	4.3	4.1	0.2
Within two years of RA			
CA arrests (%)	19.6	22.1	-2.5
CA convictions (%)	9.5	10.4	-0.9
LA Jail admissions (%)	7.6	7.4	0.2

SOURCE: Data on "CA arrests" and "CA convictions" come from CA DOJ. Data on "LA Jail admissions" come from LASD.

NOTES: The full sample is used for one-year CA arrests and convictions, N = 1066 (program) and N = 1012 (control). The rest of the items in the exhibit have sample sizes of less than the full sample. For one-year LA Jail admissions, N = 1065 (program) and N = 1009 (control). For two-year CA arrests and convictions, N = 612 (program) and N = 566 (control). For two-year jail admissions, N = 622 (program) and N = 571 (control).

*/**/*** The difference between the program and control groups is statistically significant at the .05/.01/.001 level

Summary and Conclusion

While EWDD did not design the LARCA program specifically to reduce participants' involvement in the criminal justice system, it was plausible to suppose that the secondary and postsecondary education and employment services that LARCA provided to dropout youth could have reduced their likelihood of getting arrested, being convicted, or serving time in jail. Nevertheless, impact analyses show no difference between the program and control group members' rates of arrests, convictions, and jail incarcerations in the one- or two-year period following random assignment. Similarly, the program had no effect on participants' types of arrest or conviction or the terms of release from jail. For both LARCA program and control group members, the rates of involvement in the criminal justice system approximately the same two years after random assignment as they were two years prior to random assignment.

Several factors could explain the lack of criminal justice impacts. Because the LARCA program did not provide any services designed specifically to address criminal justice system involvement, it would be logical to assume that such involvement would only be affected secondarily by educational or employment impacts, which were the program's actual focus. While the study team did find positive educational impacts, no employment impacts were identified. Perhaps participants would also need to be better off than members of the control group in the employment area before an associated effect on criminal justice system involvement could occur. A recent random assignment evaluation of YouthBuild, which was targeted to youth who lacked high school credentials, also found positive education and

training impacts (and some, limited employment-related impacts) but no impacts on criminal justice system outcomes (Miller et al., 2016). Together, these findings may indicate that improving educational outcomes alone may not be enough to reduce criminal justice involvement for this population.

Given that about one fifth of LARCA participants and control group members were arrested within two years of random assignment, there is a clear need for programming that reduces criminal justice involvement for similar youth. However, such programming may have to be targeted specifically to address this problem rather than relying on potential secondary benefits from educational or employment services.

VII. LARCA Program Costs and Cost-Effectiveness

The cost study, which built on the findings of the random assignment impact study, explored the costs of operating the LARCA program as seen through various lenses and then analyzed the costs in terms of the outcomes and impacts they produced. This chapter discusses the cost study and its findings in three parts. The first part outlines the overall approach to the analysis, describing the data sources used, the overall approach taken to analyzing the data, and some key limitations of this analysis. The second part describes the costs of operating the LARCA program, explaining how EWDD and the individual providers allocated and used Workforce Innovation Grant (WIF) funds and leveraged resources and how and why costs varied by provider. The third part, which is informed by findings from the impact study and the descriptive portion of the cost study, analyzes the cost-effectiveness of LARCA by examining program expenditures in relation to the educational impacts of the program.

Key Findings

- **At the system level, EWDD's system-level costs per actual participant enrolled were not much different from what the costs per participant would have been if all planned-for participants had been enrolled**. The relatively small difference between planned and actual costs per participant indicates that system-level costs are fairly fixed.
- **Providers supplemented the WIF grant by leveraging resources from community partners and other grants.** LARCA providers leveraged over $750,000 in other grants and in-kind donations from community partners, and generally did so to support delivery of key program services such as vocational training, educational services and supportive services.
- **At the provider level, costs per participant varied widely and appeared to be more related to infrastructure and relationships than to actual enrollment**. Providers with on-site WIA youth programs (which enabled them to draw on existing curricula, courses, and trained staff members to reduce start-up costs) had lower costs per participant regardless of enrollment, as did providers that were city agencies (which drew on a centralized administrative structure rather than absorbing administrative costs internally).
- **Staffing represented the main provider-level cost of operating LARCA, consistent with LARCA's intensive service model and the high-need population for which it was designed.** Salaries and fringe benefits—which allowed providers to staff the functions of program management, recruitment, case management, and employment services—accounted for over half (and in most cases nearly three-quarters) of total costs.

- **The LARCA program spent large amounts to achieve the enhanced educational outcomes enjoyed by the program group.** The study found that it cost the LARCA program over $500,000 to increase the composite educational outcome of participants (earning a secondary degree or equivalent or enrolling in postsecondary education) by every percentage point increase.
- **The cost-effectiveness analysis is constrained by availability of data, and several factors need to be taken into account when interpreting the finding that the costs required to produce a percentage point increase between the program and control group were considerable:** the cost-effectiveness study may potentially underestimate the cost of serving the control group; the cost-effectiveness study was unable to examine costs by service delivery area; a longer evaluation time frame may have led to results more favorable to LARCA; and the high costs reported in the cost-effectiveness analysis may reflect program startup costs.

Approach to the Cost Study

Using the data sources and analytic approach outlined below, the cost study sought to answer the following research questions.

- How did EWDD and the six provider organizations spend grant funds, at both the city level (for the whole system of program partners) and at the provider level?
- What resources did LARCA providers leverage to supplement the WIF grant?
- How did grant expenditures and costs per participant vary by provider and provider type?
- How cost-effective was the LARCA program compared with the Workforce Investment Act (WIA) youth and adult programs that control group members accessed?[40]

Data Sources

The analysis draws on the following types of data, as well as on the outcomes and impact findings described in earlier chapters.

- **System-level expenditure data** describe EWDD's agency-level spending on the LARCA program—that is, the costs EWDD incurred to manage the program and partnerships with other organizations and agencies that provided services to all participants, but not

[40] WIA was replaced by the Workforce Innovation and Opportunity Act (WIOA) in July of 2015. Because WIOA went into effect well after the end of study intake and nearly at the end of the grant, this report uses the term "WIA" to refer to all US DOL-funded youth and adult program services that control group members received, even if some individuals may have enrolled in these services as funded under WIOA rather than WIA.

the funds spent reimbursing providers for their expenditures. These figures come from EWDD's own expenditure reports for fiscal years 2012-2013, 2013-2014, and 2014-2015.

- **Provider-level expenditure data** describe spending by individual LARCA providers and come from grant expenditure reports completed by providers for fiscal years 2012-2013, 2013-2014, and 2014-2015. Provider-level expenditure data also come from expenditure reports for individual WIA adult and youth program providers (known locally as WorkSource and YouthSource centers) for the same fiscal years. These WIA cost data were used to assess program costs for the control group for the cost effectiveness analysis.

- **Leveraged resources data** include information on resources other than those from the WIF grant that providers used to support LARCA program costs. The study team obtained these data from EWDD's quarterly reports to the U.S. Department of Labor (US DOL) for the WIF grant, which were based on estimates of leveraged resources (both additional grants and in-kind donations) reported to EWDD by the LARCA providers from June 2014 through September 2015.

- **WIA activity data** include reports on total numbers of active participants in WIA adult and youth program services by WIA provider for program years 2012-2013, 2013-2014, and 2014-2015.

Analytic Approach

To conduct the analysis, the study team organized and modified the cost data. The first step was to group the data as presented in cost reports into the following categories: administrative staff and program service delivery staff costs (both direct and indirect); materials and supplies; partner provider services costs, including their labor and other costs; administrative/overhead; direct payments for things like supportive services, education, or training; payments to participants such as stipends or incentive payments; and leveraged resources (including grants, donations and in-kind contributions). Then, to account for inflation during the grant period, the study team standardized all amounts using the Consumer Price Index for August 2012 (the month US DOL released WIF grant funds to EWDD). The study team then analyzed the data from several different perspectives.

- The study team calculated **system-level and provider-level costs**. The analysis looked at overall costs and costs by cost categories (e.g., staffing) for EWDD and for the services that it funded that benefitted each of the providers. The analysis also looked at the provider-level costs, both in aggregate and broken out by type of provider to better understand the different costs involved in operating the program at this level.

- The study team calculated program costs **with and without leveraged resources**. The study recognizes that leveraged resources are important to include because they reflect the full set of resources used to operate the program. However, there are several reasons to report resources and costs without considering leveraged resources. First, it helps policy makers better understand the actual ways the WIF grant monies were

spent. Second, WIA cost data do not include leveraged resources and so it is important to consider only WIF funding for the cost effectiveness analysis. Third, providers did not begin reporting leveraged resources until implementation of the grant was well underway, in 2014, so leveraged funding data are not available for the full lifetime of the grant. Fourth, leveraged resources may be underreported by providers given the wide variance in the resources reported and compared to information gathered in the implementation study about program operations. Some of these limitations and the study team's responses are discussed further below.

- The study team calculated costs per participant based on both **planned enrollment and actual enrollment** in order to capture the extent to which some costs are fixed and others are marginal.

- The study team tabulated **provider-level costs overall and by type of provider.** We looked at variations such as those providers with WIA programs on-site versus those without, as well those that are city agencies versus those that are non-profit organizations.

- The study team conducted a **cost-effectiveness analysis**, which looks at the cost of creating the impacts discussed in previous chapters.

Limitations of the Analysis and Corrective Measures Taken

The data used in the analysis and the analyses themselves have several limitations that are important to consider when interpreting the results.

- LARCA enrollment began in January 2013 and participants continued receiving services as late as October 2015. However, financial data reporting periods align with the city's fiscal year, which runs from July until June, and reports are not due to EWDD until August. Due to this mismatch and the timing of the analysis, the study team was not able to obtain data for July 2015 to October 2015. This means that the financial data from EWDD on grant expenditures do not include a small portion of the program operating period and thus may underreport true program costs.

- EWDD did not begin gathering data on leveraged resources until July 2014 (based on a request to do so from the DOL as part of its grant monitoring process) and these amounts were reported to DOL on a quarterly basis, separate from EWDD's fiscal calendar (and therefore extend to September 2015, past the end of the last fiscal year for which EWDD's financial reporting for the cost study ends). Any examination of leveraged resources therefore only pertains to the period between July 2014 and September 2015, which is well into program operation. Leveraged resources reported by EWDD also did not include other programs on site like WorkSource or YouthSource

centers (i.e., WIA-funded services).[41] The chapter therefore looks at costs for providers that operated on-site WIA programs versus those without to capture how providers leveraged that program to support LARCA.

- The leveraged resources data do not appear to be consistent across providers. For example, while the implementation study noted that two providers connected program group members with internship opportunities with local hospitals and clinics, only one of them reported this activity as a leveraged resource (Geckeler et al., 2015). To account for this discrepancy, the chapter presents estimates that contain both the reported amounts of leveraged resources and an estimate of the upper bound of total funding plus leveraged resources. To calculate the upper bound estimate, the study team assumed all providers leveraged the highest share of leveraged resources reported (36% of the total sub-grant amount, by YO! Watts).

- With regards to the cost-effectiveness analysis, neither LARCA nor WIA cost data can be disaggregated by service area (e.g., spending on education, vocational training, or employment-related services). This prevents the cost study from describing how costs were spent on these key programmatic areas for LARCA. Also, for this reason, the study team conducted a cost-effectiveness study of the LARCA program, as a whole, rather than for each service area, which would have been more informative in identifying key areas of cost-effectiveness and ineffectiveness.

- The design of the cost-effectiveness analysis aligned with the intent of the LARCA program as a workforce training program. However, as LARCA implementation unfolded, the scope of the LARCA program matured to become focused on educational attainment. Acquiring costs of educational attainment through LAUSD and local community colleges may provide a more precise estimate of cost-effectiveness for educational outcomes in lieu of using overall program costs.

- Precise reporting of spending on the control group is limited. While WIA serves as a comparable and likely alternative to the LARCA program, given the screening criteria, only about one third of control group participants enrolled in a WIA program. The costs reported in the cost-effectiveness analysis reflect control group costs based on enrollment in WIA, which could underestimate the cost of providing education and training services for control group members as data do not capture costs from alternative programs or through self-funded training. Nevertheless, this is the best

[41] Five of the six providers (not YPI Pico-Union) operated WIA adult and/or youth programs, and three of the six providers (YO! Watts, YO! Boyle Heights, and YPI San Fernando) operated a WIA youth program on-site during LARCA implementation. LARCA participants were not allowed to co-enroll in the WIA youth program (although they may have enrolled in these programs after completing LARCA). However, the implementation study found that these providers did leverage some of the resources of on-site WIA youth programs such as staff time, space, and even programming such as HSET classes for LARCA participants.

available approach given the limited availability of cost data for the control group. This limitation is discussed further in the cost-effectiveness analysis section below.

LARCA Program Costs

As shown below in Exhibit VII-1, EWDD and the providers spent $10,193,778 of the WIF grant on the operation of the LARCA program between July 2012 and July 2015, yielding a cost per participant of $9,562.[42] Factoring in leveraged resources brings the total to $10,951,353, yielding a cost per participant of $10,273. The remainder of this section explores program costs and cost per participant at the system level, costs with and without leveraged resources, provider-level costs and provider-level cost per participant, types of provider-level costs, and cost per participant by type of provider.

Exhibit VII-1: Total LARCA Program Cost and Cost Per Participant

Cost Category	Total Cost	Number of Participants	Cost Per Participant
LARCA program cost	$10,193,778	1,066	$9,563
LARCA program cost, including leveraged resources	$10,951,353	1,066	$10,273

SOURCE: LARCA grant expenditure reports from EWDD for FY 2012-2013, 2013-2014, and 2014-2015 and leveraged resource reports from EWDD to US DOL from August 2014 through September 2015.

System-Level Program Costs and Cost Per Participant

As shown below in Exhibit VII-2, EWDD spent $2,319,541 (just under one-quarter of total program expenditures) on administering the LARCA program and paying for system-wide subcontracts and other services utilized by each of the providers. One of EWDD's primary costs for operating the LARCA program was for subcontracts and outside services such as the InnerSight assessment and experience (discussed in Chapter II) and the Pupil Service and Attendance (PSA) Counselors from the Los Angeles Unified School District (LAUSD) (though actual staff costs for these counselors were borne by providers). Another key cost was staff labor (both salaries and fringe benefits) for city employees with programmatic responsibilities, including overseeing program implementation, tracking performance measures, managing contracts, and managing WIF grant finances. EWDD spent smaller amounts on overhead and administration. These latter costs represent allocations from the grant for rent and office expenses (at EWDD), as well as for staff travel and materials and supplies (such as printing, copying, and binding of program materials).

[42] The total WIF grant was $12 million. However, this figure does not include either spending during the 2015-2016 fiscal year, when some participants were still accessing services and EWDD was still providing oversight, or payments to SPR for the evaluation ($900,000).

Exhibit VII-2: System-Level LARCA Program Costs and Cost-Per-Participant

System-Level (EWDD) Cost Categories	Amount
Outside Services/Subcontracts	$1,148,973
Staff Labor (Salary and Fringe)	$1,026,384
Overhead/Administration	$104,283
Materials and Supplies	$39,900
Total	**$2,319,541**
Cost Per Provider	**$386,590**
Cost Per Enrolled Participant	**$2,176**
Cost Per Planned Participant	**$1,933**

SOURCE: LARCA grant expenditure reports from EWDD for FY 2012-2013, 2013-2014, and 2014-2015

When the total system-level cost is divided among the six providers, it yields a per-provider cost of $386,590. EWDD's system-level expenses represent $2,176 per enrolled participant. The study further calculated the cost per planned participant (i.e., what the cost per participant would have been if the program had enrolled to its original target of 1,200 participants or 200 participants per provider); this cost came to $1,933 per planned participant. The relatively small difference between planned and actual costs per participant indicates that operating costs at the system level are fairly fixed.

Leveraged Resources

Providers used leveraged resources to support services that benefitted participants. Exhibit VII-3 shows that providers reported $757,575 in leveraged resources to EWDD. Analysis of the leveraged resources data showed two main kinds of leveraged resources.

- In-kind donations by community partners that offered key program components comprised most leveraged resources ($567,267). These donations included free or discounted enrollment in vocational training or life skills classes, donated GED or charter school instructor time, on-the-job training and internship opportunities with local employers, and supportive services from local non-profits such as diapers and formula for parenting youth, business attire, and legal and counseling services.

- Other grants and private funding comprised the remaining portion ($190,308) of reported leveraged resources. Most of these resources were other grants received by providers. For example, YPI San Fernando and YO! Watts also operated the EWDD-funded Summer Youth Employment Program, and could leverage that grant for LARCA by having LARCA youth complete paid internships through that program. The other source included in this category is scholarship dollars awarded to youth for vocational training.

Exhibit VII-3: LARCA Provider-Reported Leveraged Resources, by Type

Type of Leveraged Resource	Amount Leveraged
In-kind (time and resources)	$567,267
Other grants and private funding	$190,308
Total	**$757,575**

SOURCE: Leveraged resources reports from EWDD to DOL from August 2014 through September 2015

As described earlier, the reported leveraged resource amounts likely underestimate leveraged resources because LARCA providers did not begin reporting leveraged resources until July 2014 and even then, did not include other on-site programs or consistently report leveraged resources.[43] This limitation of the leveraged costs data is discussed further below in the provider-level costs section as it pertains to calculating per-participants costs by provider.

Provider Sub-Grants and Actual Costs

Each provider received a portion of the WIF grant to pay for LARCA program costs. Non-profit organizations (LA Conservation Corps, CRCD, and both YPI sites) received higher allocations, while YO! Watts and YO! Boyle Heights, which are technically programs under EWDD, received slightly lower allocations because the city absorbed some of the administrative costs for these two sites. Exhibit VII-4 shows the amount each provider was allocated (its WIF sub-grant amount) and each provider's actual costs for site-level program operations (these amounts do not include the system-level costs discussed above). The exhibit also shows the percentage of this allocation spent (at the time of the final report provided to SPR). Each provider's actual study enrollment is also included for reference.

Exhibit VII-4: Sub-Grant Amounts, Actual Costs, and Percent of Sub-Grant Spent, by Provider

	CRCD	LA Conservation Corps	YO! Boyle Heights	YO! Watts	YPI Pico Union	YPI San Fernando
WIF Sub-Grant Amount	$1,450,000	$1,450,000	$1,010,000	$1,010,000	$1,475,000	$1,400,000
Actual Costs	$802,277	$1,227,238	$602,278	$716,434	$1,289,452	$1,393,027
Percent of Sub-Grant Spent	55.3%	84.6%	59.6%	70.9%	92.1%	99.5%
Actual Enrollment	138	200	157	204	143	230

SOURCE: LARCA grant expenditure reports from EWDD for FY 2012-2013, 2013-2014, and 2014-2015

As shown in Exhibit VII-4, YPI San Fernando had the highest total costs (and highest total enrollment) and spent nearly all of its sub-grant. YPI Pico Union and LA Conservation Corps also

[43] For example, CRCD did not report any leveraged resources and most of the providers did not report funding for charter school operations.

spent most of their sub-grant allocations. Of the remaining providers, YO! Watts spent just over seventy percent of its sub-grant (as noted earlier, YO! Watts reported over $300,000 in leveraged resources, which may explain this slightly lower spending) and YO! Boyle Heights and CRCD each spent less than two-thirds of their sub-grants. These latter two providers enrolled fewer participants than planned, which may explain their lower spending. YPI Pico Union, which also under-enrolled, had the second-highest total costs, likely because it was a newly-opened organization and had to develop its infrastructure and staffing while creating and implementing the LARCA program.

Provider-Level Cost Per Participant

The study team sought to explore the variations in provider spending. An important aspect of this variation was per-participant cost. Exhibit VII-5 displays the cost per participant for each provider in the following ways:

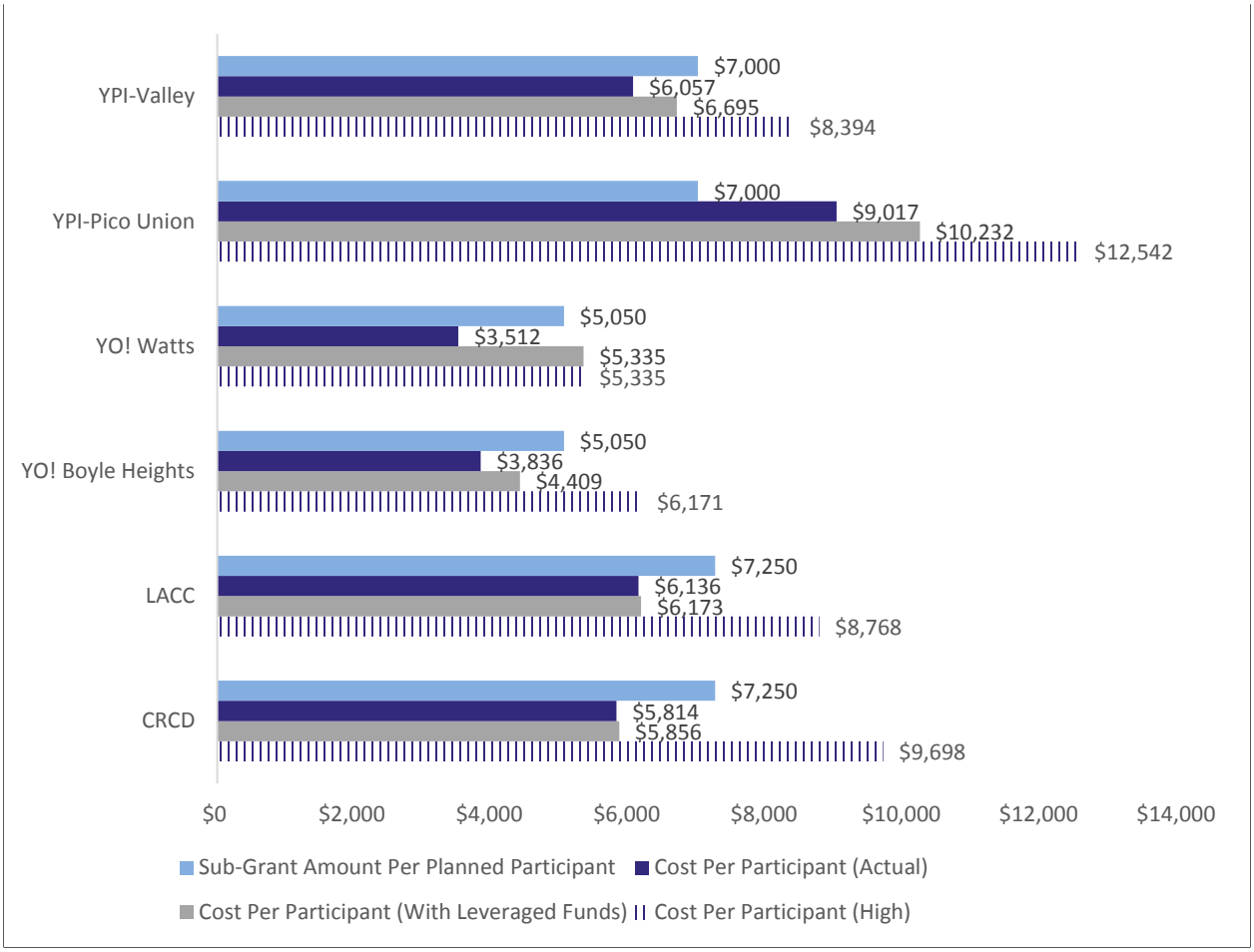
- The top bar for each provider is the sub-grant amount per planned participant: that is, the portion of the WIF grant each provider received divided by the planned number of participants. (As noted above, providers received slightly different sub-grant amounts, though all had the same target enrollment.) This bar represents the cost per participant that would have been incurred if all grant funds had been spent and the provider had enrolled its planned 200 participants.

- The second bar from the top shows actual cost per actual participant: that is, the amount each provider reported on its expenditure reports divided by the number of program group members who actually enrolled in the evaluation. This number is the most straightforward estimate, as it relies on both actual costs and actual enrollment.

- The third bar from the top shows the cost per participant including leveraged resources in the cost amount: that is, the actual cost for each provider plus reported leveraged resources, divided by the total number of participants who actually enrolled at that provider. This number attempts to represent all reported inputs (expenditures and leveraged resources) in order to provide a fuller picture of the resources needed to support each participant.

- Since leveraged resources were underreported, an additional bar for each provider is included that gives a high estimate of cost per participant. As described earlier in the chapter, this number assumes that all providers leveraged resources equal to 36 percent of their total costs (the percentage of total spending represented by leveraged resources from YO! Watts, the provider that reported the highest level of leveraged resources). The high estimate is therefore calculated as 136 percent of total grant costs, divided by the actual enrollment for each provider. While this estimate is imprecise, it represents an attempt to define the upper bound of total spending.

Exhibit VII-5: Various Per-Participant Cost Calculations, By Provider



SOURCE:LARCA grant expenditure reports from EWDD for FY 2012-2013, 2013-2014, and 2014-2015 and leveraged resource reports from EWDD to DOL from August 2014 through September 2015

NOTES: CRCD did not report any leveraged resources, so the amounts for actual cost per participant and cost per participant with leveraged funds do not differ. Similarly, because the upper bound estimate of leveraged funds is based on amounts reported by YO! Watts, the amounts for cost per participant with leveraged funds and the higher estimate of cost per participant do not differ.

Looking across providers, actual costs per participant were lower than planned costs per participant for all providers except YPI Pico Union, which, as discussed earlier, was unique among providers in being a newly-established site and therefore needed to invest in organizational infrastructure and had not yet operated in the community long enough to have developed many partnerships with organizations that might have provided in-kind donations. Similarly, the cost per participant with leveraged funds included is still close to or below the planned cost per participant, except for YPI Pico Union and YO! Watts (which reported significantly more leveraged resources than other providers). Only the high estimates of cost per participant exceed the planned cost per participant across sites, which is to be expected given that this estimate is designed to represent the upper limit of costs. Taken together, then, these varied estimates of cost per participant point to the importance of organizational

infrastructure and partner relationships for stretching grant funding to cover program costs, via both reported leveraged resources and existing in-house systems.

Types of Provider-Level Costs

Another way to examine differences and similarities in provider-level costs is to explore how funds were spent. Exhibit VII-6 shows a line-item breakdown of total grant costs for each provider and how these costs sum across providers. Several observations can be made for each cost category:

- **Salaries and fringe benefits for program managers and line staff**. Across providers, staffing represented the largest share of program costs, at or around 70 percent of total costs for all providers except CRCD where staff salaries and fringe benefits accounted for slightly more than half of total costs (CRCD, however, also had the highest spending on outside services and subcontracts, which included staffing costs for those partners). LARCA used a service-intensive approach given its high-need target population, and this model required significant staffing costs to cover the functions of program management, recruitment, case management, and employment services.

- **Overhead and administration**. Because of the aforementioned staffing needs and the reporting requirements of the LARCA grant, providers also incurred overhead and administration costs, such as those for in-house accounting and human resources staff who devoted time to monitoring and supporting the LARCA grant. These costs are lower for city agencies, which relied on EWDD's infrastructure to handle these functions, and for CRCD, which relied heavily on subcontracts (as detailed below) and therefore incurred fewer human resources costs.

- **Outside services and subcontracts**. Providers often partnered to provide key program services. They contracted with LAUSD for PSA counselors, with charter schools for high school course instruction, and with community colleges and private training providers for vocational training, work readiness training, and assistance with job placement. YO! Watts also contracted with LAUSD adult schools for secondary education services. CRCD had the highest costs in this area, likely due to their engagement of partners to deliver both secondary education and vocational/life skills training.

- **Materials and supplies**. This item represents spending on materials and supplies needed for program operation, such as computers, uniforms, furniture, and copying and printing of recruitment materials. Costs for this item varied widely across providers and were highest at YO! Watts and YO! Boyle Heights, which both needed to use specific city procurement services for costs like copying, printing, and technical services.

Exhibit VII-6: Provider-Level LARCA Costs

	CRCD	LA Conservation Corps	YO! Boyle Heights	YO! Watts	YPI Pico Union	YPI San Fernando	Total
Staff Labor (Salary and Fringe)	$415,259	$855,481	$467,122	$505,025	$880,953	$893,591	$4,017,431
Overhead/Administration	$24,907	$218,696	$21,790	$28,302	$178,011	$182,910	$654,615
Participant Costs	$117,236	$119,069	$32,080	$72,927	$119,341	$161,975	$622,629
Outside Services/Subcontracts	$225,876	$12,385	$166	$116	$72,956	$97,844	$409,342
Materials and Supplies	$18,999	$21,607	$81,120	$110,065	$38,191	$56,707	$326,689
Total	$802,277	$1,227,238	$602,278	$716,434	$1,289,452	$1,393,027	$6,030,706

SOURCE: LARCA grant expenditure reports from EWDD on provider-level costs for FY 2012-2013, 2013-2014 and 2014-2015.

- **Participant costs.** Providers also used LARCA funds for direct payments to participants, such as for stipends and for supportive service needs and gift cards for referring peers to the program and for completing key program milestones such as life skills training modules. Spending on this item was similar across non-profit provider agencies, but significantly lower for city agencies like YO! Watts and YO! Boyle Heights, which generally did not offer incentives for referrals or milestones.

Cost Per Participant by Provider Characteristics

The final way the study team analyzed the cost per participant was according to provider characteristics. Because WIA youth programs served a population similar to that of LARCA, and because the implementation study found that on-site WIA youth programs shared several key resources with LARCA (e.g., GED classes, job search classes and resources, and program staff time), the study team hypothesized that providers with on-site WIA youth programs might have a lower cost per participant than other providers due to their leveraging of existing staff and systems.[44] As shown in Exhibit VII-7, below, providers with on-site WIA youth programs did indeed have a lower cost per participant (that is, the actual cost per enrolled program group member) than those that did not operate WIA youth programs on-site.

Exhibit VII-7: Cost Per Participant, By Provider Characteristics

Provider Type	Number of Providers	Cost Per Participant
WIA Youth Program Status		
Operates WIA Youth Program On-Site	3	$4,588
Does Not Operate WIA Youth Program On-Site	3	$6,900
Agency Type		
City Agency	2	$3,663
Non-Profit Organization	4	$6,674

SOURCE: LARCA grant expenditure reports from EWDD for FY 2012-2013, 2013-2014, and 2014-2015

Two of the providers that operated WIA youth programs (YO! Watts and YO! Boyle Heights) on-site were also city agencies (rather than non-profit organizations), so the study team looked at the cost per participant for city agencies separately and found that per-participant costs were lower for these two providers than for their four non-profit counterparts (even those that also operated WIA youth programs on-site). For city agencies, as reported during the implementation study, the city absorbed some of the administrative and overhead costs of operating the program, such as processing payroll and arranging subcontracts as well as billing and even email and phone systems. In both cases, providers were able to rely on other existing

[44] WIA youth programs, therefore, essentially represent a leveraged resource, though none of the providers reported WIA as a leveraged resource on their quarterly reports to EWDD.

infrastructure, beyond reported leveraged resources, to support the creation and implementation of LARCA, reducing the costs of developing and maintaining the program.

LARCA's Cost Effectiveness

The cost-effectiveness analysis examines LARCA program expenditures in relation to the impacts they produced. This part of the cost study is informed by, and uses findings from, the impact study and the descriptive portion of the cost study.

Comparing LARCA's Per-participant Costs with those of the WIA Youth and Adult Programs

To conduct the cost-effectiveness analysis, the average cost per participant for WIA adult and youth programs is needed to determine the total cost of serving the control group based on actual WIA enrollment by control group members. To do this, the study team first determined the total costs and unique enrollment for the WIA adult and youth programs as provided within the expenditure reports for fiscal years 2012-2013, 2013-2014, and 2014-2015. The average cost per participant, calculated for the youth and adult programs respectively, reflects the same duration represented in LARCA program costs (i.e., January 2013 through July 2015). The average cost per participant for WIA was then calculated as:

$$\text{Cost/Participant}_{\text{Program}} = \frac{Total\ Spending\ in\ FY\ 2012-2013^{45},\ \ 2013-2014,\ \ and\ 2014-2015_{Program}}{Total\ Enrollment\ in\ FY\ 2012-2013_{46},\ \ 2013-2014,\ \ and\ 2014-2015_{Program}},$$

where *Program* represents either the WIA youth or adult programs.

While the total cost for WIA was calculated as:

$$\text{Total Cost} = \Sigma \text{Cost/Participant} * \text{Participation}_{\text{Program}}$$

Exhibit VII-8 presents the average cost per participant and actual WIA participation for control group members, by WIA program, for each fiscal year, as well as the total cost. The exhibit shows that more control group members enrolled in the WIA youth program than in the WIA adult program and that control group participation in both adult and youth programs began in earnest during FY 2013-2014. Even after adjusting for inflation, the average cost per WIA participant was higher in FY 2013-2014 and 2014-2015 compared to FY 2012-2013. The average cost per WIA participant is similar for both WIA youth and adult programs. On average, WIA costs about half as much as the LARCA program to serve an individual, with the former costing around $4,500, on average, per participant and the latter costing over $9,500, on average per participant.

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[45] Only half of total spending in FY 2012-2013 is used to calculate the cost per participant to reflect the same time period of LARCA implementation and spending (i.e., beginning January 2013).

[46] Only half of total enrollment in FY 2012-2013 is used to calculate the cost per participant to reflect the same time period of LARCA implementation and spending (i.e., beginning January 2013). Enrollment is assumed to have been lower if only examining a six-month period instead of a one-year period.

Exhibit VII-8: Average Cost per Participant for WIA Adult and Youth Programs and Total WIA Cost for Control Group Members

	Jan 2013 - July 2015
WIA Youth Program	
Average Cost Per Participant	$4,560
Unduplicated Enrollment	178
WIA Adult Program	
Average Cost Per Participant	$4,444[a]
Unduplicated Enrollment	35
TOTAL COST	$967,314

SOURCE: WIA expenditure reports from EWDD for FY 2012-2013, 2013-2014, and 2014-2015 and WIA participation reports from EWDD for PY 2012-2013, 2013-2014, and 2014-2015

NOTES:

[a]Enrollment numbers for the WIA Adult program in FY 2014-2015 were not available. To estimate enrollment for that year, the ratio of enrollment between the youth and adult program in the preceding years was used to estimate what the enrollment of the adult program was in FY 2014-2015. In the preceding two years, there were (on average) 99.7 participants in the WIA adult program for every 100 participants in the WIA youth program. As there were 2,377 participants in the WIA youth program, the study team estimated 2,369 participants were enrolled in the WIA adult program for that fiscal year. The average cost per WIA adult participant is based on this assumed enrollment.

In total, an estimated $967,000 was spent towards serving the control group members that enrolled in WIA, compared to the more than $10 million spent on LARCA program participants as described above. As noted previously in the report, this cost likely underestimates the total cost for services received by the control group as it only looks at WIA participation and does not include costs for other programs or services that control group members may have received. This limitation is discussed further in the summary and conclusions section.

Cost Effectiveness

While a cost-effectiveness analysis is instructive considering the program costs required to achieve observed differences in outcomes between the program group and the control group, the findings may be imprecise due to both the low WIA enrollment rates for control group members and the fact that control group members may have accessed other services not captured in the available financial data and should be interpreted cautiously. Estimating the cost effectiveness of LARCA can be estimated as follows:

$$\text{Cost per percentage-point difference in outcome}^{47} = \frac{Cost_{program} - Cost_{control}}{Outcome_{program} - Outcome_{control}}$$

[47] The analysis uses the LARCA program costs without leveraged costs for the primary reason that the WIA costs do not include leveraged costs; in addition, in some cases, WIA may be a leveraged cost for LARCA.

The important question for this calculation is what outcome to consider. Since the ultimate goal of the LARCA program was to increase employment and earnings for program participants, either of those outcomes or a composite of the two would be the obvious choice. However, as Chapter V showed, the program had no impact on employment or earnings. The LARCA program did, however, have an impact on participants' educational outcomes and, as noted earlier, a diploma or equivalent credential may lead to increased employment and earnings over the longer term. While postsecondary credentials would also be important to consider, that information, as discussed in Chapter IV, was also not available. The study team therefore used a composite educational measure of whether an individual either attained a credential through secondary education (including a high school diploma or equivalent) or enrolled in postsecondary education. Exhibit VII-9 shows the data used in the cost-effectiveness calculation and the result.

Exhibit VII-9: Per-unit Cost of Bettering Educational Outcomes of LARCA Participants

	Cost	Percentage Achieving Desired Outcome[a]	Cost/Unit Change in Outcome
Program Group	$10,193,778	48.4%	–
Control Group	$967,314	31.3%	–
Difference	$9,226,464	17.2%	$536,422.33

SOURCE: Total costs for LARCA and WIA come from Exhibits VII-1 and VII-8. Outcome data come from data presented in Chapters III and IV.

NOTES: LARCA costs exclude leveraged resources as no equivalent leveraged resources are available for WIA and WIA funding is likely to be a leveraged resource in some cases for LARCA. The sample size (N=996) for the difference in outcomes calculation includes only those study participants that had two years of data after RA as well as secondary and postsecondary data.

[a]The "desired outcome" reflects a composite measure indicating if a participant either attained secondary credential (including a high school diploma or equivalent) OR enrolled in post-secondary education. These measures individually are examined in Chapters III and IV, respectively.

The cost effectiveness analysis shows that program group members attained a positive outcome on the cost study's composite measure of desired outcome (a high school diploma or equivalent credential or enrolled in postsecondary education) at a rate 17.2 percentage points higher than members of the control group. To achieve this difference, the LARCA program invested approximately $536,400 for each percentage point gain in this measure, which is clearly very high.[48] On the one hand, this high cost could be an example of the law of

[48] The estimated cost of serving control group participants does not reflect the full cost of services received by the control group. It only reflects WIA costs for the control group members who enrolled in WIA, whereas control group members could enroll in services other than WIA and clearly did. To account for this imprecision, the study team conducted additional cost-effectiveness analyses to serve as potential upper bounds of costs for the control group. In these analyses, the study team assumed either: 1) all control group members who attained a secondary credential or enrolled in post-secondary education (the composite measure) enrolled in WIA, or 2) all control group members enrolled in WIA. Even in these alternative scenarios, a 17.2% difference

diminishing returns—that is, the added benefit of an additional dollar spent on further improving education outcomes declines given that control group members did reasonably well, albeit to a lesser degree than the program group members, in earning their secondary school credential or enrolling in postsecondary education (as evidenced in Chapters III and IV).

On the other hand, there is reason to believe that the cost per unit of gain could go down with a window of analysis that began later and ran longer. Consider that LARCA was a new program that involved a significant investment in design and implementation. Given that the LARCA evaluation period only examined outcomes for a relatively short period during and immediately following LARCA program implementation, the cost-effectiveness study assigned all the costs of program planning, development, and implementation to the cost of serving the LARCA participants during the study period. Some of these expenditures—such as the training of staff or the development and implementation of new partnerships, especially with education and training providers—can be thought of as investments in developing the longer-term capacity of LARCA providers, but would be sunk costs in a cost-effectiveness analysis looking at an existing version of LARCA. Also, evidence suggests that earning a high school diploma could have enduring employment impacts, and as noted in Chapter V, the program could see employment impacts with a longer follow-up window. Furthermore, educational impacts could also improve with more time. Subsequently, this short-term assessment of LARCA cost effectiveness may very well overestimates the marginal costs of the LARCA program for participants and underestimate the long-term gains accruing to program participants. A longer-term assessment of program costs and impacts may have yielded different (and quite possibly, more positive) conclusions about the LARCA program's cost effectiveness.

Summary and Conclusions

The cost study for the evaluation consisted of two main components. The first part of the cost study was an analysis of program costs. This analysis surfaced the following key findings.

- **Overall, EWDD's system-level costs per actual participant enrolled were not much different from what the costs per participant would have been if all planned-for participants had enrolled.** The relatively small difference between planned and actual costs per participant indicates that system-level costs are fairly fixed. This finding indicates that for programs like LARCA, once the investment in infrastructure has been made, oversight agencies like EWDD can support providers in serving more participants at a reasonable marginal cost.

- **Providers supplemented the WIF grant by leveraging resources from community partners and other grants.** LARCA providers leveraged over $750,000 in other grants and in-kind donations from community partners, and generally did so to support delivery of key program services such as vocational training, educational services, and supportive services. These leveraged resources were essential to supporting delivery of

between the program and control group would cost between $325,459 and $516,884 per unit of gain in the composite measure and would not fundamentally alter the conclusions of the cost-effectiveness analysis.

key program services such as vocational training, educational services, and supportive services. Additionally, because leveraged resources were likely underreported, these donations may represent a notable share of the overall program costs.

- **At the provider level, costs per participant varied widely and appeared to be more related to infrastructure and relationships than to actual enrollment.** Providers with on-site WIA youth programs (which enabled them to draw on existing curricula, courses, and trained staff members to reduce start-up costs) had lower costs per participant regardless of enrollment, as did providers that were city agencies (which drew on a centralized administrative structure rather than absorbing administrative costs internally). YPI Pico Union, for example, was a brand-new organization and had fairly high costs, overall and per participant, despite being under-enrolled. By contrast, YO! Watts, which met its enrollment target, and YO! Boyle Heights, which did not, had similarly low costs per participant due to being able to leverage existing infrastructure through their status as city agencies and through their on-site WIA programming, which enabled them to draw on existing curricula, courses, and trained staff members to reduce start-up costs.

- **Staffing represented the main provider-level cost of operating LARCA, consistent with LARCA's intensive service model and the high-need population for which it was designed.** Disconnected youth need substantial support to stay engaged in educational and vocational training, which means that such programs need both sufficiently large staffs and sufficiently experienced staff members to provide this support. Across providers, therefore, salaries and fringe benefits—which allowed providers to staff the functions of program management, recruitment, case management, and employment services—accounted for over half (and in most cases nearly three-quarters) of total costs.

The second portion of the cost study was the cost-effectiveness analysis. The cost-effectiveness analysis found that the cost of creating a gain in educational outcome was quite high. Specifically, the study found that it cost the LARCA program over $500,000 to increase the composite educational outcome of participants (earning a secondary degree or equivalent or enrolling in postsecondary education) by every percentage point increase. Several factors need to be considered when interpreting this finding:

- **The cost-effectiveness study may potentially underestimate the cost of serving the control group.** WIA adult and youth programs were a clear alternative to the LARCA program. However, only about one third of control group participants enrolled in WIA. Therefore, using WIA costs to estimate spending on the control group may not adequately capture education or other training services control group members received through other types of providers. However, because a complete recording of costs for serving control group members was not available, the cost effectiveness study relied on readily-available WIA cost data as a lower-bound of how much was spent on the control group.

- **The cost-effectiveness study was unable to examine costs by service delivery area.** Looking separately at these service areas—secondary education services, postsecondary education services, and employment services—would have provided a more granular assessment of costs, along with information as to whether certain areas of service were more cost-effective than others. Data on service-level costs would be needed for both the LARCA and WIA programs to conduct such a study.

- **A longer evaluation time frame may have led to results in the cost-effectiveness analysis that were more favorable to LARCA.** This would especially be true if the longer time frame resulted in employment impacts or increased educational gains. With so much of the program focused on education, program participants were enrolled in school or training programs for much of the evaluation time frame, giving them less time to become employed or to increase earnings. At the same time, programs like WIA have short time frames and may see improvements in outcomes sooner.

- **The high costs reported in the cost-effectiveness analysis may reflect program startup costs.** Staring a new program is resource-intensive and may make a program such as LARCA appear cost-ineffective in comparison to an established program like WIA adult and youth programs (even if those investments can be harnessed in other ways in the future). Furthermore, an established program like WIA often has a wide distribution of infrastructure costs across a greater number of participants, making that program appear more cost-effective.

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VIII. Summary and Conclusions

In presenting the results of its impact and cost studies, this final report completes the nearly five-year evaluation of EWDD's LARCA program. This evaluation produced several important findings about what the Economic and Workforce Development Department (EWDD) of Los Angeles accomplished with its Workforce Innovation Fund (WIF) grant from the United States Department of Labor (DOL). Importantly, it details the many successes the program had in increasing secondary and postsecondary enrollment and the earning of diplomas and college credit by program participants. These successes demonstrate that the LARCA program design offers a promising approach for improving the educational outcomes of disengaged dropout youth.

This chapter summarizes the evaluation's findings and discusses ways that practitioners and policy makers might interpret them. It also discusses the implications of these findings for future efforts and research focused on out-of-school youth, which now have added significance given recent changes in workforce legislation.

Study Enrollment and Key Services

The study team worked with EWDD and the six LARCA program providers to implement a random assignment impact study design that began with the opening of program enrollment in January 2013. According to the design, all interested and eligible individuals who consented to participate in the study had a 50-percent chance of being assigned to the program group and a 50-percent chance of being assigned to the control group. Program group members were enrolled in the program while control group members were referred to other programs and services in the community.

- **During the intake period, LARCA program providers enrolled 2,078 individuals into the impact study.** Although some providers exceeded their individual enrollment goals, overall the study fell short of the enrollment goal of 2,400 individuals (1,200 program participants). The final study sample included 1,066 program group members and 1,012 control group members. The composition of the study sample looked similar to what was anticipated given the eligibility criteria and the focus on dropout youth in the greater Los Angeles area.

- **Random assignment was successful.** Program and control group members did not differ significantly from one another across baseline characteristics. The study team was therefore able to assume that these two groups were identical along observable and unobservable measures, meaning that differences in outcomes between the two groups were due to participation in the program.

- **The LARCA program provided participants with a variety of services in addition to those focused on education, training, and employment.** Program services included case management, assessments, supportive services, and financial literacy and work readiness training.

- **WIA adult and youth programs offered a strong alternative to LARCA, but only about a quarter of control group members received WIA services.** Despite being eligible for and having easy access to both WIA adult and youth programs, relatively few control group members took advantage of these services. Control group members did, however, enroll in some secondary and postsecondary education, either on their own or through the support of other programs.

Impacts on Secondary Education

Through LARCA, program participants enrolled in programs leading to a high school diploma or a high school equivalency test (HSET) credential (this is termed "re-enrollment" below because it represents a return to secondary education for LARCA participants and obtaining the degree is referred to as "completion" of secondary education). Providers also offered supplemental tutoring and homework assistance. Participation in these services led to the following results.

- **Program group members re-enrolled in secondary education programming at higher rates than members of the control group.** Within one year of random assignment, approximately 60 percent of program group members re-enrolled, while only 48 percent of control group members did so. Within two years after random assignment, 64 percent of program group members re-enrolled in secondary education, compared with 52 percent of control group members.

- **Program group members received secondary education credentials at higher rates than control group members.** Within one year of random assignment, approximately 13 percent of program group members—but only 8 percent of control group members—received a high school diploma or equivalent. Within two years after random assignment, approximately 25 percent of program group members received a high school diploma or equivalent, compared with 16 percent of control group members. Among those that received a secondary education credential, nearly all did so with a high school diploma; only five participants across both program and control groups completed secondary education with an HSET credential.

- **Outcomes for key subgroups mirrored those for the full sample, but there were no significant differences in outcomes between subgroup pairs.** Nearly all the individual subgroup analyses show program group members re-enrolling in secondary education programs and receiving secondary education credentials at significantly higher rates than control group members at both one and two years past random assignment, but none of the program–control differentials between subgroups were statistically significant.

As these findings show, the LARCA program was successful in achieving the key goals of re-engaging participants in secondary education and helping them attain secondary education credentials. Nevertheless, the percentage of program group members who achieved a diploma or equivalent—relative to those who could have—was somewhat low. Within two years of random assignment, only 25 percent of the program group earned a diploma or HSET credential

compared to 64 percent re-enrolling in secondary education programs. Even though the LARCA program produced real gains in these areas, future program designers may want to consider ways to increase impacts even more. While the specific steps LARCA program staff members could have taken to boost these outcomes for participants was not a question this evaluation was able to address, the following are a few areas worth considering in future program design and research.

- **Provide additional education-related services.** Future programs may want to consider providing additional education-related services beyond those offered by the LARCA program. These might include academic services designed to aid student learning as well as support services to help stabilize their lives. EWDD is currently exploring such supports through its Performance, Partnership, Pilot (P3) program.

- **Modify the delivery of existing services.** Future programs may be able to boost achievement through more intensive versions of the existing program model services. For instance, a program might add additional staff members (such as PSA counselors) to provide a greater level of support to students in their pursuit of education. A program might also increase the intensity of certain services (e.g., tutoring) or require that participants receive them. These changes could, in theory, ensure that participants' barriers to success are more readily identified and addressed.

- **Further investigate HSET credential programs and outcomes.** While an HSET credential is likely to yield fewer long-term employment and higher education benefits than a diploma, it may represent a more realistic outcome than a high school diploma for some disconnected youth (Heckman et al., 2010; Murnane et al., 1999). However, as noted in the report, very few participants received an HSET credential. One important question is whether HSET credentials are under-reported to CDE. Another is how best to boost performance as discussed above.

Impacts on Vocational Training and Postsecondary Education

Each provider placed participants into training programs in construction, green technology or healthcare. Training providers varied by organization type and included the providers themselves, proprietary training programs, and public and private colleges and universities; these training providers were often located in the communities that providers served. The training programs offered the possibility of college credit and industry recognized credentials. The study looked at Los Angeles Community College District (LACCD) college enrollment to track postsecondary outcomes. Enrollment in postsecondary education was likely higher than what the study reported for both program and control groups since some participants sought out training at (and some providers partnered with) institutions not part of LACCD.

- **LARCA participants enrolled in LACCD colleges at a higher rate than control group members.** Twenty-seven percent of the program group enrolled in LACCD colleges within one year of random assignment as compared to 17 percent of the control group. Within two years, this gap had widened, with 40 percent of the program group as

compared to 24 percent of the control group having enrolled. Enrollment included both credit and non-credit classes, and all of the differences between the program and control groups around enrollment were significant at both one and two years after random assignment (RA).

- **Program group members attempted more credits, and, at least within the first year after RA, earned more credits than control group members.** However, program group members' credit success rate (credits earned/attempted) was the same as that of control group members, and control group members who did enroll were less likely to drop out than program group members.

- **The LARCA program had a greater impact on enrollment and credit completion for some subgroups.** Impacts on LACCD enrollment were greater for older youth, males, and non-Hispanics than they were for younger youth, females, and Hispanics. Also, older youth completed more credits than did younger youth. Enrollment differences between these subgroups for these measures only held true for one year after RA.

- **The LARCA program had a greater impact on LACCD college enrollment and credit completion for participants enrolled earlier in the enrollment cycle.** In fact, there were no impacts on enrollment or credit completion for those enrolled later in the enrollment cycle (at one year from RA). The study cannot determine why there were no impacts for those enrolled later, but it may be due to these services occurring later and thus the study having insufficient time to track them for this subgroup. It could also have to do with over-taxing of staff members, the winding down of the program, or changes in enrollment standards. Further research is needed to explore this finding.

Participating in the LARCA program had clear positive impacts on postsecondary educational outcomes. At the same time, participants' outcomes were not as strong as might be hoped especially around credit (or credential) attainment. Program group members, on average, earned only about half the LACCD credits they attempted, and program group members' credit success rate was no better than that of control group members. To improve results like these, future program designers (and evaluators) may want to consider ways of enhancing the support given to participants who enroll in postsecondary education and tracking their outcomes—similar to the discussion above around secondary education outcomes.

Impacts on Employment

LARCA employment-related services included work readiness training, job search and placement services, and paid work experience.

- **Many program group members received employment services from the LARCA program.** Around 41 percent of the program group received paid work experiences provided or arranged by the LARCA program. This service likely contributed to the relative employment stability of program group members. Program group members also

participated in work readiness training and took advantage of employment assistance services offered by the program.

- **Program participants fared slightly worse in employment outcomes than control group members.** Within one year of random assignment, program group members were less likely to be employed than control group members, although their total quarters employed and total earnings for this period were comparable. Within two years of random assignment, program group members were no less likely to be employed than control group members, but they did earn less.

- **Outcomes for key subgroups mirrored those for the full sample and impacts did not differ between subgroup pairs.** Consistent with the findings for the full sample, the subgroup analysis indicates that the program group fared worse than the control group in terms of employment and earnings-related outcomes across nearly all subgroups and both within one year of random assignment and within two years of random assignment. Program impacts did not differ between subgroups within a category.

- **LARCA's long-term impacts on employment cannot be fully assessed, given the limited timeframe of the analysis**. Study findings hint at the possibility that LARCA participants' employment could be poised to grow more in the future, but the study's short observation period made it impossible to determine if this might be the case. The study team was only able to gather employment and earnings data for up to one year after random assignment for the full sample and up to two years past random assignment for less than the full sample. Yet program services sometimes lasted one or two years, leaving little time to follow a person's employment patterns after completing education services.

The LARCA program's lack of employment impacts is somewhat expected, given that many LARCA participants would forgo employment, in the short-term, to participate in the program's education and training services (Trause & Weeks, 2012). Participants' lack of opportunity to find work on their own may have been offset by part-time employment and paid work experiences provided by or arranged through providers, reducing the need to find work in the short term. Continued examination of program outcomes over time is needed to determine if long-term employment outcomes improve for LARCA participants following completion of education or training.

Impacts on Criminal Justice System Involvement

While reducing involvement in the criminal justice system was not a stated goal of the LARCA program, there was good reason to think that LARCA might help reduce such involvement. Study participants had a relatively high rate of criminal justice system involvement at baseline—nearly one-fifth of participants had been arrested, about seven percent had been convicted, and five percent had been incarcerated in Los Angeles County jails.

- **The LARCA program had no impact on program participants' rates of arrest, conviction, or incarceration in Los Angeles County jails.** Program group members were just as likely as control group members to be involved with the criminal justice system. This finding holds true at both one year and two years from random assignment.

- **The LARCA program had no impacts on the types of arrest or conviction or the type of release from jail.** LARCA program participants and control group members had comparable numbers of arrests and convictions for felonies, misdemeanors, violent crimes, property crimes, drug crimes, and public order crimes in the two years following random assignment. Their terms of release from jail (i.e., release to supervision, direct discharge, or other release) were also similar.

- **For both LARCA program and control group members, the rates of involvement in the criminal justice system were about the same two years after random assignment as they were two years prior to random assignment.** During the two years after random assignment, about 20 percent of the program group and 22 percent of the control group were arrested, about ten percent of both groups were convicted of a crime, and about eight percent of the program group and seven percent of the control group were incarcerated in a Los Angeles County jail. There were similar rates of criminal justice system involvement for both groups in the two years prior to random assignment.

Because the LARCA program did not include program elements specifically designed to address or reduce criminal justice system involvement, any impact in this area would have been unintended and indirect. The evaluation explored the potential for a program like LARCA to reduce these impacts with the understanding that increased educational gain and eventual employment might indirectly lead to reduced involvement in the criminal justice system, which would benefit the participants and society, through reduced crime and financial costs. The important question is to what extent such involvement is a barrier to participant success. According to the baseline data, a sizeable portion of this population, prior to random assignment, had already been involved in the criminal justice system, and some portion of this group had convictions or periods of incarceration. Research points to the barrier that past incarceration can place on employment prospects (Pager 2003, Holzer et al. 2004, Raphael 2014) and the many other issues that criminal justice system involvement might have for people seeking employment (Solomon, 2012). The services described above that are designed to help participants achieve academic success (or those for employment) may work better if they also address criminogenic needs for those individuals who have them.

Findings from the Cost Study

The cost study included a descriptive analysis of LARCA program costs, including the costs associated with the WIF grant and leveraged funds utilized by the program, and a cost-effectiveness analysis.

- **Overall, EWDD's system-level costs per actual participant enrolled were not much different from what the costs per participant would have been if all planned-for**

participants had enrolled. The relatively small difference between planned and actual costs per participant indicates that system-level costs were fairly fixed.

- **Providers supplemented the WIF grant by leveraging resources from community partners and other grants.** LARCA providers leveraged over $750,000 in other grants and in-kind donations from community partners, and generally did so to support delivery of key program services such as vocational training, educational services, and supportive services.

- **At the provider level, costs per participant varied widely and appeared to be more related to infrastructure and relationships than to enrollment.** Providers with on-site WIA youth programs (which enabled them to draw on existing curricula, courses, and trained staff members to reduce start-up costs) had lower costs per participant regardless of enrollment, as did providers that were city agencies (which drew on a centralized administrative structure rather than absorbing administrative costs internally).

- **Staffing represented the main provider-level cost of operating LARCA, which is consistent with the intensive service model and the high-need population for which it was designed.** Salaries and fringe benefits—which allowed providers to staff the functions of program management, recruitment, case management, and employment services—accounted for over half (and in most cases nearly three-quarters) of total costs.

- **The LARCA program spent large amounts to achieve the enhanced educational outcomes enjoyed by the program group.** The study found that for each percentage-point increase in the composite educational outcome of participants (earning a secondary degree or equivalent or enrolling in postsecondary education) the LARCA program spent more than $500,000.

The cost study was able to provide several important insights into the way program funding was spent on participants; it separated centralized, system-level costs from provider-level costs and it showed how costs varied across providers. While the cost-effectiveness analysis showed that the costs of the LARCA program were considerable when compared to a program like WIA, this finding must be interpreted in a broader context. Most importantly, since LARCA was implementing an innovative and new program design, its start-up costs were substantial, whereas WIA, as an ongoing program, did not encounter such costs; therefore, using WIA as the basis for cost comparisons presents a skewed picture of LARCA's costliness. Further, the LARCA program was always designed to be, as program organizers described it, "the Cadillac of WIA." It was designed to provide longer, more intensive services that would obviously cost more than those of WIA.

Implications for Education and Workforce Policy and Future Research

The findings in this report contribute to the knowledge base of what works for out-of-school youth. In particular, these findings may prove valuable in discussions that have arisen around how best to design services to address the changes imposed on youth programming under the Workforce Innovation and Opportunity Act (WIOA), which replaced WIA in July of 2015 (Hossain, 2015). There are two key changes to youth workforce services under WIOA (as compared to WIA) that focus attention on the findings from this report. Under WIA, workforce investment areas were required to spend a minimum of 30 percent of their youth program funds on out-of-school youth (as compared to in-school youth), but now WIOA requires them to spend 75 percent on these youth.[49] In addition, WIA considered out-of-school youth to be those between 14 and 21 years of age, whereas WIOA now defines out-of-school youth as individuals ages 16 to 24. In other words, WIOA, places a much greater emphasis on serving the same type of youth that LARCA did. Thus, those designing and operating WIOA services for out-of-school youth may have a particular interest in learning about LARCA's service model and the ways in which it reached its goals and fell short.

This report also contributes to the ever-growing body of research in this field and points to the need for some additional research. Chapter I highlighted several evaluations of programs that informed the design of the program and the evaluation and which point to the value of increased and enhanced education, training, and employment services for out-of-school youth populations. A recently released paper by MDRC (Treskon, 2016) also discusses many new evaluations of out-of-school youth programs, including a recently released impact study of the YouthBuild program (Miller et al., 2016) and an impact study of the Linking Innovation, Knowledge and Employment program (Gupta et al., 2016). Both studies found impacts on education and training, but unlike the LARCA evaluation also found some impacts on employment. Together, these evaluations help confirm the effectiveness of programs that target education and employment services for disconnected youth and shed some light on which services may best help to re-connect this population. However, some further research is warranted to (1) better identify service elements that help re-connect youth to education and employment and reduce their likelihood of criminal justice system involvement and (2) ensure the use of methods and designs that allow for the effective measuring of all relevant impacts. Those pursuing future research on out-of-school youth programs may want to consider the following key questions.

- To what extent can impacts be improved by modifying screening and enrollment procedures to serve a broader, less motivated population?
- What practices, partnerships, and services might be used to improve attainment of important educational outcomes such as high school diplomas, postsecondary credit attainment, degrees, or industry-recognized certificates?

[49] While EWDD did not meet the requirements of WIOA prior to it being enacted, the agency did prioritize out-of-school youth; it had a soft goal of trying to use 70 percent of WIA youth program funds to serve out-of-school youth.

- What services might lead to improved employment and earnings? Are employment and earnings the right measures to consider for services designed to improve the life-chances of dropout youth? What are the best ways to measure or capture these outcomes?
- Do programs like LARCA have impacts for dropout youth, particularly on employment, that may show up only over a period longer than many employment-focused evaluations are able to analyze?
- To what extent does criminal justice system involvement matter for this population and what services may help to mitigate it?
- How can programs better capture program costs and thereby enable more accurate and exhaustive cost studies?

Overall, the LARCA program was effective for the youth it served. Moreover, the effectiveness of the model was robust enough to show positive impacts on secondary and postsecondary education for dropout youth in a city where the workforce system both prioritized out-of-school youth and offered moderately rich array of similar services that control group youth could easily access. The evaluation notes that some additional research may still be warranted but that the findings affirm the value of the LARCA program features, providing evidence for their inclusion in the design of future programs targeting out-of-school youth.

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Appendix A: Program Summaries

The Coalition for Responsible Community Development

Provider Overview

Type of Organization: Founded in 2005, CRCD is a non-profit organization that provides youth and adult services, primarily to residents in the Vernon-Central neighborhood of Los Angeles.

Workforce Innovation Fund Grant Amount: $1,450,000

LARCA Program Staff: 9 staff members, 6-7 FTE

Key Partners: LAUSD (PSA Counselors), Los Angeles Trade Tech College (vocational training), CRCD Academy YouthBuild Charter School (secondary educational services), and Chicago School of Psychotherapy (PhD interns facilitated group counseling and life skills workshops), USC School of Social Work (MSW interns provided counseling services).

Recruitment and Eligibility

Primary Recruitment Methods: Canvassing local neighborhoods, sending letters to youth on LAUSD's dropout list, and conducting outreach at community events and local career and resource fairs.

Summary of Intake and Enrollment Process: Youth completed the LARCA application during the weekly program orientation and then met with the Intake Specialist to verify eligibility and take the CASAS assessment. Eligible youth then participated in a two week "Mental Toughness Orientation" (an element of the program's YouthBuild affiliation) after which completers were randomly assigned. Program group participants were then assessed for supportive services and credit completion, took the InnerSight assessment, and met with their case managers to develop their individual service plans.

Provider-Specific Eligibility Criteria: Youth had to live in one of the 17 zip codes CRCD serves. Youth also needed to meet a minimum score on the CASAS to proceed to the Mental Toughness Orientation.

Case Management Services

Case Management: Case managers provided continuous support for all LARCA participants and helped them overcome barriers to employment.

Number of Case Managers: Two case managers.

Frequency/Duration of Scheduled Meetings: case managers met with LARCA participants as a cohort and individually on a weekly basis.

Comprehensive Services

Key Supportive Services Utilized: Housing support, transportation assistance (bus passes), substance abuse counseling (if needed), childcare services, legal assistance, and mental health counseling.

Work Readiness Training: Participants began their work readiness training shortly before earning their diploma. The career placement coordinator delivered the training, which employed the LA Chamber of Commerce curriculum, and consisted of two, two to three hour workshops in addition to a mock interview session.

Life Skills Workshops: CRCD staff, interns, and partner staff provided workshops on financial literacy, substance abuse counseling, anger management, sexual health, and CPR training.

Youth Development: Participants had the opportunity to serve as work crew leaders during their worksite experience, serve on a youth policy council, and connect with other YouthBuild sites to share successes and challenges.

Secondary Education

Type of Credential: Participants enrolled in high school diploma classes at a charter school.

Educational Provider(s): YouthBuild Charter School of California delivered the high school diploma classes on the campus of LA Trade Technical College.

Time to Complete: Participants achieved a high school diploma in 8-16 weeks. They rotated between classes and vocational training.

Vocational Training

Career Pathway(s): Construction and conservation training.

Vocational Training Provider(s): Los Angeles Trade Technical College and CRCD enterprises.

Vocational Training Services: The training, provided by LA Trade Technical College, consisted of a 10-week class that covered carpentry, weatherization, and green building and led to a HBI-PACT or Homebuilder's Institute Certificate as well as OSHA and CPR credentials. Participants could also receive paid work experience, doing neighborhood cleanup and graffiti abatement through CRCD enterprises.

Employment and Post-Secondary Education

Employment Placement: CRCD emphasized post-secondary education over employment, but employment placement services were offered about 30 weeks into the program. One staff member assisted participants in finding positions, usually in retail or the service sector.

Post-Secondary Education Placement: A post-secondary education counselor started working with youth from the beginning of the program cycle to engage in college visits and college readiness classes. Participants often pursued postsecondary educational coursework at LA Trade Technical College. Los Angeles Conservation Corps

Los Angeles Conservation Corps

Provider Overview

Type of Organization: Founded in 1986, LA Conservation Corps is a non-profit organization that provides services to at-risk youth throughout the City and County of Los Angeles.

Workforce Innovation Fund Grant Amount: $1,450,000

LARCA Program Staff: 10 staff members, 5-6 FTE

Key Partners: LAUSD (PSA Counselors), The Education Corps (secondary educational services), Los Angeles Trade Tech College (vocational training in construction), Creation World Safety (safety certification training), NATEC Inc (safety certification training), Forklift Academy (vocational training), University of Southern California (MSW interns provide counseling services), Baby Buggy and Baby2Baby (diapers and baby supplies), Public Counsel (legal services), Lincoln Park Driving School (driver's education classes).

Recruitment and Eligibility

Primary Recruitment Methods: Visiting schools to engage potential dropouts, calling and sending letters to youth on LAUSD's dropout list, soliciting referrals from other PSA Counselors and school staff, referrals from YouthSource and WorkSource center staff, and participating at local job fairs or other community events.

Summary of Intake and Enrollment Process: After attending one of the program's four weekly orientations, recruitment coordinators met with youth to assess their readiness for the program, administered a psychosocial assessment, and collected eligibility documentation. Eligible and suitable youth were then randomly assigned. Program group youth then met with a career coach and PSA counselor to create an education plan and individual service strategy, and took the CASAS and online InnerSight Inventory.

Provider-Specific Eligibility Criteria: N/A

Case Management Services

Case Management: Case managers' goal was to support participants throughout the program and mitigate barriers that could impede their success by helping participants set education and career goals, assess basic life needs, and make referrals for supportive services.

Number of Case Managers: Three case managers.

Frequency/Duration of Scheduled Meetings: Case managers officially met with participants twice a month for at least 15-30 minutes.

Comprehensive Services

Key Supportive Services Utilized: Housing, transportation (reduced costs for drivers' licenses and metro passes), substance abuse counseling (MSW interns), childcare services, legal services for traffic violations, and mental health services.

Work Readiness Training: Work readiness training was introduced after the first three months of school and then during the last week of the second academic semester (for secondary school). The vocational training and transitions coordinator delivered the training, which was based on the LA Chamber of Commerce's curriculum.

Life Skills Workshops: LA Conservation Corps staff members and partner organizations offered workshops on financial literacy (conducted by New York Life and Operation HOPE), sexual heath (led by case managers), and nutrition and wellness.

Youth Development: Participants had the opportunity to become assistant crew leaders on program work crews after they completed their vocational training. They could also represent the organization at conferences and at community events.

Secondary Education

Type of Credential: Participants enrolled in high school diploma classes at a charter school.

Educational Provider: LA Education Corps delivered the high school diploma classes on site.

Time to Complete: Participants achieved a high school diploma in 9-18 months. They rotated between 3 months of education and 3 months of vocational training.

Vocational Training

Career Pathway(s): Conservation and green construction-related training.

Vocational Training Provider(s): LA Conservation Corp offered its own conservation training and work experience at sites across the city.

Vocational Training Services: Training covered topics including recycling, graffiti abatement, solar panel installation, and community gardening and led to varied construction and conversation certificates, as well as OHSA, CPR, and First-Aid credentials. Participants received paid work experience related to the training through an internship with the provider.

Employment and Post-Secondary Education

Employment Placement: LA Conservation Corps emphasized post-secondary education over immediate employment, but one staff person provided employment placement services to participants after they had received their diploma and started work readiness training. While most participants went into post-secondary education, a staff person assisted participants in finding employment in conservation, construction, and culinary arts.

Post-Secondary Education Placement: LA Conservation Corps offered a course combining information on post-secondary education and employment, including information about financial aid. Participants also went on college tours.

Youth Opportunity Movement – Boyle Heights

Provider Overview

Type of Organization: Founded in 2001, YO! Boyle Heights is a program within the Los Angeles Economic and Workforce Development Department that provides services to at-risk youth, primarily in the Boyle Heights neighborhood of Los Angeles.

Workforce Innovation Fund Grant Amount: $1,010,000

LARCA Program Staff: 4 staff members; 2-3 FTE

Key Program Partners: LAUSD (PSA Counselors), Kaiser Permanente (internships), Five Keys Charter School (secondary educational services), Los Angeles Trade Technical College (basic skills remediation to prepare youth for vocational training), El Centro de Ayuda (financial literacy training), Southwest College (safety certification training) and East Los Angeles College (vocational training).

Recruitment and Eligibility

Primary Recruitment Methods: Engaging staff at local adult schools, sending letters to youth on LAUSD's dropout list, soliciting referrals from LAUSD high school staff, and canvassing local neighborhoods.

Summary of Intake and Enrollment Process: Youth attended one of two weekly program orientations and completed a pre-application. Youth then met with the Program Manager to submit additional paperwork and take the CASAS assessment. Eligible and suitable youth were then randomly assigned. Program group youth then met with the PSA Counselor to assess the number of credits they needed to graduate and whether they should pursue one of the HSETs or high school diploma. Participants then met with the LARCA Program Manager to discuss their supportive services needs and to take the InnerSight assessment.

Provider-Specific Eligibility Criteria: N/A

Case Management Services

Case Management: Case management staff assisted participants in setting career and educational goals and monitoring their progress in achieving these goals. Case management staff mentioned that their overall goal was to ensure that participants enrolled in and completed education, vocational training, and post-secondary education programs.

Number of Case Managers: Two case managers.

Frequency/Duration of Scheduled Meetings: Case management meetings were held on a drop-in basis and typically lasted between 15-30 minutes.

Comprehensive Services

Key Supportive Services Utilized: Housing, transportation (metro passes and tokens), childcare support, legal assistance, mental health counseling, and tattoo removal.

Work Readiness Training: Participants began their work readiness training after they completed their HSET or diploma. YO! Boyle Heights was shifting from providing their own work readiness training toward working with local community colleges that provided training that employed the 8-hour LA Chamber of Commerce's curriculum.

Life Skills Workshops: A counselor delivered a financial literacy workshop using four modules from a Federal Deposit Insurance Corporation (FDIC) financial literacy curriculum.

Youth Development: Participants had the opportunity to serve on a youth council.

Secondary Education

Type of Credential: Participants chose between high school diploma or one of the HSET preparation classes.

Educational Provider(s): Participants could attend high school diploma classes at Five Keys charter school on site, high school diploma or HSET prep classes at LAUSD adult schools, or high school diploma or HSET prep classes offered by LAUSD and East Los Angeles College instructors on site.

Time to Complete: Varied based on type of program and credits needed.

Vocational Training

Career Pathway(s): Health related training in Health Information Technology (HIT). Participants could also enroll in other types of health training.

Vocational Training Provider(s): East Los Angeles College provided the HIT training.

Vocational Training Services: HIT training consisted of classes from East Los Angeles College's HIT AA degree offered to a cohort of LARCA participants. Participants received college credit for the classes, and, if they continued, they could achieve an associate's degree. Participants also received paid work experience through an internship at Kaiser.

Employment and Post-Secondary Education

Employment Placement: YO! Boyle Heights emphasized post-secondary education over employment, but provided employment placement services to participants who indicated an interest. A WIA career coach helped participants find minimum wage positions in the retail or service sectors.

Post-Secondary Education Placement: Participants could meet with a dedicated college counselor to get assistance with applications, financial aid, and conducting college visits.

Youth Opportunity Movement – Watts

Provider Overview

Type of Organization: Founded in 2000, YO! Watts is a program within the Los Angeles Economic and Workforce Development Department that provides services to at-risk youth, primarily in the Watts neighborhood of Los Angeles.

Workforce Innovation Fund Grant Amount: $1,010,000

LARCA Program Staff: 8 staff members, 3-4 FTE

Key Partners: LAUSD (PSA Counselors), New Regal Health Career (vocational training), Maxine Waters Adult School (secondary educational services), Downey Adult School (secondary educational services), Inspire Academy (secondary educational services), Los Angeles Trade Tech College (work readiness classes), Los Angeles City College (work readiness classes) and Operation Hope (financial literacy classes).

Recruitment and Eligibility

Primary Recruitment Methods: Contacting youth on LAUSD's dropout list, soliciting referrals from local community organizations, canvassing the local community, and conducting community outreach at local shopping centers.

Summary of Intake and Enrollment Process: Youth attended one of the twice weekly program orientations and then met with the PSA Counselor to verify school status. After submitting eligibility paperwork, youth were interviewed by the LARCA grant manager who assessed their level of interest. Eligible and suitable youth were then randomly assigned. Program group members then took the CASAS and the InnerSight Inventory.

Provider-Specific Eligibility Criteria: N/A

Case Management Services

Case Management: Case managers stated that their role was to serve as a mentor that could connect participants with supportive services. The overall goal was to ensure that participants earned a GED or high school diploma and completed vocational training.

Number of Case Managers: Two staff members provided case management service.

Frequency/Duration of Scheduled Meetings: Case managers met with participants formally once a quarter and otherwise as needed.

Comprehensive Services

Key Supportive Services Utilized: Housing, transportation, substance abuse counseling, childcare services, legal assistance, mental health care, and uniforms for CNA training.

Work Readiness Training: Program participants began work readiness training shortly after enrollment. YO! Watts worked with instructors from local community colleges to provide work readiness training. The classes were generally held for 8 hours a week for four weeks.

Life Skills Workshops: YO! Watts staff members provided workshops on financial literacy, time management, and healthy eating and nutrition.

Youth Development: Participants had the opportunity to become peer tutors and serve on youth leadership councils.

Secondary Education

Type of Credential: Participants chose between high school diploma or HSET prep classes.

Educational Provider(s): Participants could attend high school diploma classes at INSPIRE, an onsite charter school. They could also take high school diploma or HSET prep classes at LAUSD adult schools or do HSET independent study with YO! Watts tutors.

Time to Complete: 1-8 months, depending on the type of program and credit completion level.

Vocational Training

Career Pathway(s): Most participants enrolled in a Certified Nursing Assistant (CNA) training. A few participants also enrolled in additional health related training (e.g., phlebotomy, pharmacy technician, etc.).

Vocational Training Provider(s): New Regal Health Career, a proprietary training provider, offered the CNA training. Local adult schools and community colleges provided the alternative health trainings.

Vocational Training Services: The CNA training enabled participants to pass the CNA certification exam, while other participants got alternative health credentials. A few participants had paid work experiences in health fields, but most pursued CNA employment.

Employment and Post-Secondary Education

Employment Placement: YO! Watts emphasized immediate employment after training was completed. The CNA training provider hosted a job fair and connected participants to jobs based on prior connections with convalescent homes, assisted living facilities, and in-home care providers. A dedicated LARCA career coach also helped participants.

Post-Secondary Education Placement: YO! Watts did not emphasize additional post-secondary education except for participants enrolled in alternative health trainings. However, interested participants could meet with the career coach or the PSA counselor to discuss postsecondary education, financial aid, and applications.

Youth Policy Institute – Pico Union

Provider Overview

Type of Organization: Founded in 1983, the Youth Policy Institute is a non-profit organization serving the Los Angeles County area. The Pico Union branch opened in 2013 to serve the Pico Union neighborhood of Los Angeles.

Workforce Innovation Fund Grant Amount: $1,475,000

LARCA Program Staff: 7 staff members, 5-6 FTE

Key Partners: LAUSD (PSA Counselors), SIATech High School (secondary educational services), Planned Parenthood (which provides guest speakers for weekly on-site life skills classes).

Recruitment and Eligibility

Primary Recruitment Methods: Word-of-mouth, visiting local schools to speak with PSA Counselors and academic counselors, presenting at school options fairs, sending letters to youth on LAUSD's dropout list, soliciting referrals from FamilySource centers and other YPI programs, and attending resource fairs and other community events.

Summary of Intake and Enrollment Process: After attending one of the twice weekly program orientations, youth met with the PSA Counselor to verify their school status. Case Managers also met with youth to answer questions and collect eligibility documentation. Eligible and suitable youth were then randomly assigned. Program group participants then met with the PSA Counselor to determine their educational needs and a case manager to take the CASAS and the InnerSight Inventory.

Provider-Specific Eligibility Criteria: N/A

Case Management Services

Case Management: The goal of case management services was to provide participants with basic needs and supportive services, help them develop their education and career goals, and empower them to become self-advocates.

Number of Case Managers: Two full time case managers and one senior case manager.

Frequency/Duration of Scheduled Meetings: Case managers formally meet with youth on a monthly basis for 15-30 minutes.

Comprehensive Services

Key Supportive Services Utilized: Housing, transportation, substance abuse counseling, childcare, legal assistance, and mental health counseling.

Work Readiness Training: Participants began work readiness training as soon as they enrolled in LARCA. Using the LA Chamber of Commerce's work readiness curriculum, the college and career specialist delivered a total of 8-hours of work readiness workshops.

Life Skills Workshops: YPI Pico Union staff members and partner organizations delivered life skills workshops on financial literacy, substance abuse issues, violence prevention workshops, parenting workshops for youth with small children, sexual health, and communication skills.

Youth Development: Participants had the opportunity to serve as peer mentors and on an Advisory Board to complete a community service-learning project.

Secondary Education

Type of Credential: Participants chose between high school diploma or HSET prep classes.

Educational Provider: Participants could attend high school diploma classes at SIA Tech, an onsite charter school. They could also do HSET prep onsite through 1st PERIOD, a program offered by YPI Pico Union.

Time to Complete: Participants took from 7-15 months to achieve their academic credential.

Vocational Training

Career Pathway(s): YPI Pico Union planned to offer training in the construction, conservation, and health fields, as well as in automotive technology (under development as of Fall 2014).

Vocational Training Provider(s): YPI Pico Union planned to connect participants to trainings at local community colleges. Participants could then choose from a variety of options, from medical billing and phlebotomy to construction.

Vocational Training Services: Participants would be able to receive a variety of credentials based on the training chosen. A few youth participated in paid work experiences.

Employment and Post-Secondary Education

Employment Placement: YPI Pico Union encouraged post-secondary education over employment, but four staff members offered employment services in a collective effort. This meant they could all assist youth with employment even if it was not their only job function. One of these staff members specialized in college and career placements. Most participants who found employment got minimum wage jobs. Participants usually started this process when they were close to receiving an academic credential.

Post-Secondary Education Placement: Providers staff arranged college visits and assisted participants with filling out applications and financial aid forms.

Youth Policy Institute – San Fernando Valley

Provider Overview

Type of Organization: Founded in 1983, the Youth Policy Institute is a non-profit organization serving the Los Angeles County area. The San Fernando branch of the organization opened in 2012 to serve the San Fernando Valley.

Workforce Innovation Fund Grant Amount: $1,475,000

LARCA Program Staff: 9 staff members, 7-8 FTE

Key Partners: LAUSD (PSA Counselors), Mission View Public School (secondary educational services), Los Angeles Mission College (vocational training in childhood development), and Anderson College (vocational training in health careers).

Recruitment and Eligibility

Primary Recruitment Methods: Contacting youth on LAUSD's dropout list, engaging LAUSD staff for potential recruits at schools, presenting at local community organizations and adult schools, distributing flyers, attending career and resource fairs and other community events, and soliciting referrals from Mission View Public School.

Summary of Intake and Enrollment Process: After attending one of two weekly LARCA program orientations, youth meet with the PSA Counselor to verify school status. Case managers then met with youth to answer questions and collect eligibility paperwork. Eligible and suitable youth were then randomly assigned. Case managers then scheduled appointments for program group participants to complete the CASAS and InnerSight Inventory as well as appointments to meet with the PSA Counselor to determine their educational needs.

Provider-Specific Eligibility Criteria: N/A

Case Management Services

Case Management: The goal of case management services was to connect participants with key supportive services and to measure their progress and completion of their education and vocational training goals.

Number of Case Managers: Two full time case managers.

Frequency/Duration of Scheduled Meetings: Case managers formally meet with youth on a monthly basis for 15-30 minutes.

Comprehensive Services

Key Supportive Services Utilized: Housing, transportation (Metro transit pass), substance abuse counseling (if needed), childcare support, legal assistance, group counseling, and mental health services.

Work Readiness Training: Participants began work readiness training shortly after they enrolled in the program. YPI San Fernando's college and career placement specialists provided the training, which used the LA Chamber of Commerce's curriculum.

Life Skills Workshops: YPI San Fernando staff members and partner providers offered workshops on financial literacy, substance abuse issues, violence prevention, anger management, parenting skills for participants with young children, sexual health, time management and computer literacy.

Youth Development: Participants had the opportunity to serve on a Youth Advisory Board, YouthBuild Youth Policy Council (if enrolled in YouthBuild), and as peer mentors.

Secondary Education

Type of Credential: Participants chose between high school diploma or HSET prep classes.

Educational Provider: Participants could attend high school diploma classes at Mission View Charter School, an onsite charter school. They could also do HSET prep onsite through 1st PERIOD, a program offered by YPI San Fernando onsite.

Time to Complete: Participants took 4-7 months to achieve their academic credential.

Vocational Training

Career Pathway: Construction, conservation, and health fields, as well as child development.

Vocational Training Provider: YPI San Fernando connected participants to trainings at local community colleges (Los Angeles Mission College) where they could choose from a variety of options. In addition, YPI San Fernando recently became a YouthBuild site and was planning to offer construction training through that program.

Vocational Training Services: Participants received a variety of credentials based on the training chosen, including HBI-PACT, child development certificate, and OSHA, CPR, and First-Aid credentials. Most participants did not do paid work experiences.

Employment and Post-Secondary Education

Employment Placement: YPI San Fernando encouraged post-secondary education over employment, but three staff members, including the case managers, offered employment services to participants. Most participants who found employment got minimum wage jobs in retail and fast food. Participants could start this process at any time.

Post-Secondary Education Placement: Provider staff members arranged college visits and assisted participants with filling out applications and financial aid forms.

Appendix B: Statistical Methods and Sensitivity Analysis

Although the randomized controlled trial (RCT) design of the study permitted the use of simple differences in means to assess the impact of the LARCA program, the study team used more complex methods and approaches to verify the estimated impacts. These methods included regression analysis and various statistical approaches (hierarchical linear modeling [HLM] and adjusting for multiple comparisons) conducted as part of a sensitivity analysis not described in the main body of the report.

Statistical Models Used

Because of the evaluation's randomized control trial design, the study team was able to assume that the program and control groups did not systematically differ is any way *except* in their exposure to the program. Thus, observed mean differences in outcomes provide an unbiased estimate of the treatment effects of the LARCA program.

To verify that the program and control groups were indeed comparable, sample means for the program and control groups were compared on observable background characteristics measured prior to and at the point of random assignment (i.e., at baseline), a process described in more detail in Chapter II. These characteristics included various demographic characteristics (e.g., age, race, gender, etc.) as well as background characteristics such as employment and educational history. Participants selected into the program group were not statistically different from those in the control group on any of these observable characteristics. The study team therefore assumed a similar equivalence for unobserved characteristics and expected the difference in means on outcomes to produce an unbiased estimate of the treatment effect.

Additional statistical models were implemented to examine whether more complex models would alter the basic findings included in this report. Beyond testing the difference in means, impacts were estimated using regression analysis and a hierarchical linear modeling (HLM) approach with adjustments to address multiple comparisons.

Regression Analysis

Regression analysis was used to extend beyond simple differences in means by allowing for the inclusion of covariates. Including covariates in the analytical model is beneficial to explaining relationships in the data if these covariates are correlated with the outcome. This may increase the model's explanation of variance, thereby reducing unexplained error and improving overall model fit (Gelman & Hill, 2006).

Two types of regression models were used for this study: ordinary least squares (OLS) for outcomes that are continuous, and logistic regressions for outcomes that are dichotomous. Logistic regressions are needed for assessing the binary outcomes of this study because the distribution of errors for these outcome measures follows a binomial distribution and, therefore, violates the distributional assumptions of OLS.

The regression models included a vector of individual-level characteristics, as represented in Equation 1:

$$\mathbf{Y}_n = \beta_0 + \beta_1 Group\ Assignment_n + \Sigma\, \beta_p \mathbf{X}_{pn} + \varepsilon_n \quad (1)$$

In this equation, β_1 provides the estimated treatment effect of LARCA on outcome **Y** for person *n*. $\mathbf{X}_p$ represents each of the covariates *p* for person *n* with β_p providing the corresponding coefficients for these covariates; the error term (ε) represents the difference between the observed and predicted outcome for person *n*. Exhibit B-1 details the covariates for the individual-level characteristics included in the regression analysis. Individual-level predictors were collected for participants at baseline and included each person's age, racial background, gender, and employment history, among others.

Exhibit B-1: Descriptive Statistics of Individuals' Background Characteristics

Variable	Mean	N
Gender-Female (%)	52.0	2,066
Age	19.8	2,078
Timing of RA-Late (%)	50.1	2,078
Random assignment group (%)	51.3	2,078
Obtained diploma/HSET or completed HS[b] (%)	21.4	2,014
Ever employed 2 years prior to RA[ab] (%)	42.1	2,078

SOURCE: Data on "secondary education" come from LAUSD. Data on "vocational training and postsecondary education" come from LACCD. Data on "employment" come from EDD. Data on "arrests" and "convictions" come from CA DOJ. Data on "LA jail admissions" come from LASD. All other data come from the LARCA Program Application form.

NOTES: Including ethnicity and credits earned before random assignment as covariates in the sensitivity analysis was considered but ultimately rejected due to high amounts of missing data.

[a]Covariate included when assessing postsecondary impacts.

[b]Covariate included when assessing employment impacts.

Not all baseline characteristics reported in Chapter II were included in the regression analysis. Participants did not vary much in some characteristics, such as primary home language. Because including these variables would not increase the explanation of variance in the data or increase model fit, and because the analysis prioritized parsimony in model specification, these covariates were ultimately dropped from the models.

Hierarchical Linear Modeling

As described in the report, participants in the study were served through one of the six LARCA providers. Because the selected participants are clustered within these six sites, the possibility of these clusters correlating with outcomes exists, biasing the estimation of standard errors—typically downward. For this reason, the study team implemented an HLM approach as one of the components of the sensitivity analysis to examine potential heterogeneous treatment

effects across sites and enable greater precision in estimating the program effect. HLM takes into account the clustering of data by site and provides clustered random effects in the estimation, accounting for the nested structure of participants across grantees (Chaplin, 2003).

The intraclass correlation coefficient (ICC) examines how much of the total variance in the outcome measure can be attributed to group identification and is calculated by dividing the group-level variance over the total variance (see Equation 2).

$$ICC = \frac{var(U_{0j})}{var(\varepsilon_{ij}) + var(U_{0j})} \quad (2)$$

A multilevel model would only be required if the ICC was non-trivial (Lee, 2000). The multilevel model used in this study is represented through the following multilevel equation:

$$\mathbf{Y}_{nj} = \beta_{0j} + \beta_{1j} Group\ Assignment_{nj} + \Sigma\, \beta_{pj} \mathbf{X}_{nj} + \varepsilon_{nj} \quad (3)$$

$$\beta_{pj} = \gamma_{p0} + \Sigma \gamma_{pt} \mathbf{Z}_j + U_{pj}, \text{ for}$$

individual n, site j, covariate p at the individual level, and covariate t at the site level

Equation 3 is identical to Equation 1 except for the addition of a level-2 equation, which allows estimation to vary by site j. The level-2 equation estimates site-level intercept and slopes (β) using site-level covariates (Z_j) and corresponding coefficients (γ_p).

Multiple Comparisons

Research that relies on numerous hypotheses tests, such as this study, risks increased probability of falsely rejecting the null hypothesis (a Type I error). This problem is traditionally addressed through adjustments to the significance level needed to reject the null hypothesis (Glickman, Rao, & Schultz, 2014). One method of estimating the multiple comparisons problem is to use the familywise error rate (FWER), which calculates the probability of committing at least one type I error. The commonly-used approach to address the FWER is to use the Bonferroni correction (Glickman, Rao, & Schultz, 2014), which determines a stricter criterion to reject the null hypothesis based on the number of hypothesis tests conducted. For example, if the *p*-value to reject the null hypothesis is less than 0.05 and hypothesis testing assessed program impacts on two outcomes, the threshold to establish statistical significance, using a Bonferroni correction, is:

$$p\text{-value} < \frac{0.05}{2} \text{ or } 0.025 \quad (4)$$

However, a FWER adjustment—like the Bonferroni correction—potentially elicits the occurrence of a type II error (determining no effect when one exists) when correcting for the occurrence of *any* type I error. Therefore, a recommended alternative to a FWER adjustment is an adjustment using the false discovery rate (FDR). Unlike the FWER, the FDR is the expected proportion of Type I errors among the significant findings *only*. One approach to control for the FDR is the Benjamini-Hochberg procedure, which determines statistical significance when

$$p\text{-value} < \frac{i}{M} * (0.05), \text{ where} \quad (5)$$

i = ordered rank of unadjusted *p*-values

M = number of all significant findings

The FDR provides a less stringent control of Type I errors compared to FWER and, subsequently, is less likely to generate Type II errors through correction.

Results of the Sensitivity Analysis

The sensitivity analysis utilizes regression analysis, HLM, and the Benjamini-Hochberg procedure to assess the robustness of the results presented in Chapters III, IV, and V.[58] The study team ran each of these three models for these six key measures:

1. Secondary school enrollment
2. Secondary school credential attainment
3. Post-secondary school enrollment
4. Post-secondary school credit completion
5. Employment
6. Earnings

Exhibit B-2 compares four different ways of estimating the impacts of the LARCA program on the secondary, postsecondary, and employment outcomes discussed in Chapters III, IV, and V.

- Model 1: Regression analysis of the outcome variables regressed on the group assignment (a baseline model).
- Model 2: Model 1 with statistical significance adjusted using the Benjamini-Hochberg correction.
- Model 3: Regression analysis with inclusion of the control variables listed in Exhibit B-1; results adjusted using the Benjamini-Hochberg correction.
- Model 4: HLM with inclusion of the same set of control variables; results adjusted using the Benjamini-Hochberg correction.

The ICCs were assessed to determine the need for utilizing a multilevel model. Generally, the ICCs were considered trivial, except for secondary and postsecondary school enrollment. As revealed in Exhibit C-2, the key impacts across secondary, post-secondary, and employment outcomes are robust to model specification. The impacts on secondary and post-secondary enrollment, secondary credential attainment, post-secondary credit completion within first year following RA, obtaining employment within the first year following RA, quarters employed in the two years following RA, and total earnings in the two years following RA did not vary with

[58] The criminal justice impacts reported in Chapter VI are considered exploratory findings, as they were not an explicit outcome of the program, and are therefore not included in the sensitivity analysis.

the inclusion of covariates. These measures were also robust to a multilevel model that accounted for the nested nature of the data.

Exhibit B-2: Sensitivity Analysis

Measure	Baseline	Benjamini-Hochberg Adjustment ($\frac{i}{M}\alpha$)	Regression with Covariates	HLM with Covariates
One year after RA				
Secondary enrollment	1.6***	1.6†	1.7†	1.8†
Secondary credential attainment	1.7***	1.7†	1.7†	1.6†
Postsecondary enrollment	1.8***	1.8†	1.8†	2.0†
Postsecondary credit attainment	0.3**	0.3†	0.3†	0.3†
Ever employed	0.8**	0.8†	0.8†	0.8†
Quarters employed	-0.1	-0.1	-0.1	-0.1
Earnings ($)	-426.8	-426.8	-382.6	-353.0
Two years after RA				
Secondary enrollment	1.7***	1.7†	1.8†	1.9†
Secondary credential attainment	1.6***	1.6†	1.6†	1.6†
Postsecondary enrollment	2.1***	2.1†	2.1†	2.1†
Postsecondary credit attainment	0.5	0.5	0.5	0.5
Ever employed	0.8	0.8	0.8	0.8
Quarters employed	-0.4*	-0.4†	-0.4†	-0.4†
Earnings ($)	-1836.5*	-1836.5†	-1924.9†	-1919.7†

SOURCE: Data on "secondary education" come from LAUSD and CDE. Data on "vocational training and postsecondary education" come from LACCD. Data on "employment" come from EDD. All other data come from the LARCA Program Application form.

NOTES: The estimates in the first column represent the impact of the program, excluding covariates. For binary outcomes, the percentages for the program and comparison groups included in the main report were used to calculate odds ratios, calculated as: $\frac{percentage_{program}/(100-percentage_{program})}{percentage_{control}/(100-percentage_{control})}$. Conversion to odds facilitates direct comparability with the subsequent models. For continuous outcomes, the coefficients shown in the first column were calculated from the difference in group percentages: $percentage_{program} - percentage_{control}$. The second column adjusts the significance of the baseline results, using the Benjamini-Hochberg procedure. The third column is a replication of group differences using regression models, with the inclusion of covariates, alongside the multiple comparisons adjustment. Lastly, the fourth column replicates model 3, including the multiple comparisons adjustment, through a hierarchical linear model (HLM). The results for continuous variables are reported as regression coefficients while the results for dichotomous variables are reported as odds ratios.

*/**/*** The difference between the program and control groups is statistically significant at the 05/.01/.001 level

†Statistically significant following Benjamini-Hochberg adjustment.

Sample Sizes for Subgroup Analyses

Exhibits B-3a and B-3b present sample sizes for the subgroup analysis exhibits found in Chapter III, IV and V. Exhibit B-3a presents the sample sizes for all secondary education, postsecondary education and employment outcomes at both one year and two years from random assignment for the age, gender and ethnicity subgroups (labeled with an "a" in each chapter). Exhibit B-3b presents the sample sizes for all secondary education, postsecondary education and employment outcomes at both one year and two years from random assignment for the age, gender and ethnicity subgroups (labeled with an "a" in each chapter).

Exhibit B-3a: Sample Sizes of Program and Control Group Members from "a" Exhibit Subgroup Analyses

	Age				Gender				Ethnicity			
	16-21		22-24		Male		Female		Hispanic		Non-Hispanic	
	P	C	P	C	P	C	P	C	P	C	P	C
Within one year of RA												
Secondary education outcomes	810	775	256	237	496	495	563	512	743	690	220	226
Postsecondary education outcomes	810	775	256	237	496	495	563	512	743	690	220	226
Employment outcomes	774	742	247	229	476	476	538	490	716	667	207	215
Within two years of RA												
Secondary education outcomes	637	580	200	184	386	358	444	403	576	506	180	182
Postsecondary education outcomes	397	363	136	141	244	234	285	268	355	321	133	131
Employment outcomes	489	445	160	153	304	281	339	314	442	397	142	144

NOTES: Data represent sample sizes for program and control groups for each subgroup category and subgroup found in the "a" subgroup analysis tables in Chapters III, IV and V.

Exhibit B-4b: Sample Sizes of Program and Control Group Members from "b" Exhibit Subgroup Analyses

	Employment History				Timing of RA				Educational Background			
	Not Employed		Employed		Early		Late		At or Below Median		Above Median	
	P	C	P	C	P	C	P	C	P	C	P	C
Within one year of RA												
Secondary education outcomes	576	542	445	429	533	504	533	508	447	420	436	408
Postsecondary education outcomes	576	542	445	429	533	504	533	508	447	420	436	408
Employment outcomes	576	542	445	429	507	490	514	481	425	398	417	396
Within two years of RA												
Secondary education outcomes	457	416	343	321	533	504	304	260	342	314	351	305
Postsecondary education outcomes	293	270	214	220	533	504	0	0	217	198	222	209
Employment outcomes	275	260	374	338	507	490	142	108	263	242	271	245

NOTES: Data represent sample sizes for program and control groups for each subgroup category and subgroup found in the "b" subgroup analysis tables in Chapters III, IV and V.

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Appendix C: LARCA Program Application Form

APPLICATION

Los Angeles Reconnections Career Academy (LARCA)

Date: _____

APPLICANT INFORMATION

Name: _____
Last First M.I.

Address: _____

City: _____ State: _____ Zip Code: _____

Gender: ☐ Female ☐ Male Age: _____ Date of Birth: _____

Primary Language: ☐ English ☐ Spanish ☐ Other _____

Tel: _____ Cell: _____ Email: _____

Social Security #: _____ Are you eligible to work in the United States? ☐ Yes ☐ No

EMERGENCY CONTACT

Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Relationship: _____ Tel: _____ Cell: _____

ALTERNATE CONTACTS

Name	Phone #	Relationship

ADDITIONAL DEMOGRAHPIC INFORMATION

Ethnicity: Hispanic/Latino | Yes | No | Not Specified
Race: (check all that apply.) | White Black or African American Hawaiian Native or other Pacific Islander
American Indian or Alaska Native Asian | Not Specified

Please check off the appropriate box as to whether or not any of the following items apply to you (the participant)?

Disabled Yes ☐ No Runaway ☐ Yes ☐ No Youth Offender ☐ Yes ☐ No

Foster Child ☐ Yes ☐ No Limited English ☐ Yes ☐ No Homeless ☐ Yes ☐ No

Parenting/ Pregnant? ☐ Yes ☐ No

If yes, how many children and what are their ages?

	Child #1	Child #2	Child #3	Child #4	Child #5
Gender					
Age					

Did/do you participate in a free lunch program at school? ☐ Yes ☐ No

Do you/ your family receive public assistance? ☐ Yes ☐ No

If yes, what type: ☐ CalWORKs ☐ General Relief ☐ Food Stamps ☐ Other: _____

EDUCATION

Last school attended: _____

Last Grade Level Completed: _____

Counselor: _____ Tel: _____

EMPLOYMENT HISTORY

If you are under 18 years old, are your parent(s) or legal guardian(s) employed? ☐ Yes ☐ No

Are you currently employed? ☐ Yes ☐ No

Have you been employed? ☐ Yes ☐ No

If you have been employed, please complete the employment history below. List your current job (if applicable) and volunteer work.

From Mo/Yr	To Mo/Yr	Employer Name & Address	Supervisor Name & Telephone	Hourly Pay Rate	# of Hours Worked p/ Week

RECRUITMENT INFORMATION

Why would you like to participate in the Los Angeles Reconnections Career Academy (LARCA) program?

_____

_____

_____

How did you hear about the LARCA program?

- ☐ High School Counselor
- ☐ Other Community-Based Organization
- ☐ School
- ☐ Family/Friend
- ☐ Walk-In
- ☐ Probation/Parole Officer
- ☐ Outreach efforts
- ☐ YouthSource Center
- ☐ FamilySource Center
- ☐ Other _____

SIGNATURES

The Los Angeles Reconnections Career Academy is an equal opportunity employer/program; it does not discriminate on the basis of race, color, religion, sex, national origin, age, disability, or any other characteristic protected by applicable state or federal civil rights laws. Auxiliary aids and services are available upon request to individuals with disabilities.

I hereby certify that the information contained in this application is true and correct to the best of my knowledge and agree to have any of its statements confirmed by the LARCA staff. I authorize the sources listed above to provide LARCA any and all information concerning my employment history and any pertinent information they may have about my ability to participate.

I am fully aware that by completing this application I am not guaranteed admission into the program. I understand that being able to enroll in the LARCA program is based on being determined to be eligible to be in the program and a random selection process and that no preferential treatment is given.

_____ _____

Applicant Signature Date

_____ _____

Parent/Legal Guardian Signature (If minor) Date

_____ _____

Staff Signature Date

OFFICE USE ONLY

Staff: _____ Date Enrolled: _____

ETO #: _____ Study ID #_____

12/4/12