



# Does GAIN increase the self-sufficiency of CalWORKs families in Los Angeles?

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# TABLE OF CONTENTS

1. Introduction . . . . .	3
Key findings . . . . .	5
2. Data and strategy . . . . .	8
3. Findings . . . . .	11
A. Characteristics of program participants . . . . .	11
B. Benefit and service experience . . . . .	12
C. Program impacts . . . . .	19
4. Learning opportunities . . . . .	29
5. Discussion . . . . .	31
Acknowledgments . . . . .	32
References . . . . .	33

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# 1. Introduction

Greater Avenues for Independence (GAIN) is an education and training program that was initially created in 1985 for long-term beneficiaries of cash assistance (Riccio et al., 1989). It is California’s version of the Welfare-to-Work program and is now a mandated part of the California Work Opportunities and Responsibility to Kids (CalWORKs) cash-assistance program for individuals who are physically able to work.<sup>1</sup> The goal of GAIN is to lift families out of poverty by improving their labor-market outcomes so that cash welfare is no longer needed. However, whether GAIN improves participant employment and earnings outcomes enough to be self-sufficient has not been assessed for over 20 years.<sup>2</sup>

In partnership with the Department of Public Social Services (DPSS) in Los Angeles, this study assesses whether GAIN increases the self-sufficiency of CalWORKs families in Los Angeles. We focus on first-time CalWORKs participants to capture the full experience of individuals engaging with the program — from enrollment to services received. We focus on participants from Program Year (PY) 2017 so that we can observe participation and employment outcomes for up to 4 years after program entry.

We ask four questions:

1. **What are the characteristics of first-time CalWORKs + GAIN participants?**
2. **What are the benefit and service experiences of first-time CalWORKs + GAIN participants?**
3. **Does CalWORKs + GAIN improve the self-sufficiency of first-time participants based on employer-reported employment and earnings over a four-year period?**
4. **How do the answers to the research questions vary by race/ethnicity or whether the family was led by single or partnered parents?**

There are also several questions related to measuring the effectiveness of GAIN that we are unable to answer. First, we are unable to disentangle the influence of CalWORKs enrollment on labor market outcomes from the influence of the GAIN program on labor market outcomes. CalWORKs is a means-tested cash-assistance program, and its eligibility rules create disincentives to work because after an initial income disregard, each additional dollar in earned income results

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1 This mandate reflects changes introduced in the Welfare-to-Work Act of 1996, where the federal cash-assistance program was changed from Aid to Families with Dependent Children (AFDC) to Temporary Assistance for Needy Families (TANF). CalWORKs is the TANF program in California.

2 Research on the effectiveness of GAIN took place in the 1990s for AFDC recipients (Freedman et al., 1996), as well as an adjusted “Jobs-First GAIN” version in Los Angeles (Freedman, Knab, et al., 2000).

in benefits decreasing by 50 cents.<sup>3</sup> In other words, enrollment in CalWORKs could have a downward impact on labor market outcomes based on program-administration rules alone. In this study, we are only able to answer whether participation in GAIN leads participants to overcome those disincentives and improves self-sufficiency, as measured by employer-reported employment. Second, DPSS is interested in learning about the effectiveness of specific service activities or occupations that will lead to improved self-sufficiency for participants. However, we are unable to measure the relative influence of either of these things. GAIN activities include services like job-search training, subsidized employment, education, and job-skills training — sometimes tied to a specific occupation — to increase employability. In this study, we broadly describe participation in these services, but we do not measure whether they are independently effective at improving labor market outcomes. The primary limitation to doing that is the need to develop a research design. Research designs represent specific strategies to isolate the effectiveness of a service from other reasons why an individual would be assigned to and participate with a service.

To build research capacity for DPSS to answer actionable questions on the effectiveness of GAIN services, we conduct a set of analyses to identify opportunities where DPSS could test the effectiveness of changing GAIN components. Specifically, we calculate whether random assignment studies would be feasible to measure improvements in labor market outcomes for either one or four years after program enrollment for different GAIN activities. For example, we calculate the smallest labor-market impacts that could be identified if half the participants were assigned to one version of the activity and the other half assigned to another version. This exercise demonstrates the available opportunities for building new evidence on the effectiveness of specific GAIN services.

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3 Ziliak (2015) provides a detailed review of the economics literature on TANF, including a discussion of the disincentives to working that are introduced by programmatic rules.

## KEY FINDINGS

1. **First-time CalWORKs + GAIN enrollees have limited employer-reported earnings, with implications for both program goals and the population available for the impact study.**<sup>4</sup>

In the six quarters before entering CalWORKs, only 65% of participants had employer-reported earnings. Obtaining formal labor positions will likely be more challenging for those with limited labor-market experiences. Further, our assessment of the research design was that it was only credible when focusing on individuals with a certain amount of previous employer-reported earnings. For this reason, we focus the empirical analysis on the subset of participants who earned \$500 dollars or more each quarter in at least two of the six pre-entry quarters.<sup>5</sup> This represents 55% of the GAIN population, and we refer to this positive-earnings group as the “in-study” sample, and present the main research findings based on this group.

2. **The average length of program participation is a year-and-a-half over a four-year period, with nearly 40% of individuals experiencing a break in participation.** On average, participants received CalWORKs benefits for 19 months. However, 39% of participants experienced a break of at least one month in their payments, which suggests some form of disengagement with CalWORKs (and GAIN) before returning to the program. This highlights the challenge of continuous and long-term engagement with program participants, which may introduce challenges to completion of longer-term GAIN activities, like skill development or training. In other words, any considerations on promoting longer-term GAIN activities should be coupled with considerations on program churn.
3. **Nearly a third of participants rely on an exemption — decreasing the chance they will benefit from GAIN activities.** Approximately 30% of participants were exempt from participating in GAIN activities at some point during their enrollment, which decreases the chances that GAIN could positively impact their employment outcomes. Caregiving is the largest exemption category (20% of participants), and this exemption category is higher for single individuals (23%) relative to those entering with a partner (15%). Individuals in this group may need alternative services tailored to their specific needs in order to support self-sufficiency.

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4 Employer-reported labor is defined as jobs covered by the Unemployment Insurance system, which covers 82% of employment positions, but does not cover gig or informal work (Alamo, 2022).

5 We provide evidence in the Appendix that the research design is not credible when including the full sample of first-time CalWORKs + GAIN participants. That said, we show that the demographics of the excluded population are not meaningfully different.

4. **Nearly 30% of participants never complete an appraisal to identify relevant activities. Of those that do, around half are assigned to an activity focused on improving labor-market outcomes but only a quarter ever complete one.**

All participants are required to complete an appraisal at the start of GAIN to identify relevant services, but only 71% complete this successfully. Nearly half of all GAIN participants are assigned to an activity that is meant to improve their labor-market outcomes — either through increasing labor-force attachment or improving skills. However, for those assigned to one of these activities, only about a quarter of participants complete them. This suggests that strategies are needed to get participants to start and persist with these activities.

5. **More than one-third of participants are sanctioned at some point for not complying with GAIN requirements, and these sanctions are applied for over half a year, on average.** Thirty-eight percent of GAIN participants in the study are sanctioned while enrolled in GAIN, which means they were not complying with program requirements and their payment amounts were reduced. These sanctions lasted for over half a year (8.7 months), on average. It is worth exploring strategies to increase compliance and engagement.

6. **We estimate causal impacts of first-time enrollment in CalWORKs + GAIN on labor-market outcomes for the in-study sample of participants who had positive employer-reported earnings before program entry, although some limitations may remain around constructing a comparison group.** This study is partially a proof-of-concept exercise in estimating the impacts of programs administered by DPSS using historical data. To do this, our research design is to identify an observationally equivalent group of CalFresh enrollees that did not participate in CalWORKs to use as a comparison group.<sup>6</sup> We attempted to identify groups that were observationally equivalent on timing and location of program enrollment, demographic characteristics, and earnings patterns before program entry. We provide empirical evidence that we can estimate the impacts of first-time CalWORKs + GAIN for a group of participants who had previous employer-reported earnings — namely, participants who earned at least \$500 in at least 2 of the 6 quarters prior to enrollment in CalWORKs + GAIN. However, we are unable to provide impacts for the broader group of GAIN participants. This is a primary limitation of the study because the excluded GAIN participants are less attached to the formal labor market and likely have a different experience.

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<sup>6</sup> CalFresh is the name of California's Supplemental Nutrition Assistance Program (SNAP), which is also administered by DPSS.



7. **We find that it is likely that participation in GAIN does not help CalWORKs participants from the in-study sample who had previous employer-reported earnings before program entry achieve self-sufficiency four years after their CalWORKs enrollment.** For first-time CalWORKs + GAIN participants who earned at least \$500 in at least 2 of the 6 quarters prior to enrollment (and for whom credible estimates of labor-market impacts are available), they are generally negative four years after enrollment. Relative to observationally-equivalent CalFresh participants, in-study GAIN participants had lower wage/salary employment by 2.6 percentage points (off a base of 57.4%) and lower quarterly earnings by \$469 (off a base of \$5,398) in the fourth year after program entry. This is a time window well beyond when most participants receive CalWORKs benefits, which implies self-sufficiency is not improved. At the same time, over all four years, in-study CalWORKs + GAIN individuals earned \$7,025 less in wage/salary earnings relative to similar CalFresh individuals. However, they also received \$12,398 in CalWORKs payments, which means they received an extra \$5,373 in total income from enrolling in CalWORKs + GAIN. Across quarters, we find that in-study CalWORKs + GAIN participants have more income from these two sources through three years before the gap disappears.
8. **Among the in-study sample of CalWORKs participants with previous employer-reported earnings before program entry, the influence of CalWORKs + GAIN on labor-market outcomes varied across subgroups.** The decrease in employment and earnings for in-study GAIN participants was particularly large for Black participants, who experienced a 7.0 percentage point decrease in employment (off a base of 58.5%) and whose quarterly earnings decreased by \$1,159 (off a base of \$5,487) relative to the CalFresh comparison group. There are no labor-market impacts (positive or negative) for in-study individuals who enrolled as part of a couple – all of the negative impacts are experienced by single-parent households. These findings highlight particular challenges for the in-study subset of Black CalWORKs participants and single-parent households as they navigate GAIN services, and should motivate program improvements specifically for these populations.
9. **DPSS has many opportunities to study which GAIN components “work.”** The number of people served by GAIN in Los Angeles is large enough to measure whether specific activities or program-improvement strategies are beneficial to GAIN participants. To understand possibilities, we assumed a simple 50:50 random-assignment research design was applied to historical assignments to (1) Job Readiness, (2) Vocational/Educational Training, and (3) Paid Work Experience activities. Doing this, we show that DPSS is well positioned to study strategies that change employment by 2 to 4 percentage points in the first year, or 3 to 6 percentage points in the fourth year after enrollment. We also estimate that DPSS should be able to study strategies that could change quarterly earnings by as little as \$181 in the first year and \$338 in the fourth

year after enrollment. These numbers are similar or smaller to the impacts identified in this study. This implies that if DPSS were to identify program improvement strategies, there are random-assignment research designs that could measure if these strategies had an impact on improving employment and earnings.

The remainder of the report contains the following sections. We first provide a general overview of the data and strategy used to answer the research questions while saving the technical details for the appendix. We then present the findings from the research questions as well as results from the planning exercise to identify future learning opportunities. Finally, we conclude with a discussion of the findings and next steps for DPSS to consider.

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## 2. Data and Strategy

**Data.** To answer the research questions, we rely on linked anonymized administrative data from Los Angeles County that DPSS shared with the research team. These data are combined from two sources: CalSAWS and the state Employment Development Department’s (EDD) employment and earnings records. CalSAWS is the case management system that California uses to administer social benefits programs. It contains information about participants’ backgrounds, benefit receipt, and service histories. EDD collects employment records for the administration of the state’s Unemployment Insurance (UI) system. These records contain quarterly earnings of wage and salaried workers as reported by employers. Importantly, these earnings only include jobs covered by the UI system, which means that uncovered jobs, like self-employment and “gig” work, are not included. This is an important limitation to studying earnings trajectories if CalWORKs participants rely on these types of uncovered employment.

The data available for all individuals in the study covers at least five and a half years. Specifically, all program histories from CalSAWS (and other social benefits delivered in Los Angeles) are available for at least 18 months before program enrollment through at least 48 months after program enrollment. Similarly, all linked earnings records from EDD were obtained for at least 6 full quarters (18 months) preceding a participant’s enrollment as well as for at least 16 quarters (48 months) after the quarter of enrollment. For a more detailed description of the data available, see Appendix A. Data Details.

**Study sample.** The focal population for the study is first-time CalWORKs participants who are required to participate in GAIN (CalWORKs + GAIN), and who enrolled in the program from July 1, 2017 through June 30, 2018 (that is, PY 2017). We focus on first-time CalWORKs participants because we want



to capture an individual's full CalWORKs experience. Because it is common for individuals to enroll, drop out, and then re-enroll, we did not want to include re-enrollees in the study because they had a previous CalWORKs experience that would not be captured. We also focus on individuals who are initially mandated to participate in GAIN, which is essentially all participants who do not have an automatic exemption.<sup>7</sup> We also restrict the sample to participants from ages 22 to 49 to remove some youth and to include a population who will be expected to work for a meaningful amount of time after program entry (e.g. ten years). In addition to CalWORKs participants, we also include CalFresh participants with similar characteristics to serve as a comparison group. For a more complete discussion of the focal population, see Appendix B. Sample and Exclusion Criteria.

We make one final sample exclusion for the study. Because the primary goal is to estimate causal impacts on employer-reported employment outcomes, we focus on participants that have a sufficient history of employer-reported employment before they enroll in a program (either CalWORKs or CalFresh). Participants must have earned at least \$500 in each of at least two of six pre-enrollment quarters. Fifty-five percent of the focal population meets this requirement, which reduces the GAIN study sample from 21,320 to 11,627. This is a large decrease in the study sample, but it still represents a policy-relevant population of GAIN participants who had some attachment to the labor market. Although this decision excludes an important population with limited attachment to the labor force, as we discuss below, it is important for the credibility of the findings. We describe how this exclusion changes the GAIN population as well as what it means for GAIN to be serving such a large population of participants that are not attached to formal employment.

**Descriptive analysis.** We answer the first two research questions using descriptive analyses. We first summarize demographic and case characteristics for different samples of CalWORKs and CalFresh participants. This provides a sense of how the various study decisions change the study sample. Focusing on people with sufficient employer-reported employment before entering their program, we summarize their benefits and service experiences. These analyses include duration of benefit issuances received, amount of benefits received, GAIN exemptions, participation in GAIN activities, and sanctions.

**Impact analysis.** We answer the third and fourth research questions using a non-experimental comparison-group design. We estimate the causal impact of first-time CalWORKs + GAIN participation by comparing employer-reported employment and earnings from these program participants to similar individuals

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<sup>7</sup> There are various types of GAIN exemptions. Automatic exemptions include age (e.g. younger than 16 or older than 60) and disabilities identified at CalWORKs application. Additional voluntary exemptions relate to caretaking, abilities, or participation in other select programs that may be identified through the GAIN appraisal process, and individuals who take these exemptions are included in the study.

who receive CalFresh, but who do not participate in CalWORKs (that is, a CalFresh-only group). The underlying assumption is that some individuals who apply for CalFresh are also eligible for CalWORKs, but do not enroll in CalWORKs for various reasons. This could be because of barriers during the application process, inconveniences, or variation in preparedness. It has been shown nationally that TANF (e.g., CalWORKs) enrollments have continued to fall over time relative to SNAP (e.g., CalFresh) which may reflect additional barriers for entering the program (Shaefer et al., 2020). Because of this, we believe the labor-market outcomes of CalWORKs + GAIN participants can be comparable to some CalFresh participants if we can identify those who: (1) apply for benefits in the same period, (2) apply in an office that offers both programs, (3) apply in the same region, (4) have indistinguishable individual and case characteristics, (5) have indistinguishable reports of income at application, and (6) have indistinguishable histories of employer-reported earnings. For a more detailed description of the strategy, please see Appendix C. Impact Design.<sup>8</sup>

**Outcomes.** Although we perform the impact analysis on quarterly employer-reported outcomes for four years, the primary outcome for the study is average quarterly employment and earnings in the fourth year after CalWORKs enrollment. We select this outcome because it is far enough removed from program entry to represent a stabilized impact.

**Subgroups.** We also performed subgroup analyses by race/ethnicity and by household type. For race/ethnicity, we first show sample sizes for five non-exclusive groups, and then perform analyses for the three groups that have a sufficiently-sized sample to estimate impacts. These three groups are Black, Hispanic, and White participants. We do not perform these analyses for Asian or American Indian/Alaska Native groups because there were too few individuals to support the analyses.<sup>9</sup> For household type, we perform analyses by single-parent and partnered-parent households as reported at the time of program enrollment. We considered including additional subgroups, but the data is insufficient. For example, we were initially planning on performing analyses for individuals who had identified as experiencing homelessness at program entry, but we found very few of these individuals had any attachment to the labor market, so the size of the in-study population was too small to be included in the analysis.<sup>10</sup>

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8 Note that the design used in this study and explained in Appendix C aligns with the standards set forth by the Pathways to Work Evidence Clearinghouse established by the Office of Planning, Research & Evaluation (OPRE) of the Office of the Administration of Children and Families (Rotz et al., 2020).

9 Specifically, the sample sizes within each region and quarter are too small for the research design to create valid comparison groups.

10 These participants are largely identified by virtue of the fact that they provided a CalWORKs district office as their residential address.

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## 3. Findings

We present findings in three sections. We first provide a summary of select characteristics for the various populations that were considered for the study. Next, we describe the benefit and service experience of the in-study population to answer Research Questions 1 and 2. Finally, we present impact estimates from first-time CalWORKs + GAIN enrollment on four years of labor-market outcomes to answer Research Questions 3 and 4.

### A. Characteristics of program participants

**There are some differences between individual and case characteristics when going from all CalWORKs recipients to the in-study GAIN sample.** To provide context for the study, we present individual and case characteristics for different populations in [Table 1](#). Seeing the changing characteristics across samples is useful for contextualizing the findings, but does not influence the validity of the findings. Some expected changes when going from all CalWORKs participants to those in GAIN are that ages increase, more people identify as female, and single-parent cases go down. Most of this comes from the exclusion of children and child-only cases. However, there are also changes in race/ethnicity, which was largely driven by Hispanic families going from 57% of the CalWORKs population to 52% of the mandatory GAIN population. This could relate to the prevalence of mixed-status Hispanic families and some parents being ineligible for GAIN (and CalWORKs) if they cannot work legally. That said, the percentage of Hispanic adults in the “In-Study” group increases back to 56%, which is because they are more likely to have previous employment (as reported by employers to EDD). There are approximately 75K individuals who are mandated to participate in GAIN, but only 21K are considered for the study based on our focal population restrictions of being aged 22 to 49 and being a first-time CalWORKs beneficiary. The in-study sample drops to 11,627 individuals once we apply the final restriction of requiring at least \$500 of earnings in each of at least two of the six quarters before program enrollment.

**The CalFresh sample is different from the CalWORKs + GAIN group, but is large for finding a comparison group.** We use the CalFresh participants to identify a valid group to compare to those enrolled in GAIN in order to estimate the causal impact of the program. The full CalFresh sample is much larger than the CalWORKs sample and they are quite different. CalFresh participants are more evenly split by gender, are around 8 percentage points less likely to be Black, have fewer children on the case (1.1 children compared to 1.9 for CalWORKs) and are less likely to have younger children (23% with a child under 5 compared to 52% for CalWORKs). Even after limiting the CalFresh-only group to the in-study population, there are still differences in characteristics

between them and the CalWORKs + GAIN in-study group. However, there continues to be a large population of CalFresh participants (55,089) to identify individuals who are similar to the 11,627 in-study GAIN participants.

TABLE 1: Individual and case characteristics for different programs and study populations

CHARACTERISTIC	CALWORKS	GAIN			CALFRESH		
		MANDATORY	FOCAL POP.	IN STUDY	ALL	FOCAL POP.	IN STUDY
Age (mean)	17	31	31	31	28	33	32
Female (%)	62	79	80	79	50	55	58
Single parent case (%)	91	81	79	83	86	79	80
<b>Race/ethnicity (Non-exclusive, %)</b>							
Black	25	26	25	26	17	15	16
Hispanic	57	52	51	56	55	52	56
Amer. Indian/Alaska Native	1	1	1	1	1	1	1
Asian	3	3	3	3	6	6	5
White	22	25	27	23	25	32	29
Children on case (mean)	1.9	1.4	1.6	1.6	1.1	0.8	0.9
Child under 5 on case (%)	52	48	46	44	23	20	22
N	224,381	75,002	21,320	11,627	550,322	92,530	55,089

Notes: Authors' calculations from CalSAWS records for individuals who enrolled in CalWORKs or CalFresh in PY 2017. The CalWORKs column includes all individuals (including children) who are on an enrolling case. The Mandatory GAIN column includes all CalWORKs individuals who are identified as having a work requirement in their first month of CalWORKs. The Focal Pop. column applies the initial study restrictions to identify first-time CalWORKs participants. The In-study column is inclusive of individuals who had at least \$500 in earnings in each of at least 2 of the 6 quarters preceding program enrollment. Demographic and family information is self-reported for everyone in the case/family at the time of application.

## B. Benefit and service experience

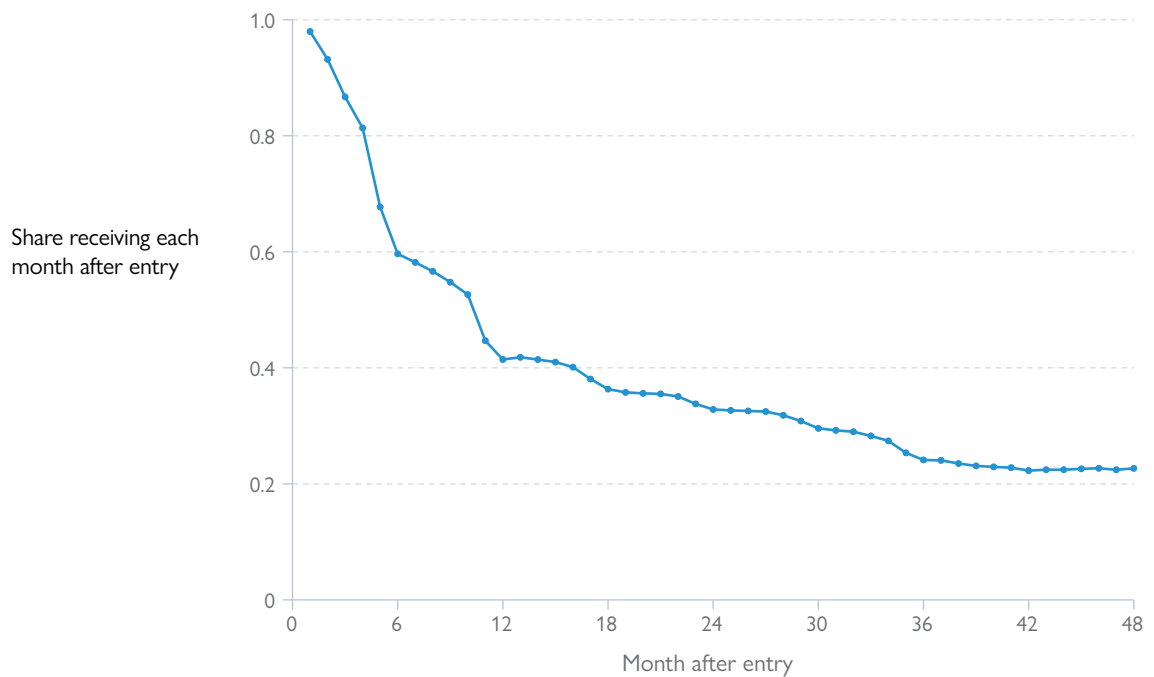
**Benefits received.** For the in-study GAIN population, we start with a description of benefits received. By understanding the number of monthly payments received, breaks in receipt, and amount of money received, we can better interpret any identified impacts from program participation.

**As measured by CalWORKs payments, most GAIN participants do not stay continuously enrolled for more than a 12-month period.**

To reflect the reality of participating in CalWORKs, we calculate the share of individuals who continued to receive CalWORKs payments after enrollment, by month, up to 48 months. [Figure 1](#) shows payments steadily drop from program entry, with noticeable drops at 6 months and 12 months – likely reflecting

ongoing participation barriers introduced by semi-annual eligibility and annual redetermination. By month 12, around 40% of participants are still receiving payments, and by 48 months, just over 20% of participants are still receiving payments. There are two primary implications. First, GAIN participants may not be enrolled in CalWORKs for long enough to participate in longer-term GAIN activities. Second, participants are largely no longer enrolled in year 4 after entry, meaning that income from earnings will not be supplemented by income from benefits for most participants at that time. Therefore, the impact of GAIN on earnings is particularly relevant in the 4th year since it will more closely reflect long-term effects on self-sufficiency and less likely to reflect disincentives to working from CalWORKs.

FIGURE 1: GAIN participants receiving CalWORKs issuances, by month after entry



Notes: Authors' calculations from CalSAWS using the program table to get enrollment date and the issuance table to get actual issuance month. The population is limited to the in-study CalWORKs + GAIN sample.

**On average, GAIN participants in the impact study received CalWORKs payments for 19 total months, with 39% of individuals experiencing a break in receipt.** Table 2 presents characteristics on payments received and benefit amounts, both overall and by subpopulations. On average, Black individuals received benefits for 22 months, which is longer than both Hispanic (19 months) and White participants (19 months). Single-parent participants also received benefits for a longer period of time (20 months compared to 16 months for partnered participants). Overall, only 7% of participants received benefits for a consecutive 48 months, implying continuous enrollment is rare. Churn — as measured by a break and return to benefits —

was common, with more than 1 in 3 participants experiencing it (39%), but this also varied by group. Black and single-partner participants were more likely to experience churn at 45%, and 40%, respectively. GAIN participants received \$12,398 in total cash assistance from CalWORKs, on average, with monthly amounts of \$586.

TABLE 2: CalWORKs benefits for in-study GAIN participants, by group

	PAYMENTS RECEIVED			BENEFIT AMOUNTS	
	MONTHS (AVERAGE)	FOR 48 CONSECUTIVE MONTHS (%)	EVER HAD A MONTH BREAK (%)	TOTAL DOLLARS (AVERAGE)	MONTHLY AMOUNT
<b>All</b>	19	7	39	\$12,398	\$586
<b>Race/Ethnicity</b>					
Black	22	8	45	\$13,485	\$577
Hispanic	19	6	38	\$12,331	\$593
White	19	6	36	\$12,242	\$586
<b>Relationship Status</b>					
Single	20	7	40	\$12,809	\$577
Partnered	16	4	31	\$11,277	\$632

Notes: Authors' calculations from the Issuance table in CalSAWS for 48 months from the time of enrollment. Demographics are based on the primary applicant. The "Ever Had a Month Break" column is the percentage of participants who stopped receiving payments for at least 1 month, but then began receiving them for any additional time period. Benefit amounts are nominal.

**CalWORKs + GAIN participants received more CalFresh benefits for a longer period of time relative to similar CalFresh-only recipients.** In addition to payments of CalWORKs benefits, we also looked at GAIN participants' receipt of CalFresh benefits. These GAIN participants received 29 months of CalFresh, on average, with an average monthly benefit of \$421, and an average total of \$12,595 (Appendix Table E1, Panel A). There was also more churn in CalFresh benefits (53%) relative to CalWORKs as measured by at least a one-month break in benefits before receiving additional payments. A similar group of CalFresh-only participants received CalFresh for fewer months (23), had smaller average benefit amounts (\$353), and an overall smaller total average amount received (\$9,116) (Appendix Table E1, Panel B).<sup>11</sup> In other words, GAIN participants received more CalFresh benefits compared to a comparable group of people who were only receiving CalFresh. We cannot say exactly why, but one explanation could be that ongoing CalWORKs enrollment facilitates ongoing CalFresh enrollment.

<sup>11</sup> We apply analytic weights from the impact study to this CalFresh group in order to make the comparisons similar. See Appendix C for a description of how these weights are created.



## Exemptions

Some exemptions are automatic, but there are several circumstances that allow participants to opt-in to an exemption from participating in GAIN activities while still receiving CalWORKs benefits. Because this study focuses on “mandatory” GAIN participants, all exemptions are based on those who opt-in for an exemption, and these individuals do not have to participate in GAIN activities as long as they are exempt. Since GAIN is intended to provide services that help participants improve their labor market outcomes, understanding the prevalence of exemptions will help us interpret results from the impact analysis and identify challenges for improving self-sufficiency for these particular groups.

TABLE 3: Percent of GAIN participants opting into an exemption, by reason and group

	EXEMPTION REASON			NEVER EXEMPT
	CAREGIVING	PREGNANCY	DISABILITY	
<b>All</b>	20	4	7	70
<b>Race/Ethnicity</b>				
Black	23	5	7	67
Hispanic	20	4	7	71
White	20	3	8	71
<b>Relationship Status</b>				
Single	23	4	7	68
Partnered	15	2	8	75

Notes: Authors' calculations from CalSAWS. The sample is limited to the 11,627 in-study CalWORKs + GAIN group. Caregiving includes care for both children and adults.

**Nearly a third of mandatory GAIN participants are exempt at some point, mostly for caregiving reasons.** Table 3 shows that overall, 70% of participants were never exempt from GAIN activities, meaning 30% of participants were exempt at some point. The most common exemptions are for caregiving (caring for a child or older adult), having a disability, and pregnancy. There are some meaningful differences across demographic groups. For caregiving, single-parent households were 8 percentage points more likely to be exempt compared to households with partners, and Black participants were 4% more likely to be exempt compared to other groups. Overall, these numbers imply that nearly a third of GAIN participants may not benefit from GAIN activities focused on improving self-sufficiency because they are not required to participate. Further, some groups — like Black and single-adult participants — are even less likely to receive these services. This decreases the ability of GAIN activities to improve

labor market outcomes, but it could also represent an opportunity to design new services specifically aimed toward caregivers that they would want to use even if they were not required.

**Activities.** For those who are not exempt, we summarize the services participants were assigned to and engaged with. We rely on the activity categories that are classified within the CalSAWS system and relate to various participation requirements.

These include:

**Appraisal:** This is the first activity participants are assigned to in order for the GAIN service worker (GSW) to learn about a participant's situation, describe program features, and assign activities.

**Assessment:** These are typically given after initial job-search activities, and are meant to identify educational skills, interests, or work barriers so that more appropriate services can be assigned. They can also include assessments for learning disabilities.

**Employment:** This includes unsubsidized work with an employer (including work study). Although this is not a GAIN-provided service, it is recorded as an activity because it contributes towards GAIN's mandatory work requirements. For example, households with no children under 6 are expected to work at least 30 hours per week.

**Counseling:** This includes specialized services and counseling related to domestic violence, mental health services, and support groups.

**Labor Force Attachment (LFA):** This group of activities is related to helping participants return to the labor market. It includes job-search training (that is, Job Club), subsidized employment, and community service placements.<sup>12</sup>

**Human Capital Development (HCD):** This group of activities is related to the development of general or specific skills. It includes remedial education, general education, vocational training, and on-the-job training.<sup>13</sup>

There is a meaningful history of research on the types of activities that have been identified as improving labor market outcomes for cash-aid recipients. This research dates back to the federally-supported experiments of the 1990s.

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12 Based on CalSAWS classifications, we created this as a combination of activity codes from categories "SER" (Subsidized Employment Referral) and "WPR" (Worker Participation Rate). We selected the codes that were directly related to employment or experience working with an organization, but not necessarily related to skill acquisition through training.

13 Based on CalSAWS classifications, we created this as a combination of activity codes from categories "SER" (Subsidized Employment Referral) and "WPR" (Worker Participation Rate). We selected the codes that were directly related to education/training in a classroom, but also included training by an employer if it is an official part of a subsidized position.

In California, the initial experimental studies of GAIN concluded that employment and earnings were most improved by “Labor-Force Attachment” or, “jobs-first” activities (Freedman et al., 1996; Freedman, Friedlander, et al., 2000; Riccio & Orenstein, 1996). However, a re-analysis of these experiments in California (Hotz et al., 2006) as well as research in other locations (Dyke et al., 2006) came to a more nuanced conclusion. Specifically, these later studies found that Labor-Force-Attachment activities may improve short-run outcomes (that is, for one to two years), but that “Human Capital Development” activities — such as vocational training — end up improving labor market outcomes over a longer time horizon. Although we distinguish between these types of activities when describing program participation, we do not attempt to estimate impacts from these two types of activities because our research design does not allow for this. That said, these differences are important when considering future program adjustments and learning opportunities about “what works.”

**Almost a third of individuals never complete an appraisal.**

We present characteristics related to assigned GAIN activities by activity category in Table 4.<sup>14</sup> Individuals can be assigned to and participate in multiple activities in the table. All GAIN participants are assigned to an appraisal, but only 71% of participants ever complete the appraisal. For those who do complete it, the median number of days from CalWORKs enrollment to completion is 12 days, which reflects a relatively quick turnaround. The appraisal is when the different exemption categories are described to participants, so the exemption numbers above are lower bounds on those who would be exempt if more participants completed the appraisal.

TABLE 4: Characteristics of GAIN activity engagement

ACTIVITY GROUP	ASSOCIATED WITH ACTIVITY (%)	FOR THOSE ASSIGNED TO ACTIVITY				
		DAYS TO FIRST SCHEDULED START (MEDIAN)	SCHEDULED HOURS/WEEK (MEDIAN)	MONTHS PARTICIPATING, IF ENGAGED (AVERAGE)	EVER DISENGAGED (%)	EVER COMPLETED (%)
Appraisal	100	12	2	2	62	71
Assessment	27	152	4	1	33	79
Employment	39	93	28	9	22	n.a.
Counseling	18	154	3	12	58	60
Labor Force Attachment	39	59	30	4	77	23
Human Capital Development	19	227	20	11	31	25

Notes: Authors’ calculations from the Activities table in CalSAWS. The sample is restricted to the 11,627 in-study GAIN sample.

<sup>14</sup> See Appendix Table E2 for a more detailed breakdown of activity categories.

**Participants are more likely to be enrolled in Labor Force Attachment services compared to Human Capital Development services.** After appraisal, the GAIN service type that is most often assigned is Labor Force Attachment (39%). The specific activity participants are mostly referred to is “Job Club” (a subset of Labor Force Attachment), which is a four-week long training focused on skills needed to search for and obtain employment. With a few exceptions, during the time period of the study, state law required participants to enroll in Job Club before any educational program was offered.<sup>15</sup> This is also reflected in the median number of days between enrollment and the first scheduled start date (59 days for LFA and 227 days for HCD).

**Only about a quarter of participants complete either LFA or HCD activities.** For both LFA and HCD activities, only around a quarter of assigned individuals eventually complete it while they are participating in GAIN. These two types of activities are the primary services that are meant to improve future labor market outcomes, so the lack of completion and high disengagement rates highlight another challenge for GAIN’s ability to influence eventual earnings and employment. Among those assigned to HCD activities, 31% have evidence of disengaging with these services at some point (based on having an unsatisfactory status in any given month) compared to 77% for LFA. This implies that participants in HCD stay more involved (based on what is visible in administrative records). The 25% completion rate for HCD may reflect programs that were ongoing when someone stopped receiving CalWORKs rather than a measure of incompleteness, so it should be considered a lower bound.

**Sanctions.** For non-exempt individuals who do not complete their GAIN assigned activities, they are sanctioned. Sanctions result in a decrease in the CalWORKs benefit amount, decreasing the income available to families. The prevalence of sanctions also provides a signal that individuals are not engaging with program activities. If many participants are sanctioned for not completing program activities, then the program itself may not be able to impact participants’ future employment and earnings outcomes. Alternatively, a high share of participants not completing the programming could also reflect a belief that the activities will not positively impact participants’ outcomes.

**Over a third of GAIN participants are sanctioned while they are enrolled in CalWORKs, and sanctioned individuals are sanctioned on average for over 8 months.** Table 5 summarizes the information about sanctions among GAIN participants. On average, about 38% of GAIN participants were sanctioned at some point after entering CalWORKs. For these sanctioned individuals, their benefit amounts were reduced for just over 8 of the 23 months

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<sup>15</sup> California Senate Bill SB 1232, passed in 2020, changed the Job Club requirement to allow GAIN participants to enroll in an education program as their first program after appraisal. However, this was not an option during the time period of the study, and is another reason why research designs to compare activity types were unavailable.

that they received payments. This is a relatively high degree of non-compliance with program activities and confirms some of the earlier findings/conclusions. Specifically, it is unlikely that GAIN activities will positively influence future outcomes if participants are not engaging in the services. We did not have the exact formulas on sanctions, but the monthly benefit amount is \$162 less when receiving a sanction, and applying that to the average time with a sanction reflects \$1,243 in lost benefits. Although this may not seem like a large dollar amount over 23 months, it is a 25% decrease in the monthly benefit, and interventions that raise awareness or saliency of this loss could be motivation for participants to remain engaged.

TABLE 5: GAIN Sanctions by demographic group

	EVER SANCTIONED (%)	FOR THOSE EVER RECEIVING A SANCTION				
		PAYMENT MONTHS	PAYMENTS WHILE SANCTIONED (%)	AVERAGE BENEFITS WITH SANCTION	AVERAGE BENEFITS WITHOUT SANCTION	ESTIMATED TOTAL LOSS FROM SANCTION
<b>All</b>	38	23	34	\$482	\$644	\$1,243
<b>Race/Ethnicity</b>						
Black	35	25	28	\$452	\$627	\$1,197
Hispanic	40	23	36	\$497	\$650	\$1,251
White	39	22	35	\$482	\$653	\$1,310
<b>Relationship Status</b>						
Single	38	24	33	\$471	\$637	\$1,272
Partnered	38	20	39	\$534	\$678	\$1,155

Notes: Authors' calculations from CalSAWS. The estimated total loss from sanction is calculated as a simple difference in the average issuance amount for families when not getting a sanction minus the average issuance amount when under sanction times the average number of months of being on sanction.

### C. Program Impacts

We now turn to estimating the impacts of first-time enrollment in CalWORKs + GAIN on the labor market outcomes of participants. As described above, these results are focused on participants that had at least \$500 in quarterly earnings in each of 2 of the 6 pre-enrollment quarters that were available for the study. We use this filter because people who have not had previous attachments to formal labor markets may have very different needs from GAIN services in order to improve their labor market outcomes.

**Impact study sample sizes.** To clarify the populations included in the analysis, Table 6 shows the sample sizes considered for the overall estimates, as well as for each subgroup.<sup>16</sup>

<sup>16</sup> Based on the empirical strategy, we sometimes exclude more of these individuals when we are unable to identify CalFresh participants who are similar to CalWORKs + GAIN participants by GAIN region and quarter. When this happened, we excluded the CalWORKs + GAIN participants from the impact results, but we are not concerned about that influencing any of the findings because it was rare (that is, never more than 5% across groups).

TABLE 6: Sample sizes for positive-earnings GAIN and CalFresh study participants, by group

GROUP	GAIN	CALFRESH
<b>All</b>	11,627	55,089
<b>Race/Ethnicity</b>		
Black	2,067	5,009
Hispanic	6,287	30,463
White	2,240	13,844
<b>Relationship Status</b>		
Single	8,426	37,937
Partner	1,528	9,703

Notes: These are the sample sizes used to estimate all program impacts as described in Appendix C. Race/ethnicity groups are non-exclusive, so an individual may be considered in more than one group if they self-identified within each.

**Baseline equivalence.** We first provide evidence that the research design is working as intended. The most straightforward way to do this is to demonstrate that the design is able to identify CalFresh-only participants that resemble CalWORKs + GAIN participants. If there are no observational differences between these two groups before program enrollment, it adds to our confidence that any differences in outcomes are the result of the program and not any pre-enrollment differences.<sup>17</sup>

**The empirical equivalence of the first-time CalWORKs + GAIN and CalFresh-only groups at baseline provides evidence that differences in outcomes can reflect causal impacts.**

We present the baseline differences between the GAIN and CalFresh-only groups in Table 7. The first two columns of the table represent the original characteristics of the two populations, where all binary characteristics (e.g., Female, not Female) are presented as shares between 0 and 1. The second two columns present two versions of the differences in those characteristics. The original differences reflect the unadjusted difference in the characteristics with a statistical test of those differences. As can be seen by the stars in the table, the two populations are originally different in a meaningful and statistically significant way. However, once we apply the research design (called “entropy balancing”), the differences between the two groups is effectively zero with no statistically significant differences (see Appendix C. Impact Design for full technical details). This provides evidence that we are able to identify a sample of CalFresh-only participants that closely resemble the first-time CalWORKs + GAIN participants. This also provides some

17 This assessment of baseline equivalence is the exact test that is set forth by the Pathways to Work Evidence Clearinghouse. That systematic review is administered by the Office of Planning, Research, & Evaluation of the Administration for Children & Families in order to identify research that meets evidence standards recognized by the federal government ([pathwaystowork.acf.hhs.gov](http://pathwaystowork.acf.hhs.gov); last accessed 1/24/2024).



evidence that any differences observed after entry into the program could reflect differences in program experiences.<sup>18</sup> For a more complete discussion on the limitations and required assumptions, see Appendix C. Impact Design. Analogous baseline equivalence tables for each subgroup comparison are given in Appendix E, Tables E3 through E7.

TABLE 7: Comparing baseline characteristics of GAIN and CalFresh participants before and after entropy balance weighting

VARIABLE	GROUP		DIFFERENCE	
	GAIN	CALFRESH	ORIGINAL	WEIGHTED
Age	30.6	32.5	-1.9***	0.0
Female	0.79	0.58	.22***	0.00
Non-English Speaker	0.07	0.12	-.05***	0.00
Single	0.72	0.69	.04***	0.00
Number of Children	1.56	0.92	.64***	0.00
Any Children Under 5	0.44	0.22	.22***	0.00
Hispanic	0.56	0.56	.00	0.00
Black	0.26	0.16	.10***	0.00
White	0.23	0.29	-.06***	0.00
Has Income	0.52	0.68	-.16***	0.00
Has Cell Phone	0.75	0.69	.06***	0.00
Had Email Address	0.81	0.73	.08***	0.00
Has Drivers License	0.89	0.82	.07***	0.00
Has Home Address	0.86	0.88	-.03***	0.00
<b>Employment</b>				
Quarter -5	0.83	0.83	0.00	0.00
Quarter -6	0.79	0.80	0.00	0.00
<b>Earnings</b>				
Quarter -5	5,592	5,815	-222***	-0.82
Quarter -6	5,449	5,555	-106*	-0.76

Notes: Authors' calculations based on CalSAWS and EDD data. The sample is limited to the in-study GAIN sample (N = 11,627) and CalFresh-only sample (N = 55,089). The Difference columns represent the original/raw differences between the GAIN and CalFresh columns and the entropy-balanced weighted differences between these groups. Demographic and family information is self-reported for everyone in the case/family at the time of application.

\*\*\*, \*\*, \* = 1, 5, and 10% statistically significant differences.

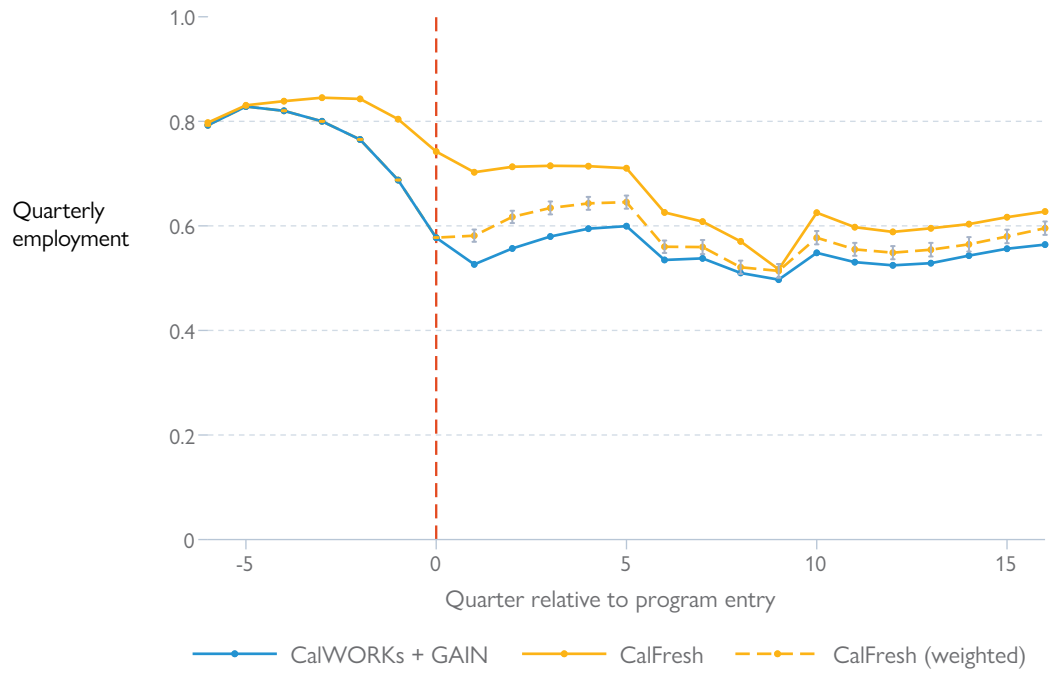
18 The Pathways to Work Evidence Clearinghouse requires specific characteristics to be equivalent before recognizing differences as causal impacts. This includes (1) earnings at least 1 year before entry, which we present for quarters -5 and -6; (2) socioeconomic status, which is satisfied by definition of all individuals receiving SNAP/TANF benefits; (3) race/ethnicity, which we present for three of the largest race/ethnicity groups in Los Angeles; (4) gender, which we show with individuals identifying as female; and (5) age, which we show with age.

**Impact results.** We begin the impact results by presenting employment and earnings trajectories for the GAIN and CalFresh-only groups. In order to show the influence of the research design, we present these trajectories with and without the design reweighting. Specifically, the unadjusted trajectories will demonstrate that the two groups are different before program enrollment — making the post-enrollment comparisons non-credible. However, the adjusted trajectories are perfectly overlapping in the pre-enrollment quarters, implying that the differences with the “weighted” CalFresh-only group in the post-enrollment quarters could reflect impacts caused by different program experiences. To highlight these differences, we also plot the impacts by quarter along with statistically-determined confidence intervals.

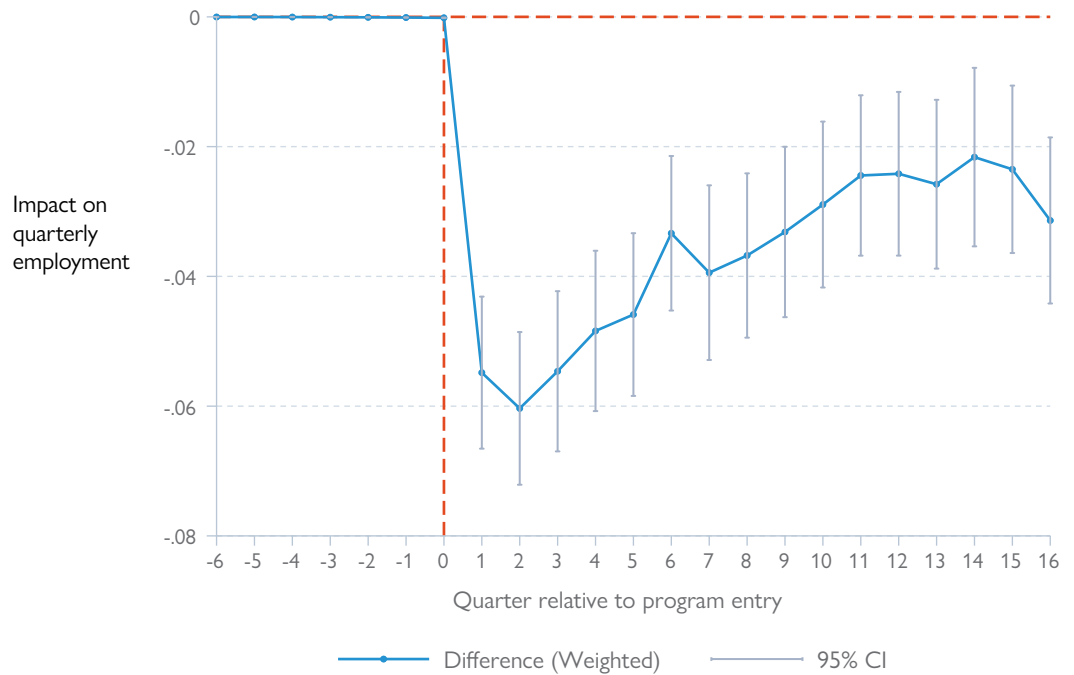
**There is no evidence that GAIN improves employment for first-time CalWORKs participants.** For first-time CalWORKs + GAIN participants, [Figure 2](#) presents employment trajectories in Panel A and impact estimates on employment in Panel B. Starting with employment trajectories, the figure shows how the design removes differences that exist between the groups in the pre-enrollment period. However, after the enrollment period (at quarter 0), differences between the GAIN and comparison group emerge. The sharp changes that occur between quarters 6 through 9 reflect the influence of the pandemic. To help visualize these differences, Panel B presents the impact estimates by quarter. On average, the impact of first-time enrollment in CalWORKs + GAIN decreases employment by 5 to 6 percentage points over the first few quarters, and this somewhat rebounds to around 3 percentage points over a longer time window. We would expect unsubsidized wage/employment to decrease while individuals are initially participating in CalWORKs and receiving benefits, but any disincentive effects of benefit amounts being reduced because of employment should be removed after participants are no longer participating. [Figure 1](#) shows there is a sustained share of 20% of CalWORKs participants that continue to receive benefits for 48 months (that is, 16 quarters), and this may be related to persistently lower employment. On average, however, GAIN is not improving employment outcomes for participants over a four-year period.

FIGURE 2: Employment rates and impact estimates, by quarter

Panel A: Employment rates



Panel B: Impact estimates of CalWORKs + GAIN relative to a comparable CalFresh-only group



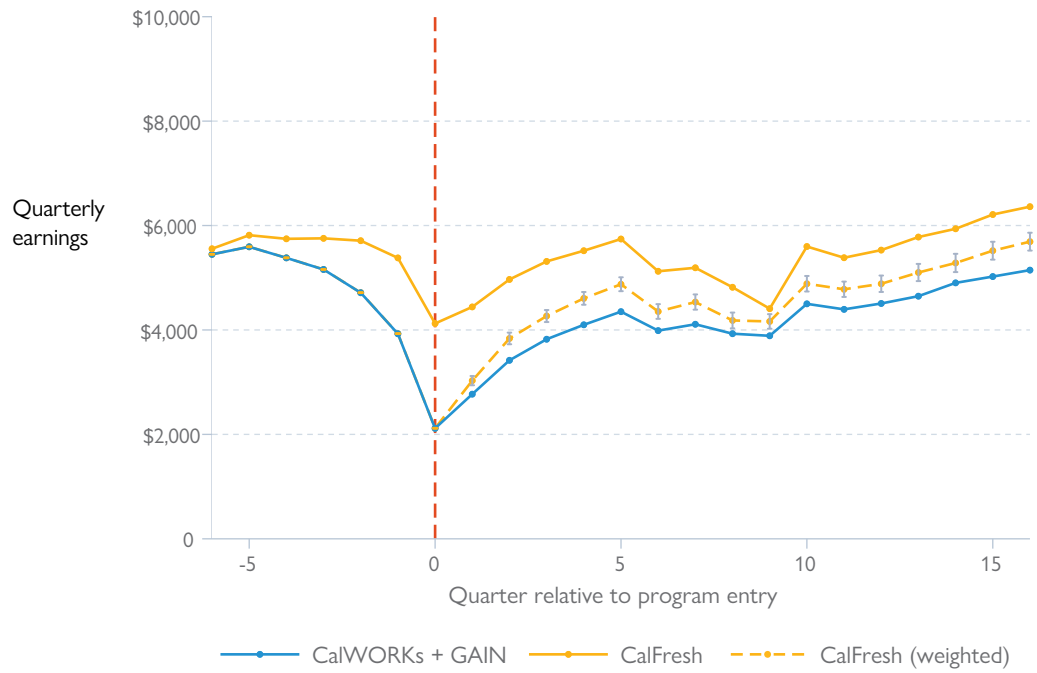
Notes: Authors' calculations using CalSAWS and EDD data when applying the research design described in Appendix C. The sample is limited to the in-study GAIN sample ( $N = 11,627$ ) and CalFresh-only sample ( $N = 55,089$ ). Error bars in both panels represent 95% confidence intervals when applying the research design. Impact results from figure are presented in Appendix Table E8.

**There is no evidence that GAIN improves earnings for first-time CalWORKs participants.**

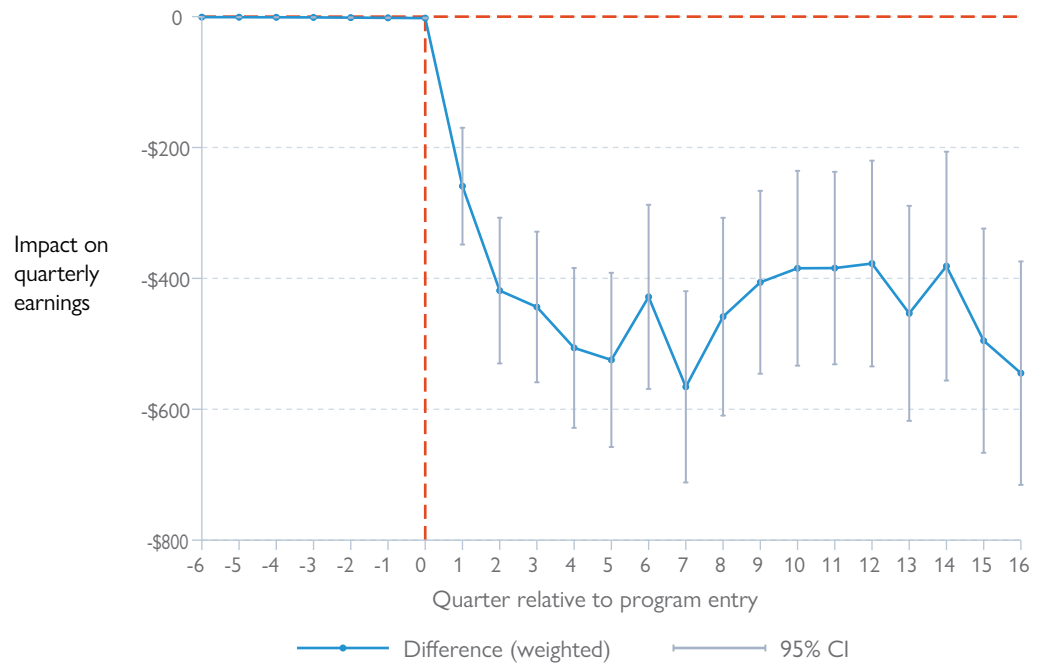
For first-time CalWORKs + GAIN participants, [Figure 3](#) presents earnings trajectories in Panel A and impact estimates on quarterly earnings in Panel B. The earnings trajectories in Panel A demonstrate how the research design is successful at identifying a group of CalFresh-only participants that resemble the GAIN participants. Similar to the employment figure, Panel A also shows how quarterly earnings of GAIN participants are lower than a comparable CalFresh-only group. To highlight these differences, Panel B presents impacts on quarterly earnings. On average, GAIN participants generally earn \$400 to \$500 fewer dollars per quarter than a group of comparable CalFresh-only participants, and these lower earnings are sustained across all 16 quarters.

FIGURE 3: Earnings and impact estimates, by quarter

Panel A: Quarterly earnings



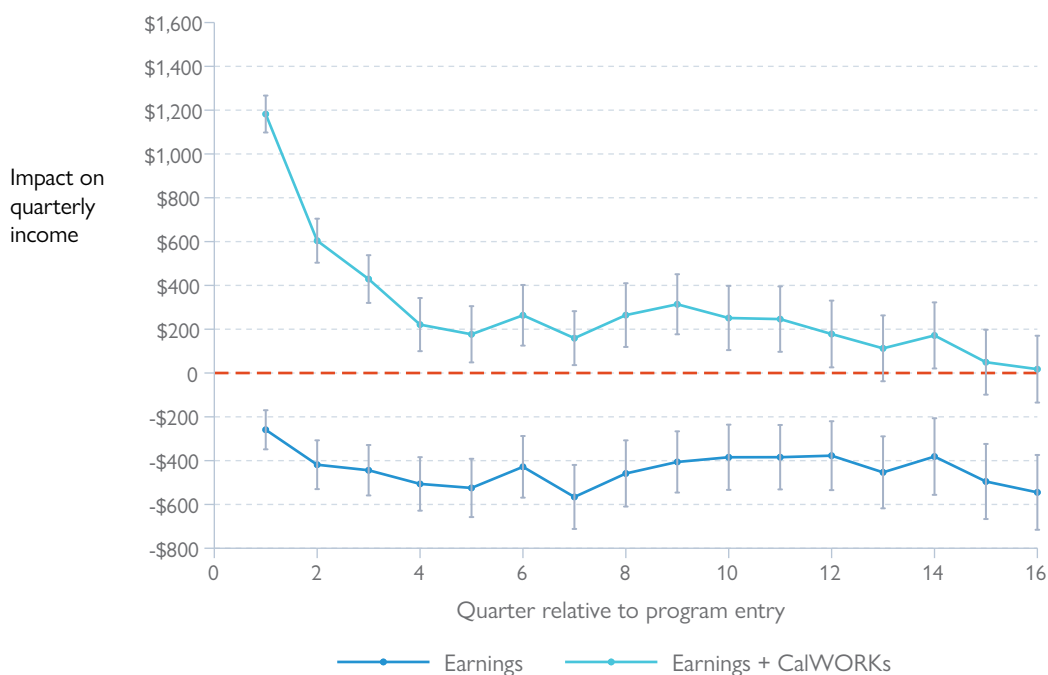
Panel B: Impacts on employment rates of CalWORKs + GAIN relative to a comparable CalFresh-only group



Notes: Authors' calculations using CalSAWS and EDD data when applying the research design described in Appendix C. The sample is limited to the in-study GAIN sample ( $N = 11,627$ ) and CalFresh-only sample ( $N = 55,089$ ). Error bars in both panels represent 95% confidence intervals when applying the research design. Impact results from figure are presented in Appendix Table E8

**CalWORKs + GAIN families receive more income when including benefits than they lose in earnings over 16 quarters.** To provide some perspective on the relationship between lower quarterly earnings and benefit receipt, we can recreate the income trajectories after adding CalWORKs benefits to employer-reported income. We do this in [Figure 4](#), which presents the impact estimates of CalWORKs + GAIN on income defined as quarterly earnings plus quarterly CalWORKs benefit payments.<sup>19</sup> It shows that despite the negative impacts on earnings, the program impacts on income from these two sources was positive for most quarters. The positive impacts on income were largest in the first quarter after program enrollment and declined over time, mirroring the program participation dynamics shown in [Figure 1](#). Summing up the income impacts from earnings and CalWORKs payments from quarter 1 to 16 suggests that participants received about \$4,600 more in total income than they would have received without enrolling in the program. We also perform this analysis when including CalFresh payments and find that CalWORKs + GAIN participants received even more income when including those benefits across all quarters (see [Appendix Figure F1](#)).

**FIGURE 4: Earnings and income (earnings + CalWORKs) impact estimates, by quarter**



Notes: Authors' calculations using CalSAWS and EDD data when applying the research design described in [Appendix C](#). The sample is limited to positive-earnings participants. Error bars in both lines represent 95% confidence intervals when applying the research design. Impact results from figure are presented in [Appendix Table E9](#).

19 The impacts on quarters -6 to 0 are excluded from this figure because there were no CalWORKs payments in those quarters and it would be the same as [Figure 3B](#) for both income sources. The supporting values for the figure can be found in [Appendix Table E9](#).



**Impacts by subgroup.** We now turn to impacts by subgroup. To simplify the presentation of results, we focus on impacts in the fourth year after program entry. We do this for multiple reasons. First, the estimates will likely reflect impacts beyond the length of any employment-related service that participants may have received. Our confidence in this idea is bolstered by the previous results that participants receive benefits for an average of 19 months. Second, the impact from any services that take time to develop — like those focused on “Human Capital Development” — will likely have been realized by year 4. This aligns with broader research on when impacts start to emerge from job training programs (Card et al., 2018). Finally, the timing of the study period means that outcomes of participants would be realized after the onset of the COVID-19 pandemic (which is visible in Figures 2 and 3). The fourth year for the earliest entrants starts in 2020 Q4 and ends in 2021 Q3. The fourth year for the latest entrants starts in 2021 Q3 and ends in 2022 Q2. Combined, we think this provides a sufficient amount of time to measure an interpretable effect of the program beyond the specific disruptions caused by the pandemic.

TABLE 8: Labor-market impacts of CalWORKs + GAIN enrollment, in Year 4, overall and by subgroups

	AVERAGE QUARTERLY EMPLOYMENT				AVERAGE QUARTERLY EARNINGS				
	BASE (%)	IMPACT (LEVEL)	IMPACT (AS A %)	P-VALUE	BASE (\$)	IMPACT (LEVEL)	IMPACT (SD UNITS)	IMPACT (AS A %)	P-VALUE
<b>All</b>	57.4	-2.6	-4.5	0.00	5,398	-469	-0.07	-8.7	0.00
<b>Race/Ethnicity</b>									
Black	58.5	-7.0	-11.9	0.00	5,487	-1,159	-0.18	-21.3	0.00
Hispanic	59.7	-2.4	-4.0	0.00	5,498	-393	-0.07	-7.2	0.00
White	56.2	-3.9	-6.9	0.00	5,350	-472	-0.07	-8.8	0.01
<b>Relationship Status</b>									
Single	59.0	-4.2	-7.1	0.00	5,355	-674	-0.11	-12.6	0.00
Partner	54.9	0.0	0.1	0.98	5,825	38	0.01	0.7	0.88

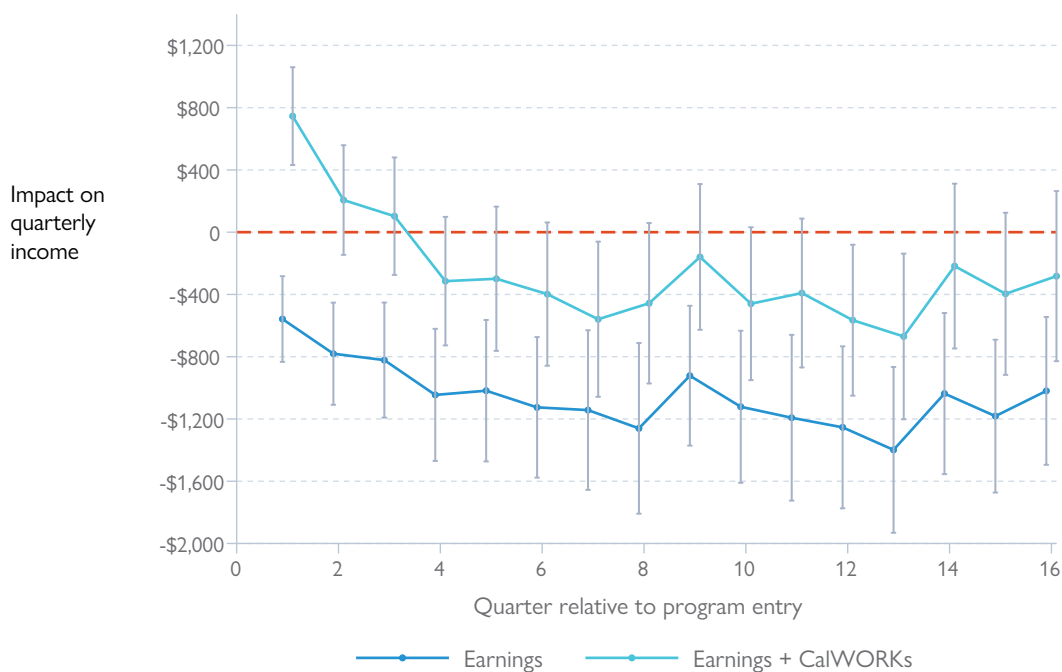
Notes: Authors’ calculations using CalSAWS and EDD data when applying the research design described in Appendix C. The sample is limited to the in-study GAIN sample (N = 11,627) and CalFresh-only sample (N = 55,089).

**Overall, first-time CalWORKs + GAIN participation leads to less-favorable labor-market outcomes, particularly for Black and single participants.** We present the impacts on average quarterly employment and average quarterly earnings in Table 8. This table shows that quarterly employment is lower in the fourth year by 2.6 percentage points (or 4.5%) and quarterly earnings are lower by \$469 (or 8.7%) for GAIN participants relative to similar CalFresh-only participants. These lower labor-market outcomes are particularly pronounced for Black individuals (11.9% less likely to be employed;

21.3% lower quarterly earnings) and single participants (7.1% less likely to be employed; 12.6% lower quarterly earnings). This increases the importance of considering these families and their circumstances explicitly when considering future program improvements. Also of note: of all the included subgroups, those who had identified a partner in their household when they applied to CalWORKs experienced no detectable differences in their labor market outcomes by the fourth year.

Because the negative impacts on employment outcomes were larger for Black participants, we also reassess impacts on their total income when including CalWORKs benefits. This is also important to understand because Black participants received CalWORKs payments for a longer period of time (22 months) relative to other subgroups (Table 2). The results are presented in Figure 5. It shows that CalWORKs benefits reduce the negative impacts on total incomes, so that in most quarters the impacts of CalWORKs + GAIN are not statistically different from zero — although they are still mostly negative, they hover around income losses of around \$400, and are sometimes statistically significant. These differences are further reduced when including income from CalFresh as well (see Appendix Table E11).

**FIGURE 5: Earnings and income (earnings + CalWORKs) impact estimates for Black participants, by quarter**



Notes: Authors' calculations using CalSAWS and EDD data when applying the research design described in Appendix C. The sample is limited to the in-study GAIN sample (N = 2,067) and CalFresh-only sample (N = 5,009) of Black participants. Error bars in both lines represent 95% confidence intervals when applying the research design. Impact results from figure are presented in Appendix Tables E10 and E11.

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## 4. Learning Opportunities

DPSS is particularly well positioned to generate new evidence on what works for GAIN participants because of the large number of participants. Without proactive planning, however, this is hard to do. For example, this study required considerable effort to identify and implement a research design that answers a relatively limited set of questions around program effectiveness for CalWORKs + GAIN as a package set of programs. We were unable to answer additional, actionable questions around what works for GAIN participants, and we had to exclude a large fraction of participants that were disconnected from wage/salary employers because the research design was not applicable for them.

To highlight some of these learning opportunities, we conducted a series of “minimum detectable impacts” analyses — sometimes referred to as “power calculations” — to identify which GAIN activities could be readily tested for improvement. Specifically, using the actual assignment of GAIN activities for participants from PY 2017, along with their realized labor market outcomes, we estimated the level of labor-market impacts that could be detected with a simple 50-50 random assignment study. For example, taking those who are assigned to a Job Readiness activity, we show what difference in labor market outcomes we would be able to detect if half were sent to one version of the activity and the other half were sent to another version of the activity. These analyses result in minimum detectable impacts (MDIs), where smaller MDIs are preferred because it lets us know that we should be able to statistically detect a difference for any impact larger than that value. As long as we hypothesize a programmatic change to have an impact that is larger than any given MDI, there is an opportunity to test it rigorously.

**DPSS can detect a 2 to 6 percentage point change in employment and an 8 to 21 percent change in earnings for frequently assigned GAIN activities.** To clarify the opportunities available for DPSS, we present minimum detectable impacts for three commonly assigned GAIN activities in Table 9: Job Readiness, Vocational/Education Training, and Paid Work Experience. These MDIs are presented in two different ways. The top panel shows impacts in levels, and the bottom panel shows impacts in terms of percentage changes from a base rate. To be clear, level impacts imply changes in percentage points (for example, 0.02 could mean changing employment rates from 56% to 58%) or dollar amounts, while percentage changes represent differences relative to the outcome of a comparison group. The first thing to note is that larger programs (like Job Readiness) are easier to study because they result in smaller MDIs. However, even for less frequently assigned activities, meaningful impacts can be identified on both employment (4 to 6 percentage points) and quarterly earnings (\$251 to \$592) for more intensive types of programs — like training or subsidized

employment. These impacts are within expectations of what other intensive labor market/training programs have produced in California for other populations (Rothstein et al., 2022), which again highlights the possibilities for DPSS to contribute to the evidence base on what works by testing if updates to GAIN can impact the outcomes of participants.

TABLE 9: Minimum detectable impacts for commonly-assigned GAIN activities

ACTIVITY	N	AVG. QUARTERLY EMPLOYMENT		AVG. QUARTERLY EARNINGS		
		YEAR 1	YEAR 4	YEAR 1	YEAR 4	
<b>Panel A: Absolute level</b>						
Job Readiness	7,402	0.02	0.03	181	338	
Vocational/Education Training	2,937	0.04	0.04	251	501	
Paid Work Experience	1,712	0.04	0.06	296	592	
<b>Panel B: Percentage change on base rate</b>						
Job Readiness	7,402	5	6	8	9	
Vocational/Education Training	2,937	10	9	14	14	
Paid Work Experience	1,712	13	12	21	18	

Note: Authors' calculations using CalSAWS and EDD data. Minimum detectable impacts were estimated using 200 simulations of 50-50 random assignment for individuals who were actually assigned to each activity. Within simulations, differences were estimated using a regression model that adjusted for the variables in Appendix Table C1. The standard deviation of impacts from these simulations was multiplied by a factor of 2.8 to reflect a two-sided Type-I error of 5% and a Type-II error of 20%.

We repeated this exercise for each GAIN planning region (see Appendix Tables G1 and G2). Although the resulting MDIs are considerably larger, there are still some meaningful opportunities for the most commonly assigned activities, and the table may also identify opportunities from potentially pooling regions together before testing similar strategies. To provide a concrete example, assume there is a new Job Readiness program that is being considered by DPSS in Region 5. If DPSS wanted to test if it were effective at increasing participants' employment rates within a year, randomly assigning half the participants to the new program and half to the old program would allow for the identification of impacts on first-year employment if the impacts were larger than 6 percentage points.

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## 5. Discussion

For individuals with some previous attachment to wage/salary employment before enrolling in CalWORKs, we do not find evidence that GAIN helps CalWORKs families achieve self-sufficiency. Instead, we find evidence that first-time CalWORKs + GAIN leads to lower labor market outcomes that persist over a four-year period — and these lower labor market outcomes are particularly large for Black individuals and single-parent households. At the same time, when estimating impacts on income that includes CalWORKs payments along with earnings, we find that participation in CalWORKs + GAIN leads families to have higher overall incomes when considering these two sources alone.

The findings from this study are not surprising given that the CalWORKs and GAIN programs have policies that may work against each other. Specifically, CalWORKs provides cash assistance for families in need, but decreases the benefit amounts (after the earnings disregard) when people have earnings from employment, which serves as a disincentive to work. This is one of the main motivations to allow for non-work activities that improve future earnings to satisfy work-requirements for a given time period, including a mix of labor-force attachment activities (such as subsidized employment or Job Club) and human-capital development activities (such as vocational training). However, we also find that participation in these activities is low — either because of exemptions, not being assigned these activities, low completion rates, or a combination of the above.

The findings of the study also highlight distinct populations for DPSS to consider when creating or adjusting programming. The first distinction is individuals who have previous employer-reported earnings. Nearly half of participants had very limited or no employer-reported earnings for a full year-and-a-half before enrolling in the program, and they will likely face more barriers entering the labor market after the program. The second distinction is with how individuals engage with GAIN services. Some eligible individuals disengage through exemptions, some individuals disengage and receive sanctions, and some participate as expected. To clarify how these groups likely have unique employment challenges, we present employer-reported earnings trajectories for them in Figures F2-F4 of Appendix F. The earnings trajectories are all distinct for these different groups, and this highlights that different populations will likely have different outcomes and different needs. DPSS may want to consider ways to tailor program experiences accordingly.

Finally, DPSS is in an ideal position to improve the lives of families while also moving the field forward. We identify opportunities for DPSS to learn how changes in services can improve program experiences and future labor-market

outcomes of participants. For program experiences, considering strategies to increase the rate of successfully completing activities — from appraisal to assigned activities — can be considered and tested. In addition, because of the large number of participants, DPSS could make adjustments to specific activities and be able to measure the effectiveness of these changes. By focusing on program improvements for specific program outputs or labor-market outcomes, the GAIN program in Los Angeles is in a promising position to innovate and improve for Los Angeles families as well as create new evidence for what works in labor force and human capital activities — evidence that could be used across the country.

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