

# The Effect of Correctional Career Training on Recidivism

An Evaluation of California Prison  
Industry Authority (CALPIA):  
Comparison Among CALPIA Programs

James Hess and Susan Turner  
October 2023

Center for Evidence-Based Corrections  
Department of Criminology, Law & Society  
School of Social Ecology

**UCI** University of  
California, Irvine

*The opinions expressed herein represent those of the authors and do not necessarily represent the position of the California Department of Corrections and Rehabilitation.*

## Executive Summary

California Prison Industry Authority (CALPIA) is a self-supporting training and production program currently operating within the California Department of Corrections and Rehabilitation (CDCR). CALPIA provides training, certification, and employment to inmates in a variety of different fields. The goods and services produced by CALPIA are sold to the state and other government entities, which provides an economic benefit to the state. In addition to the vocational and economic aspect of the program, one of CALPIA's missions is to reduce the subsequent recidivism of their inmate participants.

In 2021, the Center for Evidence-Based Corrections prepared a report on the recidivism outcomes for individuals who had participated in CALPIA programs for at least six months (Hess and Turner, 2021). That report examined the effect of participation in CALPIA on the recidivism of CDCR inmates by comparing CALPIA participants with at least 6 months in the program and released between August 2014 and July 2018 with inmates who were accepted into the CALPIA program but were released before they could actively participate (i.e., the "Waitlist" group). That report found that participation in CALPIA was associated with reduced offending. CALPIA individuals had lower rates of arrests, conviction, and incarceration during a three-year follow-up than a Waitlist comparison group. Although the sample size for our analysis of Career Technical Education (CTE) was small, participation in this CALPIA program yielded lower recidivism rates than other CALPIA program participation.

This report further analyzes the sample of individuals who participated in CALPIA programs by separating the CALPIA programs into thirteen different groups, placing similar programs together. Thus, it is a comparison within CALPIA programs only. The analysis strategy is the same as used in our previous report: we examine arrest, conviction and return to custody calculated at one-, two- and three-year post release for the individuals. Propensity score analyses were used to adjust for baseline differences in the groups. Our findings suggest that the enterprise programs perform about equally well with the exception of CTE, which appears to do slightly better than other enterprises. We also found a positive effect for CTE in our earlier report. Several other programs show patterns of higher or lower recidivism which are suggestive but not conclusive due to lack of statistical significance. We note that small sample sizes, using propensity score analyses, may have limited our ability to detect significant differences.

# Contents

Executive Summary.....	i
Contents.....	ii
List of Tables.....	iii
Introduction .....	1
Methods .....	2
Outcome Measures.....	2
Rearrest.....	2
Reconviction.....	3
Return to Custody (RTC).....	3
Comparison Groups .....	3
Results .....	4
Interpretation of Results.....	4
Highlights.....	4
Conclusions .....	12
References.....	13
Appendix A .....	14

# List of Tables

Table 1. Arrest Recidivism.....	6
Table 2. Conviction Recidivism .....	8
Table 3. Return to Custody Recidivism .....	10

# Introduction

California Prison Industry Authority (CALPIA) is a self-supporting training and production program currently operating within the California Department of Corrections and Rehabilitation (CDCR). CALPIA provides training, certification, and employment to inmates in a variety of different fields. The goods and services produced by CALPIA are sold to the state and other government entities, which provides an economic benefit to the state. In addition to the vocational and economic aspect of the program, one of CALPIA's missions is to reduce the subsequent recidivism of their inmate participants.

In 2021, the Center for Evidence-Based Corrections prepared a report on the recidivism outcomes for individuals who had participated in CALPIA programs for at least six months (Hess and Turner, 2021). That report examined the effect of participation in CALPIA on the recidivism of CDCR inmates by comparing CALPIA participants with at least 6 months in the program and released between August 2014 and July 2018 with inmates who were accepted into the CALPIA program but were released before they could actively participate (i.e., the "Waitlist" group). That report found that participation in CALPIA was associated with reduced offending. CALPIA individuals had lower rates of arrests, conviction, and incarceration during a three-year follow-up than a Waitlist comparison group. Although the sample size for our analysis of Career Technical Education (CTE) was small, participation in this CALPIA program yields lower recidivism rates than other CALPIA program participation.

This report further analyzes the sample of individuals who participated in CALPIA programs by separating the CALPIA programs into thirteen different groups, placing similar programs together. Thus, it is a comparison among CALPIA programs only. The goal was to drill down to see if program comparisons could yield more information about what works in terms of CALPIA programs and enterprise employment sectors. The analysis strategy is the same as used in our previous report: we examine arrest, conviction and return to custody calculated at one-, two- and three-year post release for the individuals. Propensity score analyses were used to adjust for baseline differences in the groups.

## Methods

In our earlier 2021 report, we used individuals from the waitlists of offenders selected for CALPIA programs rather than the general CDCR population as they met selection criteria. Comparisons were made between CALPIA and waitlist individuals. In this study, we start with individuals who completed a minimum of 180 days in an enterprise program, and contrast those in one industry group with those in all other groups. CALPIA has many enterprises in which individuals participate. For the purposes of the current study, we placed the enterprises into thirteen different categories. These categories were suggested by CALPIA staff to reflect similar job types. One reason for grouping the enterprises into categories is that many individual enterprises do not have sufficient numbers of people within this cohort completing 180 days of training to provide the statistical power to detect genuine differences in recidivism. The assignments are listed in the Appendix A to this report. In tables, we refer to the programs by category.

Data for the sample originates from two main sources. CDCR Office of Research provided the CALPIA sample of those who participated, demographic, work/program history, needs assessments, and movement data for the entire sample. Recidivism information was obtained through criminal history records provided by the California Department of Justice (DOJ).

Individuals in this study were CALPIA participants prior to their release to the community from CDCR between August 2014 and July 2018. Of these inmates, 3221 completed 180 days or more in at least one CALPIA enterprise and had recidivism data available from the California Department of Justice (DOJ). For a cleaner comparison industry groups, this study drops 117 individuals who completed 180 days in more than one of these groups, leaving 3104 individuals in this analysis. This is a subset of the sample reported in our 2021 report comparing CALPIA participants to inmates waitlisted for PIA participation but released before enrollment.

## Outcome Measures

Recidivism, or the likelihood a released inmate will continue criminal behavior, is the outcome of interest in this study. Recidivism is measured in three ways: *rearrest*, *reconviction* and *reincarceration*. Most released inmates from California prisons no longer return to prison for a supervision violation, therefore, return to custody (RTC) is not the only measure of recidivism used. Rearrest and reconviction at the county level are also important measures to include.

*Rearrest.* California DOJ criminal history records are used to measure whether a released inmate was rearrested for any felony within three years after being released from CDCR. CDCR provided the CII numbers for the sample to DOJ, who matched participants. DOJ then sent the criminal history records (without the CII) to UCI for analysis.

*Reconviction.* DOJ data also allows us to measure if inmates were reconvicted of any felony in California based on an arrest during the three-year follow-up period.

*Return to Custody (RTC).* Offenders released from prison in California may be released to parole supervision by the State, or they may be released to the counties for supervision by Probation. Regardless of the type of post-release supervision, the vast majority of inmates released from prison are not returned to custody for a supervision violation. “Return to custody” indicates a return to a CDCR prison. This mostly occurs when an offender is convicted of a new crime warranting a prison term. Returns to custody were identified through the CDCR movement records.

The observed outcomes (from the unweighted sample) and the propensity score analysis results are presented for each measure of recidivism (i.e., rearrest, reconviction, and return to prison).

## Comparison Groups

Comparisons in the current report are for each of the enterprise groups, contrasted with the individuals who participate in CALPIA in all other enterprises. This is different from the 2021 report in which CALPIA participants were compared with “waitlist” controls who were eligible for CALPIA, but who did not participate before they were released to the community. Thus, this study examines thirteen different comparisons between groups. For each group comparison, we present 1-, 2- and 3- year recidivism rates for three separate outcomes of interest – arrest, conviction and return to custody.

Differences in the background characteristics of individuals will contribute to differences observed in outcomes. In order that comparisons across enterprises reflect differences in the programs (rather than reflect differences between characteristics of individuals in the groups), we use matching techniques to reduce individual differences at the group level.

As in the 2021 report, we show both observed differences between groups and then present findings from Propensity Score matching. Propensity score matching (PSM) is a technique that aims to make two comparison groups statistically equal across control covariates. PSM has been used in other studies comparing prison work groups to non-prison work groups (e.g., Bohmert & Duwe, 2012; Richmond, 2014; Saylor & Gaes, 1997). Factors that may distinguish the groups and that occur prior to enrollment into CALPIA are used to “predict” membership in the enterprise being examined. This produces a “propensity score.” Then, the enterprise members are weighted by their propensity score to achieve balance between the two groups. This maximizes similarity of the enterprise and comparison groups across the background measures. PSM equalizes pre-program differences, and thus, increases confidence that differences in the rates of recidivism between the groups are due to participation in the program. Good matches were achieved for the present study. Results showing bias between groups before and after PSM are available from the authors.

# Results

## Interpretation of Results

We note that differences in recidivism rates between groups were tested for statistical significance using chi-square tests. Chi-square tests calculate the difference between observed and expected data. Statistical significance for the chi-square values tells us whether the probability of getting a difference in recidivism rates a certain size (or bigger) is by chance alone. The asterisks in tables indicate:

- \* means  $p < .05$ . This indicates there is less than a 5% chance that this difference could occur by chance alone.
- \*\* means  $p < .01$ . This indicates there is less than a 1% chance that this difference could occur by chance alone.
- \*\*\* means  $p < .001$ . This indicates there is less than a 0.1% chance that this difference could occur by chance alone.

The numbers in the "N" column report the numbers of cases and controls in the analysis. The total of the two before propensity score matching is 3104. We had at least two years of follow-up (time between release and the DOJ data extraction) for everyone, but we did not have 3 years of follow up for 420, so we lost about 14% of the participants in the 3rd year. In the rows, "All" refers to the unweighted analyses, or observed results; PSM refers to the results from the propensity score matching.

The numbers in the 1-, 2-, and 3-year columns are the percentage who recidivated. In the discussion of findings, we report the difference between the enterprise groups of interest (cases) and controls as the relative (percentage) difference between cases and controls because that standardizes it across the different types of recidivism. For example, the overall 3-year re-arrest rate is 41%. In CTE, the unweighted difference between cases and controls is  $34.2 - 41.7 = -7.5$ . The 3-year RTC rate overall is 14.5%. The unweighted difference between cases and controls is  $10.8 - 14.9 = -4.1$ . So the absolute difference is larger for arrest than RTC (in this example) - but the RTC baseline is much lower. For arrests, -7.5 percentage points means that CTE recidivism is 18% lower than controls. For RTC, -4.1 percentage points means that CTE recidivism is 28% lower than controls.

## Highlights

Across industry groups and recidivism outcomes (arrests, convictions, and RTCs), there are no real outliers and few statistically significant differences. We note that statistical significance depends on the size of the difference in recidivism rates between the two groups and the number of cases and controls. With the smaller effective sample size after propensity score matching, it is harder to establish that a difference in recidivism rates is a real finding. We also generally find that, as anticipated, propensity score matching reduces differences in recidivism rates.

None of the industry groups has statistically significant results from the other enterprise groups across 1-, 2-, and 3-year outcomes for arrests, convictions, and returns to custody. The low recidivism RTC rates make significance hard to achieve. After propensity score matching, only two

comparisons have enough cases and controls and a big enough difference in recidivism rates to be significant. We caution that not too much should be made of one significant result. With a significance criterion of  $p < .05$  and 117 comparisons (13 groups by 3 years by three recidivism outcomes), we expect 6 comparisons to meet the criterion by chance alone. However, a pattern of lower or higher recidivism across different outcome measures and multiple follow-up periods is worth noting, particularly for the three year results which will average out chance fluctuations in the timing of the discovery of recidivism.

The *CTE program* shows the strongest results. It shows significantly lower recidivism rates for 1- and 3-year outcomes for arrests and for 2- and 3-year outcomes for convictions. The 3-year recidivism rate is 23% lower than the control group for arrests and 39% lower for convictions. The RTC differences, however, vary above and below the controls by a percentage point or two and are far from significance ( $p$  ranges from .44 to .76).

The *Computer/IT* group also achieves consistently good results with arrests recidivism rates 26% below the controls at 3 years ( $p = .25$ ). This group does not fare as well on convictions, with a 3 year recidivism rate only 15% below controls ( $p = .75$ ), but the RTC rate is 31% below controls in the first year and 47% below controls in years 2 and 3 ( $p = \sim .36$ ).

The *Administrative/Warehouse* group is no worse than controls for new arrests, somewhat better for convictions in the 2<sup>nd</sup> and 3<sup>rd</sup> years (3 year  $p = .29$ ), and consistently 22% or more lower for RTC (year 3, 35% lower recidivism,  $p = .07$ ).

*Metal Working* industries are about the same as the controls for new arrests and somewhat better in years 1 and 2 for RTC but are consistently more than 20% lower for convictions ( $p = .18$  in the 3<sup>rd</sup> year).

The composite *Health Facilities* group has somewhat lower recidivism in the first year. For arrests, this disappears by the 3<sup>rd</sup> year. For convictions, the 20% advantage of the first two years fades to 13% by the third year. For RTC, the 23% to 28% advantage of the first two years is down to 18% in the third year ( $p = .29$ ).

The *Fabric* industries group has somewhat higher recidivism than the controls. For arrests, recidivism is 20% higher in the first year, fading to 14%-15% in years 2 and 3 ( $p$  values range between .05 and .10). For convictions, recidivism is 30% higher in the first year, fading to 25% in year 3 ( $p$  values range between .06 and .16). For RTC, recidivism is 45% higher in the first year, fading to 19% in year 3 (with a significant  $p$  value of .02 in year 2 but much weaker at .25/.26 in years 1 and 3).

The *Light Industries* group also has somewhat higher recidivism than the controls. For arrests, recidivism is roughly 30% higher in the first two years, declining +21% in year 3 (with a significant  $p$  value of .02 in year 2 but weaker at .15 and .08 in years 1 and 3). For convictions, recidivism is 34% to 39% higher in the first two years and still up by 31% in year 3 ( $p$  values range between .11 and .28). For RTC, recidivism is the same as controls in the first year, rising to 30% higher in years 2 and 3 (year 2 and 3  $p$  values are .32 and .21).

Table 1. Arrest Recidivism

Model	N		1 Year Recidivism %			2 Year Recidivism %			3 Year Recidivism %		
	Cases	Controls	Cases	Controls	ChiSq	Cases	Controls	ChiSq	Cases	Controls	ChiSq
PIA_ADMIN_WAREH_INVENTORY											
All	241	2863	22.4	21.7	0.1	34.9	33.8	0.1	43.4	40.9	0.5
PSM	240	239.6	22.5	25.0	0.4	35.0	38.0	0.5	43.6	46.1	0.3
PIA_AG_FOOD_PRODUCTION											
All	194	2910	34.0	20.9	18.3***	42.8	33.3	7.2**	47.5	40.6	3.3
PSM	193	190.8	34.2	32.5	0.1	43.0	48.8	1.3	47.2	55.8	2.6
PIA_COMPUTER_IT											
All	102	3002	8.8	22.2	10.3**	16.7	34.5	14***	21.8	41.7	13.7***
PSM	102	96.6	8.8	13.0	0.9	16.7	24.0	1.6	21.8	29.6	1.3
PIA_CONSTRUCTION_BLDING_TRADES											
All	158	2946	15.2	22.1	4.2*	31.6	34.0	0.4	39.1	41.2	0.2
PSM	158	170.6	15.2	22.5	2.8	31.6	36.8	1.0	39.1	44.4	0.8
PIA_DINING_FOOD_PROCESSING											
All	261	2843	30.3	21.0	12.2***	42.5	33.1	9.4**	50.0	40.2	8.1**
PSM	259	258.3	30.1	27.2	0.5	42.5	41.3	0.1	50.2	49.3	0.0
PIA_FABRIC											
All	551	2553	25.2	21.0	4.8*	37.7	33.1	4.4*	46.2	40.0	6.3*
PSM	551	555.4	25.2	21.0	2.8	37.7	33.0	2.8	46.2	40.1	3.6
PIA_HEALTHCARE/LAUNDRY_SERVICES											
All	915	2189	18.1	23.3	9.9**	30.3	35.4	7.7**	37.8	42.3	4.6*
PSM	914	920.8	18.2	20.9	2.2	30.3	32.0	0.6	37.9	38.7	0.1
PIA_MARINE											
All	31	3073	22.6	21.7	0.0	38.7	33.9	0.3	42.9	41.0	0.0
PSM	31	31.0	22.6	27.0	0.2	38.7	41.1	0.0	42.9	46.8	0.1

Table 1. Arrest Recidivism (continued)

Model	N		1 Year Recidivism %			2 Year Recidivism %			3 Year Recidivism %		
	Cases	Controls	Cases	Controls	ChiSq	Cases	Controls	ChiSq	Cases	Controls	ChiSq
PIA_METAL_WORKING											
All	301	2803	20.6	21.9	0.3	32.2	34.1	0.4	38.1	41.4	1.1
PSM	301	299.6	20.6	22.0	0.2	32.2	34.1	0.2	38.1	41.3	0.6
PIA_OTH_LIGHT_INDUSTRY											
All	350	2754	19.7	22.0	1.0	32.6	34.1	0.3	37.8	41.5	1.5
PSM	350	349.4	19.7	15.5	2.1	32.6	24.6	5.5*	37.8	31.1	3.0
PIA_CAREER_TECHNICAL_ED											
All	269	2835	14.1	22.5	10.0**	27.5	34.5	5.4*	34.2	41.7	4.7*
PSM	269	277.2	14.1	20.6	4.0*	27.5	33.9	2.6	34.2	44.3	4.8*
PIA_AG_DINING_FOOD_PROCESSING											
All	455	2649	31.9	20.0	32.1***	42.6	32.4	18.1***	48.9	39.7	12.1***
PSM	452	451.6	31.9	29.3	0.7	42.7	45.2	0.6	48.9	53.3	1.6
PIA_FACILITIES HEALTHCARE SERVICES											
All	423	2681	19.4	22.1	1.6	31.7	34.3	1.1	42.2	40.9	0.2
PSM	423	424.5	19.4	23.2	1.9	31.7	35.9	1.7	42.2	43.4	0.1

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

Table 2. Conviction Recidivism

Model	N		1 Year Recidivism %			2 Year Recidivism %			3 Year Recidivism %		
	Cases	Controls	Cases	Controls	ChiSq	Cases	Controls	ChiSq	Cases	Controls	ChiSq
PIA_ADMIN_WAREH_INVENTORY											
All	241	2863.0	10.0	8.7	0.4	14.9	15.5	0.1	20.1	19.8	0.0
PSM	240	239.6	10.0	10.8	0.1	15.0	19.3	1.5	20.2	24.4	1.1
PIA_AG_FOOD_PRODUCTION											
All	194	2910	16.5	8.3	15.1***	25.3	14.8	15.1***	27.6	19.2	7.5**
PSM	193	190.8	16.6	15.3	0.1	25.4	25.4	0.0	27.8	32.7	1.0
PIA_COMPUTER_IT											
All	102	3002	2.9	9.0	4.5*	5.9	15.8	7.4**	8.0	20.2	7.8**
PSM	102	96.6	2.9	3.2	0.0	5.9	7.8	0.3	8.0	9.4	0.1
PIA_CONSTRUCTION_BLDING_TRADES											
All	158	2946	8.2	8.9	0.1	13.3	15.6	0.6	19.6	19.8	0.0
PSM	158	170.6	8.2	9.3	0.1	13.3	18.6	1.7	19.6	22.6	0.4
PIA_DINING_FOOD_PROCESSING											
All	261	2843	12.6	8.5	5.2*	22.6	14.8	11.0***	28.1	19.0	10.7**
PSM	259	258.3	12.4	13.2	0.1	22.4	21.2	0.1	28.3	26.5	0.2
PIA_FABRIC											
All	551	2553	10.7	8.4	2.9	18.9	14.8	5.8*	23.4	19.0	4.8*
PSM	551	555.4	10.7	8.2	2.0	18.9	14.6	3.6	23.4	18.8	3.0
PIA_HEALTHCARE/LAUNDRY_SERVICES											
All	915	2189	6.0	10.0	12.8***	12.3	16.8	9.8**	16.3	21.2	8.5**
PSM	914	920.8	6.0	8.4	3.8	12.4	13.8	0.9	16.3	17.6	0.5
PIA_MARINE											
All	31	3073	9.7	8.8	0.0	19.4	15.5	0.4	21.4	19.8	0.0
PSM	31	31.0	9.7	12.8	0.2	19.4	22.0	0.1	21.4	24.8	0.1

Table 2. Conviction Recidivism (continued)

Model	N		1 Year Recidivism %			2 Year Recidivism %			3 Year Recidivism %		
	Cases	Controls	Cases	Controls	ChiSq	Cases	Controls	ChiSq	Cases	Controls	ChiSq
PIA_METAL_WORKING											
All	301	2803	7.6	9.0	0.6	12.0	15.9	3.2	15.8	20.2	2.9
PSM	301	299.6	7.6	9.8	0.9	12.0	16.6	2.6	15.8	20.4	1.8
PIA_OTH_LIGHT_INDUSTRY											
All	350	2754	8.3	8.9	0.1	14.6	15.6	0.3	18.7	19.9	0.2
PSM	350	349.4	8.3	6.2	1.2	14.6	10.5	2.6	18.7	14.3	2.1
PIA_CAREER_TECHNICAL_ED											
All	269	2835	5.6	9.1	3.9*	10.4	16.0	5.8*	14.2	20.3	4.8*
PSM	269	277.2	5.6	6.6	0.2	10.4	18.9	7.9**	14.2	23.4	6.2*
PIA_AG_DINING_FOOD_PROCESSING											
All	455	2649	14.3	7.9	19.7***	23.7	14.1	27.6***	27.9	18.3	19.8***
PSM	452	451.6	14.2	14.0	0	23.7	23.4	0	28.0	30.1	0.4
PIA_FACILITIES HEALTHCARE SERVICES											
All	423	2681	7.3	9.1	1.4	12.8	15.9	2.8	17.9	20.0	0.8
PSM	423	424.5	7.3	9.3	1.1	12.8	16.0	1.8	17.9	20.6	0.8

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

Table 3. Return to Custody Recidivism

Model	N		1 Year Recidivism %			2 Year Recidivism %			3 Year Recidivism %		
	Cases	Controls	Cases	Controls	ChiSq	Cases	Controls	ChiSq	Cases	Controls	ChiSq
PIA_ADMIN_WAREH_INVENTORY											
All	241	2863.0	3.3	3.4	0.0	8.7	10.2	0.5	11.9	14.8	1.3
PSM	240	239.6	3.3	4.3	0.3	8.8	12.5	1.8	12.0	18.3	3.4
PIA_AG_FOOD_PRODUCTION											
All	194	2910	5.7	3.2	3.3	16.5	9.7	9.4**	21.1	14.1	6.6*
PSM	193	190.8	5.7	6.3	0.1	16.6	15.7	0.1	21.2	23.6	0.3
PIA_COMPUTER_IT											
All	102	3002	1.0	3.5	1.9	2.9	10.3	5.9*	3.5	15.0	8.8**
PSM	102	96.6	1.0	1.4	0.1	2.9	5.5	0.8	3.5	6.6	0.9
PIA_CONSTRUCTION_BLDING_TRADES											
All	158	2946	2.5	3.4	0.4	8.2	10.2	0.6	13.9	14.6	0.1
PSM	158	170.6	2.5	2.8	0.0	8.2	8.5	0.0	13.9	11.7	0.3
PIA_DINING_FOOD_PROCESSING											
All	261	2843	4.6	3.3	1.3	13.4	9.8	3.5	19.4	14.1	4.5*
PSM	259	258.3	4.6	5.5	0.2	13.1	13.9	0.1	19.5	19.6	0.0
PIA_FABRIC											
All	551	2553	4.2	3.2	1.3	13.4	9.4	8.3**	16.5	14.2	1.6
PSM	551	555.4	4.2	2.9	1.3	13.4	9.1	5.2*	16.5	13.8	1.3
PIA_HEALTHCARE/LAUNDRY_SERVICES											
All	915	2189	2.8	3.6	1.2	8.1	10.9	5.7*	12.8	15.3	2.8
PSM	914	920.8	2.8	3.0	0.0	8.1	9.6	1.3	12.8	13.1	0.0
PIA_MARINE											
All	31	3073	9.7	3.3	3.8	16.1	10.0	1.3	21.4	14.5	1.1
PSM	31	31.0	9.7	4.6	0.6	16.1	15.8	0.0	21.4	18.3	0.1

Table 3. Return to Custody Recidivism (continued)

Model	N		1 Year Recidivism %			2 Year Recidivism %			3 Year Recidivism %		
	Cases	Controls	Cases	Controls	ChiSq	Cases	Controls	ChiSq	Cases	Controls	ChiSq
PIA_METAL_WORKING											
All	301	2803	3.0	3.4	0.2	8.0	10.3	1.6	14.1	14.6	0.1
PSM	301	299.6	3.0	3.5	0.1	8.0	10.6	1.2	14.1	14.5	0.0
PIA_OTH_LIGHT_INDUSTRY											
All	350	2754	2.3	3.5	1.5	9.1	10.2	0.4	14.0	14.6	0.1
PSM	350	349.4	2.3	2.5	0.0	9.1	7.1	1.0	14.0	10.7	1.6
PIA_CAREER_TECHNICAL_ED											
All	269	2835	2.6	3.5	0.5	6.7	10.4	3.7	10.8	14.9	2.8
PSM	269	277.2	2.6	1.7	0.5	6.7	8.4	0.6	10.8	11.7	0.1
PIA_AG_DINING_FOOD_PROCESSING											
All	455	2649	5.1	3.1	4.6*	14.7	9.3	12.7***	20.1	13.6	11.8***
PSM	452	451.6	5.1	6.3	0.6	14.6	14.7	0.0	20.3	21.7	0.3
PIA_FACILITIES HEALTHCARE SERVICES											
All	423	2681	2.8	3.5	0.4	8.0	10.4	2.3	13.3	14.8	0.5
PSM	423	424.5	2.8	3.7	0.5	8.0	11.1	2.3	13.3	16.2	1.1

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

## Conclusions

This report presents findings from a deeper dive into the data presented in the 2021 UCI report *The Effect of Prison Industry on Recidivism: An Evaluation of California Prison Industry Authority (CALPIA)*. For the current study, we examined thirteen different groups of enterprise programs and compared each with the other groups to see whether any particular enterprise group performed differently from the other groups. Our findings suggest that the programs perform about equally well with the exception of CTE, which appears to do slightly better than other enterprises. We also found a positive effect for CTE in our earlier report. Several other programs show patterns of higher or lower recidivism which are suggestive but not conclusive due to lack of statistical significance. We note that small sample sizes, particularly after propensity score matching, may limit our ability to detect significant differences.

## References

Hess, J. and Turner, S. (2021). *The Effect of Prison Industry on Recidivism: An Evaluation of California Prison Industry Authority (CALPIA)*. University of California, Irvine: Center for Evidence-Based Corrections.

Bohmert, M.N. and Duwe, G. (2002). Minnesota's Affordable Homes Program: Evaluating the effects of a prison work program on recidivism, employment, and cost avoidance. *Criminal Justice Policy Review*, 23, 3, 327-351.

Richmond, K.M. (2014). The impact of federal prison industries employment on the recidivism outcomes of female inmates. *Justice Quarterly*, 31, 4, 719-745.

Saylor, W.G. & Gaes, G.G. (1997). Training inmates through industrial work participation, and vocational and apprenticeship instruction. *Corrections Management Quarterly*, 1, 2, 32-43.

## Appendix A

### **PIA\_CAREER\_TECHNICAL\_ED**

- PIA\_CTE\_AutoCAD
- PIA\_CTE\_Carpntry
- PIA\_CTE\_CompCode
- PIA\_CTE\_Culinary
- PIA\_CTE\_FacMaint
- PIA\_CTE\_Ironwrk
- PIA\_CTE\_Laborer
- PIA\_CTE\_DivePrg
- PIA\_CTE\_Roofing

### **PIA\_ADMIN\_WAREH\_INVENTORY**

- PIA\_Accounting
- PIA\_CentOffice
- PIA\_Distrib
- PIA\_Inv\_Manag
- PIA\_Maint\_Rep
- PIA\_Off\_Admin
- PIA\_Warehouse

### **PIA\_AG\_FOOD\_PRODUCTION**

- PIA\_Crops
- PIA\_Dairy

### **PIA\_COMPUTER\_IT**

- PIA\_CTE\_AutoCAD
- PIA\_CTE\_CompCode
- PIA\_Digital
- PIA\_CompRecyc

### **PIA\_CONSTRUCTION\_BLDING\_TRADES**

- PIA\_CSFM\_Constr
- PIA\_CTE\_Carpntry
- PIA\_CTE\_Laborer
- PIA\_CTE\_Roofing
- PIA\_Mod\_Constr

### **PIA\_DINING\_FOOD\_PROCESSING**

- PIA\_Bakery
- PIA\_CTE\_Culinary
- PIA\_Cof\_Roast
- PIA\_Egg\_Prod
- PIA\_F\_Bev\_Pack
- PIA\_MeatCutting
- PIA\_Poultry

**PIA\_FABRIC**

PIA\_Fab\_Eng  
PIA\_Fab\_Prod  
PIA\_Knit\_Mill

**PIA\_HEALTHCARE/LAUNDRY\_SERVICES**

PIA\_CSFM\_FacMaint  
PIA\_CTE\_FacMaint  
PIA\_DentalLab  
PIA\_Laundry  
PIA\_Optical

**PIA\_MARINE**

PIA\_CTE\_DivePrg

**PIA\_METAL\_WORKING**

PIA\_CTE\_Ironwrk  
PIA\_Fabrication  
PIA\_Lic\_Plates  
PIA\_Metal\_Prod  
PIA\_Metal\_Sign  
PIA\_Tool\_Die

**PIA\_OTH\_LIGHT\_INDUSTRY**

PIA\_Bindery  
PIA\_Clean\_Prod  
PIA\_Furniture  
PIA\_Printing  
PIA\_Shoes  
PIA\_Mattress

**\*PIA\_AG\_DINING\_FOOD\_PROCESSING**

PIA\_Bakery  
PIA\_CTE\_Culinary  
PIA\_Cof\_Roast  
PIA\_Crops  
PIA\_Dairy  
PIA\_Egg\_Prod  
PIA\_F\_Bev\_Pack  
PIA\_MeatCutting  
PIA\_Poultry

**\*PIA\_FACILITIES HEALTHCARE SERVICES**

PIA\_CSFM\_FacMaint  
PIA\_CTE\_FacMaint

**\*Composite categories including other groups.**