

## University of Pennsylvania's Crime and Justice Policy Lab (CJP)

# Recidivism Analysis Research Brief

## Overview

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**Community Justice Support Centers (CJSCs)** are an innovative, court-run initiative that combine traditional community monitoring with treatment, education, and career services to keep clients that are at high-risk for recidivism out of jail or prison. In 2016 the Massachusetts Probation Service's Office of Community Corrections (OCC)—the office that oversees the CJSC—began a process of improvements that emphasized evidence-based practices (EBP) such as cognitive behavioral therapy, fidelity monitoring, and performance measurement..

University of Pennsylvania's Crime and Justice Policy Lab (CJP) analyzed court data to track outcomes of CJSC participants both before and after the significant program changes in 2016. Although this research is limited to retrospective data, **three different types of analyses all suggest that current CJSCs are reducing rates of recidivism among participants.** The research team also did not find positive effects of CJSCs in the pre-2016 analysis, suggesting that OCC's focus on evidence-based practices, fidelity monitoring, and performance measurement may be responsible for the positive program outcomes. The research team's conclusion: given the high social and financial cost of incarceration, CJSCs are a very promising governmental innovation that could improve the lives of many justice-involved individuals.

## About the Office of Community Corrections (OCC)

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In 1996 the Massachusetts State Legislature created the OCC to address a lack of sentencing options available to the courts. The state prison population was rising and there was significant concern that courts were sentencing individuals who had committed relatively minor offenses to prison due to lack of other punishment options. The OCC was designed to provide supervision and structured reporting but also to be a hub of services for justice-involved individuals. Today, the OCC operates 19 CJSCs across the state through community-based partnerships. Starting in 2016, the OCC extensively revised its programming to rely more heavily on EBP.

Today, each CJSC offers about a dozen different programs that address substance use disorder, connections to the community, career opportunities, decision making skills, and education. Much of the programming is centered on cognitive-behavioral therapy and is selected for its basis in research. Participants are assigned programming based on an actuarial risk/need assessment. Most individuals are court-ordered to the CJSC as part of their probationary sentence. The research team focused its analysis on these individuals.

## Methodology

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The University of Pennsylvania's CJP sought to identify the causal effect of CJSC participation on recidivism in the CJSC's modern program design. Therefore, CJP selected data from 2018 for analysis, as this was the most recent data where the research team could look at one-year outcomes. The research team also looked at data in 2013, prior to changes that made CJSCs more congruent with EBP. Both the research team and the OCC hypothesized that the 2013 program would not have the same positive effects as the most recent program data—looking at 2013 data could provide a valuable comparison.

The research team used observational data on probationers who attended CJSC and developed a matched dataset of probationers who did not attend CJSC but who had similar risk/need levels, in both time periods. To develop the matched comparison groups the research team explored multiple analysis techniques, including Mahalanobis distance matching (MDM), propensity score matching (PSM), and

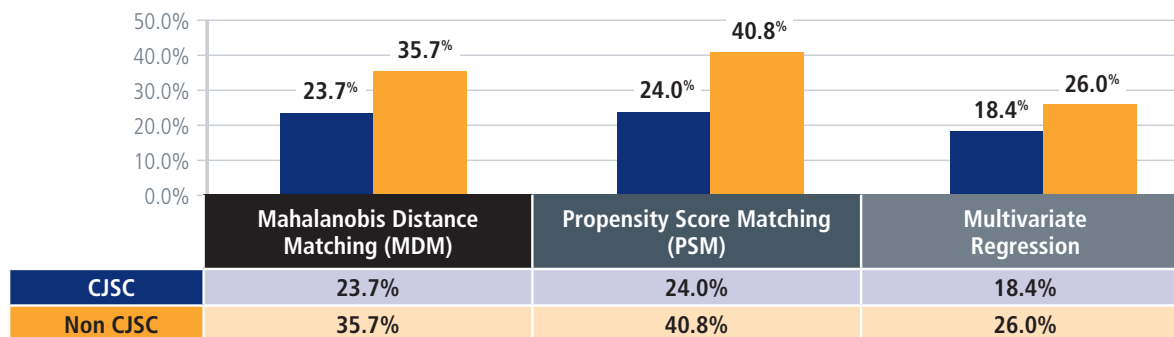
multivariate regression. Multiple techniques were used to determine if results were consistent across different approaches. Since each matching method relies on assumptions and introduces error, consistency across techniques would reinforce any findings of the analysis. Following matching, the team analyzed the difference in recidivism (defined as a re-arraignment within one year of referral to the CJSC) between the treatment groups and comparison groups in each period.

## Results

CJSC participants in 2018 saw large and significant reductions in recidivism relative to the comparison groups. All three analysis approaches provide strong evidence of a true reduction in recidivism in the CJSC treatment groups versus the non-CJSC comparison groups.

The same analysis techniques applied to the 2013 participants—before the OCC strengthened its programming—generally found no significant differences between the two groups! This is consistent with the research team’s hypothesis that measures taken in 2016 to enhance the CJSCs were effective.

**Estimated Recidivism Rate Among 2018 CJSC Treatment Groups & Non CJSC Comparison Groups**



The graph above compares the recidivism rate in the 2018 CJSC treatment group to the non CJSC comparison group under each analysis technique. 2018 CJSC participants saw large and statistically significant reductions in recidivism using all analysis techniques relative to the non CJSC comparison groups. The findings range from 26% to a 36% reduction in arraignments within one year of CJSC referral, depending on the technique used to identify the comparison group. Note that each of these differences is statistically significant.

## Conclusion

This analysis provides compelling evidence that CJSCs are reducing recidivism for the justice-involved individuals they serve. The research team did not find this effect for the less EBP oriented 2013 program. **This finding was consistent with the overall research hypothesis and supports the principle that program monitoring and implementation with fidelity to EBP produces better outcomes for participants.** The earlier findings also serve as further evidence that the results reflect the program’s effect and are not due to a limitation of the analysis techniques used.

Since this is not a randomized evaluation, there is always a chance these results were driven by selection effects. However, the comparative analysis of 2013 data—when the CJSCs were likely working with individuals with less risk of recidivism—provides additional evidence these results reflect the effect of the program and are not driven by selection effects.

*The Crime and Justice Policy Lab is grateful for assistance of Jenna Jacobson, Laura Lempicki and Vin Lorenti on completing this research project. Primary data analysis was done by Emma Rackstraw.*

<sup>1</sup> All of the analysis approaches found *higher* rates of recidivism for CJSC participants in 2013, although these differences were only statistically significant for multivariate regression and not for the matching methods.

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For more information about the OCC or Community Justice Support Centers contact [community.justice@jud.state.ma.us](mailto:community.justice@jud.state.ma.us)