



# Transition-Age Youth Pilot Program

## Evaluation Report #2

September 2021

Report prepared by Evident Change for the Board of State and  
Community Corrections pursuant to Penal Code sec. 1000.7



# CONTENTS

Executive Summary .....	i
Introduction .....	1
Evaluation Design .....	2
Findings.....	6
Conclusions and Recommendations .....	21

Questions or comments regarding this report can be directed to Dr. Erin Espinosa, Director of Research, at [eespinosa@evidentchange.org](mailto:eespinosa@evidentchange.org)

# EXECUTIVE SUMMARY

## Introduction

Senate Bill (SB) 1004 (Ch. 865, Statutes of 2016) and SB 1106 (Ch. 1007, Statutes of 2018)<sup>1</sup> provided six counties (Alameda, Butte, Napa, Nevada, Santa Clara, and Ventura) the opportunity to implement a transition-age youth (TAY) pilot program with deferred entry of judgment in juvenile halls for young adult offenders.<sup>2</sup> Behavioral and psychoneurological research indicating that young adults (between the ages of 18 and 24) may developmentally benefit from rehabilitative rather than punitive approaches to corrections<sup>3</sup> initiated the legislation.<sup>4</sup>

To be eligible for the TAY program, potential participants must meet statutory criteria, including being in the age range (between the ages of 18 and 24 at the time of the qualifying offense), offense type (charged with a felony offense, other than a violent, serious, or sexual felony), prior record (no prior conviction for a violent, serious, or sexual felony offense), suitability for the program, and otherwise would have served time in custody in a county jail. In addition, candidates must consent to participate in the program and agree to waive their right to a trial or hearing, plead guilty to the charge(s), and waive time for the pronouncement of the judgment. TAY program participants engage in services such as cognitive behavioral therapy and age-appropriate educational and vocational programming and participate in community supervision. Upon a participant's successful completion of the program, the court will dismiss the participant's criminal charge(s) associated with this sentence.

---

<sup>1</sup> SB 1106 amended SB 1004 and extended the date of authorization to establish a pilot program to January 1, 2022, and expanded the scope of the pilot to include Ventura County, which ultimately chose not to participate in the TAY program and is not included in this or the previous report.

<sup>2</sup> A third law related to the TAY program, AB 1390, was enacted in July 2019. AB 1390 expanded the program eligibility criteria to include young adults who were between the ages of 21 and 24 at the time of their arresting offense. Program participation by an individual in this age group must be approved locally by the jurisdiction's multidisciplinary team established for this project.

<sup>3</sup> Cauffman, E. (2012). Aligning justice system processing with developmental science. *Criminology and Public Policy*, 11(4), 751–758. doi:10.1111/j.1745-9133.2012.00847.x; Farrington, D. P., Loeber, R., & Howell, J. C. (2012). Young adult offenders: The need for more effective legislative options and justice processing. *Criminology and Public Policy*, 11(4), 729–750. doi: 10.1111/j.1745-9133.2012.00842.x; Scott, E., Bonnie, R. J., & Steinberg, L. (2016). Young adulthood as a transitional legal category: Science, social change, and justice policy. *Fordham Law Review*, 85(2), 641–666; Steinberg, L. (2012). Should the science of adolescent brain development inform public policy? *Issues in Science and Technology*, 28(3), 70–76.

<sup>4</sup> Senate Committee on Public Safety. (2016). SB 1004 young adults: deferred entry of judgment pilot program. Retrieved from [http://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill\\_id=201520160SB1004](http://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill_id=201520160SB1004).

## Evaluation Design

The legislation authorizing TAY programs requires the Board of State and Community Corrections (BSCC) to conduct an evaluation of the programs' impact and effectiveness and to submit a comprehensive evaluation report to the Assembly and Senate Committees on Public Safety. In May 2020, the BSCC contracted with Evident Change to conduct this evaluation.

Building off the original evaluation plan developed by the BSCC, the Evident Change evaluation team used a mixed-method and participatory process-based approach to examine the TAY programs' impact and effect in three primary areas (outlined in SB 1004): (1) sentencing, especially opportunities for community supervision; (2) presence of the program in the juvenile facility; and (3) program completion, skills improvements, and recidivism. The team also conducted a qualitative process evaluation that explored how TAY programs were structured, implemented, and operated; program challenges and successes; and program staff's knowledge, perceptions, and recommendations for improvement.

This report is the second of two reports submitted by Evident Change to the BSCC. The previous report summarized findings based on available data through mid-December 2020, with an emphasis on qualitative and descriptive findings. This report provides an overview of the quantitative analytics using data collected from the California Department of Justice (DOJ) to specifically target findings and conclusions related to sentencing (Evaluation Question One; EQ1) and recidivism (Evaluation Question Three; EQ3).

## Limitations of This Report

The first limitation to the evaluation design comes in the identification and development of comparison groups to the TAY participant group. The evaluation team recommends the use of propensity score matching (PSM) when working with administrative data for program evaluation that includes outcome analyses. PSM is a sampling approach that results in statistically equivalent comparison groups (e.g., treatment and non-treatment groups, participant and non-participant groups) and could be used in evaluations such as this one in lieu of randomization. However, TAY participants from Santa Clara County accounted for a larger proportion of the individuals in that evaluation group. For PSM to be reliably used in this evaluation, additional TAY participants from counties other than Santa Clara County are necessary.<sup>5</sup> Due to these factors, the evaluation team chose not to use PSM for the evaluation design and instead utilized a nonequivalent control group

---

<sup>5</sup> Andrilon, A., Piracchio, R., & Cheveret, S. (2020). Performance of propensity matching to estimate causal effects in small samples. *Statistical Methods in Medical Research*, 29(3), 644–658. <https://doi.org/10.1177/0962280219887196>; Cenzer, I., Boscardin, J., & Berger, K. (2020). Performance of matching methods in studies of rare diseases: A simulation study. *Intractable Rare Diseases Research*, 9(2) 79–88. doi: 10.5582/irdr.2020.01016

design that examined similarities and differences between the TAY participant group and two comparison groups (pre- and post-TAY comparison groups).

Another limitation to the evaluation design relates to the time point for determining recidivism-based outcomes. During the evaluation period, the average length of enrollment in the TAY pilot across all counties was 12.9 months. Due to the variability in the length of operations of the TAY pilot across all counties, variability in the average length of enrollment, and the relatively short timeframe of operation of the TAY pilot, the examination of differences in recidivism between the TAY participant group and the comparison groups was limited to six months from program exit.

Therefore, the results included in this report should be reviewed with caution, as the data collection and analytics were limited due to (1) limited variables in the DOJ data set, and (2) limited timeframe for sample selection. Further analysis should include a longitudinal study design that incorporates both case processing (e.g., arrest records, petitions) and sentencing outcome data collection and analysis.

## **Findings**

For the ease of understanding the evaluation approach, the findings (in both this Executive Summary and in the full report) are presented with EQ3 first followed by EQ1, and then a short overview of the overlap between these findings and the qualitative information included in the first report. The key findings of Report #2 of the TAY evaluation are as follows:

### Recidivism-EQ3:

Evaluation Question: What is the program's effectiveness with respect to program participants and a comparison group?

Data from the California DOJ allowed for the creation of two comparison groups resulting in three distinct evaluation groups: 1. TAY participant, 2. Post-TAY participant comparison group, and 3. Pre-TAY comparison group (see full report for description of group development). The TAY participant group had slightly fewer previous arrests than the two comparison groups and significantly fewer prior arrests for felonies than the comparison groups. Specifically, Latinx/Hispanic people in the TAY participant group had a lower average for prior arrests than both comparison groups. While previous arrest rates were also higher for other races/ethnicities in the comparison groups than the TAY participant group, the difference between groups was not statistically significant. Other than those differences, the groups were comparably similar by race/ethnicity, gender, and age.

There were statistically significant differences between the evaluation groups. Specifically, new arrests within six months of program exit accounted for a smaller proportion of outcomes for TAY participants than for the pre-TAY comparison group. For new violations,

there were significant differences between TAY participants and the post-TAY comparison group, with TAY participants experiencing 13% fewer violations within six months of exit than the post-TAY comparison group. In addition, there were statistically significant differences in violations between the post- and pre-TAY comparison groups, with the post-TAY group experiencing a larger proportion of violations within six months. There were no statistically significant differences between groups for new convictions. In addition, a stepwise binomial regression model was developed to examine the influence of being a TAY participant on future arrests in comparison to other predictor variables (e.g., race/ethnicity). The final model indicated that being a participant in the TAY pilot reduced the likelihood of rearrest in six months ( $p < .01$ ), while being White increased the likelihood of rearrest in six months.

An examination of TAY program completion (e.g., successful versus unsuccessful) revealed a statistically significant difference between new arrests, new convictions, and new violations for people who were successful in completing TAY programming compared with people who were identified as unsuccessful. Over 60% of those who did not successfully complete the program were rearrested within six months compared to only 9% of those who successfully completed it.

#### Sentencing - EQ1:

Evaluation Question: What is the TAY program's impact on sentencing, especially opportunities for community supervision?

Due to the variability in how individuals were identified and enrolled in TAY across the participating counties (as detailed in the process evaluation results), the best fit for the study design to evaluate the impact of the TAY pilot on sentencing was the creation of a TAY participant sample and population-based comparison groups anchored in two time points: prior to each county's implementation of TAY and after TAY implementation. The process included the identification and examination of both the individuals and the arrest dispositions related to an arrest or arrest event. This process resulted in the development of three distinct evaluation groups (see full report for a description of the groups): 1. TAY participant, 2. after TAY, and 3. before TAY.

Sentencing differences were statistically significant between the TAY participant group and the "after TAY" group for jail or prison only, jail and probation, diversion/deferral, and acquitted/dismitted. When comparing the participant group to the "before TAY" group, differences in sentence proportions were statistically significant for jail and probation, diversion/deferral, and acquitted/dismitted. Specifically, the TAY participant group experienced a significantly smaller proportion of jail and probation sentences (7.9%) than both the "before" (72.4%) and "after" (62.8%) TAY comparison groups. It should be noted, however, while not being statistically significant, TAY participants who received a jail sentence had longer sentences than individuals in the comparison groups.

## **Connection to Process Evaluation Outcomes:**

### Net Widening

The quantitative data analysis for EQ 1 suggests that staff reports during structured interviews related to the variation in enrollment and eligibility criteria can be preliminarily confirmed. While the data do not indicate a definitive impact of net widening due to the TAY legislation (as seen in the variation in sentence dispositions), the data indicate that discretion within the counties as described in staff interviews and surveys allowed for enrollment of participants who may not have been arrested for an eligible offense.

### Considerations for Juvenile Hall Component

In interviews, some staff indicated that the juvenile hall component of the TAY pilot was no longer in use. Staff indicated that ending that portion of the program was due to factors such as the realignment of the Department of Juvenile Justice and/or COVID-19 responses, while others indicated it should remain and that the length of time in juvenile hall for TAY participants should be extended.

The outcome analysis for EQ3 found no statistical significance related to successful completion of the TAY program for those who spent time in juvenile hall compared to participants who did not spend time in juvenile hall. It should be noted that a larger proportion of participants who did not receive the in-custody portion of the program had successful TAY program completions compared with those who spent some time in juvenile hall (e.g., 63.5% of those who experienced an in-custody stay were successful compared with 75.0% of those without a juvenile hall stay).

## **Future Evaluation Considerations**

To examine the impact of the TAY pilot more extensively, future evaluations should incorporate an integrated cross-sectional and longitudinal study design. The qualitative data collection should incorporate case processing, participant perspectives, stakeholder perspectives, and other social artifacts (e.g., petitions, written disposition recommendations). This approach would allow for a more comprehensive examination of both the formal and informal influences of TAY programming inclusive of community contextual considerations (e.g., other local diversion programs or services) that may be correlated to sentencing outcomes related to TAY programming.

Future evaluations may also consider the benefits of a larger TAY participant group. A larger TAY participant group will increase the statistical influence of counties with less TAY participation than others and ultimately allow for the use of PSM to identify and develop comparison groups more accurately. It should be noted that one of the greatest challenges with evaluation research is in identifying equivalent comparison groups. In the development of evidence-based programs and interventions, primarily from healthcare

research, randomized controlled trials (RCTs) have been considered the gold standard in controlling for sample variability between the study or treatment group and comparison or control groups.<sup>6</sup> Future research should consider the development of statistically equivalent groups via PSM, as 1. randomization is extremely difficult for studies of treatment services, and 2. supports of individuals involved with court systems are extremely expensive to conduct and often difficult to complete in social service systems.<sup>7</sup>

---

<sup>6</sup> Grossman, J., & Mackenzie, F. (2005). The randomized controlled trial: Gold standard, or merely standard? *Perspectives in Biology and Medicine*, 48(4), 516–534.

<sup>7</sup> Mezey, G., Robinson, F., Campbell, R., Gillard, S., Macdonald, G., Meyer, D., Bonell, C., & White, S., (2015). Challenges to undertaking randomised trials with looked after children in social care settings. *Trials*, 16(206). <https://doi.org/10.1186/s13063-015-0708-z>



## INTRODUCTION

Senate Bill (SB) 1004 (Ch. 865, Statutes of 2016) and SB 1106 (Ch. 1007, Statutes of 2018)<sup>8</sup> provided six counties (Alameda, Butte, Napa, Nevada, Santa Clara, and Ventura) the opportunity to implement a transition-age youth (TAY) pilot program with deferred entry of judgment in juvenile halls for young adult offenders.<sup>9</sup> Behavioral and psychoneurological research indicating that young adults (between the ages of 18 and 24) may developmentally benefit from rehabilitative rather than punitive approaches to corrections<sup>10</sup> initiated the legislation.<sup>11</sup>

To be eligible for the TAY program, potential participants must meet the following requirements, as stated in SB 1004.

1. Must be between the ages of 18 and 20 at the time of the offense (note: AB 1390, enacted in July 2019, expanded the age range to include young adults between the ages of 21 and 24 at the time of the offense).
2. Must be found suitable for the program using a risk assessment instrument.
3. Must be found able to benefit from services generally reserved for delinquents.
4. Must meet the rules of the juvenile hall developed in accordance with applicable regulations set forth in Title 15 of the California Code of Regulations.
5. Must be charged with a felony offense, other than a violent, serious, or sexual felony offense.
6. Cannot have a prior conviction for a violent, serious, or sexual felony offense.
7. Cannot be required to register as a sex offender pursuant to Chapter 5.5 of Title 9, Part 1.

---

<sup>8</sup> SB 1106 amended SB 1004 and extended the date of authorization to establish a pilot program to January 1, 2022, and expanded the scope of the pilot to include Ventura County, which ultimately chose not to participate in the TAY program and is not included in this or the previous report.

<sup>9</sup> A third law related to the TAY program, AB 1390, was enacted in July 2019. AB 1390 expanded the program eligibility criteria to include young adults who were between the age of 21 and 24 at the time of their arresting offense. Program participation by an individual in this age group must be approved locally by the jurisdiction's multidisciplinary team established for this project.

<sup>10</sup> Cauffman, E. (2012). Aligning justice system processing with developmental science. *Criminology and Public Policy*, 11(4), 751–758. doi:10.1111/j.1745-9133.2012.00847.x; Farrington, D. P., Loeber, R., & Howell, J. C. (2012). Young adult offenders: The need for more effective legislative options and justice processing. *Criminology and Public Policy*, 11(4), 729–750. doi: 10.1111/j.1745-9133.2012.00842.x; Scott, E., Bonnie, R. J., & Steinberg, L. (2016). Young adulthood as a transitional legal category: Science, social change, and justice policy. *Fordham Law Review*, 85(2), 641–666; Steinberg, L. (2012). Should the science of adolescent brain development inform public policy? *Issues in Science and Technology*, 28(3), 70–76.

<sup>11</sup> Senate Committee on Public Safety. (2016). SB 1004 young adults: deferred entry of judgment pilot program. Retrieved from

[http://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill\\_id=201520160SB1004](http://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill_id=201520160SB1004).

8. Would have otherwise served time in custody in a county jail.
9. Must consent to participate in the program and agree to waive their right to a speedy trial or preliminary hearing, plead guilty to the charge or charges, and waive time for the pronouncement of the judgment.

For an individual who is determined to be eligible and suitable for, and who consents to participate in, the TAY program, the court enters a deferred entry of judgment. An individual may then be enrolled into a TAY program, where they can serve up to one year in a juvenile hall. During TAY program participation, individuals may receive supports and services such as age-appropriate educational, vocational, and supervision services and/or mental health services. If a participant successfully completes the program, the court will dismiss the individual's charge(s) associated with their TAY enrollment. However, if the individual is found to perform unsatisfactorily in the program,<sup>12</sup> the probation department may file a motion of entry of judgement. Once it receives the motion, the court conducts a hearing to establish whether a judgment should be entered. If the court determines that an individual was not benefiting from the services and supports included in the program or is performing unsatisfactorily in the program, the court may render a verdict of guilty to the charge(s) and schedule a sentencing hearing.

The legislation also requires the Board of State and Community Corrections (BSCC) to conduct an evaluation of the program and to submit a comprehensive evaluation report to the Assembly and Senate Committees on Public Safety by December 31, 2023. The evaluation must address the following areas: (1) the impact of the TAY program on sentencing, especially related to opportunities for community supervision; (2) the impact of the TAY program on minors in juvenile facilities; and (3) the effect of the TAY program on participants compared with the results for young adults sentenced for similar crimes who did not participate in the TAY program. In May 2020, BSCC contracted with Evident Change to conduct the evaluation.<sup>13</sup>

## EVALUATION DESIGN

The evaluation was framed within three primary (as outlined in SB 1004) and four secondary evaluation questions (EQs).

### Primary Evaluation Questions

---

<sup>12</sup> While the definition of successful completion varied across programs (see qualitative section of report #1), in general, participants could be found to have an unsatisfactory program completion if they committed a new offense or violated conditions of the program.

<sup>13</sup> Evident Change (formerly the National Council on Crime and Delinquency) is a nonprofit that supports the improvement of social services systems through research and data analytics.

1. What is the TAY program's impact on sentencing, especially opportunities for community supervision?
2. What is the impact of the presence of the program on minors in the juvenile facility?
3. What is the program's effectiveness with respect to program participants and a comparison group?

### **Secondary Evaluation Questions**

4. How is the program structured?
5. How is the program implemented and operated?
6. What challenges and successes did the program experience?
7. What are program staff's knowledge, perceptions, and recommendations related to improving TAY programs?

This is the second of two reports Evident Change submitted to the BSCC regarding the TAY pilot program. Due to limitations in accessing and processing quantitative data from the California Department of Justice (DOJ), Evident Change requested a no-cost contract extension to allow for the examination of the evaluation questions requiring official arrest data from DOJ. In December 2020, Evident Change submitted the first report to the BSCC, which includes the process evaluation components with an overview of each TAY program, findings for EQs 2 and 4–7, and partial findings for EQs 1 and 3. Please see the first report, titled [Transition-Age Youth \(TAY\) Pilot Program Evaluation Report \(December 2020\)](#), for more information on the initial findings. The current report focuses on answering EQs 1 and 3, connecting the quantitative findings to the process outcomes, and providing overall recommendations for future exploration.

While the Evident Change evaluation team assessed the quality of the quantitative data as part of preparing (i.e., cleaning) the data for analysis, it was determined that comparison groups would need to be developed differently than originally planned to appropriately examine EQs 1 and 3. To streamline the discussion and interpretation of the comparison group development, this report begins with an examination of EQ 3 methods and findings, followed by EQ 1 methods and findings and concluding with the connection between the first report's quantitative analysis and the process evaluation.

### **EQ 3 Methods**

Following the original evaluation design developed by the BSCC to assess the impact of the TAY program on both EQ 1 (sentencing) and EQ 3 (program effectiveness), the evaluation team examined differences between two primary groups: (1) A comparison group, based on data provided by DOJ and consisting of individuals sentenced from counties participating in the TAY pilot *before* TAY was a sentencing option (specifically between April 1, 2015, and the date that participant data identified as the TAY program start date, with program start dates varying by individual counties), known as the pre-TAY

program comparison group;<sup>14</sup> and (2) the TAY program participant group (individuals served by the TAY program through official program enrollment).

For EQ 3, the data quality and integrity assessment revealed two potential additional groups for comparison to the TAY participant group, again based on data provided by the DOJ: (1) a post-TAY comparison group (consisting of TAY-eligible individuals who did not participate in the program after the date of TAY implementation) and (2) an opt-out group (consisting of TAY-eligible individuals who chose not to participate in the program; reported by Santa Clara and Butte counties only). To ensure all results of the TAY evaluation are reliably interpreted as an aggregate outcome project, the evaluation team excluded analysis that included the opt-out group from this report; results for the opt-out group are available by request. Table 1 provides an overview of the number of TAY participants by county.

Table 1		
Distinct TAY Program Participants by Participating County		
County	#	%
Alameda	9	3.9%
Butte	64	28.1%
Napa	3	1.3%
Nevada	18	7.9%
Santa Clara	134	58.8%
<b>Total</b>	<b>228</b>	<b>100.0%</b>

Propensity score matching (PSM) is a sampling approach that results in statistically equivalent comparison groups (e.g., treatment and non-treatment groups) and could be used in evaluations such as this one in lieu of randomization. However, a larger number

---

<sup>14</sup> Pre-TAY and post-TAY program group members were selected for inclusion in these cohorts based on a single conviction using the following criteria.

1. Must be within either the pre-TAY or post-TAY program time periods.
2. Must have at least one TAY program–eligible felony.
3. Must not have any prior convictions with ineligible offenses.
4. Must not have a prior sex offense.
5. Must be within one of the five counties participating in the TAY program.
6. Must be within the age range for the TAY program.
7. Must have a disposition of probation/jail (this is one single disposition type, not either/or; the data include date of disposition and do not include the time order of jail before probation or jail after probation dispositions).
8. Must have a jail exit date that allows for a follow-up period of at least six months, based on calendar time as well as the data extract cutoffs.

of TAY participants outside of Santa Clara County (ideally at least a sample of 200 participants in addition to those in the Santa Clara group) is necessary for a reliable application of PSM in generating comparison groups that would provide a valid statistical inference to the larger population.<sup>15</sup> Due to these factors, the evaluation team chose not to use PSM for the evaluation design and instead implemented a nonequivalent control group design that examined comparisons between the TAY participant group and two comparison groups (pre- and post-TAY comparison groups).

### Study Groups Development and Demographics

Each participating county provided internal tracking documents to the evaluation team for TAY program participants. This information included individuals enrolled in the TAY program, those who opted out of program participation (opt-outs), cases closed with no TAY program ordered, individuals pending enrollment in TAY, and those designated as “unsuitable”<sup>16</sup> for the program (for Santa Clara County). Due to significant issues with missing data (e.g., some variables were only available for one department, some cases lacked identification numbers to facilitate matching across county and DOJ data sets), for this evaluation report, only individuals who were identified as being enrolled in the TAY program were included from the county data while both comparison groups were developed from data collected from DOJ.

The following is a summary of the final three groups included in the study design.

1. *TAY participant group*: In addition to the internal tracking documents, each county provided a file of DOJ data matched to the county’s TAY program participants. The TAY participant group includes individuals from all five counties who participated in the TAY program. Individuals who had an enrollment date or variable indicating an enrollment status within the data provided by the participating counties were included in this sample. Of the data that Evident Change received from the counties, four participants who were not matched to the DOJ data sets were excluded from the analysis, resulting in a final TAY participant group sample size of 228.
2. *Pre-TAY comparison group*: This group consists of individuals who received a conviction after April 1, 2015, and before the implementation of the TAY program in their respective counties as identified within the DOJ data sets, and who met TAY eligibility criteria, resulting in a sample size of 455.

---

<sup>15</sup> Andrilon, A., Piracchio, R., & Cheveret, S. (2020). Performance of propensity matching to estimate causal effects in small samples. *Statistical Methods in Medical Research*, 29(3), 644–658. <https://doi.org/10.1177/0962280219887196>; Cenzer, I., Boscardin, J., & Berger, K. (2020). Performance of matching methods in studies of rare diseases: A simulation study. *Intractable Rare Diseases Research*, 9(2) 79–88. doi: 10.5582/irdr.2020.01016

<sup>16</sup> Santa Clara County is the only county that submitted data on individuals determined to be unsuitable for the TAY program.

3. *Post-TAY comparison group*: This group consists of individuals who were TAY program eligible following TAY implementation in the participating counties and who were **not** enrolled in the TAY program, as identified in both the DOJ and county data sets, resulting in a sample size of 144. It should be noted that this group includes individuals who chose not to participate in the program voluntarily and those who were not enrolled due to other programmatic processing or local decisions.

## FINDINGS

### Demographics of Evaluation Groups

The evaluation team used bivariate statistics to examine differences between the evaluation groups. More specifically, Fisher’s exact test (F test) was used to determine if differences between groups were statistically significant. An F test allows for the comparison of proportions between groups with small sample sizes (e.g., at least one expected frequency is less than 5) to determine whether the differences between the groups are statistically significant. If the result is significant, then post-hoc testing is completed to determine which pairs of variables are significant.

In each evaluation group, the largest proportion of participants was Latinx/Hispanic. However, the pre-TAY comparison group had a statistically significant higher proportion of Black/African American individuals than the post-TAY comparison and participant groups. In addition, White individuals accounted for a significantly larger proportion of participants in the TAY participant group and the pre-TAY comparison group (Table 2).

Race/Ethnicity	TAY Participant		Post-TAY Comparison Group		Pre-TAY Comparison Group	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Asian/Pacific Islander	10	4.4%	11	7.6%	23	5.1%
Black/African American	28	2.3%*	27	18.8%*	154	33.8%*
Latinx/Hispanic	98	43.0%	70	48.6%	174	38.2%
White	71	31.1%*	33	22.9%	95	20.9%*
Multiple/Other	21	9.2%	3	2.1%	9	2.0%
<b>Total</b>	<b>228</b>	<b>100.0%</b>	<b>144</b>	<b>100.0%</b>	<b>455</b>	<b>100.0%</b>

\* $p < .05$

Possibly due to small sample sizes, there were no statistically significant differences by gender between evaluation groups. It should be noted, however, that a slightly smaller

proportion of individuals in the TAY participant group were categorized as female than the two study groups (Table 3).

<b>Gender Composition by Evaluation Group</b>						
<b>Gender</b>	<b>TAY Participant</b>		<b>Post-TAY Comparison Group</b>		<b>Pre-TAY Comparison Group</b>	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Female	28	12.3%	24	16.7%	61	13.4%
Male	197	86.4%	120	83.3%	394	86.6%
Multiple	3	1.3%	0	0.0%	0	0.0%
<b>Total</b>	<b>228</b>	<b>100.0%</b>	<b>144</b>	<b>100.0%</b>	<b>455</b>	<b>100.0%</b>

Note: The “Multiple” category was developed to rectify the gender identification differences between local county data and DOJ data. For example, one of these individuals had a gender identification of male in the local county data and female in the DOJ data. Rather than exclude these three individuals from the analysis, we developed the multiple category.

The TAY participant group included a small proportion of people who were ages 21 to 24 (n=13) at the time of the arrest that brought them into the TAY program, while the comparison groups did not include any people in this age range. The average age for all three groups was 19. However, there were no statistically significant differences related to age between the groups (Table 4).

<b>Age Composition by Evaluation Group.</b>						
<b>Age at Arrest</b>	<b>TAY Participant</b>		<b>Post-TAY Comparison Group</b>		<b>Pre-TAY Comparison Group</b>	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
18	82	36.0%	49	34.0%	156	34.3%
19	87	38.2%	60	41.7%	173	38.0%
20	46	20.2%	35	24.3%	126	27.7%
21	12	5.3%	0	0.0%	0	0.0%
22	0	0.0%	0	0.0%	0	0.0%
23	1	0.4%	0	0.0%	0	0.0%
<b>Total</b>	<b>228</b>	<b>100.0%</b>	<b>144</b>	<b>100.0%</b>	<b>455</b>	<b>100.0%</b>



## Offense History of Evaluation Groups

Data collected on offense history of individuals from each of the evaluation groups was examined from the data extract pulled from DOJ.<sup>17</sup> It includes all arrests and convictions for individuals included in the study design. On average, TAY participants had a lower rate of prior arrests than the comparison groups. Table 5 provides an overview of the average number of prior arrests by group.

<b>Group</b>	<b>Average Prior Arrests</b>
Post-TAY Comparison Group	7.38
Pre-TAY Comparison Group	7.36
TAY Participant	5.02

The evaluation team conducted additional bivariate analyses to examine the differences in the severity of offense history by evaluation group. For this examination, the team used analysis of variance (ANOVA) to test for statistical differences between the groups. If differences were significant, the team conducted post-hoc testing using Tukey (Honest Significance Difference) HSD to determine which pairings of variables between the groups were significantly different. On average, TAY participants had more prior arrests for violations and infractions than the comparison groups, although the differences between groups were not statistically significant. However, there was a statistically significant difference in the average number of previous felony arrests, with both comparison groups having a higher average of prior felony arrests than the TAY participant group. Table 6 provides an overview of offense history by severity and by group.

<b>Arrest Offense Severity</b>	<b>TAY Participant</b>	<b>Post-TAY Comparison Group</b>	<b>Pre-TAY Comparison Group</b>
Felony	2.34**	4.05**	3.43**
Misdemeanor	3.84	4.46	4.54
Infraction	1.46	1.30	1.38
Violation	3.44	2.52	2.09

\*\* $p < .01$

---

<sup>17</sup> Data retrieved from DOJ includes all offense or arrest history available to the DOJ.



When examining offense history by race/ethnicity, the differences between Latinx/Hispanic individuals by group were statistically significant, which may be because more Latinx/Hispanic individuals were represented in all groups than other races/ethnicities. Specifically, Latinx/Hispanic people in the TAY participant group had a lower average for prior arrests than both comparison groups. While previous arrest rates were also higher for other races/ethnicities in the comparison groups than the TAY participant group, the difference between groups was not statistically significant. However, the average number of prior arrests for White TAY participants was nearly twice that of the TAY participants of other races/ethnicities and more similar to the averages for the comparison groups (excluding Asian/Pacific Islander). Table 7 provides an overview of the average arrest history between groups by race/ethnicity.

Table 7			
Arrest History Averages by Race/Ethnicity and Evaluation Group			
Race/Ethnicity	TAY Participant	Post-TAY Comparison Group	Pre-TAY Comparison Group
Asian/Pacific Islander	3.33	3.67	3.53
Black/African American	3.87	8.04	7.16
Latinx/Hispanic	3.53*	6.64**	5.56*
White	6.81	6.04	6.99
Multiple/Other	3.60	9.00	6.67

\* $p < .05$ ; \*\* $p < .01$

### Recidivism Outcome Sample Selection

Due to a range of factors, counties participating in the TAY pilot began enrolling participants over a span of approximately two years (Table 8).

Table 8	
Start Date of TAY Program Enrollment by County	
County	Start Date of TAY Program Enrollment
Alameda	June 2019
Butte	March 2017
Napa	April 2018
Nevada	May 2017
Santa Clara	October 2017

During the evaluation period, the average length of enrollment in the TAY pilot across all counties was 12.9 months (ranging from 10.9 months to 17.5 months). Due to the

variability in the length of operations of the TAY pilot across all counties, variability in the average length of enrollment, and the relatively short timeframe of operation of the TAY pilot across all counties, the evaluation team limited the examination of differences in recidivism between the TAY participant group and the comparison groups to six months from program exit.

For the TAY participant group, 72 participants were excluded from the sample for outcome analysis as they were still active in the program on the date of the last data extract. An additional 35 participants were excluded due to being less than six months from the program end date (e.g., participant was only out of the program for two months upon data extract). The data collected included descriptive data for 19 participants on discharge reason (e.g., successful or unsuccessful) without a corresponding end date. However, data for 14 of these 19 people did include a facility exit date. Subsequently, the evaluation team used the facility exit date as a proxy for program discharge in the analysis. The remaining five individuals with missing discharge or program end dates were excluded from the TAY participant group, resulting in a final outcome sample of 116 TAY participants.<sup>18</sup>

For the pre- and post-TAY comparison groups, the evaluation team created a proxy end date to approximate an end date similar to the TAY participant group program end date. The comparison groups included individuals with multiple dispositions (e.g., probation or jail), sentence types, locations, and durations. The date of exit from a jail facility was used as the proxy beginning date for the outcome evaluation. The evaluation team conducted descriptive statistics on demographics by outcome group with no significant variance between the outcome subsample and the original comparison groups. Table 9 provides an overview of the final sample size for the outcome analysis by evaluation group. Table 10 provides a breakdown of the outcome sample by participating county.

<b>Table 9</b>	
<b>Outcome Sample Size by Evaluation Group</b>	
<b>Group</b>	<b>Total</b>
TAY Participant	<b>116</b>
Post-TAY Comparison Group	<b>144</b>
Pre-TAY Comparison Group	<b>455</b>

---

<sup>18</sup> The last date of court data included in the data sets was November 2020. In addition, the data sets included only two TAY participants who exited the program after shelter-in-place orders were implemented (March 19, 2020) and had a six-month follow-up period within the data collected. Therefore, analytics comparing outcomes before and during COVID-19 could not be conducted between groups.

**Table 10**

**Outcome Sample Size by Participating County**

County	TAY Participant		Post-TAY Comparison Group		Pre-TAY Comparison Group	
	n	%	n	%	n	%
Alameda	2	1.7%	6	4.2%	237	52.1%
Butte	40	34.5%	28	19.4%	45	9.9%
Napa	1	0.9%	1	0.7%	17	3.7%
Nevada	10	8.6%	10	6.9%	8	1.8%
Santa Clara	63	54.3%	99	68.8%	148	32.5%
<b>Total</b>	<b>116</b>	<b>100.0%</b>	<b>144</b>	<b>100.0%</b>	<b>455</b>	<b>100.0%</b>

Arrest and Court Outcomes

Each county provided data related to the offense that led to a participant’s TAY program enrollment. However, the data varied from county to county. In some cases, an arrest date and offense description were provided, while in some cases no arrest date was provided with several offense descriptions. Subsequently, these data did not directly match the DOJ data sets and were used to conduct individual case checks to confirm the correct arrest in the DOJ data as the index (i.e., initiating) arrest leading to TAY program enrollment. In most cases, the first arrest prior to TAY enrollment was selected as the index event. However, some individuals had additional arrests between their TAY index arrest and TAY start date. For the outcome analyses, only arrests for offenses that occurred after an individual’s TAY enrollment date were included.

- *New arrest*: Includes any new arrest event occurring within the six-month period following the program end date (for TAY participants) or proxy program end date (for comparison groups).
- *New violation*: Includes probation violations and revocations.<sup>19</sup>
- *New conviction*: Includes offenses with a disposition of convicted, petition sustained, jail, etc. In addition, conviction events associated with the TAY enrollment arrest may be included in the recidivism analysis if the conviction occurred during the six-month outcome period after exiting the TAY program.

---

<sup>19</sup> Probation violation and revocation data did not include an event date (as the arrest and court action data included) but only a disposition date.

## Differences Between Groups for Arrest, Conviction, and Violations

The evaluation team conducted bivariate analyses to examine the differences in new arrests, convictions, and violations by evaluation group. For this portion of the evaluation, the team used ANOVA to test for statistical differences between the groups. If differences were significant, the team conducted post-hoc testing using Tukey HSD to determine which variable pairings between the groups were significantly different.

There were statistically significant differences between groups with new arrests within six months of program exit, accounting for a smaller proportion of outcomes for TAY participants than for the pre-TAY comparison group. For new violations, there were significant differences between TAY participants and the post-TAY comparison group, with TAY participants experiencing 13% fewer violations within six months than the post-TAY comparison group. In addition, there were statistically significant differences in violations between the post- and pre-TAY comparison groups, with the post-TAY group experiencing a larger proportion of violations within six months. There were no statistically significant differences between groups for new convictions (Table 11).

<b>Outcome</b>	<b>TAY Participant</b>		<b>Post-TAY Comparison Group</b>		<b>Pre-TAY Comparison Group</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
New Arrest	33	28.4%*	56	38.9%	196	43.1%*
New Felony Arrest	24	20.7%	47	32.6%	144	31.6%
New Misdemeanor Arrest	29	25.0%	37	25.7%	139	30.5%
New Conviction	25	21.6%	24	16.7%	74	16.3%
New Violation <sup>20</sup>	9	7.8%**	30	20.8%*	59	13.0%*
<b>Total</b>	<b>116</b>	<b>100.0%</b>	<b>144</b>	<b>100.0%</b>	<b>455</b>	<b>100.0%</b>

Note: The column total is the sample size; \* $p < .05$ ; \*\* $p < .01$ ; new arrest may include multiple offenses, and so the  $n$  for new arrest is not the total of the subset of new felony and new misdemeanor arrests.

Next, the evaluation team examined differences in types of new offenses (e.g., person versus weapons arrests). The data set included well over 100 types of offenses. To simplify the analysis, the evaluation team recategorized those offense types into six groups: person (e.g., assault), sex offense (e.g., sexual assault), property (e.g., graffiti),

---

<sup>20</sup> When testing for significance between groups at the county level, the evaluation team found a significant difference for one county between all three evaluation groups for new violations.

weapons (e.g., gun use in vehicle theft), drugs (e.g., possession of cocaine), and other (e.g., violation of probation). The only significant difference between groups was for the “other”<sup>21</sup> arrest category. Specifically, the TAY participant group experienced fewer new arrests for “other” offenses than the pre-TAY comparison group (Table 12).

Table 12						
New Offense Types by Evaluation Group						
Outcome	TAY Participant		Post-TAY Comparison Group		Pre-TAY Comparison Group	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
New Person Arrest	9	7.8%	20	13.9%	46	10.1%
New Sex Offense Arrest	1	0.9%	0	0.0%	1	0.2%
New Property Arrest	22	19.0%	36	25.0%	103	22.6%
New Weapons Arrest	5	4.3%	16	11.1%	43	9.5%
New Drug Arrest	13	11.2%	14	9.7%	64	14.1%
New Other Arrest	24	20.7%*	33	22.9%	132	29.0%*
<b>Total</b>	<b>116</b>	<b>100.0%</b>	<b>144</b>	<b>100.0%</b>	<b>455</b>	<b>100.0%</b>

\* $p < .05$ ; Note: “New Other Arrest” includes all arrests not included in the previous categories.

### New Arrests by Race/Ethnicity and Gender

An examination of new arrests by race/ethnicity by evaluation group did not find any statistically significant differences between groups. However, White participants accounted for a larger proportion of new arrests for the TAY participant group than the post-TAY comparison group (Table 13).

---

<sup>21</sup> “Other” offenses included violations, infractions, and other offenses not categorized in the table.

Table 13						
New Arrests by Race/Ethnicity and Evaluation Group						
Race/Ethnicity	TAY Participant		Post-TAY Comparison Group		Pre-TAY Comparison Group	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Asian/Pacific Islander	1	14.3%	2	18.2%	6	26.1%
Black/African American	2	20.0%	14	51.9%	63	40.9%
Latinx/Hispanic	13	26.0%	23	32.9%	70	40.2%
White	16	43.2%	14	42.4%	55	57.9%
Multiple/Other	1	8.3%	3	100.0%	2	22.2%
<b>Total</b>	<b>33</b>	<b>28.4%</b>	<b>56</b>	<b>38.9%</b>	<b>196</b>	<b>43.1%</b>

An examination of differences in new arrests by gender across evaluation groups showed no statistically significant differences between groups (Table 14).

Table 14						
New Arrests by Gender and Evaluation Group						
Gender	TAY Participant		Post-TAY Comparison Group		Pre-TAY Comparison Group	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Female	3	15.8%	7	29.2%	24	39.3%
Male	30	31.6%	49	40.8%	172	43.7%
<b>Total</b>	<b>33</b>	<b>28.4%</b>	<b>56</b>	<b>38.9%</b>	<b>196</b>	<b>43.1%</b>

Recidivism Outcomes for TAY Participants by Program Completion

The evaluation team conducted additional analysis to examine recidivism-related outcomes by TAY participant completion type (successful versus unsuccessful completion as defined by the counties). Using an F test with the creation of 2X2 contingency tables, the analysis revealed a statistically significant difference between new arrests, new convictions, and new violations for people who were successful in completing TAY programming compared with people who were identified as unsuccessful. Over 60% of those who did not successfully complete the program were rearrested within six months compared with only 9% of those who successfully completed it. In addition, almost 60% of those identified as unsuccessful and almost 3% of successful individuals were convicted within six months (Table 15).

Outcome	Successful (n=76)		Unsuccessful (n=40)	
	<i>n</i>	%	<i>n</i>	%
New Arrest	7	9.2%**	26	65.0%**
Felony	2	2.6%	22	55.0%
Misdemeanor	6	7.9%	23	57.5%
New Conviction	2	2.6%**	23	57.5%**
Felony	0	0.0%	17	42.5%
Misdemeanor	2	2.6%	12	30.0%
New Violation	0	0.0%**	9	22.5%**

\*\* $p < .01$ ; new arrest, new conviction, and new violation all represent TAY participants; the data included multiple offenses per arrest and conviction.

### Influence of Program Participation on Six-Month Recidivism

A stepwise binomial regression was run to examine the influence of all predictor variables (e.g., race/ethnicity, gender, evaluation group) on new arrests within six months of program completion. With this approach, an initial model was run with all available variables. That model was not statistically significant. Therefore, additional models were run after removing (i.e., deleting) the variable with the lowest level of significance. The Hosmer-Lemeshow test showed that the final model shown in Table 16 fit the data well. The model indicated that being a participant in the TAY pilot reduced the likelihood of rearrest in six months ( $p < .01$ ) while being White increased the likelihood of rearrest in six months ( $p < .001$ ).

Variable	Estimate	Standard Error	z value	P value
Constant	-0.431	0.138	-3.122	0.0018**
Race				
Asian/Pacific Islander	-0.697	0.398	-1.752	0.0798
Black/African American	0.136	0.194	0.700	0.4837
White	0.673	0.200	3.366	0.0008***
Multiple/Other	-0.336	0.496	-0.678	0.4975
TAY Participant	-0.676	0.237	-2.852	0.0043**
Post-TAY Comparison	-0.155	0.200	-0.776	0.4376

\*\* $p < .01$ , \*\*\*  $p < .001$ ; Null deviance: 961.6 on 714 degrees of freedom; Residual deviance: 933.6 on 708 degrees of freedom; Race is regressed on new arrest by race.

## Recidivism Outcomes for TAY Participants by Facility Time

The evaluation team conducted additional analysis using the F test to examine outcomes for TAY participants who spent some time (defined as any time, no matter the length) in juvenile hall during the program compared with those who did not. While the difference between these groups was not statistically significant, of those who spent some time in juvenile hall (n=96), 63.5% successfully completed the program versus 75% of those who successfully completed the program without a juvenile hall stay.

### **EQ 1 Methods**

For EQ 1, the evaluation team sought to examine whether the proportion of community supervision sentences was different between the three study groups. To operationalize sentencing options by (1) eligible individuals and (2) eligible offenses, the evaluation team used both a listwise and pairwise process to align court actions by comparable TAY-eligible participants and TAY-eligible offenses.<sup>22</sup> Cases where court actions did not include a TAY-eligible offense and where the individual had a prior conviction for a TAY-ineligible offense (i.e., too severe) were excluded. This resulted in a DOJ sample of pre- and post-TAY comparison groups consisting of 2,870 distinct individuals.

As a next step, the remaining individuals who met the following criteria were included in the comparison groups.

- Must have been ages 18 to 20 at the time of the court action.
- Court action/offenses must be from one of the five participating counties.
- Must have at least one felony offense on the court action.
- Court action must be after April 1, 2015.

After excluding records that did not meet the above criteria, the final sample included 1,854 distinct individuals.

### Operational Definitions for Sentencing Variables

The DOJ data set included two different variable fields related to court-directed sentencing. Within those fields were 228 categories related to disposition. One field included a description of the disposition with information on the type and magnitude of the individual's disposition, consisting of 200 variables (e.g., acquitted, diverted, probation, jail). The other field included the location (e.g., prison or jail) of the disposition, consisting of 28 variables (e.g., jail, probation, fines, restitution, work programs).

---

<sup>22</sup> Newman, D. (2014). Missing data: Five practical guidelines. *Organizational Research Methods*, 17(4), 372–411.



Therefore, for each court action, which could include multiple offenses, the disposition description and location fields were combined to create the four following sentence categories by individual and date of the court action.

- Jail or prison only: Disposition and/or sentence location only includes jail or prison (does not include probation).
- Jail and probation: Disposition is probation and includes prison or jail or the sentence location indicates jail or prison.<sup>23</sup>
- Probation only: Dispositions and sentence locations do not include jail or prison.
- Diversion/deferral: The most severe court action was a diversion or deferral (e.g., no disposition included probation or jail/prison).
- Acquitted/dismissed: All dispositions must be acquittals and/or dismissals.

### Sentencing Sample Criteria

Due to the variability in how individuals were identified and enrolled in TAY across the participating counties (as detailed in the process evaluation results), the evaluation team determined the best fit for the study design would be the creation of both a TAY participant sample and population-based comparison groups anchored in two time points: prior to each county's implementation of TAY and after TAY implementation. The process included the identification and examination of both the individuals and the arrest dispositions related to an arrest or arrest event. This process resulted in the development of the following three distinct evaluation groups.

- TAY participant (n=164 individuals): This group includes TAY participant dispositions that occurred after TAY was implemented in their respective county. This participant sample is not identical to the list of participants presented in the outcome analysis due to filtering techniques used to ensure each sample resembled each other as much as possible. For example, this cohort was filtered to only include 18- to 20-year-olds due to the fact the pre- and post-TAY samples used in the outcome analysis did not include 21-year-olds.
- After TAY (n=574 individuals): This group includes individual dispositions for non-TAY participants that occurred after TAY implementation. This sample does not include post-TAY dispositions for TAY participants.
- Before TAY (n=1,116 individuals): This group includes all dispositions that occurred prior to TAY implementation.

---

<sup>23</sup> Note that it is possible to receive a disposition of "jail/probation," and these records comprise most of this category.

## Proportional Differences in Sentencing Dispositions

The results of the sentencing analysis are presented at the disposition or sentence level, not at the individual level. If an individual has more than one disposition or sentence during any time included in the data set, all sentences are included (aggregated by court action date).

Table 17 provides an overview of the sentencing proportions by type and by evaluation group. The evaluation team conducted an F test to examine the differences in sentence proportions by evaluation group. Differences were statistically significant between the TAY participant group and the “after TAY” group for jail or prison only, jail and probation, diversion/deferral, and acquitted/dismissed. When comparing the participant group to the “before TAY” group, differences in sentence proportions were statistically significant for jail and probation, diversion/deferral, and acquitted/dismissed. Specifically, the participant group experienced a significantly smaller proportion of jail and probation sentences (7.9%) than both the before (72.4%) and after (62.8%) TAY comparison groups. These results indicate that proportional differences between these sentencing options are correlated with the implementation of the TAY pilot program.

Sentence	TAY Participant		After TAY Comparison Group		Before TAY Comparison Group	
	n	%	n	%	n	%
Jail or Prison Only	12	4.8%*	91	12.6%*	114	8.0%
Jail and Probation	20	7.9%*	453	62.8%*	1,037	72.4%*
Probation Only	12	4.8%	36	5.0%	53	3.7%
Diversion/Deferral	158	62.7%*	49	6.8%*	14	1.0%*
Acquitted/Dismissed	47	18.7%*	76	10.5%*	181	12.6%*
Convicted/Fined/Other	3	1.2%	16	2.2%	33	2.3%
<b>Total</b>	<b>252</b>	<b>100.0%</b>	<b>721</b>	<b>100.0%</b>	<b>1,432</b>	<b>100.0%</b>

\* $p < .05$

To examine the differences in sentence length by evaluation group by sentence type, the team conducted a T-test. None of the differences were statistically significant. However, TAY participants who received a jail sentence had longer sentences than individuals in the comparison groups (Table 18).

Table 18						
Average Sentence Length by Evaluation Group and Sentence Type						
Group	Jail		Prison		Probation	
	#	Days	#	Days	#	Days
TAY Participant	29	189.52	3	771.67	29	1,081.00
After TAY	494	142.84	62	1,040.82	479	1,005.26
Before TAY	1,086	127.95	97	883.73	1,084	1,151.58

Note: Counts will not match Table 17 due to the exclusion of suspended sentences from the sentence length analysis. Those sentences were excluded due to the lack of verification of the actual sentence being served (e.g., time in jail) or not.

Due to the statistically significant decrease in jail and probation sentences across all three evaluation groups and the non-significant differences in sentence lengths between groups, the data suggest that the TAY pilot program may not have resulted in net widening for jail and probation sentences. In addition, the increased proportion of diversions/deferrals across the “before TAY” and “after TAY” timepoints suggests that participating probation departments increased the use of diversion programming during TAY implementation. These results should be reviewed with caution as the data collection and analytics were limited to correlational analyses and causality due to (1) limited variables in the DOJ data set, and (2) limited timeframe for sample selection. Further analysis should include a longitudinal study design that incorporates both case processing (e.g., arrest records, petitions) and sentencing outcome data collection and analysis.

In addition to the sentencing evaluation, post-hoc analysis of the index (i.e., initiating) offenses resulting in TAY program enrollment suggests that some individuals were enrolled without having been arrested for a felony offense (which was one of the criteria for TAY eligibility). Of the 228 TAY participants included in the study sample, 212 had an index arrest that included a felony, indicating that 16 who were arrested for misdemeanor or infraction offenses were also enrolled in the pilot program.

**Connection to Process Evaluation Outcomes**

Net Widening

During data collection for the process evaluation, TAY program staff indicated that there were differing understandings among decision makers regarding who is suitable or eligible for TAY program involvement. Staff indicated they would like to see more people enrolled in TAY programs and to have a common understanding of and application for TAY program eligibility criteria among system partners. For example, most respondents to a survey administered for the process evaluation reported that they would like clarification about whether an individual’s juvenile justice history (70.2% of respondents) or adult justice history (78.7%) are factors in determining program eligibility. In addition, some interview participants suggested the program’s eligibility criteria should be

expanded to include misdemeanors, as did close to two thirds (61.7%) of survey respondents.

The quantitative data analysis for EQ 1 suggests that staff reports related to the variation in enrollment and eligibility criteria can be preliminarily confirmed. While the data do not indicate a definitive impact of net widening due to the TAY legislation (as seen in the variation in sentence dispositions), the data indicate that discretion within the counties as described in staff interviews and surveys allowed for enrollment of participants who may not have been arrested for an eligible offense.

### Considerations for Juvenile Hall Component

Each county customized their TAY program to respond to unique community needs. While the initiating legislation intended for each program to have a juvenile hall in-custody component, in practice, some counties either did not implement an in-custody component or that piece of the program was not consistently applied to all participants, for various reasons (e.g., local expectations, response to COVID-19). Table 19 provides an overview of the expected duration of TAY program components by county.

<b>County</b>	<b>Included In-Custody Component for All or Some Participants</b>	<b>Expected Duration of In-Custody Component</b>	<b>Expected Duration of Community Supervision Component</b>	<b>Expected Duration of Entire Program</b>
Alameda	Yes, some	30–45 days	8–11 months	About 12 months
Butte	Yes, all	About 90 days	About 9 months	About 12 months
Napa	No, did not use this component	N/A	12 months	12 months
Nevada	Yes, some	Varied	Varied	12–18 months
Santa Clara	Yes, all	30–60 days	6–9 months	About 12 months

When asked whether the juvenile hall component should be retained as part of the TAY program model, some staff indicated that it was no longer in use as part of the program due to factors such as the Department of Juvenile Justice’s upcoming realignment and/or COVID-19 responses, while others indicated it should remain and that the length of time in juvenile hall for TAY participants should be extended.

The outcome analysis included in this report for E3 found that there was no statistical significance related to successful completion of the TAY program for those who spent some time in juvenile hall compared to participants who did not spend time in juvenile hall. It should be noted that a larger proportion of participants who did not receive the in-custody portion of the program had successful TAY program completions compared with

those who spent some time in juvenile hall (e.g., 63.5% of those who experienced an in-custody stay were successful compared with 75% of those without a juvenile hall stay being successful). Therefore, while staff perceptions of the potential impact and need for the juvenile hall component were mixed, the preliminary findings, while not predictive, suggest that the juvenile hall component may not impact successful program completion. In addition, the results of the E1 and E3 quantitative data analytics suggest that the strongest predictor of lower rates of recidivism (based on rearrest, conviction, or receiving a violation within six months of program completion) for people who meet TAY program eligibility is successful TAY program completion.

### Staff/Stakeholder Perceptions of TAY Program Benefits

The evaluation team found through the process evaluation that TAY staff and stakeholders felt programs are beneficial and made recommendations for improvement. County representatives generally believed the TAY pilot program is worthy of the effort and provides positive services, supports, and opportunities for young adults. Most indicated that (1) the TAY program is beneficial to young adults in their community, (2) they would like to see an increase in agreement and consistency in the operationalization of eligibility and suitability between stakeholders in the decision making for their community, (3) they would like to see a standard operationalization and agreement on defining successful and unsuccessful completions, and (4) funding for program support and enhancement is necessary to move the project beyond a pilot status.

## **CONCLUSIONS AND RECOMMENDATIONS**

Based on the process, sentencing, and outcome findings of this preliminary evaluation, future implementation of the TAY program should consider the role of the juvenile hall component of the program model. The outcome analysis suggests that the juvenile hall component may not contribute to greater levels of success than for individuals who participated in only the community component of the approach. In addition, the sentencing data suggest that once the TAY pilot was implemented, there was an increase in the proportion of individuals who were referred to diversion programs, indicating that the TAY pilot could be contributing to an increased usage of diversion programs in lieu of in-custody approaches to adult offending in the participating communities.

### **Evaluation Limitations**

Some limitations to this evaluation of the TAY pilot project may be attributed to, and not limited to, the following areas: (1) limited number of interviews and survey responses for qualitative data collection (see first report), (2) varied approaches toward determining eligibility, suitability, and enrollment of participants in the TAY pilot by participating

counties (see first report for description of implementation approaches), (3) variances in the number of participants enrolled in each participating county (e.g., Santa Clara and Butte County's participants together accounted for 87% of the entire participant sample size) resulting in potential sample bias, and (4) the time limited scope of quantitative data collection through administrative data due to the relatively short time frame of TAY implementation by each project site.

The qualitative data collected was reliant on a small number of interviews with TAY county representatives and BSCC staff, responses to an online survey administered to TAY staff and stakeholders, and TAY source documents such as the county applications and internal reports. Therefore, the process evaluation results presented in the first report and referenced in the current report were limited to the views of those who chose to participate in an interview and/or respond to the survey. In addition, the varied approaches toward determining eligibility, suitability, and enrollment across each county implementing TAY challenged the internal reliability of cross-site evaluation of the impact on sentencing by the implementation of the TAY pilot as well as outcome evaluation. Specifically, the quantitative data analysis indicated that some individuals enrolled in the program were not arrested for a TAY eligible felony offense, thereby highlighting individual counties' discretion in enrollment. These data suggest that staff perceptions of program variability may be accurate and hint that the implementation of the TAY pilot may have included opportunities for net widening. However, the relatively limited scope of data collection and length of program implementation hindered the evaluation team's ability to examine the correlation of arrest offense significantly and comprehensively to program enrollment and any potential causal predictors of future recidivism based on that enrollment.

## **Future Evaluation Considerations**

Should the TAY program continue to operate in the five original counties and/or expand to additional counties, the evaluation team recommends ongoing evaluation to support the continuous quality improvement of the program and to support and inform the BSCC in providing technical assistance to key stakeholders associated with the implementation. To examine the impact of the TAY pilot more extensively on sentencing, future evaluations should incorporate an integrated cross-sectional (data collected at a targeted point or targeted points in time) and longitudinal (over the course of TAY pilot implementation) study design. The qualitative data collection should incorporate case processing (e.g., arrest records, petitions, etc.), participant perspective (through interviews or focus groups), stakeholder perspectives (expanded beyond the limited capacity of this evaluation to include and not limited to defense attorneys, prosecutors, key probation staff, and other community stakeholders), and other social artifacts (e.g., petitions, written disposition recommendations) related to sentencing decisions. This approach would allow for a more comprehensive examination of both the formal and informal influences of TAY programming inclusive of community contextual considerations (e.g., other local diversion programs or services) that may be correlated to sentencing outcomes related to TAY programming.

Future evaluations may also consider the benefits of a larger TAY participant group for counties other than Santa Clara and Butte (due to extended program enrollment). A larger participant group, across all participating counties, will increase the statistical influence of counties with less TAY participation than others and ultimately allow for the use of PSM to identify and develop comparison groups that are more accurately reflective of both the overall TAY participant group and county-level distinctions than could be assumed in this evaluation. It should be noted that one of the greatest challenges with evaluation research is in identifying equivalent comparison groups. In the development of evidence-based programs and interventions, primarily from healthcare research, randomized controlled trials (RCTs) have been considered the gold standard for controlling for sample variability between the study or treatment group and comparison or control groups.<sup>24</sup> Given that randomization is extremely difficult for studies of treatment services and supports of individuals involved with court systems, are extremely expensive to conduct, and often difficult to complete in social service systems, future research should consider the use of nearest neighbor matching to create statistically equivalent groups via PSM.<sup>25</sup>

As another consideration toward the enhancement of future examinations of both the impact of sentencing and outcomes of the TAY pilot program, quantitative data collection and analysis should include predictive modeling techniques and survival analysis. More specifically, predictive modeling such as binomial regression can be used for predicting the odds of experiencing or seeing an event, given the influence of predictor variables. The binomial regression model is part of a family of generalized linear models (GLMs). GLMs are typically used to model the relationship between an expected value in response to a combination of predictor variables.<sup>26</sup> For example, the binomial regression model could be used to predict the odds of an individual experiencing an event such as a thunderstorm on a particular day based on the (1) current temperature, (2) barometric pressure, (3) time of year, (4) humidity, (5) geography/location, and (6) altitude.

Expanding the analyses to include time-to-event outcomes, including convictions for individuals participating in TAY compared to comparison groups, would allow for the integration of time to event as an outcome, and expand the markers of program impact from simple recidivism. For example, nonparametric Cox survival analysis models can be created to estimate the prediction of a time-to-event experience or outcome. Using these models, an expanded project evaluation can examine the impact of program dosage on the length of time to the occurrence of new outcomes, rather than relying on arrest and court conviction data. For example, violations are the most significant predictor of future

---

<sup>24</sup> Grossman, J., & Mackenzie, F. (2005). The randomized controlled trial: Gold standard, or merely standard? *Perspectives in Biology and Medicine*, 48(4), 516–534.

<sup>25</sup> Mezey, G., Robinson, F., Campbell, R., Gillard, S., Macdonald, G., Meyer, D., Bonell, C., & White, S., (2015). Challenges to undertaking randomised trials with looked after children in social care settings. *Trials*, 16(206). <https://doi.org/10.1186/s13063-015-0708-z>

<sup>26</sup> Scheick, T., Zhang, M., & Gerds, T. (2008). Predicting cumulative incidence probability by direct binomial regression. *Biometrika*, 95 (1), 205–220.

out-of-home placements for both juvenile and adult justice system involved individuals.<sup>27</sup> Including time-to-event analysis that examines the difference in time to violations between TAY participants and a comparison group based on PSM would allow leadership implementing the TAY pilot to explore local policies, staffing procedures, and other contextual elements associated with TAY program implementation that may contribute to or enhance outcomes related to arrests for violations.

---

<sup>27</sup> Guo, S., & Metcalfe, C. (2020). The long road to probation completion: A longitudinal analysis of the effect of life events on re-arrest among probationers. *Deviant Behavior*, DOI: 10.1080/01639625.2020.1841587; Dir, A. L., Magee, L. A., Clifton, R. L., Ouyang, F., Tu, W., Wiehe, S. E., & Aalsma, M. C. (2021). The point of diminishing returns in juvenile probation: Probation requirements and risk of technical probation violations among first-time probation-involved youth. *Psychology, Public Policy, and Law*, 27(2), 283–291. <https://doi.org/10.1037/law0000282>