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Pretrial Risk Assessment Tool Validation

County of Sonoma



Judicial Council of California

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Executive Summary

In 2019, the California Legislature passed a bill that focused on the collection and analysis of data in the pretrial context. Senate Bill 36 (Stats. 2019, ch. 589) created Penal Code section 1320.35, which mandated that pretrial risk assessment tools used to inform judicial officer pretrial release decisions be validated using scientific methods at least once every three years. Pretrial services agencies may work with the Judicial Council of California to validate these tools. Sonoma County submits individual-level data to the Judicial Council of California for the purposes of completing the required tool validation and meeting other data reporting mandates.

Using industry standard statistical methods for validation, the Judicial Council tested the performance of the Public Safety Assessment Tool (PSA) using data from July 2020 through May 2025. Results of multiple statistical tests are presented that describe the accuracy of the PSA scores in predicting outcomes during the pretrial release period (the time between pretrial release from jail and final court disposition) and the consistency of the tool across subgroups. Although the information contained in this report is technical, the findings are summarized below.

Findings from the general tool validation section showed that the PSA subscale risk scores were a statistically significant predictor of all outcomes of interest during the pretrial period, including failure to appear (FTA), new arrest, new filing, new conviction, and new violent arrest. Analyses that focused on the tool's proficiency in categorizing individuals by risk level yielded results that fell within the "good" to "excellent" range for all outcomes examined except for new violent arrest.¹

Analyses of predictive bias found that, in some instances, the tool's performance at predicting outcomes and categorizing risk levels varied by race/ethnicity and gender group. Key findings include:

- The tool demonstrated a stronger ability to differentiate risk for Hispanic individuals than for Black individuals for new arrests or for white individuals for new filings and new convictions.
- Compared to white individuals assessed at the same risk level, Black individuals showed a lower likelihood of new filings and new convictions, and Hispanic individuals showed a lower likelihood of FTA and new arrests.

¹ For a description of the range classified as "excellent" and "good" in these analyses, see the Validation Methods section.

- Women exhibited a higher likelihood of FTA and a lower likelihood of new arrest compared with men assessed at the same risk level.

This is the county's first risk assessment tool validation report where the Black race category met the sample size threshold for analysis.² Future validation studies may provide further insight to verify the results of this report and evaluate the consistency of the findings.

² For the sample size threshold, see the Validation Methods section.

Introduction

This report fulfills the legislative mandate of Senate Bill 36 (Stats. 2019, ch. 589) by validating the pretrial risk assessment tool used by Sonoma County.³ It constitutes the second Sonoma-specific validation of the Public Safety Assessment Tool (PSA), examining data from July 1, 2020, to May 23, 2025.

SB 36 established tool validation and transparency reporting requirements for probation and pretrial service agencies in California that use pretrial risk assessment tools. These requirements are outlined in Penal Code section 1320.35.

³ Additional details about SB 36 can be found at [leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200SB36](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201920200SB36).

Validation Methods

Under Penal Code section 1320.35, pretrial risk assessment tools are required to be validated. The Penal Code defines “validate” as follows:

“Validate” means using scientifically accepted methods to measure both of the following:

- (A) The accuracy and reliability of the risk assessment tool in assessing (i) the risk that an assessed person will fail to appear in court as required and (ii) the risk to public safety due to the commission of a new criminal offense if the person is released before the adjudication of the current criminal offense for which they have been charged.
- (B) Any disparate effect or bias in the risk assessment tool based on gender, race, or ethnicity.⁴

In accordance with this definition, this report consists of two main components that analyze risk scores and associated outcomes for individuals who were released from custody pretrial: a general validation assessing the tool’s overall effectiveness in predicting pretrial release outcomes and an analysis of predictive bias evaluating whether the tool’s performance varied by race/ethnicity or gender. Individuals may have been released in a variety of ways by a sheriff or judge, including on bail. Judges use data received from the risk assessment tool along with other information to make their release or detention decisions. This report does not look at judicial decision-making or the use of the risk assessment tool by judges.

Methodology

The PSA risk scores presented in this report were calculated by the local assessing agency using a scoring scheme designed by the tool developers. The PSA takes into account aspects of an individual’s criminal history, current criminal offense, history of failures to appear in court, age, and other factors.⁵ The PSA was specifically designed to predict failure to appear, new criminal arrest, and new violent criminal arrest.⁶ The outcomes examined within this report that closely correspond to the predictive objectives of the tool are failure to appear (FTA), new arrest, and new violent arrest. This report also examines several additional outcomes to provide a wider perspective of the tool’s ability to predict more specific outcomes of interest and to offer

⁴ Pen. Code, § 1320.35(b)(4).

⁵ For the factors and weights specific to the PSA, see Appendix A.

⁶ Advancing Pretrial Policy & Research, *How the PSA Works*, advancingpretrial.org/how-the-psa-works/.

additional context surrounding potential biases.⁷ The full list of outcomes examined includes the following:

- Failure to appear
- New arrest
- New filing
- New conviction
- New violent arrest

Descriptive statistics are presented exploring basic features of the data, such as demographics, and showing the overall distributions of arrest offenses and adverse outcomes. The distributions of risk scores are shown in groupings of risk levels defined by the tool developer.

A receiver operating characteristic (ROC) curve model was used to provide the area under the curve (AUC) statistic for each outcome of interest. The AUC value is a single number that represents the ability of the tool to differentiate between individuals at lower or higher risk across the range of the tool, quantifying the tool's proficiency in categorizing individuals by their risk. The AUC was calculated for each outcome overall, as well as separately for each gender and race/ethnicity group to examine whether the ability of the tool to differentiate individuals by risk differs by gender or race/ethnicity. For criminal justice risk assessments, a common metric for evaluating AUC values is derived from Desmarais and Singh (2013).⁸ According to their definitions:

- AUC less than 0.55 is “poor”;
- AUC between 0.55 and 0.63 is “fair”;
- AUC between 0.64 and 0.70 is “good”; and
- AUC between 0.71 and 1.00 is “excellent.”

The observed rate of adverse outcomes is also presented for each score. The pattern of these rates is an indicator of the accuracy of the tool, showing whether the likelihood of negative outcomes consistently rises as risk score increases.

Logistic regression was used to test whether risk scores significantly predict the likelihood of each outcome of interest and whether any of the differences in outcomes by risk level across

⁷ While the PSA was not designed to predict all the included outcomes, these measures are included to provide a broader view of failure to appear and public safety risk. Per Penal Code section 1320.35(b)(4)(A), assessing the ability of the tool to accurately and reliably predict risk of failure to appear in court and risk of committing a new crime are essential components of a validation study. Some of the included outcomes, particularly new violent arrest and new conviction, were not observed as often as other outcomes in the study. Because there were fewer cases to analyze, the results of analyses examining these outcomes are less precise and should be interpreted with extra caution compared to outcomes that occurred more frequently.

⁸ Sarah L. Desmarais and Jay P. Singh, *Risk Assessment Instruments Validated and Implemented in Correctional Settings in the United States*, Lexington, KY: Council of State Governments (Mar. 27, 2013), csgjusticecenter.org/wp-content/uploads/2020/02/Risk-Assessment-Instruments-Validated-and-Implemented-in-Correctional-Settings-in-the-United-States.pdf.

gender or race/ethnicity are statistically significant. In statistical analysis, statistical significance is a technical term used to indicate that it is very unlikely that a result or difference occurred by chance. Statistical significance does not specify the size or magnitude of the result or difference.

To identify any predictive bias in the tools, fitted curves of the rates of adverse outcomes at each score were displayed separately by gender and race/ethnicity groups. Logistic regression was used to test whether the likelihood of each outcome of interest by risk level differs across gender or race/ethnicity groups in a manner that is statistically significant.

Definitions

- **Pretrial period** starts with the booking of an individual at the jail and ends with the disposition of all cases associated with that booking.
- **Failure to appear (FTA)** is measured using court records documenting the issuance of a bench warrant for FTA or missed court hearings during the pretrial period.⁹
- **New arrest** is any new arrest during the pretrial period reported to the California **Department of Justice (DOJ)** or a new booking within the county recorded by the jail.¹⁰
- **New filing** is any new arrest during the pretrial period that results in charges filed with the court and reported to the DOJ upon disposition.¹¹
- **New conviction** is any new arrest during the pretrial period that results in a conviction reported to the DOJ during the data collection period.¹²
- **New violent arrest** is any new arrest during the pretrial period for an offense on the list of offenses in Appendix B. This list of violent offenses was created through consensus among counties that participated in the Assembly Bill 74 Pretrial Pilot Program.¹³

⁹ Individuals were also counted as having an FTA if they have an arrest during the pretrial period with an FTA charge in the Department of Justice arrest data. This constitutes a very small proportion of individuals counted as having an FTA.

¹⁰ New criminal offenses were defined in four ways to capture different outcomes of interest. All new criminal offense indicators were measured using data from the DOJ.

¹¹ DOJ records on arrests are likely more complete than DOJ records on court filings and dispositions. Court reporting to the DOJ is incomplete, and filings are not recorded until a disposition has been reached.

¹² Because of the short time frame of the data collection period and delays in court reporting to the DOJ, new convictions may not be a complete measure of all arrests during the pretrial period that resulted in a conviction.

¹³ The list of violent offenses was compiled through a consensus of attorneys and subject matter experts who participated in the Pretrial Pilot Program (see Appendix B). This list was developed early in the AB 74 Pretrial Pilot Program because the PSA has a scoring element that asks if an offense is violent. Through the facilitation of the Judicial Council legal team and the collaboration of stakeholders from counties using the PSA, the counties agreed on a list of offenses in California that should be considered violent in line with the guidelines specified by the

Validation Sample Sizes

For the purposes of this report, general validation results are shown when the sample size was greater than 200. For analyses of predictive bias by race/ethnicity and gender, subgroup results are shown when the overall sample size was at least 1,000 and each subgroup size was greater than 200. Sample sizes smaller than these may not produce reliable results. Sonoma County's sample size was sufficient for general validation results and for analyses of predictive bias by gender and race/ethnicity for Black, Hispanic and white groups.

developers of the PSA. This list includes a broader range of offenses than the statutory definition of “violent felonies,” encompassing both felonies and misdemeanors. It also serves as an outcome measure for violent reoffense rates, as the infrequency of the violent felony rearrests made it difficult to obtain reliable statistical analysis for that outcome. Additional details can be found on Advancing Pretrial Policy & Research, *Guide to the PSA Violent Offense List*, advancingpretrial.org/guide/guide-to-the-psa-violent-offense-list/.

Data Overview

Data Sources

This report relies on data from multiple sources, including the courts, county justice partner agencies, and the California Department of Justice (DOJ). The data used in this report spans July 1, 2020, to May 23, 2025. The sources are as follows:

- **Jail booking data:** The Sonoma County Sheriff's Office provided data on individuals booked into local jails, including booking dates, charges, and releases.
- **Probation data:** The Sonoma County Probation Department performed pretrial assessment services and provided pretrial risk assessment data, including assessment dates and scores.
- **Court case data:** The Superior Court of Sonoma County provided data on court cases, including disposition dates and the issuance of warrants for failures to appear for those with felony or misdemeanor criminal filings.
- **Statewide data:** The DOJ provided statewide arrest and disposition data for booked defendants.

Data Limitations

- **General limitations:** Further research is needed to analyze the elements that may be driving any observed differences in the rates of adverse outcomes between different groups and whether there are data-driven modifications to the tool's risk factors or weights that can further improve the predictive power of the tool.
- **Data integration:** The use of separate data systems by local justice agencies may impact the ability to fully match data across agencies. Ongoing upgrades and enhancements to data systems may affect annual statistical reporting.
- **The COVID-19 pandemic:** The data in this report encompasses a time range that includes the duration of the COVID-19 pandemic. In early 2020, the statewide emergency bail schedule and local policies aimed at preventing COVID-19 spread resulted in reduced booking rates and jail population.¹⁴ Many individuals who would

¹⁴ On March 4, 2020, Governor Gavin Newsom declared a state of emergency to protect public health and safety. On March 27, 2020, the Governor issued an order that gave the Judicial Council of California and the Chief Justice authority to adopt emergency rules and take other necessary actions to respond to the health and safety crisis resulting from the COVID-19 pandemic. Under this order, the Judicial Council adopted various emergency measures to support courts in providing essential services and help to safely reduce jail populations.

On April 6, 2020, the council adopted 11 temporary emergency rules of court. Emergency rule 4 of the California Rules of Court established a statewide emergency bail schedule that set presumptive bail at \$0 for most

otherwise be eligible for pretrial program participation were either cited and released in the field or released on \$0 bail without a risk assessment. Crime and arrest patterns, as well as criminal case dispositions, were likely affected by pandemic-related restrictions and shelter-in-place orders. Consequently, the population of program participants during this time may differ in both number and composition from what would be observed outside the pandemic.

Data Linking and Filtering

Data were viewed and accessed based on criteria set forth in data-sharing agreements. Data views were joined and standardized to create a validation dataset of bookings with associated pretrial risk assessment information, relevant court case information, and outcomes during the pretrial period. The only bookings included in the validation analysis were those for which the individual was released pretrial and there was a final disposition associated with the booking. The sample was limited in this way because outcomes during the pretrial period were of primary interest in this analysis, and the full pretrial period could be observed. This report refers to each booking linked with an associated assessment and completed pretrial period as a “pretrial observation.”

Sonoma County’s data contained 17,670 PSA risk assessments that were scored. The Assessed Bookings column in Table 1 shows the number of bookings (16,559) for new arrests that have an associated risk assessment date and the necessary personal identifier—the Criminal Identification and Information number (CII)—to link with DOJ data.¹⁵ The Pretrial Complete column shows the assessed bookings for which there is a final disposition in the data (13,538), whether the disposition is before or after filing of charges with the court. Since the Judicial Council does not collect data directly from district attorney’s offices in each county, dispositions of charges that were dropped before being filed with the court are less likely to be present in the data and will only be present if the “decline to prosecute” disposition was the reason recorded for release from jail or was reported to the DOJ.

Due to the limited time frame of the data collection period, and the inclusion of all bookings through the entire data collection period, “pretrial complete” bookings present in the data are likely skewed toward dispositions that occur in a shorter time frame compared to all dispositions. The validation dataset (7,631) used for the analysis shows the number of bookings with

misdemeanors and lower-level felonies, with specified exceptions, but did not change any of the traditional bail procedures or the ability of a court to exercise discretion related to the setting of bail. Emergency rule 4 was intended to promulgate uniformity in release and detention of arrestees throughout the state and to safely reduce jail populations and protect justice system personnel and public health. Under the emergency rule, courts retained their ability to adjust bail in an individual case if necessary to ensure the appearance of the defendant and protect public safety. The council repealed the rule on June 10, 2020, with an effective date of June 20, 2020. Additionally, the council encouraged courts to adopt schedules with \$0 bail or significantly reduced bail levels for certain misdemeanor and low-level felony offenses to meet their local public health and safety conditions.

¹⁵ A CII number is a unique identifier assigned by the DOJ to individuals who have been fingerprinted in the state. This identifier serves as the linking key for accessing and querying a person’s statewide criminal history.

associated assessment scores and a final disposition for individuals who were released during the pretrial period.

Table 1 shows the number of assessments at each stage of filtering and the type of validation that will be presented based on the number of pretrial observations.

Table 1. Counts of All Assessments at Each Stage of Filtration

Tool Name	County	Assessments	Assessed Bookings	Pretrial Complete	Validation Dataset	Validation Type
PSA	Sonoma	17,670	16,559	13,538	7,631	General + Bias

Descriptive Statistics

Demographics

Table 2 provides the number of assessments in the evaluation dataset, along with the racial/ethnic and gender makeup and the median age. The validation sample consisted primarily of white (48 percent), Hispanic (41 percent), and Black (7 percent) individuals. The validation sample was predominantly male (83 percent),¹⁶ and the median age was 36.

Table 2. Demographic Profile of Evaluation Dataset

County	Total	Race/Ethnicity (%)				Gender (%)		Median Age
		Black	White	Hispanic	Other	Male	Female	
Sonoma	7,631	7	48	41	4	83	17	36

Arrest Offenses

As shown in Table 3, misdemeanor arrests represented most bookings (56 percent), while felony arrests were a slightly smaller share (42 percent).¹⁷ Of the bookings in the dataset, 17 percent included a charge for a violent offense,¹⁸ 13 percent included a charge for a property offense, and 25 percent included a charge for a drug offense. Additionally, driving under the influence (DUI) charges were included in 33 percent of bookings, and domestic violence (DV) charges were included in 12 percent of bookings.¹⁹

Table 3. Distribution of Arrest Offense Type in Evaluation Dataset (%)

County	Felony	Misdemeanor	Violent	Property	Drug	DUI	DV
Sonoma	42	56	17	13	25	33	12

¹⁶ Nonbinary, other, and unknown genders represented less than 0.1 percent of the bookings in the evaluation dataset.

¹⁷ Infractions and all other or unknown charge levels represented 2% of the bookings and were excluded from the evaluation dataset.

¹⁸ For the list of violent offenses as defined by the pilot consensus, see Appendix B (for further context, see footnote 13).

¹⁹ Individual bookings may include multiple charges.

Adverse Outcomes

Several different adverse outcomes were measured during the pretrial period (Table 4). Failures to appear (FTA) were recorded in 29.6 percent of pretrial observations. New arrests during the pretrial period were recorded in 53.7 percent of pretrial observations, while filed charges were recorded in 30.1 percent and new convictions in 18.2 percent of pretrial observations.²⁰

Additionally, new violent arrests, including felony and misdemeanor arrests for offenses of a violent nature, were recorded in 14.6 percent of pretrial observations.²¹

Table 4. Rates of Pretrial Misconduct in Evaluation Dataset (%)

County	FTA	New Arrest	New Filing	New Conviction	New Violent Arrest
Sonoma	29.6	53.7	30.1	18.2	14.6

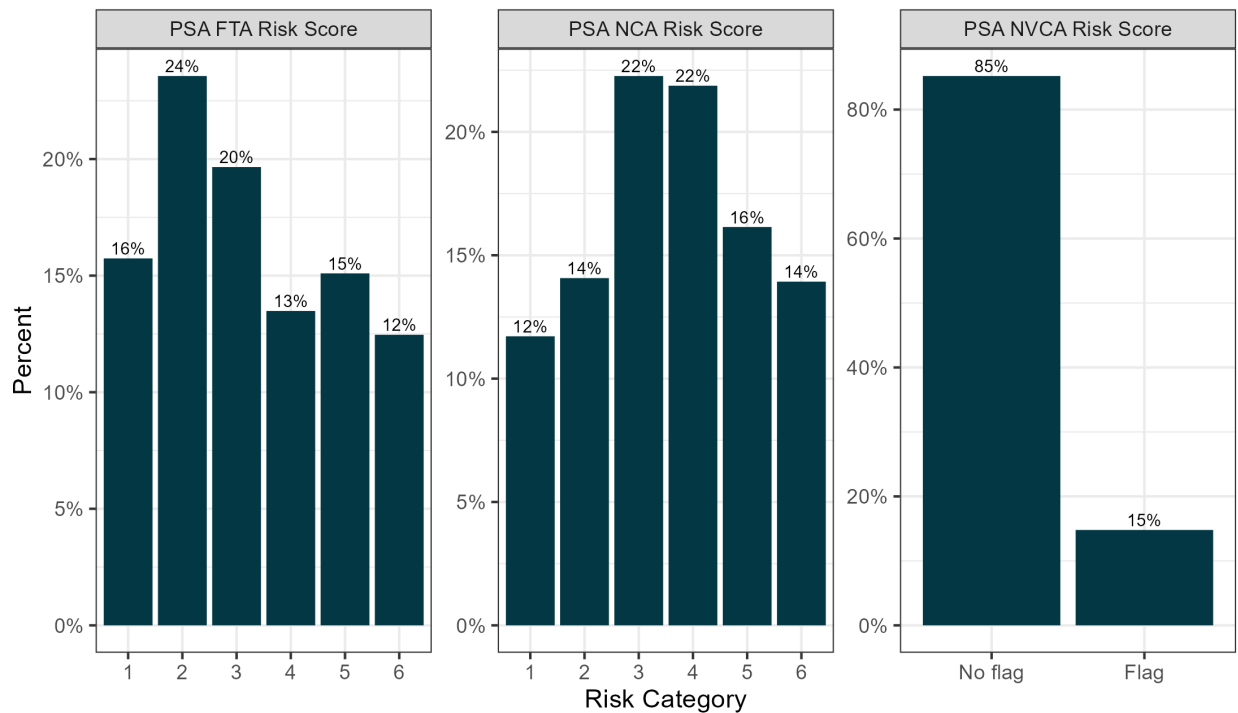
²⁰ New arrests, new filings, and new convictions were measured using DOJ data. New arrests and new violent arrests were reported to the DOJ by arresting agencies, whereas new filings and new convictions were reported to the DOJ by courts. Court filings are typically not reported to the DOJ until the case has been disposed. The DOJ may have incomplete records of filings and convictions from the courts because of difficulties or delays in reporting, and new arrests during the pretrial period may not have been resolved during the data collection period.

²¹ For the list of violent offenses as defined by the pilot consensus, see Appendix B (for further context, see footnote 13).

General Validation

Figure 1 illustrates the full distribution of risk levels for individuals in the evaluation dataset assessed with the PSA for each subscale. The PSA-FTA subscale was designed to predict the risk of failure to appear in court. The PSA-NCA subscale was designed to predict the risk of a new arrest, and the PSA-NVCA flag was designed to predict new arrests for a violent crime. As determined by the tool developers, the FTA and NCA subscales are each divided into six risk levels, with 1 representing the lowest risk and 6 the highest, and the NVCA subscale is divided into a binary flag: a flag represents higher risk of new violent crime, and no flag represents lower risk of new violent crime.²² Lower scores were more common for the PSA-FTA subscale, midrange scores were more common for the PSA-NCA subscale, and 15 percent of assessed individuals received a PSA-NVCA flag.

Figure 1. Distribution of PSA Risk Scores by Risk Category



²² The PSA-NVCA subscale is scored from 1 to 6, where scores of 1 to 3 are categorized as “no flag” and scores of 4 to 6 are categorized as “flag.”

Table 5 shows the count of individuals at each risk level. The counts and distribution of all assessed individuals may differ from the distribution in the evaluation dataset because the evaluation dataset only includes released individuals with concluded pretrial periods.²³

Table 5. Counts of Individuals by PSA Risk Category

PSA FTA Risk Score	Total
1	1,201
2	1,798
3	1,500
4	1,029
5	1,152
6	951

PSA NCA Risk Score	Total
1	894
2	1,074
3	1,699
4	1,669
5	1,232
6	1,063

PSA NVCA Risk Score	Total
No flag	6,502
Flag	1,129

²³ For the full risk distribution of all individuals assessed, see the SB 36 Pretrial Program aggregated data reports at courts.ca.gov/programs-initiatives/criminal-justice-services/california-pretrial-release-program/pretrial-release.

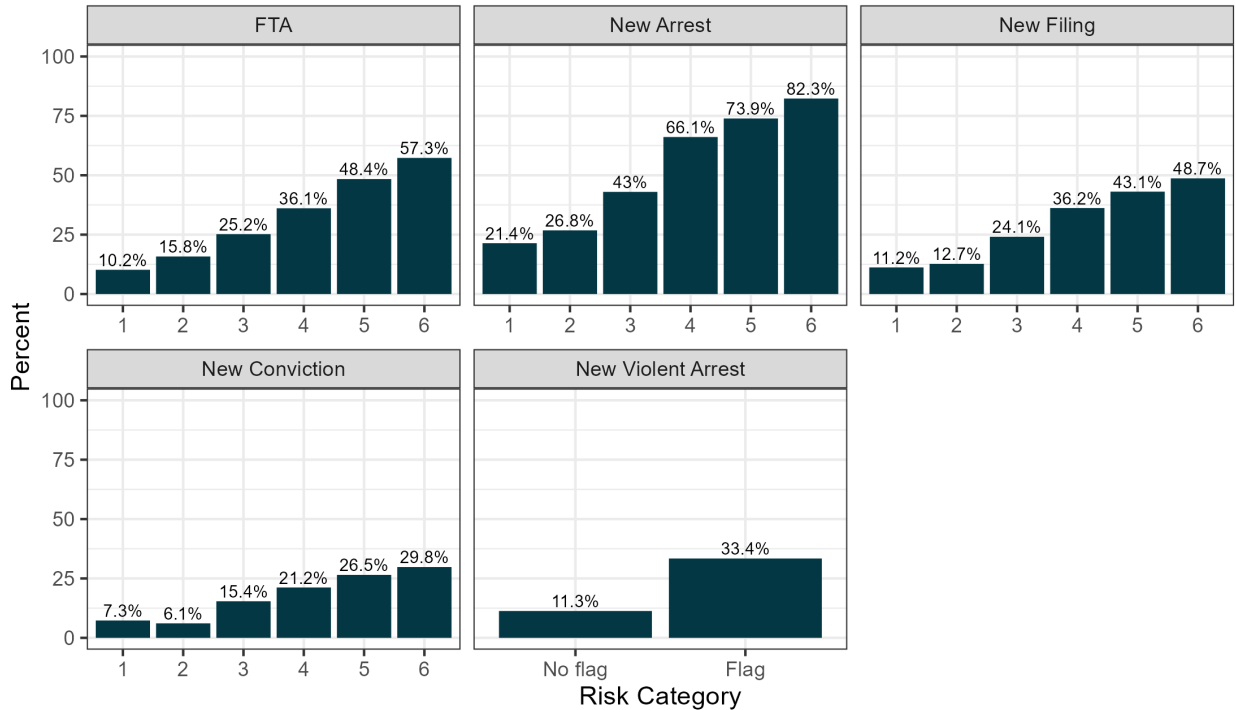
Observed Rates of Adverse Outcomes

Figure 2 shows the rate of various adverse outcomes during the pretrial period at each risk level of the PSA, using each of the PSA subscales for the relevant outcomes:

- The PSA-FTA subscale is used for the outcome of FTA;
- The PSA-NCA subscale is used for the outcome of new arrest, new filing, and new conviction; and
- The PSA-NVCA flag is used for the outcome of new violent arrest.

Observed rates of each outcome of interest²⁴ generally increased as the risk level increased, with the jump from the first to second risk level for the new conviction outcome being the only exception to this trend.

Figure 2. PSA Outcomes by Risk Category



²⁴ For definitions of each outcome of interest, see the Validation Methods section.

Assessing Risk Score Predictions of Adverse Outcomes

Table 6 shows the results from logistic regression models predicting each outcome of interest. Logistic regression is a statistical model used to predict the probability of a certain event or outcome (e.g., being rearrested, failing to appear in court) based on one or more predictor variables (e.g., score on an assessment, severity of charged offense). The models controlled for the number of days the individual spent released during the pretrial period. For each outcome of interest, the models showed that the PSA-FTA and PSA-NCA subscales and the PSA-NVCA flag were statistically significantly ($p < .001$) associated with the likelihood of each of the corresponding outcomes during the pretrial period, as was the number of days an individual spent on release ($p < .001$).

Table 6. Logistic Regression Models Predicting the Likelihood of Outcomes of Interest by Risk Scores, Controlling for Days Released

	<i>Dependent variable:</i>				
	FTA (1)	New Arrest (2)	New Filing (3)	New Conviction (4)	New Violent Arrest (5)
PSA FTA Risk Score	0.565*** (0.018)				
PSA NCA Risk Score		0.668*** (0.019)	0.451*** (0.018)	0.385*** (0.021)	
PSA NVCA Risk Score					1.406*** (0.075)
Days Released	0.002*** (0.0001)	0.002*** (0.0001)	0.001*** (0.0001)	0.001*** (0.0001)	0.001*** (0.0001)
Constant	-3.464*** (0.087)	-2.654*** (0.082)	-2.843*** (0.085)	-3.237*** (0.100)	-2.376*** (0.054)
Observations	7,631	7,631	7,631	7,631	7,631
Log Likelihood	-3,928.817	-4,412.041	-4,289.266	-3,417.514	-2,969.644
Akaike Inf. Crit.	7,863.634	8,830.082	8,584.532	6,841.027	5,945.289

Note:

* $p < 0.05$; ** $p < 0.01$; *** $p < .001$

Tool Proficiency in Categorizing Individuals by Risk

Table 7 shows the area under the curve (AUC) values for the PSA, using the full range of risk scores, for each outcome of interest. The AUC value is a single number representing the ability of the tool to differentiate between lower- and higher-risk individuals across the range of the tool.²⁵ The AUC values for the PSA fell in the “excellent” range for FTA and new arrest, the “good” range for new filing and new conviction, and the “fair” range for new violent arrest.

The 95 percent confidence interval is also shown, representing the range of AUC estimates within which the true AUC value is statistically 95 percent likely to fall. A smaller range indicates that, given the size of the sample and pattern of the data, the AUC can be estimated with greater precision.

Table 7. AUC Values for Outcomes of Interest

Risk Score	Outcome	AUC	CI (95%)
PSA FTA	FTA	0.717	0.705-0.73
PSA NCA	New Arrest	0.743	0.732-0.754
PSA NCA	New Filing	0.678	0.665-0.69
PSA NCA	New Conviction	0.655	0.64-0.67
PSA NVCA	New Violent Arrest	0.612	0.598-0.626

Note: N = 7,631

²⁵ Desmarais, *supra*. AUC values are categorized as follows: poor (less than 0.55), fair (0.55–0.63), good (0.64–0.70), and excellent (0.71–1.00).

Analysis of Predictive Bias

Race

Figure 3 illustrates the distribution of PSA risk assessment scores by race/ethnicity. The distribution of scores varied by race/ethnicity:

- For the PSA-FTA subscale, Black and white individuals were least frequently assessed at risk level 1 (low), while Hispanic individuals were least frequently assessed at risk level 6 (high). Black and Hispanic individuals were most frequently assessed at risk level 2 (low), while white individuals were most frequently assessed at risk levels 2 to 3 (low to moderate)
- For the PSA-NCA subscale, Black and white individuals were least frequently assessed at risk level 1 (low) and most frequently at level 4 (moderate), whereas Hispanic individuals were least frequently assessed at risk level 6 (high) and most frequently at level 3 (moderate).

For the PSA-NVCA flag, 22 percent of Black individuals received a new violent crime flag, compared with 17 percent of white and 11 percent of Hispanic individuals.

Figure 3. Distribution of Risk Scores by Race/Ethnicity

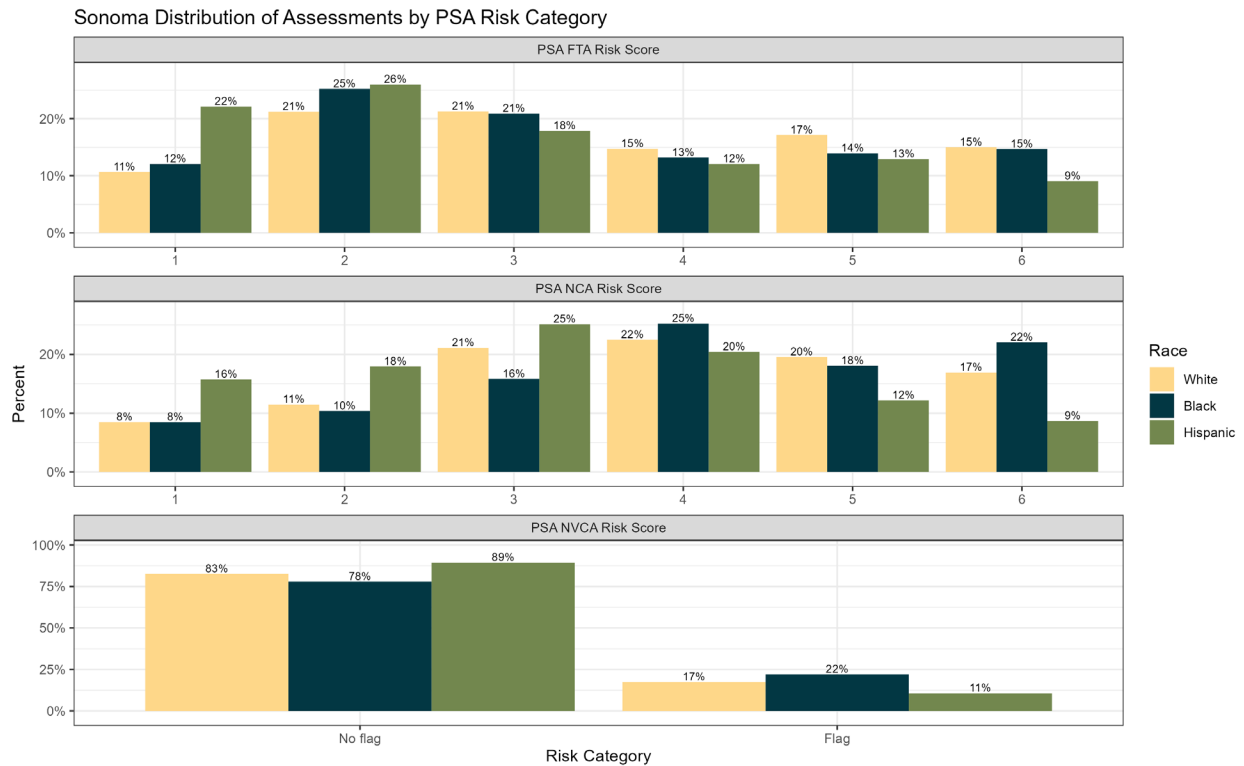


Table 8 shows the number of assessed individuals broken down by race/ethnicity. These numbers indicate that there is sufficient data to run statistical tests that look at how the PSA scales performed by race/ethnicity for Black, Hispanic, and white groups.²⁶

Table 8. Count of Individuals by Risk Score and Race/Ethnicity

PSA FTA Risk Score	White	Black	Hispanic
1	393	64	694
2	783	134	815
3	785	111	561
4	543	70	378
5	632	74	405
6	553	78	284

PSA NCA Risk Score	White	Black	Hispanic
1	313	45	493
2	423	55	563
3	779	84	788
4	829	134	640
5	721	96	382
6	624	117	271

PSA NVCA Risk Score	White	Black	Hispanic
No flag	3,047	414	2,803
Flag	642	117	334

²⁶ For more information about sample size cutoffs, see Validation Sample Sizes in the Validation Methods section.

Tool Proficiency in Categorizing Individuals by Risk and Race/Ethnicity

Table 9 shows the AUC values²⁷ and 95 percent confidence intervals for each outcome of interest by race/ethnicity group:

- The AUC values for Black individuals fell within the “good” range for FTA, new arrest, new filing, and new conviction and within the “fair” range for new violent arrest.
- The AUC values for Hispanic individuals fell within the “excellent” range for FTA and new arrest, within the “good” range for new filing and new conviction, and within the “fair” range for new violent arrest.
- The AUC values for white individuals fell within the “excellent” range for new arrest, within the “good” range for FTA and new filing, and within the “fair” range for new conviction and new violent arrest.

Statistical testing²⁸ indicated that the AUC values for Hispanic individuals were statistically significantly higher than the AUC values for Black individuals for new arrest ($p < 0.05$) and the AUC values for white individuals for new filing ($p < 0.05$) and new conviction ($p < 0.05$). This suggests that the PSA-NCA subscale was better able to differentiate risk for Hispanic individuals compared to Black and white individuals for the aforementioned outcomes.

Table 9. AUC Values by Outcome of Interest and Race/Ethnicity

Risk Score	Outcome	AUC			CI (95%)		
		White	Black	Hispanic	White	Black	Hispanic
PSA FTA	FTA	0.705	0.677	0.722	0.688-0.722	0.629-0.724	0.701-0.743
PSA NCA	New Arrest	0.728	0.684	0.743	0.711-0.744	0.638-0.729	0.727-0.76
PSA NCA	New Filing	0.657	0.655	0.687	0.64-0.675	0.605-0.705	0.667-0.708
PSA NCA	New Conviction	0.634	0.669	0.667	0.614-0.654	0.608-0.73	0.642-0.692
PSA NVCA	New Violent Arrest	0.625	0.592	0.600	0.604-0.645	0.539-0.646	0.578-0.623

Note: N White = 3,689 , N Black = 531 , N Hispanic = 3,137

²⁷ For a description of the meaning of AUC values, see the Validation Methods section.

²⁸ For DeLong tests for two receiver operating characteristic (ROC) curves, see Appendix C.

Visualizing Tool Predictions by Race/Ethnicity

Figure 4 shows the results of statistical models estimating the predictive power of the tool for each race/ethnicity group. Each line represents the probability of each outcome of interest at each risk level separately for each race/ethnicity. The gray area around each line represents a 95 percent confidence interval. Where the gray areas do not overlap, the evidence indicates there is likely a true difference between the groups. Conversely, where the gray areas do overlap, there may not be sufficient evidence to conclude that there are differences between groups.²⁹

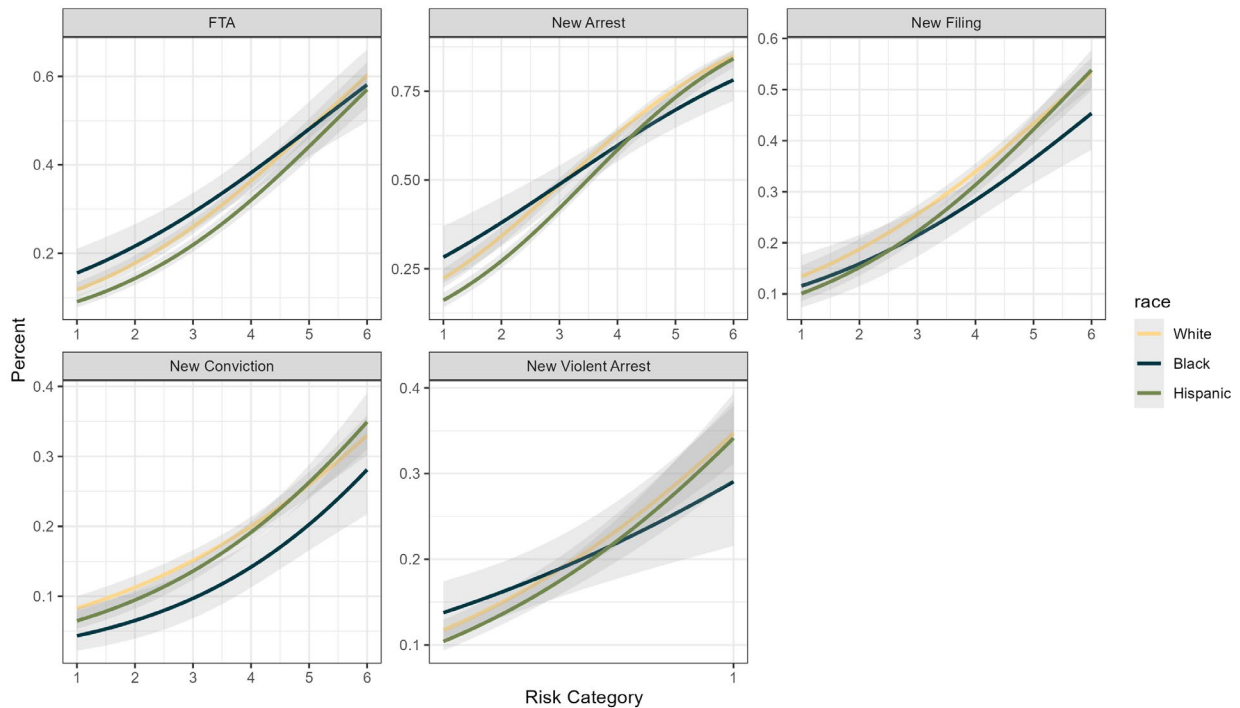
For the FTA outcome, the confidence intervals for Black and white individuals did not overlap at the midrange with the confidence interval for Hispanic individuals. Additionally, the confidence intervals for Black and Hispanic individuals did not overlap at the lower end. Hence, there is evidence that Hispanic individuals exhibited lower FTA rates than Black individuals at the lower end of the range and lower rates than Black and white individuals at the midrange.

For the new arrest outcome, at the lower end of the range, the confidence interval for Hispanic individuals does not overlap with the confidence intervals for Black and white individuals. Thus, there is evidence that Hispanic individuals exhibited lower new arrest rates than Black and white individuals at the lower end of the range.

Since the confidence intervals for Black, Hispanic, and white individuals overlapped for new filings, new convictions, and new violent arrests, there is likely insufficient evidence to conclude any true difference in the likelihood of these outcomes for individuals with the same score across these groups. Additionally, the 95 percent confidence intervals were notably wider for new violent arrests due to the small sample size, which diminishes the ability of the models to make precise predictions for this specific outcome.

²⁹ In some cases, statistical testing may indicate there is still a statistically significant difference even when the gray areas overlap, especially if the overlap is minimal. Statistical tests are discussed following the visualizations.

Figure 4. Comparison of Racial/Ethnic Differences in Logistic Regression Curves by Outcomes of Interest



Assessing Tool Predictions by Race/Ethnicity

Table 10 shows the results of a logistic regression model predicting each outcome of interest by the relevant PSA subscale risk score, race, and number of days spent released. This statistical test compared Black and Hispanic individuals to white individuals (base group). The PSA subscale risk scores were a statistically significant predictor ($p < .001$) of all outcomes of interest. The number of days an individual was out on release was also a statistically significant predictor of all outcomes of interest, indicating that the longer an individual spent on release, the more likely the individual was to experience these outcomes.

Black race was a statistically significant predictor for the outcomes of new filing ($p < 0.05$) and new conviction ($p < 0.01$). The negative coefficients associated with these outcomes indicated a lower likelihood of these outcomes for Black individuals compared to white individuals with the same risk score. Additionally, Hispanic ethnicity was a statistically significant predictor for the outcomes of FTA ($p < 0.05$) and new arrest ($p < .001$). The negative coefficients associated with these outcomes indicated a lower likelihood of these outcomes for Hispanic individuals compared to white individuals with the same risk score.

This statistical test is limited, however, because it tested for an overall effect of race across the full risk scale, and as can be seen from the tables and figures above, there may be different patterns across particular ranges of the tool. Table 11 uses a more complex statistical model that allows for this possibility.

Table 10. Logistic Regression Model Predicting the Likelihood of Outcomes of Interest by Risk Scores and Race/Ethnicity, Controlling for Days Released

	<i>Dependent variable:</i>				
	FTA (1)	New Arrest (2)	New Filing (3)	New Conviction (4)	New Violent Arrest (5)
PSA FTA Risk Score	0.556*** (0.019)				
PSA NCA Risk Score		0.650*** (0.020)	0.445*** (0.019)	0.387*** (0.022)	
PSA NVCA Risk Score					1.419*** (0.077)
Race:Black	0.151 (0.108)	-0.102 (0.106)	-0.270* (0.106)	-0.365** (0.128)	0.043 (0.129)
Race:Hispanic	-0.141* (0.060)	-0.186*** (0.055)	-0.094 (0.057)	-0.024 (0.066)	-0.082 (0.072)
Days Released	0.002*** (0.0001)	0.002*** (0.0001)	0.001*** (0.0001)	0.001*** (0.0001)	0.001*** (0.0001)
Constant	-3.394*** (0.095)	-2.501*** (0.091)	-2.756*** (0.095)	-3.197*** (0.112)	-2.336*** (0.066)
Observations	7,357	7,357	7,357	7,357	7,357
Log Likelihood	-3,779.671	-4,261.950	-4,141.218	-3,300.608	-2,868.459
Akaike Inf. Crit.	7,569.341	8,533.899	8,292.435	6,611.216	5,746.919
<i>Note:</i>	*p<0.05; **p<0.01; ***p<.001				

Table 11 shows the results of a logistic regression model that predicts each outcome of interest by the relevant PSA subscale risk score, race, the interaction between race and the PSA subscale risk score, and number of days spent released. This statistical test again compared Black and Hispanic individuals with white individuals. A statistically significant interaction was observed between race and risk score among Black individuals for the new arrest outcome ($p < 0.05$). This indicates that the impact of Black race varied across the range of risk scores for the new arrest outcome. As shown in Figure 4, the logistic regression fitted curves for new arrest intersect such that, at the lower end of the risk scale, the curve for Black individuals lies above that of white individuals, while at the higher end, the curve for white individuals lies above that of Black individuals. This crossover pattern suggests that, compared to white individuals, risk was underestimated for Black individuals at the low end of the scale for the new arrest outcome but overestimated at the high end. Statistical testing confirmed that Black individuals were significantly more likely to have a new arrest than white individuals at the lowest risk level (Table 11). At the highest risk level, white individuals were statistically significantly more likely to have a new arrest than Black individuals (Appendix C, Table C1).

Table 11. Logistic Regression Model Predicting the Likelihood of Outcomes of Interest by Risk Scores, Race/Ethnicity, and Interaction of Race/Ethnicity and Risk Scores, Controlling for Days Released at the Lowest Risk Score

	<i>Dependent variable:</i>				
	FTA (1)	New Arrest (2)	New Filing (3)	New Conviction (4)	New Violent Arrest (5)
PSA FTA Risk Score	0.559*** (0.026)				
PSA NCA Risk Score		0.647*** (0.027)	0.427*** (0.026)	0.359*** (0.030)	
PSA NVCA Risk Score					1.442*** (0.101)
Race:Black	0.380 (0.212)	0.393 (0.222)	-0.128 (0.269)	-0.659 (0.370)	0.195 (0.154)
Race:Hispanic	-0.164 (0.121)	-0.285* (0.114)	-0.241 (0.127)	-0.195 (0.152)	-0.092 (0.084)
Days Released	0.002*** (0.0001)	0.002*** (0.0001)	0.001*** (0.0001)	0.001*** (0.0001)	0.001*** (0.0001)
FTA*Black	-0.085 (0.068)				
FTA*Hispanic	0.009 (0.038)				
NCA*Black		-0.172* (0.069)	-0.041 (0.074)	0.084 (0.096)	
NCA*Hispanic		0.043 (0.041)	0.052 (0.040)	0.056 (0.046)	
NVCA*Black					-0.435 (0.270)
NVCA*Hispanic					0.054 (0.166)
Constant	-2.846*** (0.096)	-1.842*** (0.091)	-2.252*** (0.097)	-2.715*** (0.115)	-2.342*** (0.069)
Observations	7,357	7,357	7,357	7,357	7,357
Log Likelihood	-3,778.742	-4,257.462	-4,139.982	-3,299.642	-2,866.897
Akaike Inf. Crit.	7,571.483	8,528.923	8,293.964	6,613.283	5,747.793

Note: *p<0.05; **p<0.01; ***p<.001

Gender

Figure 5 illustrates the distribution of risk assessment scores by gender.

- For the PSA-FTA subscale, men were least frequently assessed at risk level 6 (high) and women at risk levels 4 and 6 (moderate and high). Both women and men were most frequently assessed at risk level 2 (low).
- For the PSA-NCA subscale, women were least frequently assessed at risk level 6 (high) and most frequently at level 3 (moderate), whereas men were least frequently assessed at risk level 1 (low) and most frequently at risk levels 3 and 4 (moderate).
- For the PSA-NVCA flag, 14 percent of women received a new violent crime flag, compared with 15 percent of men.

Figure 5. Distribution of Risk Scores by Gender

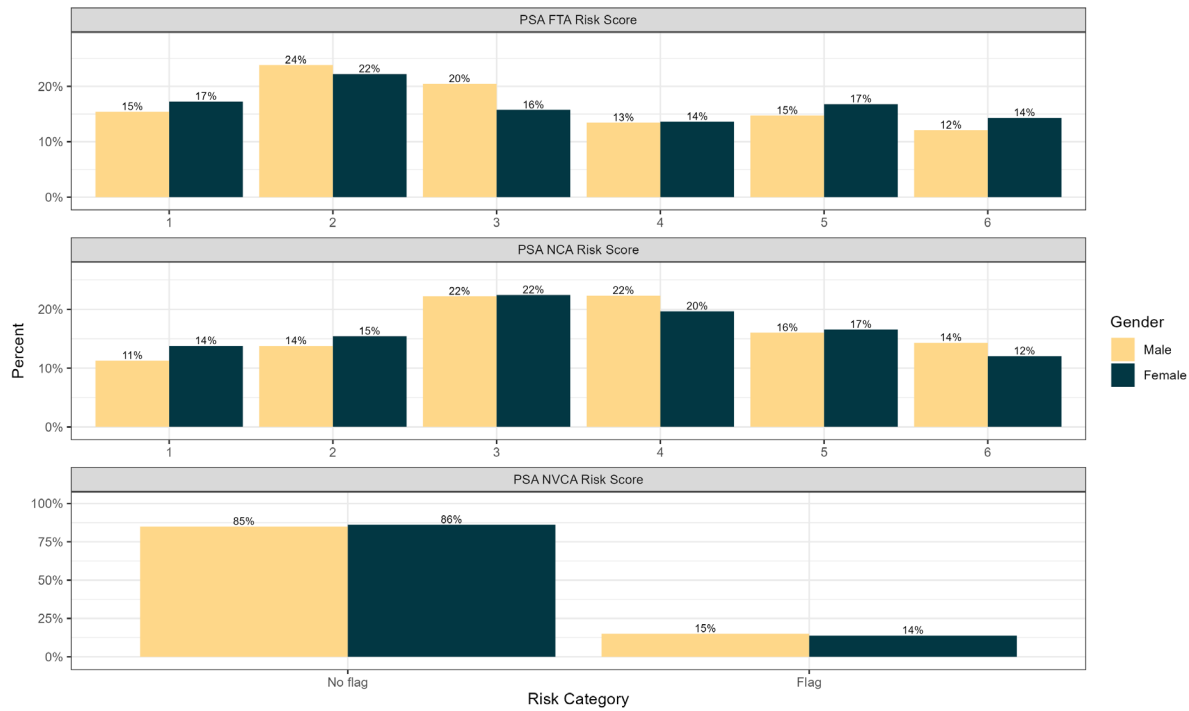


Table 12 shows the number of assessed individuals broken down by gender. These numbers indicate that there were sufficient data to conduct statistical tests that look at how the PSA performed by gender.

Table 12. Count of Individuals by Risk Score and Gender

PSA FTA Risk Score	Male	Female
1	972	229
2	1,503	295
3	1,291	209
4	848	181
5	929	223
6	761	190

PSA NCA Risk Score	Male	Female
1	711	183
2	869	205
3	1,401	298
4	1,408	261
5	1,012	220
6	903	160

PSA NVCA Risk Score	Male	Female
No flag	5,359	1,143
Flag	945	184

Tool Proficiency in Categorizing Individuals by Risk and Gender

Table 13 shows the AUC values³⁰ and 95 percent confidence intervals for each outcome of interest and relevant PSA risk subscale by gender. The AUC values for women fell within the “excellent” range for new arrests, within the “good” range for FTA and new filings, and within the “fair” range for new convictions and new violent arrests. The AUC values for men fell within the “excellent” range for FTA and new arrests, within the “good” range for new filings and new convictions, and within the “fair” range for new violent arrests. Statistical testing³¹ indicated that there were no statistically significant differences in the AUC values between women and men for any outcomes of interest.

Table 13. AUC Values for Outcomes of Interest by Gender

Risk Score	Outcome	AUC		CI (95%)	
		Female	Male	Female	Male
PSA FTA	FTA	0.692	0.723	0.663-0.722	0.709-0.736
PSA NCA	New Arrest	0.735	0.745	0.709-0.762	0.733-0.757
PSA NCA	New Filing	0.663	0.681	0.632-0.694	0.667-0.694
PSA NCA	New Conviction	0.629	0.658	0.587-0.671	0.642-0.674
PSA NVCA	New Violent Arrest	0.621	0.610	0.588-0.654	0.594-0.626

Note: N Female = 1,327 , N Male = 6,304

³⁰ For a description of the meaning of AUC values, see the Validation Methods section.

³¹ For DeLong tests for two ROC curves, see Appendix C.

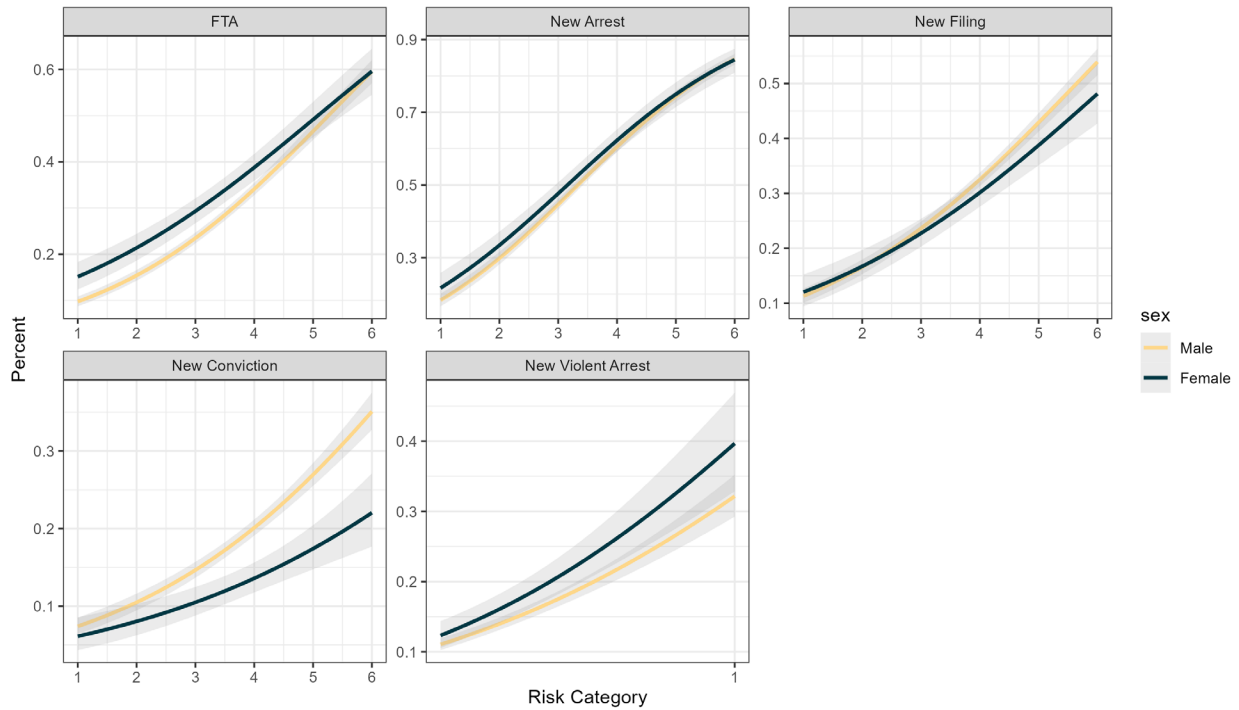
Visualizing Tool Predictions by Gender

Figure 6 show the results of statistical models of the predictive power of the PSA subscale for each outcome of interest for women as compared to men. Each line represents the probability of each outcome of interest at each risk level separately by gender. The gray area around each line represents a 95 percent confidence interval. Where the gray areas do not overlap, the evidence indicates that there is likely a true difference between the groups. Conversely, where the gray areas do overlap, there may not be sufficient evidence to conclude that there are differences between groups.³² For the FTA outcome, the confidence intervals for women and men did not overlap at lower to moderate ranges of the tool, indicating that women had a higher likelihood of FTA than men in these ranges.

On the other hand, for the new conviction outcome, the confidence intervals for women and men did not overlap at the moderate to higher ranges of the tool, indicating that women had a lower likelihood of new conviction than men in these ranges. Since the confidence intervals for women and men overlapped for the new arrest, new filing, and new violent arrest outcomes, there was likely insufficient evidence to conclude any true difference in the likelihood of these outcomes for individuals across these groups with the same score. It is important to note that the 95 percent confidence intervals were notably wider for new violent arrests due to the small sample size, which diminishes the ability of the models to make precise predictions for this specific outcome. Additionally, because there were fewer women in the evaluation dataset relative to men, the 95 percent confidence intervals tended to be wider for women.

³² In some cases, statistical testing may indicate there was still a statistically significant difference even when the gray areas overlap, especially if the overlap is minimal. Statistical tests are discussed following the visualizations.

Figure 6. Comparison of Gender Differences in Logistic Regression Curves by Outcome of Interest



Assessing Tool Predictions by Gender

Table 14 shows the results of a logistic regression predicting each outcome of interest by the relevant PSA subscale risk score, gender, and number of days spent released. This statistical test compared women with men as the base group. The PSA subscale risk scores were a statistically significant predictor ($p < .001$) for all outcomes of interest. The number of days an individual was out on release was a statistically significant predictor ($p < .001$) for all outcomes of interest, indicating that the longer an individual spent on release, the greater the likelihood of experiencing these outcomes. Female gender was a statistically significant predictor of FTA ($p < 0.05$) and new convictions ($p < .001$). The positive coefficient value for the FTA outcome indicates that women had a higher likelihood of this outcome compared to men with the same risk score. For the new arrest outcome, the negative coefficient value indicates that women had a lower likelihood of this outcome compared to men with the same risk score.

This statistical test is limited, however, because it tested for an overall effect of gender across the full risk scale, and there may be some differences that emerge only in particular ranges of the tool. Table 15 shows the results of a more complex statistical model that allows for this possibility.

Table 14. Logistic Regression Model Predicting the Likelihood of Outcomes of Interest by Risk Scores and Gender, Controlling for Days Released

	<i>Dependent variable:</i>				
	FTA (1)	New Arrest (2)	New Filing (3)	New Conviction (4)	New Violent Arrest (5)
PSA FTA Risk Score	0.564*** (0.018)				
PSA NCA Risk Score		0.668*** (0.019)	0.451*** (0.018)	0.382*** (0.021)	
PSA NVCA Risk Score					1.409*** (0.075)
Female	0.176* (0.071)	0.055 (0.068)	-0.136 (0.071)	-0.505*** (0.091)	0.138 (0.086)
Days Released	0.002*** (0.0001)	0.002*** (0.0001)	0.001*** (0.0001)	0.001*** (0.0001)	0.001*** (0.0001)
Constant	-3.489*** (0.087)	-2.665*** (0.083)	-2.819*** (0.086)	-3.160*** (0.101)	-2.399*** (0.056)
Observations	7,631	7,631	7,631	7,631	7,631
Log Likelihood	-3,925.788	-4,411.721	-4,287.399	-3,400.697	-2,968.377
Akaike Inf. Crit.	7,859.577	8,831.441	8,582.799	6,809.394	5,944.753

Note: *p<0.05; **p<0.01; ***p<.001

Table 15 shows the results of a logistic regression that predicts each outcome of interest by the relevant PSA subscale risk score, gender, the interaction between gender and the PSA risk score, and number of days spent released. The number of days spent released was a statistically significant ($p < .001$) predictor of each outcome of interest. This statistical test again compared women with men as the base group.

The results indicate that there were no statistically significant interactions between gender and the relevant PSA subscale risk score on any of the outcomes of interest. In the absence of a statistically significant interaction, the logistic regression model with no interaction, as shown in Table 14, is more appropriate to demonstrate the impact of gender.

Table 15. Logistic Regression Model Predicting the Likelihood of Outcomes of Interest by Risk Scores, Gender, and Interaction of Gender and Risk Scores, Controlling for Days Released

	<i>Dependent variable:</i>				
	FTA (1)	New Arrest (2)	New Filing (3)	New Conviction (4)	New Violent Arrest (5)
PSA FTA Risk Score	0.579*** (0.020)				
PSA NCA Risk Score		0.673*** (0.021)	0.459*** (0.020)	0.393*** (0.023)	
PSA NVCA Risk Score					1.377*** (0.083)
Female	0.384** (0.138)	0.113 (0.135)	0.001 (0.155)	-0.263 (0.203)	0.093 (0.101)
Days Released	0.002*** (0.0001)	0.002*** (0.0001)	0.001*** (0.0001)	0.001*** (0.0001)	0.001*** (0.0001)
FTA*Female	-0.075 (0.044)				
NCA*Female		-0.024 (0.048)	-0.047 (0.048)	-0.079 (0.060)	
NVCA*Female					0.176 (0.196)
Constant	-2.966*** (0.076)	-2.007*** (0.070)	-2.392*** (0.074)	-2.811*** (0.087)	-2.390*** (0.057)
Observations	7,631	7,631	7,631	7,631	7,631
Log Likelihood	-3,924.309	-4,411.595	-4,286.911	-3,399.844	-2,967.976
Akaike Inf. Crit.	7,858.618	8,833.190	8,583.822	6,809.688	5,945.951

Note:

*p<0.05; **p<0.01; ***p<.001

Conclusion

Overall, the PSA subscale risk scores were a statistically significant predictor of all outcomes of interest during the pretrial period, including FTA, new arrest, new filing, new conviction, and new violent arrest. Although the tool generally differentiated between higher- and lower-risk individuals within each examined race/ethnicity and gender group, analyses show that the tool's performance sometimes varied by group. Most notably, statistical testing revealed that the tool demonstrated a greater ability to differentiate risk for Hispanic individuals relative to Black individuals for new arrests and relative to white individuals for new filings and new convictions. Given that this is the county's first risk assessment tool validation report where the Black race category met the threshold for analysis, future validation studies may provide further insight to verify the results of this report and evaluate the consistency of the findings.

It is important to note that risk assessment tools and risk scores are among several factors that judicial officers consider when making release and detention decisions. The Judicial Council has issued multiple prior reports addressing risk assessment tools, bias mitigation strategies, and pretrial release programs. These reports are intended to inform the Legislature, trial courts, and relevant assessing agencies.³³ Additionally, the Judicial Council's Criminal Law Advisory Committee recently established the Pretrial Policy and Data Subcommittee. The subcommittee intends to review various aspects of pretrial release, such as risk assessment tool validation studies, in the coming years for the purpose of providing counties with more guidance surrounding this critical stage of the criminal legal process.

³³ Relevant prior reporting includes the *SB 36 Pretrial Pilot Program Aggregated Data Report*, *Bias Mitigation in Pretrial Processing*, and *Pretrial Risk Assessment Tool Validation*, all of which are accessible at courts.ca.gov/programs-initiatives/criminal-justice-services/california-pretrial-release-program/pretrial-release.

Appendix A: Public Safety Assessment Factors and Weights

Table A1. Public Safety Assessment Factors and Weights

Risk Factor	Response	Weight
FAILURE TO APPEAR (0–7)		
Pending charge at the time of the offense	no	0
	yes	1
Prior conviction	no	0
	yes	1
Prior failures to appear pretrial in past two years	0	0
	1	2
	2 or more	4
Prior failure to appear pretrial older than two years	no	0
	yes	1
NEW CRIMINAL ACTIVITY (0–13)		
Age at current arrest	23 or older	0
	22 or younger	2
Pending charge at the time of the offense	no	0
	yes	3
Prior misdemeanor conviction	no	0
	yes	1
Prior felony conviction	no	0
	yes	1
Prior violent conviction	0	0
	1 or 2	1
	3 or more	2
Prior failure to appear pretrial in past two years	0	0
	1	1
	2 or more	2
Prior sentence to incarceration	no	0
	yes	2
NEW VIOLENT CRIMINAL ACTIVITY (0–7)		
Current violent offense	no	0
	yes	2
Current violent offense, 20 years old or younger	no	0
	yes	1
Pending charge at the time of the offense	no	0
	yes	1
Prior conviction	no	0
	yes	1
Prior violent conviction	0	0
	1 or 2	1
	3 or more	2

Source: Laura and John Arnold Foundation, *Public Safety Assessment: Risk Factors and Formula* (2013), saccprobation.saccounty.gov/Documents/Resources/Data/Pre-trial%20Monitoring/Public%20Safety%20Assessment%20Risk%20Factors%20and%20Formula.pdf?c sf=1&e=Gzf3nk.

Table A2. Public Safety Assessment: Factors and Weights

Outcome Measure	Raw Score	Risk Level
Failure to Appear	0	1
	1	2
	2	3
	3	4
	4	4
	5	5
	6	5
	7	6
New Criminal Activity	0	1
	1	2
	2	2
	3	3
	4	3
	5	4
	6	4
	7	5
	8	5
	9–13	6
Outcome Measure	Raw Score	Flag
New Violent Criminal Activity	0	no
	1	no
	2	no
	3	no
	4	yes
	5	yes
	6	yes
	7	yes

Source: Laura and John Arnold Foundation, *Public Safety Assessment: Risk Factors and Formula* (2013), saccprobation.saccounty.gov/Documents/Resources/Data/Pre-trial%20Monitoring/Public%20Safety%20Assessment%20Risk%20Factors%20and%20Formula.pdf?csf=1&e=Gzf3nk.

Appendix B: Violent Offense List

The list of violent offenses contained in Table B1 was compiled through a consensus of attorneys and subject matter experts who participated in the AB 74 Pretrial Pilot Program.³⁴ This list was developed early in the Pretrial Pilot Program because the PSA has a scoring element that asks if an offense is violent. Through the facilitation of the Judicial Council legal team and the collaboration of stakeholders from counties using the PSA, the counties agreed on a list of offenses in California that should be considered violent in line with the guidelines specified by the developers of the tool. This list includes both felony and misdemeanor offenses, meaning it includes a broader range of offenses than the statutory definition of “violent felonies.” This list of offenses was chosen as an outcome measure for violent reoffense rates, as the infrequency of the violent felony rearrests made it difficult to obtain reliable statistical analysis when limiting by charge level. Additional details can be found in Advancing Pretrial Policy & Research, *Guide to the PSA Violent Offense List* at advancingpretrial.org/guide/guide-to-the-psa-violent-offense-list/.

Table B1. Violent Offense List

Pen. Code Section	Description
69	Obstructing or resisting executive officer in performance of duty; threats, force, or violence
136.1(c)(1)	Intimidating or threatening witness or victim; act is accompanied by force
140(a)	Threatening witnesses, victims, or informants
148(b)	Removal or taking of weapon other than firearm from peace officer during commission of resisting offense
148(c)	Removal or taking of firearm from peace officer during commission of resisting offense
148(d)	Removal or taking of firearm from peace officer engaged in performance of duty
148.10(a)	Resisting peace officer: death or serious bodily injury
149	Assault by a public officer
151	Advocacy to kill or injure peace officer
186.26(c)	Use of coercion or violence to solicit or recruit another to actively participate in criminal street gang
187(a)	Murder, first or second degree
191.5(a)	Gross vehicular manslaughter while intoxicated
192(a)	Voluntary manslaughter
192(b)	Involuntary manslaughter
192(c)(1)	Vehicular manslaughter with gross negligence
192(c)(3)	Vehicular manslaughter

³⁴ For more information about the AB 74 Pretrial Pilot Program, please see Judicial Council of Cal., Pretrial Pilot Program: Final Report to the Legislature (July 21, 2023), courts.ca.gov/sites/default/files/courts/default/2024-12/pretrial-pilot-program_final-report.pdf.

Pen. Code Section	Description
192.5(a)	Vehicular manslaughter in the operation of a vessel while intoxicated with gross negligence
192.5(b)	Vehicular manslaughter in the operation of a vessel while intoxicated without gross negligence
192.5(c)	Vehicular manslaughter in the operation of a vessel
203	Mayhem
205	Aggravated mayhem
206	Torture
207(a)	Kidnapping
207(b)	Kidnapping a child under 14 to commit lewd or lascivious act
207(c)	Kidnapping by false pretense
207(d)	Kidnapping from outside the state
208(b)	Kidnapping a child under 14
209(a)	Kidnapping for ransom
209(b)(1)	Kidnapping to commit robbery, rape, oral copulation, or sodomy
209.5(a)	Kidnapping during carjacking
210.5	False imprisonment of a hostage
667.85	Kidnapping to deprive parent
211	Robbery: first or second degree
212	Fear defined for robbery
212.5	Robbery: degrees
214	Train robbery
215	Carjacking
217.1(a)	Assault on a public official
217.1(b)	Attempted murder of a public official
218	Train wrecking: attempt, punishment
218.1	Obstructing railroad track, punishment
219	Train derailing or wrecking, punishment
219.1	Throwing missile at common carrier with bodily harm
219.2	Throwing hard substance or shooting missile at train or other conveyance
220	Assault with intent to commit mayhem, rape, sodomy, oral copulation, or any violation of section 264.1, 288, or 289
220(a)(1)	Assault with intent to commit a felony
220(a)(2)	Assault with intent to commit a felony, victim under 18
220(b)	Assault to commit a felony during the commission of a first-degree burglary
222	Administering to another chloroform, ether, laudanum, or any controlled substance, anesthetic, or intoxicating agent
236	False imprisonment
236.1	Human trafficking: provisions regarding minors, consideration of total circumstances
237(a)	False imprisonment

Pen. Code Section	Description
240	Assault
241	Assault: punishment
241.1	Assault on custodial officer
241.2	Assault on school or park property
241.3	Assault against person on public transportation, both on property of and within motor vehicle of provider
241.4	Assault on peace officer of a school district
241.5	Assault on a highway worker
241.6	Battery on school employee
241.7	Assault against jurors
241.8(a)	Battery against member of U.S. Armed Forces
242	Battery
243	Battery: punishment
243.1	Battery on custodial officer
243.2(a)(1)	Battery on person; school, park grounds
243.25	Battery on an elder or dependent adult
243.3	Battery on transportation personnel or passenger
243.35	Battery on public transportation provider
243.4	Sexual battery
243.5(a)(1)	Assault or battery on school property
243.6	Battery on school employee
243.65(a)	Battery against a highway worker
243.7	Battery against jurors
243.8(a)	Battery against a sports official
243.9(a)	Aggravated battery by gassing on peace officer or local detention facility employee
244	Assault with caustic chemical
244.5(b)	Assault with stun gun or Taser
244.5(c)	Assault with stun gun or Taser on peace officer or firefighter
245(a)(1)	Assault with a deadly weapon other than firearm
245(a)(2)	Assault with firearm on person
245(a)(3)	Assault with machine gun on person
245(a)(4)	Assault by force likely to produce great bodily injury
245(b)	Assault with semiautomatic firearm
245(c)	Assault with a deadly weapon not firearm on a peace officer or firefighter likely to produce great bodily injury
245(d)(1)	Assault with a firearm on a peace officer or firefighter
245(d)(2)	Assault on peace officer or firefighter with semiautomatic firearm
245(d)(3)	Assault with machine gun or assault weapon on a peace officer or firefighter
245.2	Assault with a deadly weapon to produce great bodily injury on transportation personnel, mass transit personnel

Pen. Code Section	Description
245.3	Assault with a deadly weapon to produce great bodily injury on a custodial officer
245.5(a)	Assault with a deadly weapon likely to produce great bodily injury on a school employee, no firearm
245.5(b)	Assault with firearm on a school employee
245.5(c)	Assault with a stun gun or Taser on a school employee
245.6	Hazing resulting in death or serious bodily injury
246	Discharge of a firearm at an inhabited dwelling, house, vehicle, etc.
246.3(a)	Discharge of firearm with negligence
246.3(b)	Discharge of a BB device with negligence
261(a)	Rape
261.5(a)	Sexual intercourse with a minor under 18 years of age
261.5(b)	Sexual intercourse with minor no more than three years older or younger than perpetrator
261.5(c)	Sexual intercourse with a minor more than three years younger than perpetrator
261.5(d)	Sexual intercourse of a 21-year-old with a minor under 16 years of age
262(a)(1)	Rape: spouse by force, etc.
262(a)(2)	Rape: spouse under a controlled substance
262(a)(3)	Rape: spouse unconscious of act
262(a)(4)	Rape: spouse; threat to kidnap, inflict extreme pain, serious bodily injury
262(a)(5)	Rape: spouse; threat to incarcerate, arrest, deport
262(a)(6)	Rape of spouse by threat to arrest or deport
264.1	Rape in concert with another person by force or violence
266a	Taking a person for prostitution
266b	Abduction to live in illicit relation, using force
266c	Unlawful sexual intercourse, sexual penetration, oral copulation, or sodomy; consent procured by false or fraudulent representation with intent to create fear
266h(b)	Pimping a minor
266i(b)	Pandering a minor
266j	Procurement of child under age 16 for lewd and lascivious acts
267	Abduction; person under 18 for purpose of prostitution
269(a)	Aggravated sexual assault of a child under 14 years of age by force
273a(a)	Willful cruelty to child, possible injury or death
273a(b)	Willful cruelty to child
273ab(a)	Assault of child under eight by force likely to produce great bodily injury resulting in death
273ab(b)	Assault of child under eight by force likely to produce great bodily injury resulting in brain injury, paralysis
273d(a)	Inflicting injury on child
273.4	Female genital mutilation
273.5(a)	Injuring a spouse, cohabitant, fiancé(e), boyfriend, girlfriend, or child's parent

Pen. Code Section	Description
273.5(f)	Infliction of injury on present or former spouse, present or former cohabitant, present or former fiancé(e), present or former dating partner, or parent of child
273.6(b)	Violation of court order to previous domestic violence, results in physical injury
273.6(d)	Domestic violence with prior, act of violence or a credible threat of violence
278	Child stealing
285	Incest
286(b)	Sodomy, person under 18
286(c)	Sodomy, person under 14
286(d)	Sodomy in concert with another by force
286(f)	Sodomy, victim unconscious
286(g)	Sodomy, victim incapable of consent
286(h)	Sodomy, victim or defendant incapable of consent due to mental disorder or physical disability
286(i)	Sodomy, victim under a controlled substance
286(j)	Sodomy by impersonation
286(k)	Sodomy under color of authority
288(a)	Lewd or lascivious act with a child under the age of 14 years
288(b)	Lewd or lascivious act with child under 14 or dependent person
288(c)	Lewd or lascivious act with child of 14 or 15 years and defendant is 10 years older
288.2(a)	Harmful matter sent with intent of seducing a minor
288.3	Contact with intent to commit sex act
288.4	Arranging a meeting with minor for lewd purposes
288.5(a)	Continuous sexual abuse of child
288.7(a)	Sex or sodomy with a child under 10
288.7(b)	Oral copulation or sexual penetration with a child under 10
287(b)	Oral copulation with a person under 18
287(c)	Oral copulation with a person under 14 by force
287(d)	Oral copulation in concert with another, victim incapable of consent
287(f)	Oral copulation, victim unconscious
287(g)	Oral copulation of an incompetent person
287(h)	Oral copulation, victim or defendant incapable of consent due to mental disorder or physical disability
287(i)	Oral copulation by anesthesia or controlled substance
287(j)	Oral copulation by impersonation
287(k)	Oral copulation under color of authority
288a(b)	Oral copulation with a person under 18
288a(c)	Oral copulation with a person under 14 by force
288a(d)	Oral copulation in concert with another, victim incapable of consent
288a(f)	Oral copulation, victim unconscious
288a(g)	Oral copulation of an incompetent person

Pen. Code Section	Description
288a(h)	Oral copulation, victim or defendant incapable of consent due to mental disorder or physical disability
288a(i)	Oral copulation by anesthesia or controlled substance
288a(j)	Oral copulation by impersonation
288a(k)	Oral copulation under color of authority
289	Sexual penetration with force, etc.
289.6(a)(3)	Sexual activity by a California Department of Corrections and Rehabilitation employee with inmate, ward, or parolee
311.4(a) or (c)	Using minors for sex acts
311.4(b)	Using minors for commercial sex acts
347(a)	Poisoning of food, drink, spring, well, reservoir, or water supply
368(b)	Willful harm to elder or dependent adult likely to produce great bodily injury or death
368(c)	Elder or dependent adult cruelty
368(f)	False imprisonment: elder or dependent adult by violence
404(a)	Rioting
417(a)	Exhibiting firearm or deadly weapon other than gun: drawing, exhibiting, or using firearm or deadly weapon; self-defense; peace officers
417(b)	Exhibiting firearm: drawing, exhibiting, or using a firearm
417(c)	Exhibiting firearm in presence of a peace officer: drawing, exhibiting, or using firearm or deadly weapon; self-defense; peace officers
417.3	Exhibiting firearm in presence of another on a public street of highway; drawing or exhibiting firearm whether loaded or unloaded
417.8	Exhibiting firearm with intent to resist or prevent arrest
422.6(a)	Violating civil rights by force or threat
451(a)	Arson causing great bodily injury
451(b)	Arson, inhabited structure or property
451.1	Arson with added circumstances
451.5(a)	Aggravated arson
452(a)	Causing fire that causes great bodily injury
452(b)	Causing fire of inhabited structure or property
455	Arson attempts and acts preliminary or in furtherance
646.9(a)	Stalking
646.9(b)	Stalking, temporary restraining order
647.6(a)(1)	Annoying or molesting child under 18
647.6(b)	Annoying or molesting child; illegal entry of building
647.6(c)	Annoying or molesting child under 18 with prior
667.61(d)(2)	Felony sex offenses, victim kidnapped, increasing risk of harm
667.61(d)(3)	Felony sex offenses, victim tortured
667.61(e)(1)	Felony sex offenses, victim kidnapped
667.61(e)(2)	Felony sex offenses during commission of burglary

Pen. Code Section	Description
667.61(e)(4)	Felony sex offenses against more than one victim
667.61(e)(5)	Felony sex offenses, tying or binding of victim or another person
667.8	Kidnapping to commit sex offense
667.85	Kidnapping child under 14
674	Sex offense by daycare provider
836.6(c)	Escape from custody by force or violence
4500	Assault by a life prisoner
4501	Assault by a state prisoner
4501.1(a)	Aggravated battery
4501.5	Battery on nonconfined person by prisoner
4503	Holding of hostages, offense
4530(a)	Escape from custody by force and violence
4532(a)(2)	Escape from alternative custody by force or violence by person booked on misdemeanor
4532(b)(2)	Escape from alternative custody by force or violence by person booked on felony
11413(a)	Terrorism by explosion
11413(b)	Terrorism by explosion (specified places)
11418(b)	Weapons of mass destruction, use and damage to life
11418(c)	Weapons of mass destruction, use and damage to public natural resources
11418(d)	Weapons of mass destruction, creation of new pathogens
18740	Use of destructive device and explosive to injure or destroy
18745	Explosion with intent to murder
18750	Explosion of destructive device causing bodily injury
18755	Explosion causing death, mayhem, great bodily injury
26100(c)	Discharge of firearm at another person from motor vehicle
18540(a)	Use of firearm to intimidate a voter
664/187(a)	Attempted murder
664/211	Attempted robbery
Veh. Code, 2800.3(a)	Serious bodily injury caused by flight from peace officer
Veh. Code, 2800.3(b)	Death caused by flight from peace officer

This list was developed by consensus during the AB 74 Pretrial Pilot Program. An updated list was created on September 29, 2025. However, the updated list of offenses was not in effect during the period covered in this report. Thus, this report uses the original list developed during the pilot program. The updated list will be used in future reports that cover the period after the list went into effect. All attempts (Pen. Code, § 664), conspiracy (Pen. Code, § 82), solicitation (Pen. Code, § 653f), and accessory (Pen. Code, § 31) only if before the act of any of the offenses identified here also meet the definition of a violent offense for purposes of administering the PSA.

Appendix C: Statistical Testing

DeLong Test for Two ROC Curves

Sonoma County PSA AUC Race Comparisons

data: rocW_FTA and rocB_FTA

$D = 1.0873$, $df = 676.77$, $p\text{-value} = 0.2773$

alternative hypothesis: true difference in AUC is not equal to 0

sample estimates:

AUC of roc1 AUC of roc2

0.7047427 0.6767871

data: rocW_FTA and rocH_FTA

$D = -1.234$, $df = 6336.1$, $p\text{-value} = 0.2172$

alternative hypothesis: true difference in AUC is not equal to 0

sample estimates:

AUC of roc1 AUC of roc2

0.7047427 0.7217933

data: rocB_FTA and rocH_FTA

$D = -1.703$, $df = 752.45$, $p\text{-value} = 0.08898$

alternative hypothesis: true difference in AUC is not equal to 0

sample estimates:

AUC of roc1 AUC of roc2

0.6767871 0.7217933

data: rocW_newarrest and rocB_newarrest

$D = 1.7887$, $df = 676.46$, $p\text{-value} = 0.07411$

alternative hypothesis: true difference in AUC is not equal to 0

sample estimates:

AUC of roc1 AUC of roc2

0.7278774 0.6838306

data: rocW_newarrest and rocH_newarrest

$D = -1.2945$, $df = 6744.9$, $p\text{-value} = 0.1955$

alternative hypothesis: true difference in AUC is not equal to 0

sample estimates:

AUC of roc1 AUC of roc2

0.7278774 0.7434400

data: rocB_newarrest and rocH_newarrest
D = -2.413, df = 684.69, p-value = 0.01609
alternative hypothesis: true difference in AUC is not equal to 0
sample estimates:
AUC of roc1 AUC of roc2
0.6838306 0.7434400

data: rocW_newfiling and rocB_newfiling
D = 0.081036, df = 665.72, p-value = 0.9354
alternative hypothesis: true difference in AUC is not equal to 0
sample estimates:
AUC of roc1 AUC of roc2
0.6571510 0.6549615

data: rocW_newfiling and rocH_newfiling
D = -2.1999, df = 6433, p-value = 0.02785
alternative hypothesis: true difference in AUC is not equal to 0
sample estimates:
AUC of roc1 AUC of roc2
0.6571510 0.6874749

data: rocB_newfiling and rocH_newfiling
D = -1.1784, df = 722.08, p-value = 0.239
alternative hypothesis: true difference in AUC is not equal to 0
sample estimates:
AUC of roc1 AUC of roc2
0.6549615 0.6874749

data: rocW_newconviction and rocB_newconviction
D = -1.0591, df = 650.41, p-value = 0.29
alternative hypothesis: true difference in AUC is not equal to 0
sample estimates:
AUC of roc1 AUC of roc2
0.6341234 0.6687945

data: rocW_newconviction and rocH_newconviction
D = -1.9967, df = 6248.5, p-value = 0.0459
alternative hypothesis: true difference in AUC is not equal to 0
sample estimates:
AUC of roc1 AUC of roc2
0.6341234 0.6669354

data: rocB_newconviction and rocH_newconviction
D = 0.055267, df = 722.75, p-value = 0.9559
alternative hypothesis: true difference in AUC is not equal to 0
sample estimates:
AUC of roc1 AUC of roc2
0.6687945 0.6669354

data: rocW_newviolent and rocB_newviolent
D = 1.0988, df = 699.85, p-value = 0.2722
alternative hypothesis: true difference in AUC is not equal to 0
sample estimates:
AUC of roc1 AUC of roc2
0.6245038 0.5924950

data: rocW_newviolent and rocH_newviolent
D = 1.5652, df = 6644.7, p-value = 0.1176
alternative hypothesis: true difference in AUC is not equal to 0
sample estimates:
AUC of roc1 AUC of roc2
0.6245038 0.6001158

data: rocB_newviolent and rocH_newviolent
D = -0.25856, df = 731.9, p-value = 0.796
alternative hypothesis: true difference in AUC is not equal to 0
sample estimates:
AUC of roc1 AUC of roc2
0.5924950 0.6001158

Sonoma County PSA AUC Gender Comparisons

data: rocM_FTA and rocW_FTA
D = 1.8569, df = 1931.8, p-value = 0.06348
alternative hypothesis: true difference in AUC is not equal to 0
sample estimates:
AUC of roc1 AUC of roc2
0.7229641 0.6924223

data: rocM_newarrest and rocW_newarrest
D = 0.64985, df = 1896.6, p-value = 0.5159
alternative hypothesis: true difference in AUC is not equal to 0
sample estimates:
AUC of roc1 AUC of roc2
0.7449173 0.7352655

data: rocM_newfiling and rocW_newfiling

D = 1.0189, df = 1885.2, p-value = 0.3084

alternative hypothesis: true difference in AUC is not equal to 0

sample estimates:

AUC of roc1 AUC of roc2

0.6805025 0.6630735

data: rocM_newconviction and rocW_newconviction

D = 1.2686, df = 1720.7, p-value = 0.2048

alternative hypothesis: true difference in AUC is not equal to 0

sample estimates:

AUC of roc1 AUC of roc2

0.6578268 0.6286695

data: rocM_newviolent and rocW_newviolent

D = -0.56108, df = 2005.8, p-value = 0.5748

alternative hypothesis: true difference in AUC is not equal to 0

sample estimates:

AUC of roc1 AUC of roc2

0.6101787 0.6206955

Additional Logistic Regression Model Testing

Table C1. Logistic Regression Model Predicting the Likelihood of Outcomes of Interest by Risk Scores, Race/Ethnicity, and Interaction of Race/Ethnicity and Risk Scores, Controlling for Days Released, at the Highest Risk Score

	<i>Dependent variable:</i>				
	FTA (1)	New Arrest (2)	New Filing (3)	New Conviction (4)	New Violent Arrest (5)
PSA FTA Risk Score	0.559*** (0.026)				
PSA NCA Risk Score		0.647*** (0.027)	0.427*** (0.026)	0.359*** (0.030)	
PSA NVCA Risk Score					1.442*** (0.101)
Race:Black	-0.043 (0.188)	-0.469** (0.180)	-0.331* (0.163)	-0.238 (0.187)	-0.240 (0.221)
Race:Hispanic	-0.118 (0.106)	-0.070 (0.117)	0.019 (0.102)	0.086 (0.112)	-0.038 (0.144)
Days Released	0.002*** (0.0001)	0.002*** (0.0001)	0.001*** (0.0001)	0.001*** (0.0001)	0.001*** (0.0001)
FTA*Black	-0.085 (0.068)				
FTA*Hispanic	0.009 (0.038)				
NCA*Black		-0.172* (0.069)	-0.041 (0.074)	0.084 (0.096)	
NCA*Hispanic		0.043 (0.041)	0.052 (0.040)	0.056 (0.046)	
NVCA*Black					-0.435 (0.270)
NVCA*Hispanic					0.054 (0.166)
Constant	-0.050 (0.069)	1.392*** (0.075)	-0.117 (0.065)	-0.921*** (0.072)	-0.900*** (0.089)
Observations	7,357	7,357	7,357	7,357	7,357
Log Likelihood	-3,778.742	-4,257.462	-4,139.982	-3,299.642	-2,866.897
Akaike Inf. Crit.	7,571.483	8,528.923	8,293.964	6,613.283	5,747.793

Note: *p<0.05; **p<0.01; ***p<.001