



Pretrial Electronic Monitoring in San Francisco

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1. Executive Summary

Pretrial electronic monitoring (pretrial EM) is a digital surveillance program that tracks the location and movements of people released to the community while they await the resolution of their criminal case. A locked plastic bracelet is attached to the person's ankle, which includes a GPS tracking device that notifies the Sheriff's Office if the person is not complying with the terms of their release. This report covers the characteristics and outcomes of people released by the courts to pretrial EM in San Francisco between 2018 and 2021. During this period, two significant events impacted pretrial detention. First, the *In Re Humphrey* decision required judges in San Francisco to consider ability to pay when setting bail and to select the least restrictive non-monetary release condition. Second, in response to the COVID-19 pandemic, policymakers issued public health directives limiting the jail population in San Francisco.

This report is not an evaluation or causal analysis of the impact of pretrial EM. Rather, this report provides policymakers with data and insights to aid decisions about pretrial EM in San Francisco. This analysis reveals:

- **The use of pretrial EM increased more than twenty-fold between 2017 and 2021.** San Francisco rarely used pretrial EM prior to 2018, averaging 75 cases per year. In 2018, more than 550 cases were released to pretrial EM and the annual caseload increased to more than 1,650 in 2021.
- **More than one-third of people on pretrial EM are unhoused/unstably housed.**
- **More than 65% of people on pretrial EM who were assessed with a standardized pretrial risk assessment tool were rated at the greatest risk of new arrest or failure to appear in court.**
- **Eighty-five percent of people on pretrial EM are booked on felony charges. The median number of prior San Francisco County Jail bookings is five.**
- **Most people on pretrial EM are terminated prematurely.** Of those who fail to comply with pretrial EM rules, 60% are returned to custody within one week of termination and 76% are returned within two months.
- **Pretrial EM termination rates are higher for people who are unhoused/unstably housed.** Nearly 80% of people who are unhoused/unstably housed on pretrial EM fail to successfully complete the program, compared to approximately 50% of people who are housed.
- **Terminations from pretrial EM often happen in the first 2 weeks of the program.** Individuals who terminate have a median number of days on pretrial EM of 15 days.

2. Introduction

The use of electronic monitoring (EM) as a technique to track the location and activities of people on pretrial release, probation, or parole, is growing nationally. People on EM are required by the court to wear a device on their ankle that tracks their location and alerts authorities if they violate movement restrictions or curfew. EM is frequently referred to as an alternative to pretrial detention, with proponents arguing it enables those who would have otherwise been detained to be securely released back into society and maintain employment as well as family ties. Others refer to pretrial EM as “e-carceration” and draw attention to the terms of release — such as movement restrictions and curfews — that can limit job prospects and foster a sense of social stigma and isolation (Alexander, 2018). Instead of reducing pretrial detention, some caution that pretrial EM may subject more people to formal legal system interventions if individuals placed on EM could have otherwise been released with no or minimal supervision.

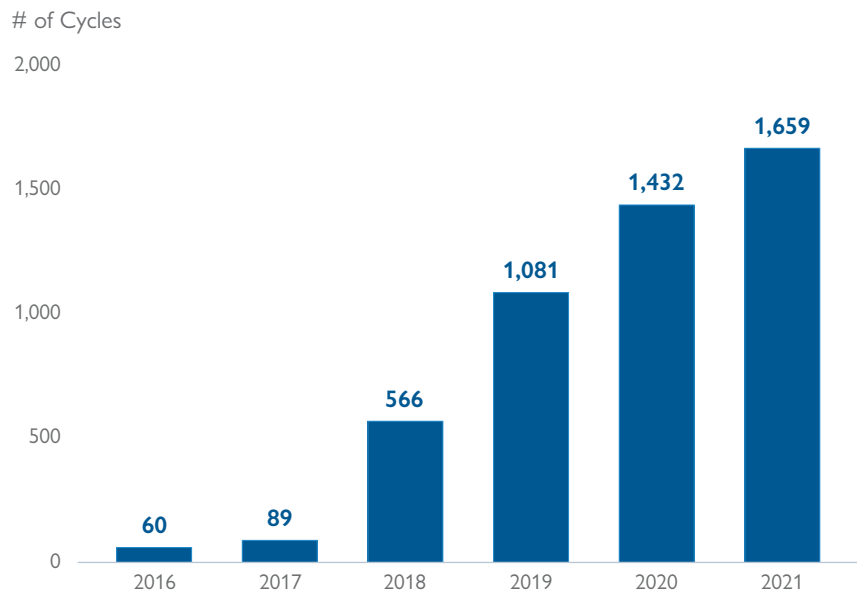
Empirical research on the effect of pretrial EM on court appearances and public safety is limited, and the results are often contradictory. Research in Santa Clara County compared pretrial EM clients to a matched sample of people on pretrial release without EM and found no difference in rearrest rates but beneficial impacts on court appearances for those on EM (Sainju, 2018). However, a study of US federal court pretrial defendants in New Jersey found those on pretrial EM were marginally more likely to be arrested or fail to appear than the comparison samples (Wolff et al., 2017). A more recent review of the research on the effect of pretrial and post-conviction EM on recidivism found that the overall effect appears to be favorable. However, subgroup analyses revealed the recidivism reductions were primarily limited to people who had been convicted of sex offenses; situations in which EM is offered as a prison alternative after conviction; and cases in European settings (Belur et al., 2020).

Qualitative research offers insights into the experiences of people on pretrial and post-conviction EM. Often, EM can create challenging conditions for employment as restrictions on movement can interfere with work requirements. In a 2011 National Institute of Justice survey of 5,000 people under EM, 22% reported they had been fired or asked to quit because of EM (NIJ, 2011). Interestingly, a qualitative study of an EM program in Belgium, which allows for much more flexibility than the typical US program, did not report any challenges with employment (Vanhaelemeesch, 2014). The monitor’s presence also weakens bonds to families and communities because it frequently limits where people can reside, travel, and work (Weisburd, et al., 2021). According to a recent study of the pretrial EM population in San Francisco, prior issues with housing instability, mental illness, substance use, and co-occurring medical and behavioral health disorders made it much harder to adhere to pretrial EM requirements and increased the chance of noncompliance (Smith & Robson, 2022).

Pretrial EM in San Francisco

Pretrial EM underwent a dramatic expansion over the last 5 years. Prior to 2018, pretrial EM was not widely used in San Francisco: the county averaged 75 releases to pretrial EM each year (Figure 1). However, in 2018 the total number climbed more than seven-fold to 566 cycles. And by 2021, the total number of EM cycles stood twenty times higher than pre-2018 levels, at 1,659 cycles.

FIGURE 1: Number of pretrial electronic monitoring cycles in San Francisco, 2016–21



Source: SFSO Community Programs Database

KEY DEFINITIONS

Pretrial EM Cycle

A specific release on pretrial EM. Releases to pretrial EM can occur at arraignment or at any subsequent appearance. A single cycle may include multiple court cases. Individuals may also be released to multiple cycles of pretrial EM over time.

Termination

A person is terminated from pretrial EM by the courts due to an arrest on a new offense or failing to comply with the conditions of their EM release (such as violating a stay-away order). Not all failures to comply result in a termination.

Pretrial Population

Individuals with new bookings into the San Francisco County Jail in which a charge was filed. Includes people who are released prior to case resolution and those who are detained until case resolution.

Sentinel Offender Services, LLC

San Francisco's EM vendor since August 1, 2019. Sentinel provides the EM ankle bracelet and monitoring software.

Two important events drove these dramatic changes. The first expansion of San Francisco’s use of pretrial EM came after *In Re Humphrey* (Cal. Ct. App. 2018) was decided in the First Appellate District on January 25, 2018.

Humphrey mandated that judges consider a defendant’s ability to pay when setting bail amounts and to release people to the least restrictive non-monetary conditions (such as own-recognizance or community supervision). To address concerns about public safety, the *Humphrey* decision specifically mentioned pretrial EM as a “condition of release” that can “in many cases protect public and victim safety as well as assure the arrestee’s appearance at trial.”

The second event driving expanded use of pretrial EM was San Francisco’s response to the COVID-19 pandemic. To minimize the risk of virus transmission, the County enacted measures to limit the jail population, including releasing more people to pretrial EM.

The expanded use of pretrial EM stemmed less from written policy than from these two events changing individual decisions by judges, who have the sole authority to order pretrial EM. The presiding judge decides whether to release a person prior to case resolution, what kind of pretrial supervision program they will participate in (if any), and what rules they must follow while under supervision. The decision to release a person to pretrial EM may occur at arraignment — the person’s first appearance before the judge — or at any point after arraignment prior to case resolution. San Francisco does not charge a monitoring fee to people who are released on pretrial EM, in contrast to many other jurisdictions. The Sheriff’s Office manages the operations of court-ordered pretrial EM through a contract with an EM equipment and supplier.¹

EM Conditions and Supervision

This section describes the common conditions of pretrial EM release and the supervisory process, including what constitutes a violation of the conditions of release.

In August 2019, the San Francisco Sheriff’s Office (SFSO) contracted with Sentinel Offender Services, LLC (Sentinel) to provide the GPS trackers and management software. People released on pretrial EM have a GPS monitoring device locked to their ankle that tracks their location 24 hours a day. The device must be charged to function and can take up to an hour to charge; typically charges last for at least 24 hours. However, charging the monitor can be challenging: 43% of respondents in San Francisco reported they had difficulty keeping their device charged (Smith & Robson, 2022).

¹ The Sheriff’s EM budget quadrupled between FY17–18 and FY18–19 (from \$220,187 to \$903,810) (BLA Policy Analysis Report, 2020).

All people on pretrial EM must agree to follow twelve standard rules including obeying all laws, assuming responsibility for issued equipment, staying within 50 miles of the SFSO, and consenting to a search of person, residence, vehicle, and property at any time, without a warrant or probable cause.² The judge often assigns additional conditions of release to pretrial EM, including home detention, curfew, residential treatment, or abstaining from firearm and drug use. Therefore, the conditions and experiences of individuals released to pretrial EM in San Francisco can vary widely.

If the judge sets home detention or curfew as a condition of release, the SFSO will not release a person from jail until they have confirmed the person will have housing while on pretrial release. If housing cannot be secured, the SFSO will send the case back to the courts and the judge can decide to: release to pretrial EM, but with tracking only; release to another type of pretrial supervision without pretrial EM; or detain until housing becomes available or the criminal case concludes.

In many cases people will initially be released with more restrictive conditions (such as home detention or curfew) and, over time, the judge may relax the conditions if the person remains in compliance. Conditions may be added if a person fails to appear at a court hearing or otherwise violates the conditions of release.

The electronic record of assigned conditions is overwritten as the conditions change, either due to good or poor performance, so it does not provide a full account of a person's conditions. The conditions data covers the timeframe of the Sentinel contract (August 1, 2019 - December 31, 2021) and includes only the assigned conditions at the end of a person's time on pretrial EM. From this, we observe that GPS tracking is the most common condition (78%), followed by home detention (43%) and curfew (39%). These are likely underestimated, as conditions assigned at release and then later removed by the courts are not represented.

The Sentinel monitoring software emails the SFSO an alert if the device detects potential non-compliance with release conditions. Alerts can be triggered if the device detects that someone enters a restricted location, violates a court-ordered stay-away or restraining order, leaves their home (if they are on home detention), or does not arrive home by curfew.

The SFSO may receive more than one hundred email alerts per day across all of those on pretrial EM, many of which do not indicate actual non-compliance. For example, to determine location, the ankle monitor pings cell towers. However, it could ping a cell tower several blocks away from the person's actual location —

² The required conditions are available here: <https://www.sfsheriff.com/sites/default/files/2020-02/Pre-Sentenced%20Individuals%20SFSD%20EM%20Rules%20-%20Revised%202.3.20.pdf>

which happens to be in a prohibited area. SFSO staff review the email alerts and if further examination is needed, will have the on-duty deputy evaluate the violation. The deputy will call the participant if non-compliance is suspected, and if the participant does not answer, SFSO staff can manually cause the device to vibrate, beep, or sound an alarm to notify the person that they must contact the SFSO.³ Alerts for a low battery, however, are automatic and when the battery level drops below a specified threshold, the monitoring device will vibrate and beep.

If the charged offense was linked to alcohol use, the judge may also order the assignment of a separate device to monitor the metabolized alcohol present in the perspiration of the person wearing the device. People who are ordered by the judge to wear these monitors must abstain from alcohol. Similar to suspected-movement offenses, Sentinel sends an email alert to the SFSO when alcohol is detected, and the SFSO decides what course of action to pursue. The device recognizes environmental alcohol exposure (such as cologne or a spilled drink on the device) in a different way than transdermal perspiration and is not supposed to send an alert in these instances.

In addition to conditions related to movement and alcohol consumption, the judge can decide to release a person to pretrial EM with or without additional supervision from the San Francisco Pretrial Diversion Project (SF Pretrial).⁴ The judge may order a person released to one of three categories of pretrial EM:

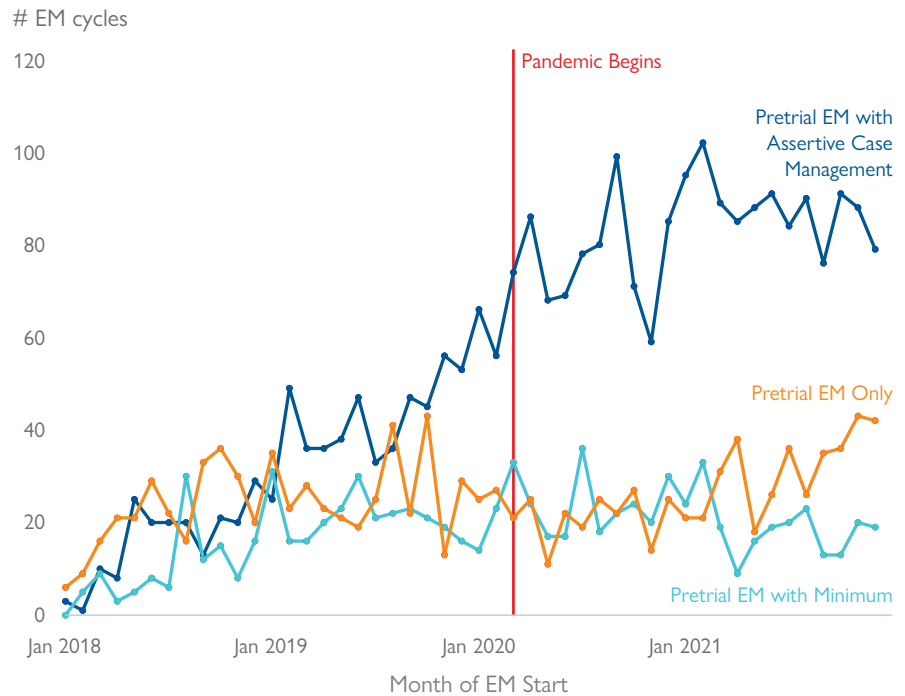
- **Pretrial EM Only:** Supervised by SFSO only, via ankle monitor.
- **Pretrial EM with Minimum:** Supervised by SFSO via ankle monitor and SF Pretrial (weekly phone check-ins and court reminders).
- **Pretrial EM with Assertive Case Management (ACM):** Supervised by SFSO via ankle monitor and provided more structured and intensive programming by SF Pretrial (supervision level varies, but can include weekly in-person check-ins and engagement in services such as substance use disorder treatment, mental health services, and housing interventions).

Release to pretrial EM with ACM is the most common supervisory status, and it grew the most as EM use expanded in San Francisco. Between 2018 and 2021, 56% of cases were released to pretrial EM with ACM. Smaller shares of pretrial EM cases were released on lower levels of supervision: 19% were released to pretrial EM with minimum supervision and 26% were released to EM only.

3 The Sheriff's Office provided CPL with the universe of email alerts sent under the Sentinel contract. However, it is not possible to ascertain from the data what share of alerts required the review of SFSO staff, resulted in a phone call to the participant, or resulted in the SFSO sending a beep, vibration, or alarm to the device.

4 People may also be under supervision by probation or parole if they are on post-sentence supervision for another case.

FIGURE 2: Releases to pretrial electronic monitoring by supervisory status, 2018–21



Note: **Pretrial EM Only**: cases include those pretrial EM cycles with no SF Pretrial supervision. **Pretrial EM with Minimum**: cases include those with non-active or minimum supervision by SF Pretrial during part or all the pretrial EM cycle. **Pretrial EM with Assertive Case Management (ACM)**: cases include those with supervision by SF Pretrial's ACM during part or all the pretrial EM cycle.

Source: SFSO Community Programs Database and SF Pretrial PSA Database.

Successful Completion of EM

If a person is not removed from the program by a judge before the case is resolved (by conviction or dismissal), they have successfully completed pretrial EM. If the court issues a warrant for their arrest because of their inability to comply with the EM terms, they are terminated.

Pretrial EM terminations generally fall into three categories:

1. Arrest for a new offense while on pretrial EM. Any arrest for a new offense, either in San Francisco or elsewhere, will trigger the Sheriff's Office to seek a warrant. The person is terminated from the EM program when the judge signs the warrant. However, a new arrest in San Francisco is the only termination reason observable in the current data system.

2. Failure to appear in court (FTAs). Failing to appear at a court hearing can be grounds for terminating a person from pretrial EM. The judge will issue a bench warrant to arrest the person for failing to appear. Pretrial EM is not terminated if

the bench warrant is stayed, and the person is given another opportunity to appear at court. If they fail to appear at the subsequent hearing, the warrant will be executed, and pretrial EM will be terminated upon arrest. We can observe FTAs in the electronic records but cannot determine if it is the reason for the termination.

3. Non-Compliance Reports (NCRs). Violating the terms of pretrial release can be grounds for termination. The on-duty deputy evaluates the alerts sent by the Sentinel monitoring software and tries to get in touch with the person, either by phone or by sending an auditory alarm through the device. If the deputy determines it was a violation, an NCR will be documented by the contracted monitoring company and placed in the person's file. The deputy reviews the NCR, attempts contact with the participant to understand circumstances of the violation, and reviews any prior non-compliance reports to determine whether an affidavit should be presented to the judge for review and termination from the program. The judge can also recall affidavit warrants after they are issued if the person appears with a justifiable reason for the violation. We can observe NCRs, but only for people released in 2021 and we cannot determine if the NCR is the reason for the termination.

3. Data

This report uses a linked longitudinal dataset of contacts with the criminal legal system from arrest to case resolution from four sources: the San Francisco Sheriff's Office (SFSO), the San Francisco District Attorney's Office (SFDA), San Francisco Pretrial Diversion Project (SF Pretrial), and Sentinel Offender Services, LLC. The analysis sample includes all cases released to pretrial EM between January 1, 2016 and December 31, 2021, though the main results focus on two periods: (1) main sample: January 1, 2018–December 31, 2021; and (2) outcomes analysis: January 1–December 31, 2021. To provide context, certain descriptive statistics also include information on the larger pretrial population: those who are charged and either detained while awaiting case resolution or released to another supervision type, on bail, on their own recognizance, or to another program. [Appendix A](#) provides a detailed summary of the data sources and definitions of key measures.

The unit of analysis is a pretrial EM cycle, which has a distinct start and end date for each pretrial EM release. People are often released on multiple pretrial EM cycles. For example, a person may be released to pretrial EM on a single court case and terminate unsuccessfully due to a new arrest. That person may then be released on a new EM cycle, with both the original and new case, and successfully complete the new cycle. This individual will be counted as having two cycles: one that they failed to complete and the other that they successfully completed. Key outcomes are provided at the individual level in [Appendix D](#).

4. Demographics and Case Characteristics

Between January 1, 2018, and December 31, 2021, there were 2,979 people released on 4,738 cycles of pretrial EM.

Table 1 shows that people on pretrial EM are predominantly male (88%), often Black (43%), and have an average age of 35. The demographic characteristics are fairly consistent across pretrial EM cycles with different levels of supervision, however the racial/ethnic breakdown of pretrial EM with minimum differs from the overall averages, with a smaller share of White people and larger shares of Black and Hispanic people. Comparisons with the broader pretrial population are summarized in **Table 2** on page 16.

Over one-third of people on pretrial EM are unhoused/unstably housed (38%). That share is highest amongst people under ACM supervision (44%).

TABLE 1: Characteristics of people on pretrial electronic monitoring in San Francisco 2018–21

	PRETRIAL EM SUPERVISORY LEVELS			
	No Additional Supervision	Minimum Supervision	Assertive Case Management	All Levels
% Black	42.5	47.2	41.9	43.1
% Hispanic	27.1	34.1	27.2	28.4
% White	20.6	12.2	24.2	21.1
% Other	9.8	6.7	6.6	7.5
Average Age	35.4	33.0	35.1	34.8
% Male	86.2	87.9	89.1	88.1
% People who are Unhoused/Unstably Housed	27.8	31.1	44.2	37.6
% Felony Booking	66.7	87.0	90.8	83.9
# of Median Prior Bookings	4.0	4.0	6.0	5.0
Total	1,217	881	2,640	4,378

Note: Housing status represents the address given to the arresting officer, as recorded in the Sheriff’s Jail Management System. Race/ethnicity data is collected by the Sheriff’s Office and includes a combination of self-report and officer-assigned data. Due to small sample sizes, race and ethnicity categories of Asian, Pacific Islander, Native American, Multi-ethnic, Other, and unknown/not stated are combined in this table in the “Other” category. Due to data limitations, transgender and non-binary individuals are excluded from the numerator of the “% male.”

Source: SFSO Community Programs Database, SFSO Jail Management System, SF Pretrial PSA Database, and SFDA Case Management System.

Most pretrial EM cycles start with a felony booking (84%). Felony offenses against a person are the most common arrest charge across all pretrial EM categories (41% overall)⁵, followed by felony property offenses (26%), and misdemeanor other offenses (9%), such as misdemeanor DUI and violation of court orders. The share with a misdemeanor booking is highest amongst those on pretrial EM only (33%, compared to 10% of those released to pretrial EM with minimum or ACM). Misdemeanor DUIs are most common amongst those on pretrial EM only (11%, compared to less than 1% of pretrial EM cases with minimum supervision).⁶ Important differences exist between people charged with misdemeanor DUI offenses and the larger pretrial EM population. First, their experience on pretrial EM is likely different: they may be assigned an alcohol monitor only (or an alcohol monitor in addition to a GPS monitor). Outcomes may also differ, both because of different types of supervision, and because individuals convicted of a misdemeanor DUI have been found to have substantially lower new arrest rates than people convicted of other misdemeanor or felony offenses in San Francisco.⁷

Most individuals released to pretrial EM have multiple prior bookings into the San Francisco County Jail. The median number of prior bookings is 5, and the average is 8.4. Prior arrests in San Francisco are slightly higher than bookings: on average, individuals have 6.1 prior felony arrests and 3.7 prior misdemeanor arrests (medians are 4 and 2, respectively). Most of those bookings and arrests did not result in a filing: on average, individuals on pretrial EM have 2.4 prior felony filings and 1.0 prior misdemeanor filing (medians are 2 and 0, respectively).

San Francisco uses the Public Safety Assessment (PSA) to assess risk of new arrest and/or failure to appear if a person is released while awaiting case resolution and make a release recommendation to the presiding judge. Stakeholders in the criminal-legal system developed a policy document proposing a release type or not recommending release based on the PSA scores and booked offenses. The policy framework provides four recommendations, ranging from lowest (release to own-recognizance with non-active supervision) to highest (release not recommended).

The assessed risk for new arrest or failure to appear on the county's pretrial risk assessment tool (PSA) was consistently high across supervision types: over two-thirds of cycles with a completed PSA were assessed to have the highest risk level (66%). [Figure 3](#) disaggregates the recommendation by pretrial EM supervision category: over half of people on pretrial EM in each category received a recommendation of "release not recommended," the highest risk level.

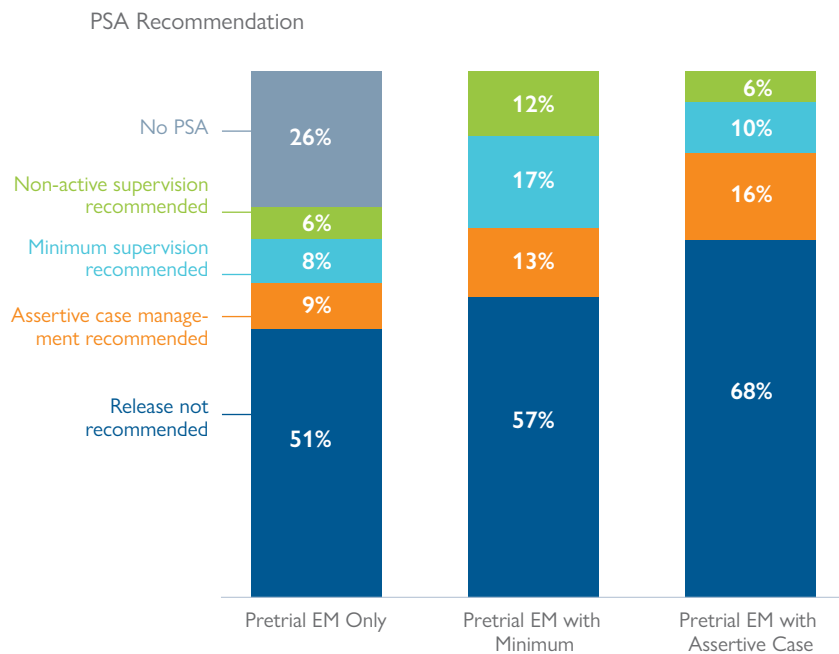
5 Assault is the most common felony person offense (53%), followed by robbery (35%).

6 Misdemeanor DUIs are both greater in terms of the share and count of pretrial EM only cases: 136 cases released to pretrial EM only were booked on misdemeanor DUIs, compared to just over 20 cases released to pretrial EM with minimum supervision or ACM.

7 In one local recidivism study, only 2% of individuals convicted of a misdemeanor DUI had a new arrest compared to 32% of all convictions. See the San Francisco Outcomes and Desistance Dashboard for more details: sfdistrictattorney.org/policy/data-dashboards/.

The PSA provides a consistent measure of past criminal history and severity of current offense across all pretrial releases. It is important as it is one piece of information the judges use to make their release decisions and can provide a check on the extent to which pretrial EM is used for lower risk clients that may be better served by less intensive supervision. However, there is an important debate about the role of risk assessment tools to inform release decisions, with many critics voicing concern that these tools perpetuate existing racial biases in the criminal-legal system. Because the risk assessment score is mostly based on prior convictions and the seriousness of the booked charge, structural racism and disparities at all points of the criminal legal system affect assessed risk, and can perpetuate the overrepresentation of people of color in the criminal-legal system. CPL studied the accuracy and reliability of the PSA in San Francisco, finding the risk scales are fair to good predictors of the risk of failure to appear or new arrest based on industry standards. However, the study also found evidence of predictive bias by race in the FTA risk scales and new violent criminal activity flag (Skog and Laco, 2021).

FIGURE 3: Assessed pretrial risk levels by pretrial EM supervision type, 2018–21



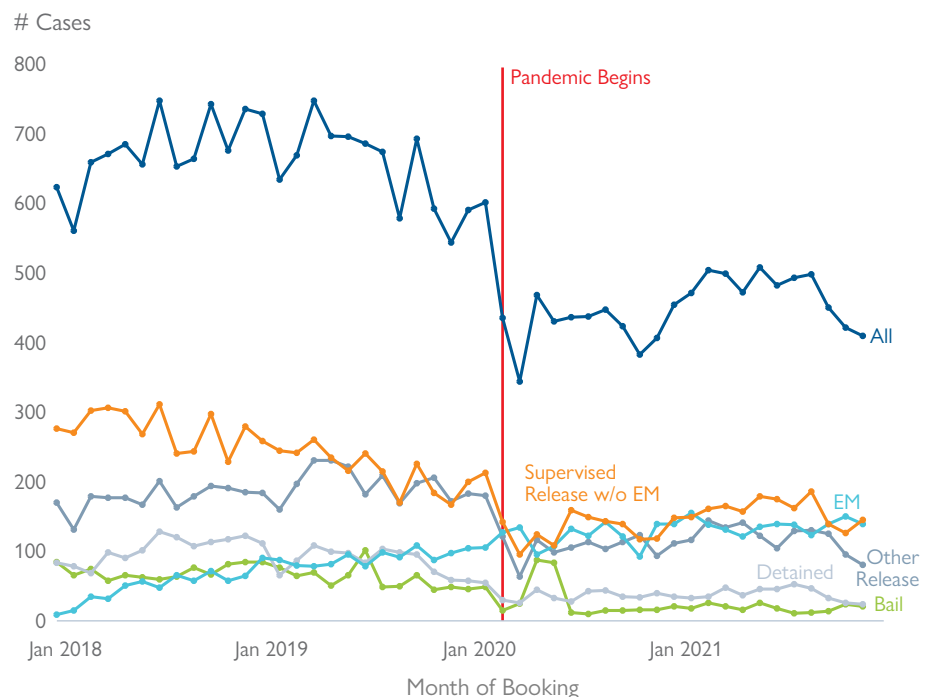
Note: The sample includes all cases, including approximately 300 pretrial EM cycles that did not have a PSA. These cases may not have been eligible for a PSA because they were booked solely for a warrant or probation/parole hold. In some cases, there may have been a PSA completed, but we were unable to match the pretrial EM record to the PSA recommendation in the SF Pretrial database.

Source: SFSO Community Programs Database and SF Pretrial PSA Database.

5. Situating Pretrial EM within the Larger Pretrial Context

Figure 4 summarizes the release trends for cases charged and either released or detained while awaiting case resolution. The navy blue line shows the monthly case numbers for the entire pretrial sample: there is a substantial decline in cases after the COVID-19 health orders took effect in March 2020. There is a consistent decline prior to health orders in the number of cases released to supervision without pretrial EM (orange line). In contrast, the number released to supervision with pretrial EM (light blue line) increased during this period. In the months after March 2020, the number of cases released to supervision with and without pretrial EM increased.

FIGURE 4: Pretrial releases in San Francisco, 2018–21



Note: Sample is restricted to bookings in which a charge was filed.

Categories are as follows:

EM: Released on EM with or without supervision by SF Pretrial.

Supervised release w/o EM: Includes individuals released to supervision by SF Pretrial (ACM, Minimum, or NAS) or Court Own Recognizance without the condition of pretrial EM.

Bail: Released on bail prior to disposition.

Other Release: Cases released prior to their disposition date to Collaborative Courts, via citations, to other jurisdictions, etc.

Detained: Disposition date occurs on or after the release date (approximately 30% of the detained sample was released on the day of case resolution). We exclude cases that have the disposition, booking, and release all on the same day and cases that are still in custody without a disposition.

Source: SFSO Community Programs Database, SFSO Jail Management System, SF Pretrial PSA Database, and SFDA Case Management System.

The demographics of the pretrial EM population are similar to the overall pretrial population (Table 2). However, there are a few notable differences. People released to pretrial EM are more likely to be male, on average, than those released to other forms of supervision or on bail. Black people are overrepresented in the pretrial population more broadly, particularly relative to their population in San Francisco and the Bay Area. The 2020 Census reported 6% of the population is Black, whereas the share of the pretrial population that is Black is six to eight times greater. The share of Black people is greatest among those detained or released to pretrial EM (44% and 43% respectively). Conversely, the share of White individuals is lowest for the pretrial EM population (21% compared to 28% released to supervision without EM and 28% of those detained).

TABLE 2: Characteristics of people released pretrial in San Francisco 2018–21

	PRETRIAL SUPERVISORY LEVELS				
	Detained	EM	Court Release (w/o EM)	Bail	Other
% Black	44.3	43.1	35.5	38.7	32.8
% Hispanic	21.7	28.4	30.2	24.1	26.2
% White	27.8	21.1	27.5	24.6	31.3
% Other	6.2	7.4	6.8	12.6	9.6
% Male	88.9	88.1	83.9	82.6	82.7
Average Age	37.0	34.8	37.4	34.4	38.0
Total	3,256	4,378	9,644	2,242	7,362

Note: Sample is restricted to bookings in which a charge was filed and excludes cases that have the disposition, booking, and release all on the same day and cases that are still in custody without a disposition. Race/ethnicity data is collected by the Sheriff's Office and includes a combination of self-report and officer-assigned data. Due to data limitations, transgender and non-binary individuals are excluded from the numerator of the "% male." Due to small sample sizes, race and ethnicity categories of Asian, Pacific Islander, Native American, Multi-ethnic, Other, and unknown/not stated are combined in this table in the "Other" category. Pretrial categories are as follows: **EM (all)**: Released on EM with or without supervision by SF Pretrial. **Supervised release without EM**: Includes individuals released to supervision by SF Pretrial (ACM, Minimum, or NAS) or Court Own Recognizance without the condition of pretrial EM. **Bail**: Released on bail prior to disposition. **Other Release**: Cases released prior to their disposition date to Collaborative Courts, via citations, to other jurisdictions, etc. **Detained**: Disposition date occurs on/after the release date (approximately 30% of the detained sample was released on the date of case resolution).

Source: SFSO Community Programs Database, SFSO Jail Management System, SF Pretrial PSA Database, SFDA Case Management System, and San Francisco Census Data 2020.

People on pretrial EM are similar to those detained in their assessed risk of failure to appear or new criminal activity (Table 3). Of those assessed, approximately two-thirds of people on pretrial EM were assessed as the highest risk, compared to over 70% of those detained for the pretrial period. Comparatively, only one-third of those assessed and released to supervision without pretrial EM

were assessed as high risk. People released to pretrial EM also have more prior contact with the criminal-legal system in San Francisco: the median number of prior bookings is five, compared to two for those detained and one for those released to supervision without EM. The share of felony bookings is consistently high across all groups, except those in the other release category which includes citations and releases to diversion and collaborative courts.

The population detained until disposition spends the longest time in custody (median of 44 days). People released to pretrial EM are in custody approximately one week prior to release. This is longer than the other release types, which likely reflects two important differences. First, people can be released to pretrial EM at any point during their pretrial incarceration, whereas other release types typically occur before or at arraignment. Second, pretrial EM clients whose release requires home detention must first be assessed by the Sheriff’s Coordinated Entry team to confirm they have housing before they can be released. For this reason, a better measure of the time people are detained awaiting release to pretrial EM would be the number of days from referral to release, instead of days from booking to release, but this data point is unavailable.

TABLE 3: Case characteristics of people released pretrial in San Francisco 2018–21

	PRETRIAL SUPERVISORY LEVELS				
	Detained	EM	Court Release (w/o EM)	Bail	Other
% With PSA assessment	96.6	93.4	97.9	62.0	57.7
Of those w/ a PSA assessment					
% Release Not Recommended	70.3	65.9	34.3	47.7	52.2
% Assertive Case Management	13.8	14.8	17.0	11.8	19.0
% Minimum	9.3	11.6	20.2	16.6	13.2
% Non-Active Supervision	6.6	7.6	28.4	23.8	15.6
% Felony	90.1	83.9	83.5	88.6	52.0
Days in Custody (Median)	44.0	7.0	3.0	1.0	1.0
Prior SF Bookings (Median)	2.0	5.0	1.0	0.0	0.0
Total	3,256	4,378	9,644	2,242	7,362

Note: Cases without PSA may not have been eligible for a PSA because they were solely booked for a warrant or probation/parole hold. This sample also includes cases released by the Sheriff on bail using the Superior Court’s felony and misdemeanor bail schedule. Effective February 20, 2020, the Sheriff’s Office no longer uses the bail schedule and all releases to bail are set by a judicial officer. Pretrial categories are as follows: **EM (all)**: Released on EM with or without supervision by SF Pretrial. **Supervised release without EM**: Includes individuals released to supervision by SF Pretrial (ACM, Minimum, or NAS) or Court OR without the condition of pretrial EM. **Bail**: Released on bail prior to disposition. **Other Release**: Cases released prior to their disposition date to Collaborative Courts, via citations, to other jurisdictions, etc. **Detained**: Disposition date occurs on/after the release date (approximately 30% of the detained sample was released at disposition). Exclude cases that have the disposition, booking, and release all on the same day and cases that are still in custody without a disposition.

Source: SFSO Community Programs Database, SFSO Jail Management System, SF Pretrial PSA Database, and SFDA Case Management System.

6. Characteristics of a Pretrial EM Cycle

Many people are released to pretrial EM with multiple open criminal cases: on average, individuals have two open cases while on pretrial EM. In 486 EM cycles (10% of the total sample), people had four or more open cases.

The median duration of pretrial EM supervision is 33 days (average is 72 days). People who are under minimum or ACM may be supervised by SF Pretrial before and/or after the pretrial EM cycle. The cumulative supervision time (days supervised through Pretrial EM and/or SF Pretrial) is, therefore, longer for this group: the median supervision period is 52 days (average is 115 days). Less than half of their pretrial release period includes time on EM (average of 79 days, median of 39).

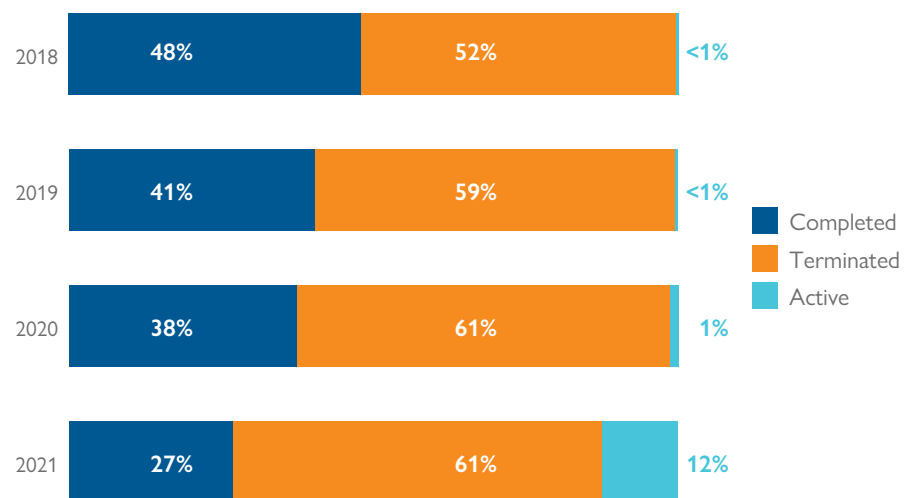
7. Pretrial EM outcomes

Pretrial release programs aim to keep individuals in the community as they await resolution on a criminal matter, instead of in pretrial detention. People released to pretrial EM successfully complete their EM cycle by complying with the conditions of release until their case is resolved or they are relieved of their conditions by the courts. Termination occurs when they cannot successfully comply with the terms of their release. There are multiple reasons a person could be terminated from pretrial EM, including arrest on a new offense, failing to comply with the terms of their release, or missing a court hearing. People can have multiple types or instances of misconduct before they are terminated.

EM Program Completion

Program completion rates are low and have decreased as the program has expanded. Overall since 2018, 38% of completed pretrial EM cycles were successful, and the remaining 62% were terminated for failing to comply with the terms of their release. Program completion rates decreased over time (Figure 5). Nearly half of the 2018 pretrial EM cycles successfully completed supervision, whereas only 31% of the 2021 pretrial EM cycles successfully completed (27% of all cycles).

FIGURE 5: Pretrial electronic monitoring completion, by year of release

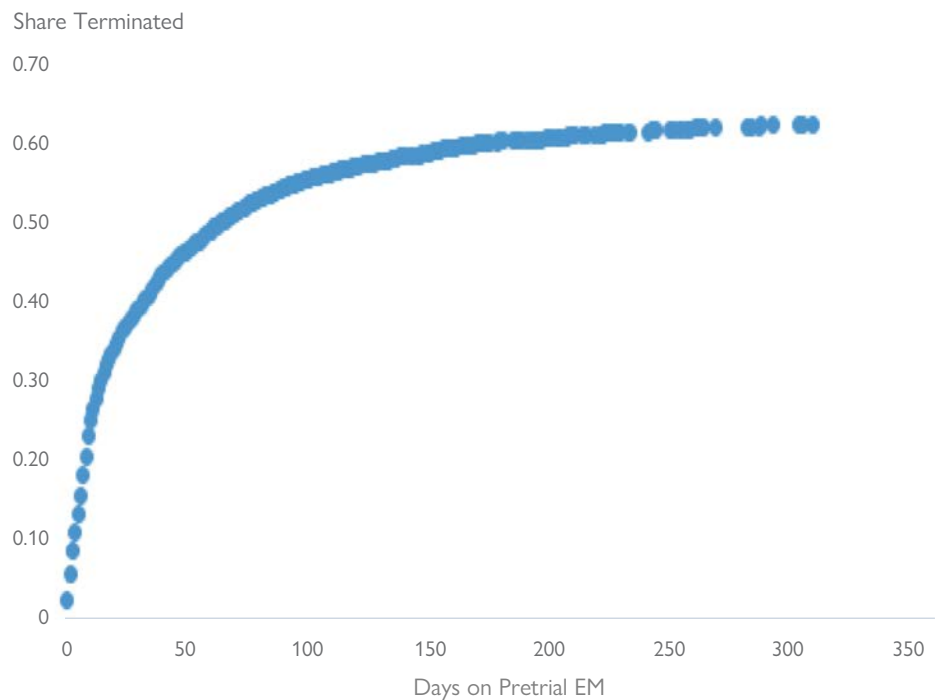


Source: SFSO Community Programs Database

It is possible that the declining completion rates are related to substantial changes in the volume and characteristics of the population on pretrial EM. Between 2018 and 2021, the overall caseload more than tripled, increasing from 566 to 1,659. During that time, the share assessed as high risk for new arrest or failure to appear also increased by 20% (from 57% of 2018 releases to 68% of 2021 releases). Furthermore, the share of people who were unhoused/unstably housed more than doubled (from 20% of 2018 releases to 45% of 2021 releases).

People who are terminated from pretrial EM are terminated quickly: the median time to termination is 15 days. **Figure 6** shows this visually: the risk of termination is highest in the first few weeks (as shown by the steepness of the line) and then starts to taper off after three months on pretrial EM. The median length of pretrial EM for those who complete successfully, however, is approximately two months (66 days).

FIGURE 6: Days to termination, pretrial electronic monitoring cycles 2018–21

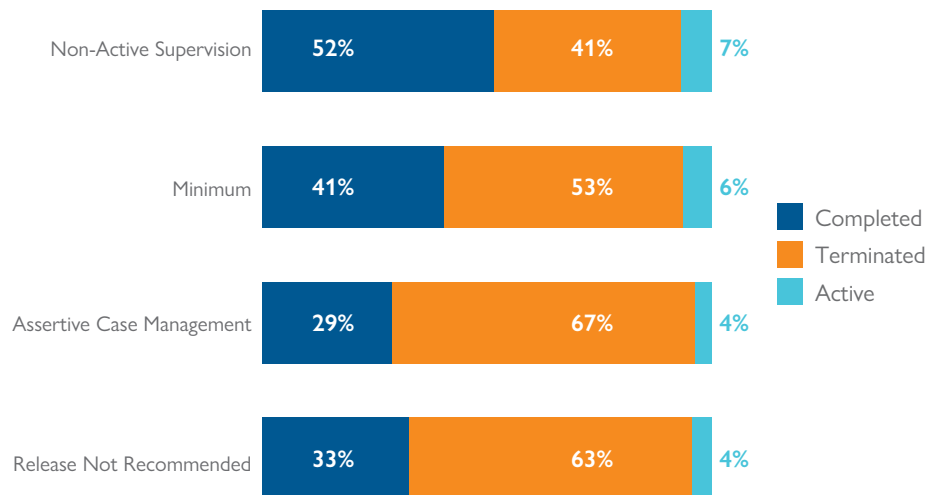


Source: SFSO Community Programs Database

Approximately one-third of people are released to pretrial EM more than once (average number of releases is 1.6). The outcomes for this group differ substantially: only 14% successfully completed their first cycle of pretrial EM, but 40% successfully completed their final cycle (see Appendix D).

Pretrial EM outcomes differ by assessed risk level (Figure 7). People assessed as being at the lowest risk of new arrest or failure to appear have the highest pretrial EM completion rates: 52% of the cycles with the lowest risk score and 41% of cycles with the second lowest risk score successfully completed pretrial EM. Most cases released on pretrial EM were assessed to be at the highest risk level and just slightly fewer than one-third of these cycles resulted in a successful completion.

FIGURE 7: Pretrial EM program completion by assessed risk, 2018–21



Note: Sample is restricted to the 4,425 cycles with PSA risk assessment. Sample sizes are as follows: Non-Active Supervision, n=336; Minimum, n=519; Assertive Case Management, n=652; and Release Not Recommended, n=2,918.

Source: SFSO Community Programs Database and SF Pretrial PSA Database

Program completion rates also differ by the pretrial EM release type. Completion rates were lowest for those released to pretrial EM with ACM: 31%, compared to approximately 46% for those released to pretrial EM only or pretrial EM with minimum supervision. Causal conclusions cannot be drawn from this simple comparison, as there are important differences between cases released to ACM and those without any additional supervision that may be correlated with successful completion.

To explore the factors that may contribute to successful program completion, we use a logistic regression model to measure the correlation between supervision type and program completion, controlling for characteristics of the case and the assessed pretrial risk level (see full results in [Appendix C](#)). The results are consistent with what we observe descriptively: people released to pretrial EM with ACM have lower completion rates compared to people released with minimum or no additional supervision, and the difference is statistically significant. Controls for criminal history, assessed risk, housing status, and year of booking reduce the magnitude of the difference, yet it remains statistically significant. This finding suggests that there are likely important differences between these groups that are not observable in the data but that are correlated with completion rates. This could include the specific context of the current case or behavioral health needs.

After Termination

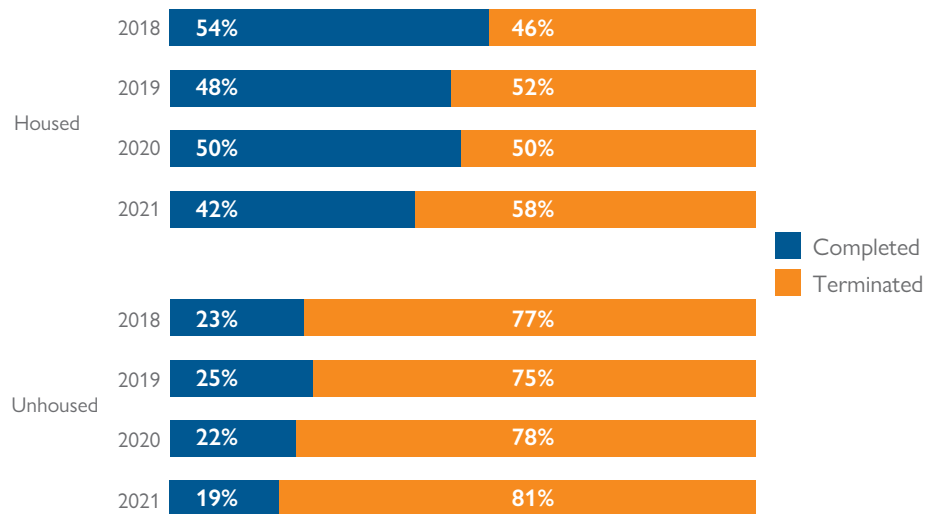
A judge can decide to remand a person to custody or release them to a different type of pretrial supervision if they are terminated from pretrial EM. Approximately three-fourths of the people who fail to comply are booked into custody within two months of termination; 58% are booked into custody within one week of termination. The share that returns to custody has declined over time: over 80% of people terminated from the pretrial EM program were returned to custody within one week in 2018, compared to less than 50% in 2021. The reasons for this decrease are likely related to changes in arrest and detention patterns in response to the COVID-19 pandemic.

The amount of time in custody varies for those who are returned. Across the 2,137 terminations that returned to custody within two months, the median number of days detained was 11. However, within this group, approximately 15% were held in custody for more than two months.

Program Completion and Terminations Among People who are Unhoused/Unstably Housed

Housing status represents the address given to the arresting officer at the time of arrest. People who self-report as transient or as unstably housed, such as living in a shelter, are counted as unhoused/unstably housed. People who are unhoused/unstably housed are less likely to successfully complete EM: overall, 21% of unhoused/unstably housed people completed, compared to 48% of people identified as housed. The program completion rates for people who are unhoused/unstably housed decreased marginally from 2018 to 2021 (23% to 19%) (Figure 8). The share of people on pretrial EM that are unhoused/unstably housed more than doubled during this period from 20% to 45%.

FIGURE 8: Electronic monitoring completion by housing status



Note: Housing status represents the address given to the arresting officer, as recorded in the Sheriff's Jail Management System.

Source: SFSO Community Programs Database and SFSO Jail Management System

Understanding Misconduct and Terminations

San Francisco does not keep electronic records of the reason a person was terminated from pretrial EM. However, if we observe a new arrest in San Francisco during the pretrial EM period, we can reliably infer that it was the cause of the termination. For those without a new arrest, we can provide information about the misconduct records we observe in the data but cannot determine if these events caused the termination.

The following section describes the frequency and types of misconduct for individuals released to pretrial EM in 2021 who were terminated (n=1,004 or 69% of completed cycles). We limit the analysis to 2021 as it is the only period that we have access to Sentinel Offender Services' non-compliance report (NCRs), which detail the reasons for non-compliance, such as failures to comply with release orders such as breaking curfew, entering stay-away zones, or tampering with the ankle monitor. [Table 4](#) provides a summary of the new arrest rate by pretrial EM category and the other misconduct types for those who terminated but did not have a new arrest in San Francisco.⁸

TABLE 4: Types of misconduct among those terminated from pretrial electronic monitoring in 2021

	PRETRIAL EM SUPERVISORY LEVELS			
	No Additional Supervision	Minimum Supervision	Assertive Case Management	All Levels
New Arrest in San Francisco	24.3%	29.0%	21.0%	22.5%
No New Arrest in San Francisco	75.7%	71%	79.0%	77.5%
<i>Failure to Appear</i>	45.5%	44.7%	37.6%	39.7%
NCR	61.5%	68.4%	67.6%	66.6%
Other Misconduct	23.9%	17.1%	19.9%	20.3%

Note: Individuals can (and often do) have more than one type of non-compliance on a given pretrial EM cycle, so the rates of non-compliance for individuals without a new arrest in San Francisco will exceed 100%. Other Misconduct: may include NCRs & FTAs we were unable to match to the EM cycle or arrests outside of San Francisco.

Source: SFSO Community Programs Database, SF Pretrial PSA Database, Sentinel NCRs, and SFDA Case Management System.

⁸ Appendix E provides a summary of new arrest rates in San Francisco for the full analysis period.

New arrest in San Francisco: Approximately 23% of the 2021 pretrial EM cycles were terminated due to a new arrest in San Francisco. [Table 5](#) summarizes the types of arrest for those terminated from pretrial EM. Of those with a new arrest, just under two-thirds (or 14% of all terminations) are arrested on a new felony offense in San Francisco. Felony property offenses are the most common new felony arrest types, with burglary and theft as the most frequent charges. Misdemeanor arrests account for approximately 37% of the new arrests in San Francisco for those released to pretrial EM (or 8% of all terminations). The most common misdemeanor arrest charge is PC 166.4(c), violation of a court order.

TABLE 5: Categories of new arrest for those terminated from pretrial electronic monitoring 2021

	ALL TERMINATIONS	ALL TERMINATIONS DUE TO ARREST IN SAN FRANCISCO
% No New Arrest in San Francisco	77.5	—
% Felony Property	6.2	27.4
% Felony Person	4.1	18.1
% Felony Drug Sales or Possession	2.1	9.3
% Other Felony	1.9	8.4
% Misdemeanor Person	1.6	7.1
% Other Misdemeanor	6.6	29.7
Total #	1,004	226

Note: Due to small sample sizes, disaggregation by supervisory level is not reported.

Source: SFSO Community Programs Database and SFDA Case Management System

Of those arrested in San Francisco, the median number of days between release to pretrial EM and a new arrest is 22 days (average is 39). The time to new arrest was similar across release categories, however those released to pretrial EM only had the shortest median number of days to first new arrest: 17 days, compared to 22 days for those released to pretrial EM with ACM and 28 days for those released to pretrial EM with minimum supervision. The time to new arrest in San Francisco is one week longer than the median time to termination (15 days), suggesting people are terminated more quickly for non-compliance, failure to appear, or arrests outside of San Francisco.

Approximately half of the new arrests in San Francisco result in a filing (12% of terminations). The most common filed charge is a felony burglary offense (29%), followed by felony theft (15%), and misdemeanor failure to comply with court orders (15%).

Non-Compliance Reports for Terminations without an Arrest: Non-compliance with a condition of release is the most common misconduct type for terminations without an arrest in San Francisco (67%). [Table 6](#) summarizes the major non-compliance types and their frequencies for this population. The first column summarizes the share of reports with each non-compliance reason. For example, nearly half the reports (45%) include a violation of a stay-away order. This includes violations of orders to stay away from people and locations, though we are unable to observe the specific type of stay-away order in the data. Reports are often generated for multiple non-compliance reasons: the second column summarizes the frequency with which each type is the sole reason for the report. Lastly, the third column summarizes the average number of categories per report.

Overall, violations of a stay-away order are the most common and they are often the sole reason for a violation report (42% of reports have a stay-away violation only). Violations for tampering or battery-related violations each occur in 13% of reports, but are almost always combined with another violation type. Alcohol-related violations are rare.

TABLE 6: 2021 Non-Compliance Report Categories (Unsuccessful Cases in 2021)

CATEGORIES	% REPORTS	% STANDALONE VIOLATION ON THE REPORT	AVG # OF VIOLATION CATEGORIES
Stay Away	44.6	42.4	1.0
Home Detention	13.3	10.6	1.2
Curfew	15.1	12.3	1.2
Other Geographic Violation	27.5	8.0	1.9
Tamper	13.5	<1.0	2.3
Battery	12.9	<1.0	2.3
Alcohol	1.1	<1.0	1.4

Notes: The first column sums to more than 100% because a report can have multiple types of violations.

Stay- Away: Violation of a stay-away order.

Home Detention: Failure to comply with terms of home detention, such as exiting the home during unapproved hours or failing to return within the period of approved leave.

Curfew: Failure to return to approved location prior to the start of a curfew.

Other Geographic Violation: Violation of other restrictions on movement - these NCRs use other key terms related to movement, such as "GPS" and "Not Travel Further". These include true "other" violation types (such as failing to stay within a 50-mile radius of San Francisco) and likely violations of stay-away, home detention, or curfew orders that were not identified using the keyword logic outlined in Appendix A.

Alcohol: Alcohol consumption detected through skin (transdermal testing).

Tamper: Device is tampered with or removed.

Battery: Device battery died.

Source: SFSO Community Programs Database and Sentinel NCRs.

Failure to Appear for Terminations without an Arrest: FTAs in court are counted if the person missed a court appearance and a bench warrant was issued. Of people who terminated pretrial EM without a new arrest in San Francisco, nearly 40% missed one or more court hearings. The failure to appear rate was stable across pretrial EM categories, though individuals on pretrial EM with ACM had a slightly lower FTA rate.

8. Discussion and Policy Recommendations

San Francisco has enacted substantial reforms to reduce the use of pretrial detention, and the jail population also decreased substantially because of the public health orders issued in response to the COVID-19 pandemic. Pretrial EM has become a far more common type of pretrial release in San Francisco: nearly 3,000 people have been released on pretrial EM since 2018. In 2021 alone, more than 1,000 individuals were released on one or more cycles of pretrial EM. Similar to the larger pretrial population, the majority of people released to pretrial EM are booked on felony offenses (84%), and about two-thirds are assessed to be at high risk for a new arrest or failure to appear. People on pretrial EM have multiple prior contacts with law enforcement in San Francisco and the median number of prior bookings is five. Over one-third of people on pretrial EM are unhoused/unstably housed at the time of release, making it more difficult to keep their ankle monitors charged and to comply with the orders of release.

There are clearly challenges impacting people's ability to adhere to the program requirements: only about 40% complete their pretrial EM cycle successfully. Among people who are unhoused/unstably housed, success rates are even lower, at 21%. Completion, however, may not be the best measure of a program's success. Extensive research has demonstrated the harms of even a short period of pretrial detention and San Francisco has been a national leader in efforts to reduce pretrial incarceration. Jail days avoided and the individual benefits of being in community while awaiting case resolution are critical measures. Additionally, the pretrial population in San Francisco is often composed of people charged with a felony offense and in need of housing, as well as behavioral health, physical health, and other services. Success for this population may be better measured by attachment to services or increases in the duration they are able to comply with the conditions of release. Lastly, all factors that contribute to a termination are likely not valued equally. Although only 31% of cycles in 2021 were successful, 84% of those cycles did not have a new arrest in San Francisco. Determining the success metrics important to San Francisco and developing a plan to collect the data needed to monitor those metrics are critical next steps.

This report provides policymakers with information about people released to pretrial EM and their outcomes to aid review of the program. Our analysis, however, is limited in its ability to answer critical questions about what explains the low completion rates and whether there are alternative supervision programs that could better address the needs and risk factors of people released to pretrial EM. Specifically, we cannot say what would have happened had pretrial EM clients been supervised under a different type of release.

Recommendations for Data Collection and Quality

To facilitate ongoing review of the program and, ideally, to support a more rigorous evaluation we offer the following recommendations:

- **Document and report termination reason:** Digitally record the reason(s) for a person's termination from pretrial EM, whether it is a new arrest in- or out-of-county, NCR, FTA, or some combination of the three. Ideally all types of misconduct reviewed by a judge should be recorded to document any misconduct that occurred prior to the termination. The Sheriff's Office should annually report termination rates and reasons.
- **Collect and report conditions data for the full EM cycle:** Maintain a digital record of the initial release conditions of pretrial EM and changes made by the court over time. The Sentinel database is set up as a case management system and the conditions of release are overwritten as they are modified. There is a wide range of experiences on pretrial EM in San Francisco and the conditions data can help quantify and differentiate the levels of supervision. These differences likely correlate with termination and completion rates and understanding this relationship may help identify the types of cases that are best suited for pretrial EM and those that could be equally or more successful on a less restrictive supervision type. Additionally, the Superior Court or Sheriff's Office should annually report the frequency and duration of the different pretrial EM conditions.
- **Track device alerts:** The Sentinel alerts data shows there are hundreds of instances of potential non-compliance per day. However, it is impossible to estimate how many of these alerts require review from SFSO deputies and how frequently an alert or alarm is sent to a person's ankle monitor. This is an important data point both from the perspective of the SFSO and the people wearing the ankle monitor. For the SFSO, responding to potential non-compliance is time consuming and it is in their interest to minimize false positives. A qualitative study of people on pretrial EM in San Francisco found multiple instances of false alarms, putting people in jeopardy of termination, and contributing to feelings of frustration, anxiety, and stress (Smith & Robson, 2022).
- **Link booking number to community programs data in the Jail Management System:** Creating a subfield in the community programs database that tracks the jail number on the booking that predated the release to pretrial EM will allow the agencies to easily connect a pretrial EM release to a jail booking. This will enable clear analyses about the point of release to pretrial EM and days held in pretrial detention prior to release. This will save time and ensure the correct booking is linked to the release.

- **Track non-compliance reports and reasons electronically:**
The analysis in this report relied on scraping PDFs to extract keywords. To enable more timely and regular updates, we recommend tracking the reason(s) for the non-compliance report using standard categories.

Recommendations on Program, Policy, and Research

This descriptive report highlights several areas for potential program improvement:

- **Investment in and evaluation of services for the unhoused/unstably housed pretrial population:** San Francisco has a housing crisis, and a substantial share of the justice-involved population is unhoused/unstably housed. The outcomes for people who are unhoused/unstably housed and released to pretrial EM are stark: approximately 80% are terminated. Increased investment and cross-agency collaboration is needed to expand the available options of stable housing, particularly for people awaiting case resolution.
- **Provide additional support and services in the first two weeks:** People who terminate tend to do so quickly: the median time to termination is 15 days. Investing in additional wraparound services and supports that can be provided, particularly during those critical first two weeks, could help people comply with the conditions of pretrial EM instead of being terminated prematurely.
- **Reduce or eliminate supervision as the risk of termination declines:** Policymakers should consider setting caps on the maximum pretrial EM length or setting regular points to review and reduce conditions as the risk of termination decreases. California's AB 1950, which limits probation terms, may be instructive.
- **Additional interventions needed to help people appear in court:** Failure to appear rates are high for people released to pretrial EM. While this may not be the most important metric, the high rate of missed court appearances increases the risk of termination and adds additional backlog to the already constrained court system. San Francisco should continue supporting telephonic or videoconference appearance as an alternative to in-person appearance - or waiving appearance altogether - as appropriate. San Francisco should evaluate creative and culturally responsive approaches to help people appear in court, particularly for people who are extremely disadvantaged due to housing insecurity or homelessness, as well as behavioral or physical health challenges.

9. Acknowledgements

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Lastly, we are incredibly thankful for the collaboration with and feedback from Crispin Hollings. His commitment to public service and transparency created space to discuss pretrial EM with policymakers across San Francisco. He will be missed.

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Appendix A: Data Sources and Measures

Table A1 summarizes the four data sources and specific data sets used in this analysis. The table also includes two data sets from Sentinel Offender Services, LLC. that were assessed, but ultimately not used in the analysis.

TABLE A1: Data sources

SOURCE	DATA SETS	DESCRIPTION
San Francisco Sheriff (January 1, 2010– December 31, 2021)	Community Programs	EM start and end dates, associated court number(s), and completion result
	Jail Management System	Bookings and releases into the county jail, release reason for persons not released on EM or to SF Pretrial, and demographics (race, ethnicity, and sex)
SF Pretrial (May 1, 2016– December 31, 2021)	PSA Case Management System	PSA risk score and release recommendation, release decision, and SF Pretrial supervision type (if applicable)
San Francisco District Attorney (January 1, 2010– December 31, 2021)	DA Case Management System	Rebooking charges, filed charges, and case disposition to describe case(s) on pretrial EM and measure new arrests while on pretrial EM. Court hearing event-level data used to measure warrants for failures to appear.
Sentinel Offender Services, LLC	Violation Alerts	All alerts for a potential violation of pretrial EM conditions. Not used in the analysis because there is no way to determine which alerts were acted upon.
	Conditions	Conditions(s) released to, including pretrial, tracking, home detention, curfew, residential treatment, or alcohol monitoring. Not used in the analysis as conditions are overwritten, so we can only observe the condition at the end of the pretrial EM cycle.
	Non-Compliance Reports	Violations that were confirmed by the Sheriff's Office to be counted as non-compliance.

Table A2 defines the key outcome and other measures used in the analysis. The description provides additional details about the keywords and logic used to identify these events in the administrative records.

TABLE A2: Defining key measures

MEASURE	DATA SOURCES	DESCRIPTION
New Arrest	SFDA Case Management System	An arrest is counted if a new misdemeanor or felony arrest occurs during the pretrial EM period. We only count arrests that are presented to the DA for a charging decision; field citations that are not forwarded to the DA for a charging decision are excluded.
Failure to Appear (FTA)	SF Pretrial SFDA Court Comments	An FTA is counted if one of the following occurs during the pretrial EM period: <ul style="list-style-type: none"> • Case is terminated from SF Pretrial's caseload for an FTA; • Court hearing description includes the following terms: FTA, BWI, bench warrant issued, or bench warrant return. Bench warrants that are recalled or stayed within 30-days are not counted as an FTA.
Non-Compliance Report (NCR)	Sentinel Services PDF Non-Compliance Reports, scraped and summarized into a spreadsheet by SFSO	The SFSO used a machine learning extraction technique to extract the text comments on the PDF NCR reports. CPL, in collaboration with the Sheriff's Office, created categories to group the common terms that were extracted from the NCRs.
DMF Recommendation	SF Pretrial	We use the PSA/DMF recommendation for the current booking (or the booking which most recently preceded the booking). PSAs are not completed for all bookings. For example, a person may not be eligible for a PSA because they were booked on a warrant only or because they have a parole or probation hold. They also may be released on bail or via citation before SF Pretrial completes the PSA.

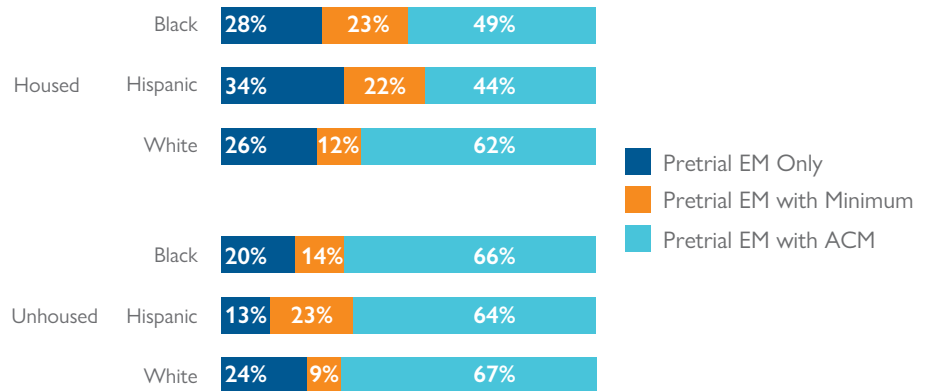
Table A3 summarizes the keywords extracted from the PDF non-compliance reports that comprise the seven NCR categories.

TABLE A3: Non-compliance keyword categorization

CATEGORY	KEYWORDS
Alcohol	Alcohol Confirmed consumption
Battery	Battery
Curfew	Curfew
Home Detention	Home detention
Other geographic*	GPS Not travel further Must remain within the interior Other geographic / movement NCR *Only count above strings if not combined with home detention, stay away, or curfew
Stay Away	Stay away
Tamper	Tampering Tamper

Appendix B: Release Categories by Race/Ethnicity & Housing Status

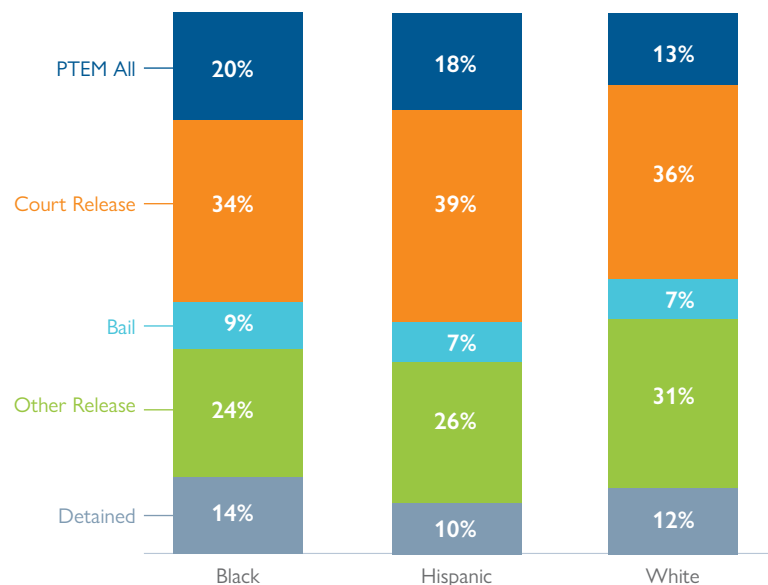
FIGURE B1: Pretrial EM release categories by race/ethnicity and housing status, 2018–21



Note: Housing status represents the address given to the arresting officer, as recorded in the Sheriff's Jail Management System. Race/ethnicity data is collected by the Sheriff's Office and includes a combination of self-report and assigned data. Transgender and non-binary individuals are excluded due to small sample sizes. Due to small sample sizes, race and ethnicity categories of Asian, Pacific Islander, Native American, Multi-ethnic, Other, and unknown/not stated cannot be reported individually and are excluded from this table.

Source: SFSO Community Programs Database and SFSO Jail Management System

FIGURE B2: Pretrial release categories by race/ethnicity, 2018–21



Note: Race/ethnicity data is collected by the Sheriff's Office and includes a combination of self-report and assigned data. Due to small sample sizes, race and ethnicity categories of Asian, Pacific Islander, Native American, Multi-ethnic, Other, and unknown/not stated cannot be reported individually and are excluded from this table.

Source: SFSO Community Programs Database, SFSO Jail Management System, SF Pretrial PSA Database, and SFDA Case Management System.

Appendix C: Logistic Regression Results

Table C1 summarizes the relationship between supervision type and program completion: we find individuals released to pretrial EM with ACM have statistically significantly lower completion rates than those released to pretrial EM with minimum or no supervision. For both columns, the coefficient of interest is ACM as this represents the odds of successfully completing relative to those released to pretrial with no additional or minimum supervision. The first column summarizes the bivariate relationship between EM with ACM and success. The odds of successfully completing for people released to pretrial EM with ACM are approximately half that of those released to pretrial EM with no additional or minimum supervision. The second column provides the multivariate results and while the odds ratio increases, it is still lower and statistically significant. The correlation between people who are unhoused/unstably housed is the strongest across all controls.

TABLE C1: Logistic regression results

<i>Outcome = successfully complete pretrial EM</i>	SIMPLE MODEL	MULTIVARIATE MODEL
ACM	0.516 *** (0.032)	0.662 *** (0.046)
DMF: RNR		0.641 *** (0.065)
DMF: ACM		0.595 *** (0.077)
DMF: Minimum		0.733 * (0.096)
2019 Cycle		0.984 (0.110)
2020 Cycle		1.175 (0.129)
2021 Cycle		0.906 (0.101)
Prior Bookings		0.950 *** (0.004)
People who are unhoused or unstably housed		0.373 *** (0.275)
Constant	0.864 *** (0.039)	2.247 *** (0.259)
N	4,502	4,502

Notes: Sample includes all completed cycles. * p<0.05, **p<0.01, and ***p<0.001.

Source: SFSO Community Programs Database, SFSO Jail Management System, SF Pretrial PSA Database, and SFDA Case Management System.

Appendix D: Additional Outcome Observations

Table D1 summarizes program outcome measures at:

- a) individual-level;
- b) first v. last pretrial EM cycle for all releases; and
- c) first v. last pretrial EM cycle for people with multiple releases to pretrial EM.

At the individual level, approximately 55% of people successfully completed at least one cycle of pretrial EM (compared to a 40% overall success rate).

The second measure shows a higher success rate for a person’s first release to pretrial EM compared to their last. This measure includes the full sample — so the 40% of people with only one release to pretrial EM will have their single cycle counted as both the first and the last.

Finally, we look at the 999 people with multiple releases to pretrial EM. While the overall success rate is lower for this group, the success rate for the first release to pretrial EM is particularly stark: only 14.1% of people successfully complete.

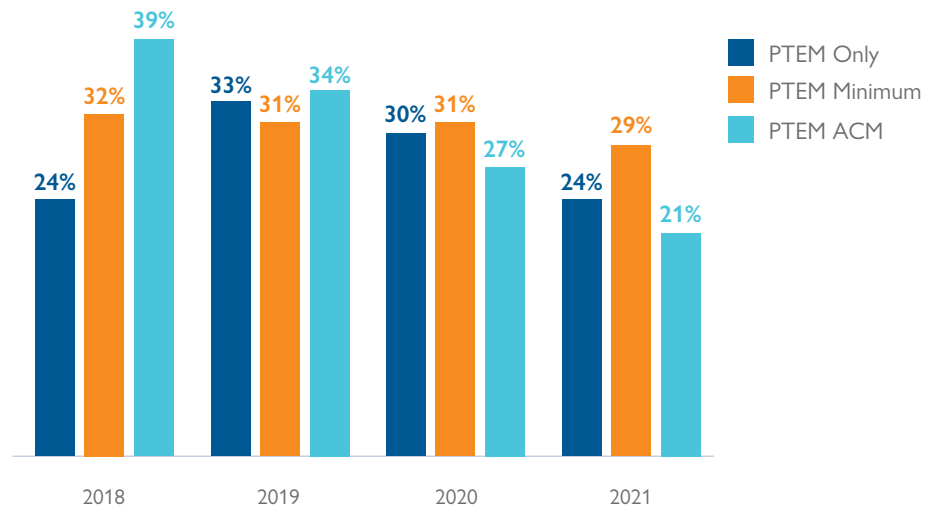
TABLE D1: [Additional program outcome measures](#)

	# / %
Individual-Level Outcomes	
n= 2,808	
# Pretrial EM Cycles (avg.)	1.6
% with any successful cycle	55.7
% with any failure to successfully complete	59.8
First v. Last Cycle Outcome (All)	
n= 2,808	
% with success on first cycle	56.8
% with success on last cycle	47.5
First v. Last Cycle Outcome (People w/ Multiple Pretrial EM Cycles)	
n= 999	
% with success on first cycle	14.1
% with success on last cycle	40.3

Source: SFSO Community Programs Database,

Appendix E: New Arrest Rates in San Francisco by Program/Year

FIGURE E1: New arrest rates, by program/year



Note: New arrest includes any arrest for a misdemeanor or felony in San Francisco.

Source: SFSO Community Programs Database, SF Pretrial PSA Database, and SFDA Case Management System.

Appendix F: Non-Compliance Reports for all Completed Cycles

TABLE F1: 2021 NCR categories (all completed cycles)

NCR CATEGORIES	% NCRS*	% STANDALONE NCR	AVG # OF NCR CATEGORIES
Stay Away	52.6	50.8	1.0
Home Detention	14.2	11.1	1.2
Curfew	14.9	11.3%	1.3
Other Geographic Violation	18.3	6.9	1.8
Alcohol	2.3	1.5	1.3
Tamper	8.6	—	2.3
Battery	7.7	—	2.3

Notes: * % NCRs is greater than 100% as an NCR can have multiple types of violations. **Stay Away:** Violation of a stay away order. **Home Detention:** Failure to comply with terms of home detention, such as exiting the home during unapproved hours or failing to return within the period of approved leave. **Curfew:** Failure to return to approved location prior to the start of a curfew. **Other Geographic Violation:** Violation of other restrictions on movement — these NCRs use other key terms related to movement, such as “GPS” and “Not Travel Further”. These include true “other” violation types (such as failing to stay within a 50-mile radius of San Francisco) and likely violations of stay away, home detention, or curfew orders that were not identified using the keyword logic outlined in Appendix A. **Alcohol:** Alcohol consumption detected through skin (transdermal testing). **Tamper:** Device is tampered with or removed. **Battery:** Device battery died.