



# **The Colorado Pretrial Assessment Tool (CPAT)**

**A Joint Partnership among Ten Colorado Counties, the  
Pretrial Justice Institute, and the JFA Institute**

**Revised Report  
October 19, 2012**

## Revised Report

This report updates content from the original CPAT report dated February 19, 2012. The updated content pertains to four risk categories that have new cut points. The new cut points and risk categories are presented in Figure 2 and Table 4.<sup>1</sup> All other content from the original report remains unchanged.

## Overview

The Colorado Improving Supervised Pretrial Release (CISPR) project is an ongoing 12-county initiative<sup>2</sup> to develop research-based policies and practices for the criminal justice professionals who have a role in pretrial decision-making and case processing. The first phase of the project involved the development of the Colorado Pretrial Assessment Tool (CPAT), an empirically validated pretrial risk assessment instrument for use in any Colorado jurisdiction. This report describes this phase of the project and presents the new tool. The second phase will include the development of research-based protocols that match defendants' pretrial risk profiles to bond conditions and/or supervision techniques that are most likely to reduce that risk.

## Funding

Funding for the development of the Colorado Pretrial Assessment Tool was provided by the following grant sources:

- 2006 Justice Assistance Grant Number 26-DJ-06-33-1, awarded to Jefferson County, Colorado, from the State of Colorado.
- 2007 Edward Byrne Memorial Justice Assistance Grant Number 27-DJ-06-33-2, awarded to Jefferson County, Colorado, from the State of Colorado.
- This project was supported by Grant No. 2010-DB-BX-K034 awarded to the Pretrial Justice Institute by the Bureau of Justice Assistance. The Bureau of Justice Assistance is a component of the Office of Justice Programs, which also includes the Bureau of Justice Statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, the SMART Office, and the Office for Victims of Crime. Points of view or opinions in this document are those of the author and do not represent the official position or policies of the United States Department of Justice.

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<sup>1</sup> Given that judges and pretrial services programs will be basing their bond decisions and supervision practices on the CPAT's categories, the new risk categories were determined to be statistically acceptable and more practical.

<sup>2</sup> The project began with data collection in ten counties (Adams, Arapahoe, Boulder, Denver, Douglas, El Paso, Jefferson, Larimer, Mesa, Weld) and has since expanded to include interest by three other counties (Alamosa, Montezuma, Pueblo) that have pretrial services programs.

## **Acknowledgements**

Many different professionals contributed the CISPR project that produced the tool. Nearly 100 employees from the ten counties played a key role in designing the project; interviewing and supervising defendants; collecting and entering data; cleaning, coding, and analyzing data, naming the tool, and/or writing the report. Most of these staff did these activities in addition to fulfilling their full-time work responsibilities. Indeed, this tool could only have been constructed because pretrial services program staff conducted 2,000 face-to-face interviews of defendants. Special thanks go to Melinda Kraus and Lynne Nieman who combined for over 4,000 hours to collect, enter, clean, and analyze data, and did so with impeccable attention to detail.

Marie VanNostrand, Ph.D., of Luminosity, Inc. helped with the design of the data collection.

James Austin, Ph.D., Avinash Bhati, Ph.D., and Roger Ocker of the JFA Institute performed the statistical analysis to identify the tool's items and scoring and wrote portions of this report.

Michael R. Jones, Ph.D., of the Pretrial Justice Institute (PJI) served as project director and completed the written report.<sup>3</sup> Dr. Jones and other PJI staff will support stakeholders' implementation of the tool.

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<sup>3</sup> The majority of Dr. Jones's time serving as project director occurred while he was employed by Jefferson County.

## Introduction

Colorado Revised Statute enumerates the factors judges shall consider when setting a defendant's bond. That section states:<sup>4</sup>

(1) In determining the amount of bail and the type of bond to be furnished by the defendant, the judge fixing the same shall consider and be governed by the following criteria:

- (a) The amount of bail shall not be oppressive;
- (b) When a person is charged with an offense punishable by fine only, the amount of bail shall not exceed the amount of the maximum penalty;
- (c) The defendant's employment status and history and his financial condition;
- (d) The nature and extent of his family relationships;
- (e) His past and present residences;
- (f) His character and reputation;
- (g) Identity of persons who agree to assist him in attending court at the proper time;
- (h) The nature of the offense presently charged and the apparent probability of conviction and the likely sentence;
- (i) The defendant's prior criminal record, if any, and, if he previously has been released pending trial, whether he appeared as required;
- (j) Any facts indicating the possibility of violations of law if the defendant is released without restrictions;
- (k) Any facts indicating a likelihood that there will be an intimidation or harassment of possible witnesses by the defendant;
- (k.5) The fact that the defendant is accused of unlawfully using or distributing controlled substances on the grounds of any public or private elementary, middle, or secondary school, or within one thousand feet of the perimeter of any such school grounds on any street, alley, parkway, sidewalk, public park, playground, or other area of premises that is accessible to the public, or within any private dwelling that is accessible to the public for the purpose of the sale, distribution, use, or exchange of controlled substances in violation of article 18 of title 18, C.R.S., or in any school vehicle, as defined in section 42-1-102 (88.5), C.R.S., engaged in the transportation of persons who are students;
- (k.7) The fact that the defendant is accused of soliciting, inducing, encouraging, intimidating, employing, or procuring a child to act as his agent to assist in the unlawful distribution, manufacture, dispensing, sale, or possession for the purposes of sale of any controlled substance;
- (l) Any other facts tending to indicate that the defendant has strong ties to the community and is not likely to flee the jurisdiction.

However, the current statute and previous versions have not provided any guidance to judges on how to define and what weight to assign each of these factors when assessing the degree of risk a defendant poses to public safety and non-appearance in court and when setting bond conditions to mitigate that risk.

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<sup>4</sup> Colo. Rev. Stat. § 16-4-105 (1) (a) – (l).

Several Colorado county governments beginning in the 1970s created pretrial services programs to provide judges with information on these factors. Like in most new programs at the time, pretrial staff created a pretrial assessment protocol by borrowing content from Colorado statute, other jurisdictions, and items used during the first pretrial assessment that was done as part of the Manhattan Bail Project in the 1960s. Since the Colorado programs began, each county's program has separately and occasionally amended its assessment protocol to coincide with statutory changes and local stakeholders' preferences. As a result, by early 2012 the twelve counties that have pretrial services programs were using different risk assessment instruments, none of which had ever been empirically validated on the local defendant population. Thus, these instruments have not provided empirically derived guidance to judges on how to define and what weight to assign various factors when determining a defendant's risk. The first phase of the CISPR Project was designed to address these limitations by providing Colorado jurisdictions with an empirically validated pretrial risk assessment instrument.

The CISPR project is similar to several other projects across the country. These projects have occurred around the same time in response to justice system officials' demand for more evidence-based and cost-effective policies and practices, including those for pretrial risk assessment. This demand has been met in part through the development of multi-jurisdiction pretrial risk assessment instruments. The first such instrument was developed for the state of Virginia in 2003<sup>5</sup> and was revalidated in 2009.<sup>6</sup> Other multi-jurisdiction instruments have been created for the Federal Court system,<sup>7</sup> Ohio,<sup>8</sup> and Kentucky,<sup>9</sup> and are currently under development in Florida and Michigan. All of these instruments, including the new Colorado tool, identify which specific factors are statistically related and how strongly they are related to pretrial misconduct for the types of defendants processed through the local courts. These instruments have demonstrated that it is possible to accurately identify the pretrial risks individual defendants pose to public safety and for non-appearance in court.<sup>10</sup>

The remainder of this report describes the method used to collect and analyze the data, the results of the analyses, the empirically-derived tool and how it is scored, and summary and conclusions.

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<sup>5</sup> VanNostrand, M. (2003). *Assessing Risk Among Pretrial Defendants In Virginia: The Virginia Pretrial Risk Assessment Instrument*. Richmond, VA: Virginia Department of Criminal Justice Services.

<sup>6</sup> VanNostrand, M., & Rose, K. J. (2009). *Pretrial Risk Assessment in Virginia*. St. Petersburg, FL: Luminosity, Inc.

<sup>7</sup> VanNostrand, M., & Keebler, G. (2009). *Pretrial Risk Assessment in the Federal Court*. Washington, DC: U.S. Department of Justice.

<sup>8</sup> Latessa, E., Smith, P., Lemke, R., Makarios, M., & Lowenkamp, C. (2009). *Creation and Validation of the Ohio Risk Assessment System: Final Report*. Cincinnati: University of Cincinnati.

<sup>9</sup> Austin, J., Ocker, R., Bhati, A. (2010). *Kentucky Pretrial Risk Assessment Instrument Validation*. Washington, DC: JFA Institute.

<sup>10</sup> Mamalian, C. (2011). *State of the Science of Pretrial Risk Assessment*. Washington, DC: Pretrial Justice Institute.

## Method

### County Profiles

Ten Colorado counties (Adams, Arapahoe, Boulder, Denver, Douglas, El Paso, Jefferson, Larimer, Mesa, and Weld)<sup>11</sup> contributed data to the development of the CPAT. Table 1 shows several characteristics of these counties. The population of these counties ranged from a high of approximately 600,000 (El Paso County, Colorado's most populated county) to a low of approximately 150,000 (Mesa County). Together, these counties collectively comprise 81% of Colorado's population. Seven counties have suburban and rural areas, two are mostly rural, and one is urban.

For the pretrial services programs serving these jurisdictions, seven are under county administration, one is directly under the county commissioners, and two are under the sheriff's office.<sup>12</sup> The programs' 2012 budgets ranged from approximately \$70,000 for El Paso County's impending program to approximately \$1.6 Million for Larimer County's program. All ten programs conduct pretrial risk assessments prior to defendants' appearing before a judicial officer, and they vary somewhat in the types of inmates they assess. In 2011, the number of pretrial assessments ranged from a low of 0 in El Paso County<sup>13</sup> to a high of approximately 7,000 in Denver. All jurisdictions provide pretrial supervision when authorized by the court. In 2011, the number of different cases supervised ranged from a low of 0 in El Paso County to a high of approximately 7,000 in Larimer County.

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<sup>11</sup> Denver is both a city and a county.

<sup>12</sup> El Paso County's pretrial services program was administratively located under county administration during data collection.

<sup>13</sup> El Paso County's program was terminated in 2008 for budgetary reasons and will be reinstated in early 2012. During data collection, the program provided both pretrial assessment and supervision.

**Table 1 (part 1)**

	<b>Adams</b>	<b>Arapahoe</b>	<b>Boulder</b>	<b>Denver</b>	<b>Douglas</b>
<b>Characteristics of the Jurisdiction</b>					
County Population (2010)	441,603	572,003	294,567	600,158	285,465
Geographical Type	Suburban and Rural	Suburban and Rural	Suburban and Rural	Urban	Suburban and Rural
<b>Characteristics of the Pretrial Services Program</b>					
Administrative Location	Sheriff's Office	Board of County Commissioners	County Administration	City/County Administration	County Administration
Program Budget (2012)	\$450,000	\$700,000	\$777,035	\$1,036,591	\$600,000
Timing of Pretrial Risk Assessment (Feb 2012)	Before First Advisement	Before First Advisement	Before First Advisement	Before First Advisement	Before First Advisement
Target Population for Pretrial Risk Assessment (Feb 2012)	All inmates who have new criminal charges or bench warrants and who will be seen for First Advisement	Inmates with felony, misdemeanor DUI/DWAI, & felony probation violation charges who will go to First Advisement	All newly booked defendants who have a new criminal charge	Inmates with felony, domestic violence misdemeanor, or DUI/DWAI with priors	All inmates newly arrested
Number of Assessments Completed (2011)	9,409	3,916	4,187	7,068	2,469
Number of Cases Supervised (2011)	530	1,632	1,897	1,953	1,221

Rural classifications may also include mountainous areas.

Jurisdictions sometimes used different counting rules or definitions when reporting their data, so direct comparisons between jurisdictions may be misleading.

Some data are actual counts and other data are estimates.

El Paso County's program was terminated in 2008 for budgetary reasons and was under county administration, and will be reinstated in early 2012 under the sheriff's office.

Jefferson County is the only jurisdiction that requires all defendants with a new criminal charge to undergo a pretrial assessment and appear before a judge prior to pretrial release. This policy began in April 2011 and was not in place during data collection. The other jurisdictions allow various categories of defendants to be released through authority delegated from the judiciary to the pretrial services staff and/or the jail staff, and often through the use of a monetary bond schedule.

**Table 1 (part 2)**

	<b>El Paso</b>	<b>Jefferson</b>	<b>Larimer</b>	<b>Mesa</b>	<b>Weld</b>
<b>Characteristics of the Jurisdiction</b>					
County Population (2010)	622,263	534,543	299,630	146,723	252,825
Predominant Classifications	Suburban and Rural	Suburban and Rural	Suburban and Rural	Mostly Rural	Mostly Rural
<b>Characteristics of the Pretrial Services Program</b>					
Administrative Location	Sheriff's Office	County Administration	County Administration	County Administration	County Administration
Program Budget (2012)	\$70,000	\$1,043,563	\$1,636,893	\$225,000	\$539,160
Timing of Pretrial Risk Assessment (Feb 2012)	Before First Advisement	Before First Advisement	Before First Advisement	Before First Advisement	Before and After First Advisement
Target Population for Pretrial Risk Assessment (Feb 2012)	All inmates that meet eligibility requirements	All newly booked inmates who have a new criminal charge	Newly booked inmates who have felony, misdemeanor, or traffic charges	All newly booked inmates who have a new criminal charge	All newly booked inmates who have a new criminal charge and who do not have another hold
Number of Assessments Completed (2011)	0	5,012	6,150	2,739	1,825
Number of Cases Supervised (2011)	0	3,027	6,965	696	1,820

Rural classifications may also include mountainous areas.

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### **Sample**

The sample size for data collection was 2,000 defendants who were booked into a county jail. Each county had a targeted number of defendants to help assure representativeness of the data collected. This target was based on a formula equally weighting the annual number of pretrial assessments, annual number of cases supervised, and county population. However, because of the termination of the El Paso County program midway through data collection and insufficient pretrial staffing levels in Boulder and Weld Counties, these three counties collected data on



slightly less than their targeted number. Several other counties compensated for this by collecting data on additional defendants. Table 2 shows the counties' data contributions.

**Table 2**

Sample Size by County

County	Final Sample Size	Percentage of Final Sample
Adams	303	15.2%
Arapahoe	249	12.5%
Boulder	154	7.7%
Denver	261	13.1%
Douglas	126	6.3%
El Paso	133	6.7%
Jefferson	340	17.0%
Larimer	256	12.8%
Mesa	119	6.0%
Weld	59	3.0%
TOTAL	2,000	100%

This table shows that the more populated counties, which also have higher criminal court case volume, contributed more data than did the less populated counties, which have lower case volume.

Several additional data collection methods were used to increase the accuracy and generalizability of the tool. Data were collected over a 16-month time period to minimize potential seasonal affects. Data were collected each day of the week and at all times of the day (daytime, evenings, nights). Defendants were selected for participation based on a pre-set schedule (e.g., every defendant during a shift; every third defendant) to minimize bias in selection (e.g., selecting only defendants who appear cooperative or who have certain demographic or charge characteristics). Experienced professional pretrial services staff conducted the interviews and entered the data into the project's data set to maximize the quality and accuracy of the data and to match the conditions under which the tool was developed as closely as possible to those under which the tool would be administered after it was developed.

A detailed data collection guide was piloted and finalized. This guide included each individual item's definition and source of information. Data collectors participated in an initial group training and later were individually observed and received feedback on the interview portion of their data collection. One person looked-up and entered the pretrial outcome data (i.e., new filing, failure to appear) for all 2,000 defendants to assure consistency in coding. Finally, data collection on defendants' performance while on pretrial release was done after the defendants' cases had closed to allow for maximum accuracy in recording whether defendants had any pretrial misconduct.<sup>14</sup>

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<sup>14</sup> 1,976 (98.8%) of 2,000 defendants' cases had closed within the one year minimum post-assessment data collection time period. Of the 24 defendants whose cases were still open, 23 had failed to appear and not subsequently arrested, and 1 was still in jail.

Data on all defendants were collected from several sources:

- Face-to-face interviews between pretrial services staff and the defendant
- Arresting agencies' charging documents
- Criminal history records from national and state databases
- Jail information systems
- Pretrial services staffs' case tracking systems

Additional data on defendants whom the pretrial services programs supervised, as well as the case manager who provided post-release supervision, were collected.

Data on many different variables were used for this project. These variables came from many different sources, such as items that the jurisdictions were currently using in their pretrial assessments and items from other jurisdictions' validated pretrial risk assessment instruments that existed at the time (e.g., Virginia; New York City; Maricopa County, Arizona). A very broad range of items were used because the resulting validated pretrial assessment tool would be the first of its kind in Colorado, so the participating jurisdictions decided to include as many items in data collection as possible to assure that the most optimum set of predictors would comprise the tool. These items pertain to demographics, residence and employment, mental health and substance use/abuse, criminal history and past criminal justice system involvement, current charges and system involvement, and are listed in Appendix I.

All defendants who participated in the study provided written authorization for release of information, which stated that the information they provided is voluntary, may be verified by a third party, cannot be used against them in any judicial proceeding except in cases of prosecution of perjury, and may be used as part of a research study. Pretrial program staff across jurisdictions reported that very few to no defendants refused the interview and participation in the study to collect data for the tool. This very high rate of defendant participation further reduces potential bias and increases the generalizability of the tool.

### **Bivariate Analysis**

Of the 2,000 defendants, 1,315 (66%) were released from jail on pretrial status and 655 (33%) were held in jail until case closure. Approximately 1% of the cases was purged by the courts because the cases were never entered into the court's statewide database or because the defendants were sentenced to diversion or had a deferred sentence for which the defendant successfully completed the sentence.

Analyses used three pretrial outcomes for each defendant:

- (1) whether the defendant had a new charge<sup>15</sup> filed against him/her;
- (2) whether the defendant failed to appear for any court date; and
- (3) whether the defendant had a new charge filed against him/her *or* the defendant failed to appear for any court date (i.e., an either/or combination of #1 and #2).

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<sup>15</sup> Charges could have been felony, misdemeanor, traffic, municipal, or petty.

All potential predictor variables that were originally scored on an interval scale during data collection were recoded into categorical variables (e.g., Age at First Arrest was recoded from the reported actual age into categories of “19 or Younger,” “20-24,” “25-29,” etc.). In addition, the categories of a few variables were combined to increase their ability to assess the likelihood of pretrial misconduct (e.g., for the variable ‘Number of Jail/Work Release Sentences,’ the categories of ‘One,’ ‘Two,’ ‘Three’ etc. were combined into “One or More”). The purpose of the bivariate analysis was to identify which potential predictors, with which scoring scheme, were statistically significantly related to the outcomes.<sup>16</sup> Only the statistically significant variables were included in the subsequent multivariate analysis. See Tables A1 through A11, which appear in Appendix II.<sup>17</sup>

### **Multivariate Analysis**

Multivariate binary logistic regression was used to estimate the relationship between each of the potential predictors with the pretrial misconduct outcomes to determine each predictor variable’s unique contribution while controlling for the influence of all other predictor variables. Because of the potentially large number of predictors and the relatively small sample size of released defendants, stepwise regression was used.

For inclusion in the statistical model, a potential predictor had to be statistically significantly related to the outcomes.<sup>18</sup> Table 3 shows the list of attributes included in the analysis and their relationship to pretrial misconduct measures. Check marks indicate that the variables are related to pretrial misconduct in the expected direction. Blank cells indicate an absence of a relationship between the variable and pretrial misconduct. The only anomaly was the variable “Any Previous Criminal Justice Related Supervision in the Past 10 Years,” which was negatively associated with pretrial misconduct. That is, a measure of past criminal conduct was associated with reduced risk of pretrial misconduct, which is counter to expectation and the research literature. Therefore, this predictor was removed from the final model.

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<sup>16</sup> In addition to statistical significance at the .05 level, potential predictor variables were also only included if they did not have a skewed distribution.

<sup>17</sup> The italicized/lightly highlighted variables were statistically significantly related to the outcomes and therefore were carried over into the multivariate analysis.

<sup>18</sup> A .30 significance level or better was used because the sample size was too small to yield a sufficient number of predictors using the more customary .05 significance level. This threshold allowed for the inclusion of a few more items in the final model, which met accepted scientific standards for criminal justice research.

**Table 3**

Variables Included in the Multivariate Analysis Assessing Risk of Pretrial Misconduct (FTA, New Filing, or a Combined Either/Or Measure)

Attribute	Pretrial Misconduct		
	FTA	New Filing	Either
Aliases			
Sex			
Living with partner			
Marital status			
Number of children living with you			
Do you have a home or cell phone	✓		✓
Contribute to housing payment	✓	✓	✓
Own or rent	✓		✓
Number of residences in past 2 years		✓	
Age at first arrest if this is not your first arrest	✓	✓	✓
Calculated jail/work-release sentences		✓	✓
Calculated prison sentences	✓	✓	✓
Employed at first arrest			
Currently on supervision	✓		✓
Any previous supervision in past 10 years	⊗	⊗	⊗
Ever arrested for new offense on supervision		✓	
Ever received alcohol/drug treatment			
Ever received mental health treatment			✓
Current or past problem with alcohol	✓		✓
Currently use illegal drugs			
Active warrants	✓		✓
Other pending charges	✓	✓	✓
Previous adult convictions			
Previous adult misdemeanor convictions			
Previous adult felony convictions		✓	
Previous FTAs	✓		
Previous revocations	✓	✓	✓

Because of the extent of overlap between the variables assessing the likelihood of new filings charges or failure to appear outcomes individually, the final model was developed using only the combined outcome measure of “Any Failure.” Additional diagnostics showed that the model assessing the likelihood of “Any Misconduct” is able to assess the likelihood of both of the

individual outcomes as well as any models developed to assess the likelihood of only one of the individual outcomes.<sup>19</sup>

To develop the weights assigned to each category of the final set of predictors, the marginal increase in pretrial misconduct risk attributable to each category was computed. The marginal increase is measured relative to the base (or omitted category). For example, if having a prior jail sentence increased the risk of pretrial misconduct by 4 percentage points relative to not having this history, then this category was assigned a weight of 4. So, a defendant who does not have a prior jail sentence is assigned a weight of “0” and a defendant who does have a prior jail sentence is assigned a weight of “4” for the ‘Prior Jail Sentence’ item. This procedure was done for each category of every predictor included in the final model. Additionally, the weights represent an item’s unique contribution to the final risk score. Thus, a total risk score can be computed by summing the points for each of the items for any given defendant.

## Results

The analyses resulted in a tool that includes the following 12 factors and scoring ranges:<sup>20</sup>

<u>Item</u>	<u>Range</u>
1. Having a Home or Cell Phone	0 to 5 points
2. Owning or Renting One’s Residence	0 to 4 points
3. Contributing to Residential Payments	0 to 9 points
4. Past or Current Problems with Alcohol	0 to 4 points
5. Past or Current Mental Health Treatment	0 to 4 points
6. Age at First Arrest	0 to 15 points
7. Past Jail Sentence	0 to 4 points
8. Past Prison Sentence	0 to 10 points
9. Having Active Warrants	0 to 5 points
10. Having Other Pending Cases	0 to 13 points
11. Currently on Supervision	0 to 5 points
12. History of Revoked Bond or Supervision	0 to 4 points

After each item is scored, a total score ranging from a low of “0” to a high of “82” is obtained. This score provides a way to use a single scale to rank all defendants on their relative risk of pretrial misconduct.

Figure 1 shows the pretrial misconduct rates and cumulative proportions of defendants scoring various points on this scale (rounded to the nearest factor of 10). The left vertical scale measures misconduct rates (shown as scatter plot points) and the right vertical scale measures the

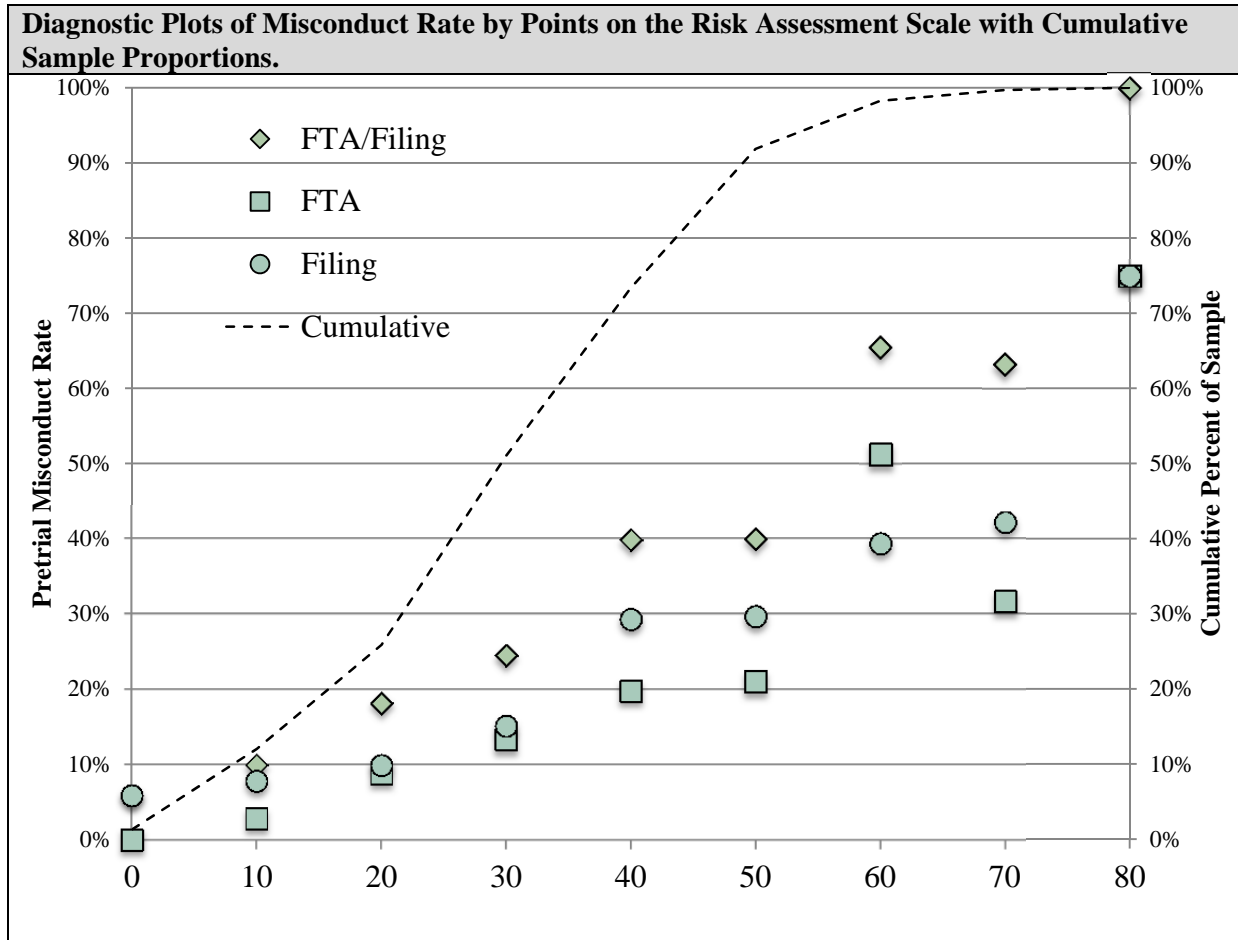
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<sup>19</sup> This finding is consistent with that of other studies done to develop a pretrial risk assessment instrument. That is, the use of separate instrument items to assess the likelihood of the separate pretrial outcomes provides little gain over a single set of items used to assess the likelihood of a combined pretrial misconduct outcome (i.e., both new crime and failure to appear).

<sup>20</sup> Many of these items or variations of them are found on other empirically validated pretrial risk assessment instruments. The weighting scheme, however, may differ.

cumulative proportion of defendants (shown as a dashed line). The plot shows that the misconduct rate increases as a defendant’s score on the tool increases (see scatter plot points). The plot also shows the proportion of defendants who score at or below various points on the scale (e.g., approximately 50% of defendants scored at or below 30 points and over 90% of defendants scored at or below 50 points).

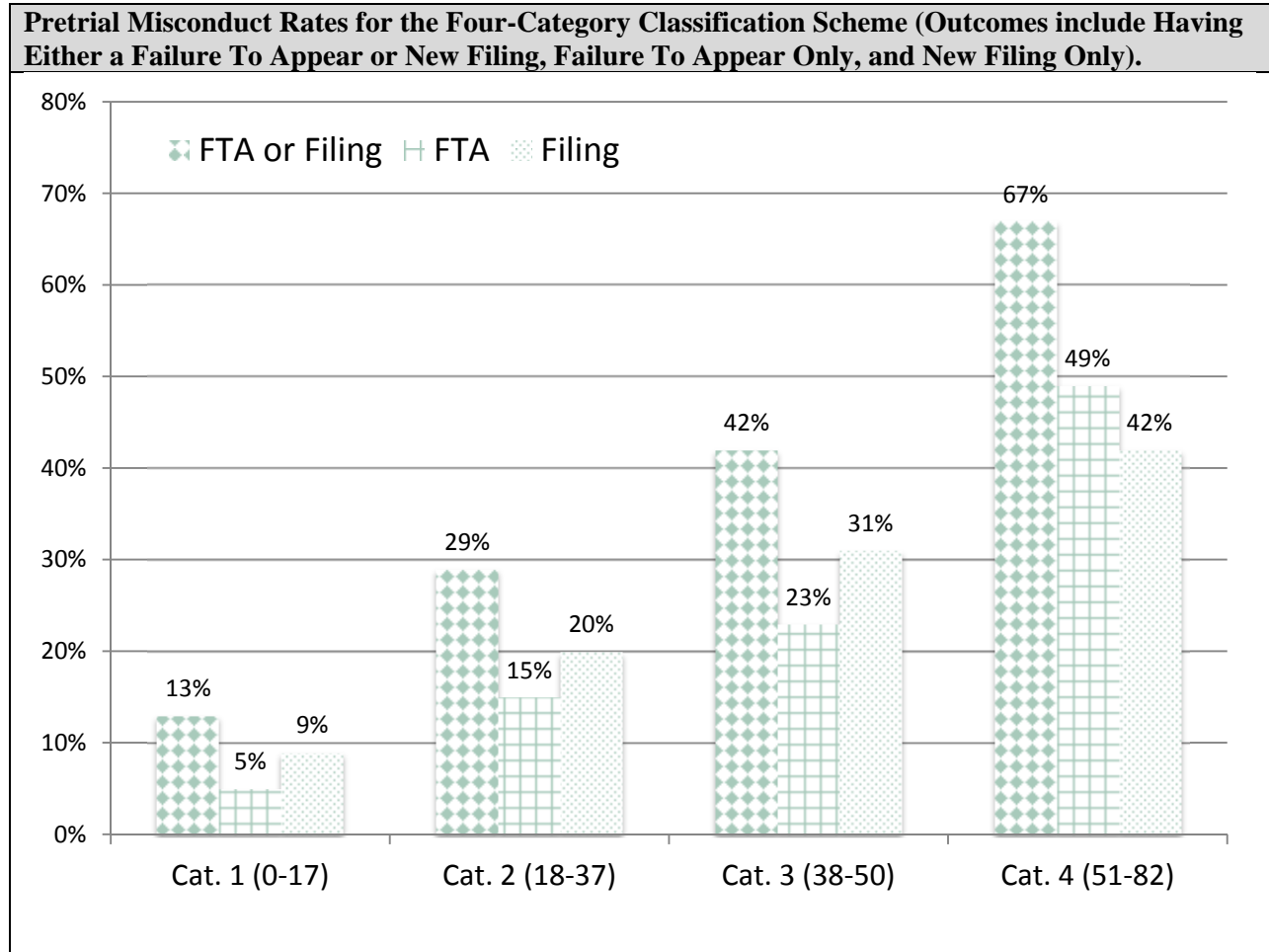
**Figure 1**



Note. FTA/Filing refers to either a FTA or a new filing.

Based on this pattern of data, a four-category classification scheme was developed using the “natural breaks” method. This method consists of inspecting the data from which the CPAT was developed to identify where defendants’ CPAT scores naturally cluster together and where they naturally separate or “break.” As depicted in Figure 2, results showed that the natural breaks method yielded four distinct risk groups, each with increasing rates of pretrial misconduct.

**Figure 2**



**The Colorado Pretrial Assessment Tool (CPAT): Items and Scoring**<sup>21</sup>

**1. Having a Home or Cell Phone**

How to score: Ask the defendant, “Do you have a working home phone or cell phone number?”

Choose from among the following two choices:

- Yes [0 points]
- No, or Unknown [5 points]

Source of Information: Face-to-face interview with the defendant

<sup>21</sup> Items 7 through 12 are scored with a “Yes-No” scheme because the analysis did not show that defendants with multiple instances or events for these six items were more likely to show pretrial misconduct than defendants with only one instance or event.

## **2. Owning or Renting One's Residence**

How to score: Ask the defendant, "For where you were living at the time of your arrest, do you own or rent?"

Choose from among the following two choices:

- Own [0 points]
- Rent, or Unknown [4 points]

Source of Information: Face-to-face interview with the defendant

## **3. Contributing to Residential Payments**

How to score: Ask the defendant, "For where you were living at the time of your arrest, do you financially contribute towards the mortgage or rent?"

Choose from among the following two choices:

- Yes [0 points]
- No, or Unknown [9 points]

Source of Information: Face-to-face interview with the defendant

## **4. Past or Current Problems with Alcohol**

How to score: Ask the defendant, "Do you believe you that you currently have or have ever had a problem with your use of alcohol?"

Choose from among the following two choices:

- No [0 points]
- Yes, or Unknown [4 points]

Source of Information: Face-to-face interview with the defendant

## **5. Past or Current Mental Health Treatment**

How to score: Ask the defendant, "Have you ever been treated for mental health problems?"

Choose from among the following two choices:

- No [0 points]
- Yes, or Unknown [4 points]

Source of Information: Face-to-face interview with the defendant

## **6. Age at First Arrest**

How to score: Ask the defendant, "How old were you the first time you were arrested?" (Can include when the defendant was first processed at a juvenile facility, taken into custody, or fingerprinted. A first arrest overrides the other categories.)

Choose from among the following five choices:

- This is my first arrest [0 points]
- 35 years or older, or Unknown [0 points]
- 25-34 years [10 points]
- 20-24 years [12 points]
- 19 years or younger [15 points]

Source of Information: Face-to-face interview with the defendant



### **7. Past Jail Sentence**

How to score: Ask the defendant, “Have you ever been sentenced to jail or work release?”

Choose from among the following two choices:

- No, or Unknown [0 points]
- Yes [4 points]

Source of Information: Face-to-face interview with the defendant

### **8. Past Prison Sentence**

How to score: Ask the defendant, “Have you ever been sentenced to prison?”

Choose from among the following two choices:

- No, or Unknown [0 points]
- Yes [10 points]

Source of Information: Face-to-face interview with the defendant

### **9. Having Active Warrants**

How to score: Answer the question, “Does the defendant have any active warrants?” (Active Warrants are ones that, at the time of arrest, did not have a court date, and the defendant was not on summons or bond for the charges. Include even if not extraditable. Do not include pending cases or the current charges.)

Choose from among the following two choices:

- No [0 points]
  - Yes, or Unknown [5 points]
- Source of Information: Online databases<sup>22</sup>

### **10. Having Other Pending Cases**

How to score: Answer the question, “Does the defendant have any cases pending against him/her in any criminal or traffic court?”

(Pending Cases require that the defendant was previously arrested or issued a summons for one or more charges and had a future court date pending at the time of arrest.

Defendant may be on summons or bond for the charges. Do not include active warrants or the current charges.)

Choose from among the following two choices:

- No [0 points]
- Yes, or Unknown [13 points]

Source of Information: Online databases

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<sup>22</sup> One or more of three online databases contain the needed information. These databases are: (1) the Colorado State Judicial Branch’s statewide court information system, including that of the City/County of Denver; (2) the Federal Bureau of Investigation’s National Crime Information Center (NCIC) database; and (3) the Colorado Bureau of Investigation’s Colorado Crime Information Center (CCIC) database.

### 11. Currently on Supervision

How to score: Answer the question, “Is the defendant currently on supervision for another court case not related to the current charges?”

(Includes pretrial supervision, diversion, probation, parole, community corrections, or other form of community-based supervision.)

Choose from among the following two choices:

- No [0 points]
- Yes, or Unknown [5 points]

Source of Information: Online databases

### 12. History of Revoked Bond or Supervision

How to score: Answer the question, “Has the defendant ever been revoked from any bond or supervision before this arrest?”

(Includes bond, pretrial supervision, diversion, probation, parole, community corrections, or other form of community-based supervision.)

Choose from among the following two choices:

- No [0 points]
- Yes, or Unknown [4 points]

Source of Information: Online databases

### Risk Level Designation

As seen in Table 4 below, defendants scored on the CPAT can be placed into one of four risk categories. These categories have different public safety rates, court appearance rates, and combined overall success rates.<sup>23</sup>

**Table 4**

Revised Risk Category	Risk Score	Public Safety Rate	Court Appearance Rate	Overall Combined Success Rate
1	0 to 17	91%	95%	87%
2	18 – 37	80%	85%	71%
3	38 – 50	69%	77%	58%
4	51 - 82	58%	51%	33%
<b>(Average)</b>	<b>30</b>	<b>78%</b>	<b>82%</b>	<b>68%</b>

A defendant’s placement into one of these categories can be interpreted as that defendant showing a risk score consistent with defendants whose average public safety rate is ##% and whose average court appearance rate is ##%.<sup>24</sup>

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<sup>23</sup> Consistent with contemporary pretrial performance measurement, the “no new criminal filing rate” (also sometimes known as the “no new arrest rate” in other studies) is expressed here as the public safety rate. The public safety rate for the CPAT study, however, was defined very broadly as a filing for *any* new felony, misdemeanor, traffic, municipal, and petty offense, and was not limited to a more narrowly defined set of crimes that involve a form of physical or emotional harm to one or more victims. For a discussion of this topic, see National Institute of Corrections. (2011). *Measuring What Matters: Outcome and Performance Measures for the Pretrial Services Field*. Washington, DC: Author.

As seen in Table 5 below, the following percentage of defendants was observed in each category:

**Table 5**

<b>Revised Risk Category</b>	<b>Percent of Defendants</b>
1	20%
2	49%
3	23%
4	8%
<b>(Total)</b>	<b>100%</b>

## Summary and Conclusion

Phase 1 of the Colorado Improving Supervised Pretrial Release (CISPR) Project produced the Colorado Pretrial Assessment Tool (CPAT), the first pretrial risk assessment instrument empirically validated for use in Colorado. The CPAT can sort defendants into one of four risk categories that show their chances of success on pretrial release. The definition of a defendant's success is the defendant being compliant with public safety (i.e., no new filings) and appearing in court (i.e., no failures to appear) while on pretrial release. This definition of success is consistent with Colorado statute that states that the purpose of bail is to promote both public safety and court appearance.<sup>25</sup>

The CPAT has 12 items, some of which are scored from information obtained from a face-to-face interview between a professional trained in pretrial interviewing and assessment techniques<sup>26</sup> and the defendant, and from information obtained from online criminal justice databases. The 12 items relate to several statutory criteria that judges must consider when deciding the type and conditions of bond.<sup>27</sup> Thus, the CPAT and the research to develop it

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<sup>24</sup> Because the data collected to measure the public safety rate also include new filings for non-violent and other lower level offenses in the categories of traffic, municipal, and petty, a jurisdiction that chooses to assign less importance to the alleged commission of these types of offenses during pretrial release (as measured by filings) can view the success rate and public safety rates in the four categories as underestimates. That is, if only felony and misdemeanor case filings are included in the public safety rates, the success rates and public safety rates would be higher. In addition, when defendants did have new filings against them during pretrial release, 24% involved felony charges and 11% involved person-crime charges.

<sup>25</sup> See Colo. Rev. Stat. § 16-4-103.

<sup>26</sup> For the validation of the CPAT, all interviews were conducted by pretrial services program staff. If other persons were to conduct the interviews and search online databases to complete the CPAT, those persons would need training and supervision similar to that which pretrial services staff receive to assure fidelity in the administration of the tool. Indeed, 8 of the 12 items are scored from information obtained from a face-to-face interview. These items were more significantly related to outcomes than were similar items scored from information obtained from online databases. This phenomenon may be attributed to the quality of the pretrial program staff's interview techniques because only jurisdictions' highest performing staff member(s), as designated by the program's manager, performed the face-to-face interviews for the CPAT's development.

<sup>27</sup> Not all statutory criteria can be easily measured (e.g., "the apparent probability of conviction and the likely sentence").

provide judicial officers with research-based information on how to most effectively define and weigh many statutory criteria.<sup>28</sup> Overall, the ability of the CPAT to assess the likelihood of pretrial misconduct is known, and therefore it is designed to replace all existing and un-validated pretrial assessments currently in use in Colorado.

As discussed earlier, the ability of the pretrial assessments currently in use in Colorado to assess the likelihood of pretrial misconduct is unknown. Given that many of these assessments, whether developed over time or adapted from jurisdictions outside of Colorado, contain items or scoring schemes that were not as significantly related to pretrial outcomes as those in the CPAT, the continued use of these assessments or certain items to assess the likelihood of pretrial misconduct in Colorado may be misleading. For example, this study failed to show that the nature (e.g., person or property crime) or severity (felony, misdemeanor) of the defendant's current charge was statistically significantly related to pretrial misconduct. Although these findings may seem counterintuitive to some people, they are consistent with the finding that some items appear on some risk assessment instruments but not on others, or that the same item is scored differently (and sometimes in the opposite direction) on different instruments.<sup>29</sup>

As the pretrial risk assessment research conducted in Virginia suggests, and because of the thorough sampling methods<sup>30</sup> used to develop the CPAT, it is likely that the Colorado counties that did not contribute data to the project can validly use the CPAT for defendants who are processed through those counties' local justice systems. Moreover, as more of these jurisdictions use the CPAT, data from this use can be used to revalidate future versions of the tool. This will enable more than ten jurisdictions to contribute data to the tool's revalidation in the future. This revalidation should occur within the next two to three years.

The CPAT can also be used help improve public safety and manage the size of the pretrial populations and the associated costs in the county jails. The CPAT identifies which defendants are likely to be higher risk to public safety and to court appearance and which defendants are likely to be non-violent or lower risk. Thus, for jurisdictions that currently release higher risk defendants without bond conditions designed to mitigate that risk, the CPAT enables those jurisdictions to identify those defendants and set appropriate conditions, up to and including possible continued pretrial detention. For jurisdictions that currently detain non-violent or lower risk defendants for all or some portion of their pretrial period, the CPAT enables those jurisdictions to identify those defendants and set appropriate conditions that reasonably assure public safety and court appearance while those defendants are on pretrial release.

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<sup>28</sup> For example, the statutory criteria "defendant's prior criminal record" can be defined several different ways, such as number of prior arrests, number or type of prior convictions, number or length of different types of sentences, etc. The research to develop the CPAT identified (in addition to "Age at First Arrest") the factors "Past Jail sentence" and "Past Prison Sentence," for example, as being better pretrial risk predictors than other ways of defining criminal history. This finding is consistent with two previous academic studies that found prior incarceration to be a relevant factor in assessing the likelihood of pretrial release. See Demuth, S., & Steffensmeier, D. (2004). The Impact of Gender and Race-Ethnicity on the Pretrial Release Process. *Social Problems* 51(2), 222-242; and Schlesinger, T. (2005). Racial and Ethnic Disparity in Pretrial Criminal Processing. *Justice Quarterly* 22(2), 170-192.

<sup>29</sup> Mamalian, C. (2011). State of the science of pretrial risk assessment. Washington, DC: Pretrial Justice Institute.

<sup>30</sup> Data were intentionally collected on defendants with a wide variety of characteristics (e.g., demographic, criminal) from different types of jurisdictions (i.e., urban, suburban, rural/mountainous) to maximize the generalizability of the CPAT to all Colorado counties.

Criminal justice decision-makers who use the CPAT need to be aware of the valid uses of the tool and cautioned against potential misuses. For example, the CPAT does not support the court's assignment of increasing monetary amounts of bond as defendants' risk scores increase or the assignment of certain bond types (e.g., personal recognizance, cash, surety) or blanket conditions for defendants in a given risk category. The CPAT also does not require that the information provided by defendants be verified by a third party for the tool to be valid, and defendants for whom self-reported information was not verified were not more likely to show pretrial misconduct than defendants for whom some information (e.g., residence, employment) was verified.<sup>31</sup>

Finally, the CPAT at this time does not indicate which bond types or bond conditions (e.g., pretrial supervision, drug testing, electronic monitoring) are most likely to mitigate an individual defendant's pretrial risk. Phase 2 of the CISPR project will help provide this kind of information. Until then, jurisdictions are advised to develop pretrial release and detention policies and programming that conform to U.S. Supreme Court case law<sup>32</sup> and the American Bar Association's national pretrial standards,<sup>33</sup> both of which establish a presumption of release under the least restrictive conditions. Moreover, consistent with the Colorado statutory requirement that bond setting be individualized to each defendant, bond conditions should be customized to each defendant's specific risk factors.<sup>34</sup>

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<sup>31</sup> When a defendant's residence and employment information was verified by a third party, the defendant's and third party's responses matched approximately 90% of the time.

<sup>32</sup> See Chief Justice Rehnquist's statement in *U.S. v. Salerno* that "[i]n our society liberty is the norm, and detention prior to trial or without trial is the carefully limited exception." 481 U.S. at 755 (1987).

<sup>33</sup> See American Bar Association Standards for Criminal Justice, Third Edition, Pretrial Release, (2007), Standards 10-1.1 through 10-1.6.

<sup>34</sup> Individualization of court-ordered bond conditions is important because any two defendants may have the same risk category or risk score but present different risk profiles, indicating they may need different bond conditions to reasonably assure public safety and court appearance. For example, two defendants may both score 30 points on the CPAT, but one may have current alcohol problems and mental health problems while the other does not. Thus, it is likely that a different set of bond conditions for each defendant would help assure their compliance with public safety and appearance in court.

# Appendix I

## List of Variables Collected and Analyzed

Has social security number?  
Aliases  
Age on date of interview  
Birth Location  
Sex  
Race  
Ethnicity  
Living with partner  
Calculated years living with partner  
Marital Status  
Children  
Number of children  
Number of children living with defendant  
Home Phone  
Cell Phone  
Residence Type  
Subsidized Housing  
Contribute to housing payment  
Own or Rent  
Calculated Years at Residence  
Number of Residences in past two years  
Previous residence  
Total previous residences  
Who lived with defendant at arrest?  
Contact with family member in area?  
Age at first arrest  
Gang Member  
Number of times sentenced to jail  
Number of times sentenced to residential community corrections  
Number of times sentenced to prison  
Employed at time of arrest  
Calculated Hours per Week  
Calculated years with employer  
Months employed in last 24 months  
Was a Primary Caregiver?  
Veteran  
Collecting Supplemental Security Income?  
Last grade completed  
Currently a student?  
Enrollment Status  
Currently on supervision for another case? (not including current charge)  
Any previous supervisions that ended in past 10 years?

Arrested for new offense on previous supervision/bond?  
Consumed alcohol?  
Age first drank alcohol  
Number drinks per week  
Currently have alcohol problem?  
Past alcohol problem?  
Currently use illegal drugs?  
Calculated number of drug categories used  
Marijuana ever used?  
Marijuana used this past month  
Marijuana used past 2 years  
Marijuana age at first use  
Methamphetamine ever used?  
Methamphetamine used this past month  
Methamphetamine used past 2 years  
Methamphetamine age at first use  
Cocaine/Crack ever used?  
Cocaine/Crack used this past month  
Cocaine/Crack used past 2 years  
Cocaine/Crack age at first use  
Heroin ever used?  
Heroin used this past month  
Heroin used past 2 years  
Heroin age at first use  
Ecstasy/MDMA ever used?  
Ecstasy/MDMA used this past month  
Ecstasy/MDMA used past 2 years  
Ecstasy/MDMA age at first use  
PCP/Angel Dust ever used?  
PCP/Angel Dust used this past month  
PCP/Angel Dust used past 2 years  
PCP/Angel Dust age at first use  
LSD/Mushrooms ever used?  
LSD/Mushrooms used this past month  
LSD/Mushrooms used past 2 years  
LSD/Mushrooms age at first use  
Prescription drugs ever used?  
Prescription drugs used this past month  
Prescription drugs used past 2 years  
Prescription drugs age at first use  
Other drug ever used?  
Other drug used this past month  
Other drug used past 2 years  
Other drug age at first use  
Other drug description  
Treated for drug/alcohol problems?

Treated for mental health problems?  
Mental health treatment in last 6 months?  
Mental health hospitalized in last 2 years?  
Ever prescribed psychiatric meds?  
Taking psychiatric meds now  
Psychiatric meds  
Family member treated for mental health problems?  
Ever tried to harm/kill self?  
Arrested for new crime  
Date of offense  
Most serious charge  
Level of most serious charge  
Are current charges domestic violence?  
Are current charges sex offenses?  
Do current charges involve meth?  
Number of active warrants  
Number of felony active warrants  
Number of misdemeanor active warrants  
Active warrant has JV case listed  
Other charges pending  
Number of pending cases  
Number of pending felony cases  
Number of misdemeanor active warrants  
Adult misdemeanor convictions (Self Report)  
Number of adult misdemeanor convictions (Self Report)  
Adult felony convictions (Self Report)  
Number of adult felony convictions (Self Report)  
Adult previous convictions (Computer)  
Number of previous adult felony convictions (Computer)  
Number of previous adult misdemeanor convictions (Computer)  
Calculated Number of FTAs (Self Report)  
When were the FTAs? (Self Report)  
Total number of FTAs listed (Computer)  
Pending revocations? (Self Report)  
Number of pending revocations (Self Report)  
Ever revoked from supervision/bond? (Self Report)  
Number of times revoked from supervision/bond (Self Report)  
Calculated number of past revocations (Computer)  
Recommended Bond  
Recommended Bond Other description  
Date of Release from Jail  
Defendant's Supervision Level  
Bond Condition - Pretrial Supervision  
Type of Bond  
Type of Surety  
Amount of Bond



Bond Condition - No Illegal Drug Use  
Bond Condition - No Alcohol Use  
Bond Condition - No Driving  
Bond Condition - No Possession of Weapons  
Bond Condition - Curfew  
Bond Condition - Mental Health Eval / Treatment  
Bond Condition - Substance Abuse Eval / Treatment  
Bond Condition - DV Eval / Treatment  
Bond Condition - No Contact Order of Any Kind  
Bond Condition - Restraining / Protection Order  
Bond Condition - Area Restrictions / Exclusion Zones  
PTS - Date of Initiation of Pretrial Supervision  
PTS - Date of Completion of Pretrial Supervision  
PTS - Phone Check-Ins Frequency  
PTS - Phone Check-Ins Frequency - Description  
PTS - Phone Check-Ins Required after each court date  
PTS - Office Visit Frequency  
PTS - Office Visit Frequency - Description  
PTS - Office Visit Required after each court date  
PTS - Initial Intake Office Visit with Case Manager  
PTS - Case Mgr Contact Phone Conversation Frequency  
PTS - Case Mgr Contact Phone Conversation Frequency - Description  
PTS - Case Mgr Contact In-Person meeting frequency  
PTS - Case Mgr Contact In-Person meeting frequency - Description  
PTS - Case Mgr Contact Required after each court date  
PTS - Frequency of Mail-in Reports  
PTS - Frequency of Mail-in Reports - Description  
PTS - Type of Electric Monitoring (exclude substance abuse monitoring)  
PTS - Type of Electric Monitoring (exclude substance abuse monitoring) - Description  
PTS - Daily Fee paid by defendant for Electronic Monitoring  
PTS - Type of Alcohol and/or Drug Monitoring  
PTS - Type of Alcohol and/or Drug Monitoring - Description  
PTS - Monitored Antabuse?  
PTS - Frequency of On-Demand Alcohol Screening  
PTS - Frequency of On-Demand Alcohol Screening - Description  
PTS - Frequency of On-Demand Drug Screening  
PTS - Frequency of On-Demand Drug Screening - Description  
PTS - Monitoring Psychiatric Medications?  
Did the defendant appear at all court dates? (after first advisement)  
Number of court dates (after first advisement)  
Number of court dates attended (after first advisement)  
Number of court dates missed (after first advisement)  
Number of New Law Violations

## Appendix II

**Table A1**

Failure Rate by Bond and Charge Information

<b>Characteristic</b>	<b>N</b>	<b>%</b>	<b>At Least 1 FTA</b>	<b>At Least 1 New Filing</b>	<b>Either</b>
Base	1,315	100%	17.1%	21.4%	31.5%
<b>Charge Level</b>					
Felony	666	50.6%	18.3%	23.7%	33.5%
Misd.	475	36.1%	13.7%	21.3%	29.9%
Traffic	174	13.2%	21.8%	13.2%	28.2%
<b>Bond Condition for Pretrial Supervision</b>					
No	679	51.6%	20.6%	20.2%	32.7%
Yes	636	48.4%	13.4%	22.8%	30.2%
<b>Type of Bond</b>					
PR	344	26.2%	12.5%	15.7%	24.1%
PR cosign	60	4.6%	8.3%	13.3%	20.0%
Cash/Property/Surety or Cash/Surety	850	64.6%	19.4%	24.0%	34.5%
Cash only	56	4.3%	17.9%	26.8%	42.9%
Other	5	0.4%	40.0%	20.0%	40.0%
<b>Type of Surety</b>					
Not used	519	39.5%	11.2%	16.0%	23.7%
Commercial source	663	50.4%	20.4%	26.2%	37.0%
Non-commercial source	132	10.0%	24.2%	18.9%	34.8%
<b>Pretrial Supervision Recommended</b>					
Yes	602	45.8%	14.0%	22.3%	30.1%
No	697	53.0%	20.2%	21.1%	33.3%

**Table A2**

## Failure Rate by Bond Conditions

Characteristic	N	%	At Least 1 FTA	At Least 1 New Filing	Either
Base	1,315	100%	17.1%	21.4%	31.5%
<b>Bond Condition - No Drug Use</b>					
No	805	61.2%	19.5%	19.3%	31.7%
Yes	509	38.7%	13.4%	25.0%	31.2%
<b>Bond Condition - No Alcohol Use</b>					
No	809	61.5%	18.9%	19.4%	31.5%
Yes	505	38.4%	14.3%	24.8%	31.5%
<b>Bond Condition - No Driving</b>					
No	1,180	89.7%	17.7%	22.1%	32.4%
No driving w/o license/insurance	127	9.7%	12.6%	15.7%	24.4%
No driving at all	7	0.5%	0.0%	14.3%	14.3%
<b>Bond Condition - No Poss. Of Weapons</b>					
No	1,066	81.1%	18.4%	20.5%	31.3%
Yes	248	18.9%	11.7%	25.8%	32.3%
<b>Bond Condition - No Contact Order</b>					
No	703	53.5%	19.2%	22.6%	33.1%
Yes	611	46.5%	14.7%	20.1%	29.6%
<b>Bond Condition - Restrain/Protection Order</b>					
No	713	54.2%	20.2%	21.3%	33.2%
Yes	601	45.7%	13.5%	21.6%	29.5%
<b>Bond Condition - Area Restrictions/Exclusion Zones</b>					
No	1,243	94.5%	17.2%	21.4%	31.6%
Yes	71	5.4%	15.5%	22.5%	29.6%

**Table A3**

## Failure Rate by Demographics

<b>Characteristic</b>	<b>N</b>	<b>%</b>	<b>At Least 1 FTA</b>	<b>At Least 1 New Filing</b>	<b>Either</b>
Base	1,315	100%	17.1%	21.4%	31.5%
<b>Has SSN</b>					
Yes	1,246	94.8%	17.0%	22.2%	31.9%
No	44	3.3%	13.6%	11.4%	20.5%
Don't Know	25	1.9%	28.0%	4.0%	32.0%
<b>Aliases</b>					
Yes	478	36.3%	19.5%	22.4%	34.1%
No	834	63.4%	15.8%	21.0%	30.1%
<b>Sex</b>					
Male	1,010	76.8%	17.9%	22.8%	32.7%
Female	305	23.2%	14.4%	17.0%	27.5%
<b>Race</b>					
White	1,126	85.6%	16.7%	20.5%	30.2%
Black	151	11.5%	19.9%	30.5%	41.7%
Asian	16	1.2%	18.8%	6.3%	18.8%
American Indian	19	1.4%	21.1%	21.1%	42.1%
Pacific Islander	3	0.2%	0.0%	0.0%	0.0%
<b>Ethnicity Hispanic</b>					
Yes	384	29.2%	19.8%	19.8%	32.6%
No	320	24.3%	16.1%	22.0%	31.0%
Refused	10	0.8%	10.0%	40.0%	40.0%
<b>Living w/ Partner</b>					
Yes	516	39.2%	14.4%	20.1%	28.4%
No/Refused	798	60.7%	18.8%	22.3%	33.4%
<b>Marital Status</b>					
Other	1,078	82.0%	18.4%	22.7%	33.3%
Married	237	18.0%	11.4%	15.6%	23.2%

**Table A4**

## Failure Rate by Demographics (Continued)

<b>Characteristic</b>	<b>N</b>	<b>%</b>	<b>At Least 1 FTA</b>	<b>At Least 1 New Filing</b>	<b>Either</b>
Base	1,315	100%	17.1%	21.4%	31.5%
<b>Have Children</b>					
Yes	758	57.6%	17.2%	22.2%	31.5%
No	555	42.2%	17.1%	20.5%	31.5%
Refused	2	0.2%	0.0%	0.0%	0.0%
<b><i>Number of Children Living w/ You</i></b>					
<i>None</i>	899	68.4%	18.6%	21.8%	33.3%
<i>One or more</i>	407	31.0%	14.0%	20.6%	27.8%
<b><i>Do You Have a Home Phone</i></b>					
<i>Yes</i>	581	44.2%	14.8%	21.3%	30.1%
<i>No/Refused</i>	726	55.2%	18.9%	21.6%	32.5%
<b><i>Do You Have a Cell Phone</i></b>					
<i>Yes</i>	930	70.7%	15.1%	21.2%	29.8%
<i>No/Refused</i>	382	29.0%	22.3%	22.3%	35.9%
<b>Is An Emergency Contact Listed</b>					
Yes	1,210	92.0%	17.2%	21.5%	31.7%
Refused	103	7.8%	16.5%	21.4%	29.1%
<b>Type of Residence</b>					
House	1,239	94.2%	16.2%	21.0%	30.5%
Hotel/motel	18	1.4%	27.8%	22.2%	38.9%
Shelter/safe house	6	0.5%	33.3%	33.3%	66.7%
Facility/treatment/jail	5	0.4%	0.0%	0.0%	0.0%
Homeless	41	3.1%	29.3%	31.7%	48.8%
<b>Subsidized Housing</b>					
Yes	71	5.4%	21.1%	25.4%	35.2%
No	1,225	93.2%	16.8%	21.2%	31.2%
Refused	3	0.2%	30.0%	10.0%	40.0%
<b><i>Contribute to Housing Payment</i></b>					
<i>Yes</i>	976	74.2%	15.1%	20.3%	28.7%
<i>No</i>	328	24.9%	22.9%	24.7%	39.3%
<b><i>Own or Rent</i></b>					
<i>Own</i>	226	17.2%	9.7%	17.3%	23.0%
<i>Rent</i>	742	56.4%	17.1%	21.3%	30.7%
<b>Who Lived With You at Arrest</b>					
Same as emergency contact	600	45.6%	16.8%	20.3%	30.7%

Live alone	232	17.6%	18.1%	25.9%	36.2%
New contact listed	455	34.6%	17.6%	21.5%	31.2%

**Table A5**

Failure Rate by Demographics (Continued)

<b>Characteristic</b>	<b>N</b>	<b>%</b>	<b>At Least 1 FTA</b>	<b>At Least 1 New Filing</b>	<b>Either</b>
Base	1,315	100%	17.1%	21.4%	31.5%
<b><i>Number of Residences in Past 2 Yrs</i></b>					
<i>None or one</i>	958	71.9%	16.8%	20.3%	30.5%
<i>More than one</i>	357	26.8%	17.9%	24.6%	34.2%
<b>Contact w/ Family Member in Area</b>					
Yes	1,036	77.7%	16.7%	21.9%	31.8%
No	277	20.8%	18.8%	19.9%	30.7%
<b><i>Is this Your First Arrest</i></b>					
<i>Yes</i>	253	19.0%	8.7%	9.9%	16.6%
<i>No</i>	1,043	78.2%	19.3%	24.4%	35.4%
<b>Are You a Gang Member</b>					
Yes	35	2.6%	28.6%	28.6%	40.0%
No	1,276	95.7%	16.8%	21.2%	31.1%
Unknown	2	0.2%	50.0%	50.0%	100.0%
<b><i>Age at First Arrest</i><sup>35</sup></b>					
<i>Unknown</i>	89	6.7%	10.1%	11.2%	20.2%
<i>19 &amp; younger</i>	709	53.2%	20.0%	26.7%	37.0%
<i>20-24</i>	251	18.8%	15.9%	19.9%	30.3%
<i>25-29</i>	100	7.5%	16.0%	15.0%	25.0%
<i>30-34</i>	64	4.8%	17.2%	14.1%	28.1%
<i>35-39</i>	38	2.9%	13.2%	10.5%	21.1%
<i>40-44</i>	27	2.0%	7.4%	3.7%	11.1%
<i>45-49</i>	18	1.4%	0.0%	5.6%	5.6%
<i>50-59</i>	16	1.2%	0.0%	12.5%	12.5%
<i>60-69</i>	2	0.2%	0.0%	50.0%	50.0%
<i>70 &amp; older</i>	1	0.1%	0.0%	0.0%	0.0%

<sup>35</sup> Age at First Arrest was scored into finer categories (i.e., 13 or Younger, 14-16, 17-19). However, counterintuitive findings emerged with lower ages of first arrest yielding lower risk defendants. Grouping all of these defendants into one category of 19 or Younger provided an intuitive weighting scheme. Moreover, the finer grouping did not yield a scoring scheme that more accurately assessed the likelihood of pretrial misconduct.

**Table A6**

## Failure Rate by Demographics (Continued)

<b>Characteristic</b>	<b>N</b>	<b>%</b>	<b>At Least 1 FTA</b>	<b>At Least 1 New Filing</b>	<b>Either</b>
Base	1,315	100%	17.1%	21.4%	31.5%
<b><i>Calculated Jail/Work Release Sentences</i></b>					
<i>None</i>	823	62.6%	15.2%	16.9%	26.7%
<i>One or more</i>	473	36.0%	20.3%	29.4%	39.7%
<b>Calculated Residential CC Sentences</b>					
None	1,239	94.2%	16.5%	20.7%	30.8%
One	66	5.0%	24.2%	33.3%	42.4%
More than one	7	0.5%	42.9%	42.9%	57.1%
<b><i>Calculated Prison Sentences</i></b>					
<i>None</i>	1,190	90.5%	15.9%	19.9%	29.7%
<i>One or more</i>	122	9.3%	28.7%	36.9%	49.2%
<b><i>Employed at Arrest</i></b>					
<i>Yes</i>	869	66.1%	15.8%	19.6%	28.9%
<i>No</i>	446	33.9%	19.7%	25.1%	36.5%
<b>Contact Supervisor to Verify Employment</b>					
Yes	554	42.1%	15.7%	18.6%	28.9%
No	278	21.1%	17.6%	21.9%	30.6%
N/A	2	0.2%	0.0%	0.0%	0.0%
<b>Are You the Primary Caregiver</b>					
Yes	398	30.3%	15.3%	20.6%	29.4%
No	886	67.4%	17.7%	22.1%	32.6%
<b>Veteran</b>					
Yes	82	6.2%	12.2%	23.2%	28.0%
No	1,221	92.9%	17.4%	21.3%	31.7%
Refused	1	0.1%	0.0%	0.0%	0.0%
<b>Collecting SSI</b>					
Yes	59	4.5%	20.3%	25.4%	37.3%
No	1,250	95.1%	17.0%	21.4%	31.3%
<b>Retired</b>					
Yes	30	2.3%	16.7%	16.7%	26.7%
No	1,277	97.1%	17.0%	21.6%	31.6%

**Table A7**

## Failure Rate by Demographics (Continued)

<b>Characteristic</b>	<b>N</b>	<b>%</b>	<b>At Least 1 FTA</b>	<b>At Least 1 New Filing</b>	<b>Either</b>
Base	1,315	100%	17.1%	21.4%	31.5%
<b>Last Grade Completed</b>					
<8th grade	19	1.4%	21.1%	0.0%	21.1%
8th grade	25	1.9%	16.0%	12.0%	24.0%
9th grade	44	3.3%	18.2%	20.5%	29.5%
10th grade	95	7.2%	22.1%	20.0%	34.7%
11th grade	174	13.2%	20.7%	20.7%	32.8%
High school/GED	562	42.7%	17.6%	25.3%	34.5%
Some college	233	17.7%	13.3%	19.7%	28.3%
Assoc/VOC/Tech degree	69	5.2%	17.4%	18.8%	31.9%
Bachelor degree	65	4.9%	9.2%	13.8%	16.9%
Some graduate	7	0.5%	14.3%	28.6%	42.9%
Graduate	16	1.2%	12.5%	12.5%	18.8%
Refused	3	0.2%	33.3%	0.0%	33.3%
<b>Currently a Student</b>					
Yes	137	10.4%	14.6%	21.9%	29.9%
No	1,167	88.7%	17.1%	21.3%	31.4%
<b>Currently on Supervision</b>					
Yes	406	30.9%	24.1%	29.8%	42.1%
No	909	69.1%	14.0%	17.7%	26.7%
<b>Any Previous Supervisions past 10 Yrs</b>					
Yes	641	48.7%	18.6%	24.5%	35.1%
No	673	51.2%	15.8%	18.6%	28.1%
<b>Ever Arrested for New Offense on Supervision</b>					
Yes	409	31.1%	22.5%	30.3%	42.1%
No	888	67.5%	14.4%	16.9%	26.1%



**Table A8**

## Failure Rate by Drug and Alcohol History

Characteristic	N	%	At Least 1 FTA	At Least 1 New Filing	Either
Base	1,315	100%	17.1%	21.4%	31.5%
<b><i>Ever Received Alcohol/Drug Treatment</i></b>					
<i>Yes/refused</i>	446	33.9%	20.4%	25.1%	37.2%
<i>No</i>	869	66.1%	15.4%	19.6%	28.5%
<b><i>Ever Received Mental Health Treatment</i></b>					
<i>Yes/refused</i>	243	18.5%	21.0%	23.9%	37.0%
<i>No</i>	1,071	81.4%	16.2%	20.9%	30.3%
<b>Ever Prescribed Psychiatric Meds</b>					
Yes	217	16.5%	18.4%	20.7%	32.3%
No	1,085	82.5%	16.7%	21.6%	31.1%
Refused	11	0.8%	36.4%	18.2%	54.5%
<b>Currently on Psychiatric Meds</b>					
Yes	217	16.5%	16.2%	20.5%	30.8%
No	1,085	82.5%	17.0%	21.6%	31.4%
Refused	11	0.8%	36.4%	18.2%	54.5%
<b>Ever Tried to Harm/Kill Yourself</b>					
Yes	92	7.0%	19.6%	19.6%	33.7%
No	1,210	92.0%	16.8%	21.7%	31.2%
Refused	11	0.8%	36.4%	18.2%	54.5%
<b><i>Current Problems w/ Alcohol</i></b>					
<i>Yes/refused</i>	146	11.1%	26.0%	20.5%	39.0%
<i>No</i>	1,149	87.4%	15.8%	21.2%	30.2%
<b><i>Past Alcohol Problems</i></b>					
<i>Yes/refused</i>	300	22.8%	23.7%	22.7%	38.3%
<i>No</i>	991	75.4%	14.8%	20.7%	29.0%
<b><i>Currently Use Illegal Drugs</i></b>					
<i>Yes/refused</i>	781	59.4%	19.3%	22.8%	34.1%
<i>No</i>	533	40.5%	13.9%	19.5%	27.8%

**Table A9**

## Failure Rate by Current Charge Description

<b>Characteristic</b>	<b>N</b>	<b>%</b>	<b>At Least 1 FTA</b>	<b>At Least 1 New Filing</b>	<b>Either</b>
Base	1,315	100%	17.1%	21.4%	31.5%
<b>Arrested for New Crime</b>					
Yes	1,237	94.1%	16.4%	21.7%	31.1%
No	78	5.9%	28.2%	16.7%	37.2%
<b>Level of Most Serious Charge</b>					
Felony	629	47.8%	17.5%	24.0%	32.6%
Misd.	501	38.1%	15.2%	20.6%	30.1%
DUI	77	5.9%	9.1%	14.3%	22.1%
Traffic	21	1.6%	33.3%	14.3%	38.1%
Municipal	1	0.1%	100.0%	0.0%	100.0%
Petty Offense	3	0.2%	33.3%	0.0%	33.3%
<b>Level of Charge &amp; Class</b>					
Felony 2	14	1.1%	21.4%	28.6%	35.7%
Felony 3	128	9.7%	20.3%	23.4%	32.8%
Felony 4	280	21.3%	16.1%	22.9%	31.4%
Felony 5	101	7.7%	14.9%	26.7%	32.7%
Felony 6	104	7.9%	20.2%	25.0%	35.6%
Misd. 1	238	18.1%	13.4%	24.8%	33.6%
Misd. 2	90	6.8%	12.2%	20.0%	25.6%
Misd. 3	119	9.0%	18.5%	16.8%	29.4%
<b><i>Current Charge Includes Domestic Violence</i></b>					
<i>Yes</i>	422	32.1%	10.2%	21.8%	27.7%
<i>No</i>	802	61.0%	19.8%	21.7%	33.0%
<i>Unknown</i>	7	0.5%	0.0%	28.6%	28.6%
<b>Current Charge Includes Sex Offense</b>					
Yes	43	3.3%	11.6%	18.6%	27.9%
No	1,177	89.5%	16.5%	22.1%	31.4%
Unknown	9	0.7%	11.1%	0.0%	11.1%
<b>Current Charge Involves Meth</b>					
Yes	48	3.7%	27.1%	27.1%	41.7%
No	1,150	87.5%	15.8%	21.5%	30.5%
Unknown	30	2.3%	13.3%	26.7%	33.3%

**Table A10**

## Failure Rate by Current Charge Description (Continued)

<b>Characteristic</b>	<b>N</b>	<b>%</b>	<b>At Least 1 FTA</b>	<b>At Least 1 New Filing</b>	<b>Either</b>
Base	1,315	100%	17.1%	21.4%	31.5%
<b><i>Number of Active Warrants</i></b>					
<i>None</i>	1,028	78.2%	13.8%	20.3%	28.9%
<i>One or more</i>	283	21.5%	29.0%	25.8%	41.0%
<b><i>Number of Active Felony Warrants</i></b>					
None	1,234	93.8%	16.5%	21.2%	31.0%
1	70	5.3%	28.6%	27.1%	40.0%
2	4	0.3%	25.0%	50.0%	50.0%
3	1	0.1%	0.0%	0.0%	0.0%
<b><i>Number of Misd. Active Warrants</i></b>					
<i>None</i>	1,161	88.3%	15.0%	21.3%	30.1%
<i>One or more</i>	148	11.3%	33.8%	23.6%	42.6%
<b><i>Other Pending Charges</i></b>					
<i>Yes</i>	311	23.7%	27.3%	31.5%	46.0%
<i>No</i>	1,001	76.1%	14.0%	18.4%	27.1%

**Table A11**

Failure Rate by Criminal History and Verified Information

Characteristic	N	%	At Least 1 FTA	At Least 1 New Filing	Either
Base	1,315	100%	17.1%	21.4%	31.5%
<b><i>Previous Adult Convictions (Computer)</i></b>					
<i>None</i>	486	37.0%	11.9%	15.0%	23.9%
<i>At least one</i>	829	63.0%	20.1%	25.2%	35.9%
<b><i>Previous Adult Misd. Convictions (Computer)</i></b>					
<i>None</i>	561	42.7%	12.8%	16.9%	26.2%
<i>At least one</i>	754	57.3%	20.3%	24.8%	35.4%
<b><i>Previous Adult Felony Convictions (Computer)</i></b>					
<i>None</i>	964	73.3%	14.6%	17.8%	27.3%
<i>At least one</i>	351	26.7%	23.9%	31.3%	43.0%
<b><i>Previous FTAs (Computer)</i></b>					
<i>None</i>	636	48.4%	10.7%	16.4%	23.9%
<i>At least one</i>	677	51.5%	23.2%	26.1%	38.6%
<b><i>Previous Revocations (Computer)</i></b>					
<i>None</i>	952	72.4%	14.2%	18.0%	27.1%
<i>At least one</i>	362	27.5%	24.9%	30.7%	43.1%
<b>Verify Current Address</b>					
TRUE	550	41.8%	14.9%	19.5%	28.2%
FALSE	40	3.0%	20.0%	35.0%	45.0%
Not Verified	709	53.9%	18.7%	22.7%	33.7%
<b>Verify Prior Residences</b>					
TRUE	309	23.5%	12.6%	23.0%	30.1%
FALSE	24	1.8%	37.5%	33.3%	50.0%
Not Verified	905	68.8%	18.0%	20.7%	31.5%
N/A	60	4.6%	20.0%	23.3%	35.0%
<b>Verify Employment</b>					
TRUE	417	31.7%	16.1%	19.9%	29.0%
FALSE	62	4.7%	25.8%	33.9%	48.4%
Not Verified	782	59.5%	17.0%	21.9%	32.1%
N/A	34	2.6%	20.6%	14.7%	26.5%
<b>Verify Caregiver Status</b>					
TRUE	275	20.9%	17.1%	21.8%	32.0%
FALSE	68	5.2%	17.6%	32.4%	39.7%
Not Verified	876	66.6%	16.9%	21.0%	31.1%
N/A	82	6.2%	19.5%	18.3%	30.5%