



**DEVELOPMENT OF A VALIDATED PRETRIAL RISK ASSESSMENT TOOL
FOR LEE COUNTY, FLORIDA**

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In the spring of 2010, the Lee County Pretrial Services Department requested assistance from the Pretrial Justice Institute (PJI) to develop and validate a pretrial risk assessment tool using variables that objectively assess defendants' potential for failing to appear in court (FTA) and for danger to the community. This report presents the results of that analysis

Over 40 different attributes of cases/defendants were collected for each case by the Lee County Pretrial Services Department. Thirty-three of these will be examined in the course of the report. The report details the selection process by which we reduce the pool of potential predictive factors of pretrial misconduct down to the eight to 12 factors that current research suggests are usually sufficient to construct the most effective risk assessment instruments (VanNostrand and Rose, 2009; VanNostrand and Keebler, 2009).

Sample

The Lee County Pretrial Services Department provided PJI with a complete list of all defendants arrested between January 1, 2009 and December 31, 2009. The list contained 39,886 records pertaining to 27,142 individual defendants. PJI then performed a randomized selection of 10 percent of the 27,142 defendants and further selected only those defendants who had been released during the pretrial period. This resulted in a sample of 1,944 defendants. Due to missing data, approximately 200 of these defendants could not be included, resulting in a final sample data base of 1,741 released defendants.

By utilizing a sample that spans an entire calendar year, Lee County Pretrial Services hoped to capture annual trends as they related to defendant population and local criminal activity. This sample included all released defendants, not just those placed on Pretrial Supervision, to provide for a realistic overview of Lee County arrests, as well as an opportunity to evaluate case progression for those defendants who according to the developed Risk Instrument would have qualified for supervision. Over 96% of the sampled cases reached final adjudication at the time that Pretrial Services submitted the final data base to PJI. This is more than adequate to ensure that we will not have findings tainted by censoring effects where some defendants have incomplete exposure to the treatment (i.e., the release).

The data collected on each sampled defendant consists of case information (charge level, charge description), demographic information (length of time in circuit, marital status, employment status), release information (bonded prior to first appearance, released on ROR, pretrial supervision, cash bond or surety bond), prior criminal history (number of arrests as compared to convictions), and case disposition information (date of disposition, re-arrests while case is pending). Upon receipt, PJI converted the MS Excel file to a Statistical Package for the Social Sciences (SPSS) datafile and a STATA datafile for analyses.

Table 1 shows the demographic characteristics of the sample. Nearly three-quarters of the defendants are over the age of 25. Nearly three-quarters are whites (the county population is 89% white according to the 2008 US Census Bureau estimate). Almost two-thirds are unmarried. The majority are employed at arrest, with the most common forms of employment being food services, self-employment, retail, and construction. Most of those employed had relatively steady employment of over 6 months. Most of those unemployed are unemployed for 6 months or less. Just under 13% of defendants are from out of Lee County. Just over 10% are transients. Almost

two out of every three defendants have resided in the same location for more than 5 years. Defendants tend not to own their homes, with 33% of defendants renting their home. Most defendants (62%) lived with a family member.

Table 1
Socio-Demographic Characteristics of Risk Assessment Validation Study Sample

	N	%
Age		
20 or Younger	248	14.2
21 to 24	311	17.9
25 to 35	621	35.7
More than 35	559	32.1
Not Available	2	0.1
Mean Age	1,738	32.25
Race/Ethnicity		
African-American	271	15.6
Asian	3	0.2
Latino	212	12.2
Native American	2	0.1
White	1,242	71.3
Not Available	11	0.6
Sex		
Female	424	24.4
Male	1,316	75.6
Not Available	1	0.1
Marital Status		
Married	326	18.7
Divorced	151	8.7
Separated	43	2.5
Widowed	18	1.0
Single	1,118	64.2
Not Available	85	0.5
NAICS Style Employment Category		
Agriculture	8	0.5
Auto Repair	22	1.3
Construction	97	5.6
Food Services	121	7.0
Health Care	20	1.1
Landscaping, Home Cleaning, & Car Cleaning	40	2.3
Manufacturing	27	1.6
Nonprofit	10	0.6
Public Administration	13	0.7
Retail	110	6.3
Self Employed	117	6.7

Service	49	2.8
Tourism, Casino, & Golf Club	45	2.6
Transportation	8	0.5
White Collar	25	1.4
Other Employment	101	5.8
Disabled	78	4.5
Student	33	1.9
Unemployed (at time of Arrest)	735	42.2
Not Available	62	3.6
Employment		
6 Months at Same Job	643	36.9
Less than 6 Months	234	13.4
Unemployed (at time of arrest)	735	42.2
Not Available	129	7.4
Unemployment Length		
6 Months or Less	314	18.0
Over 6 Months to 1 Year	188	10.8
Over 1 Year to 2 Years	89	5.1
More than 2 Years	86	4.9
Employed /Not Available	1,064	61.1
Residential Stability		
20 Years or More	77	4.4
10 Years to Less than 20 Years	159	9.1
5 Years to Less than 10 Years	222	12.8
3 Years to Less than 5 Years	184	10.6
1 Year to Less than 3 Years	407	23.4
6 Months to Less than 1 Year	178	10.2
Less than 6 Months	429	24.6
Not Available	85	4.9
Time in Geographical Area		
20 Years or More	476	27.3
10 Years to Less than 20 Years	340	19.5
5 Years to Less than 10 Years	290	16.7
3 Years to Less than 5 Years	193	11.1
1 Year to Less than 3 Years	202	11.6
6 Months to Less than 1 Year	60	3.4
Less than 6 Months	102	5.9
Not a County Resident	158	9.1
Not Available	98	5.6
Residence Location		
Lee County	1,517	87.1

Florida, Other than Lee County	131	7.5
Another State	27	1.6
Not Available	66	3.8
Type of Residence/Property Ownership		
Own Home	133	7.6
Rent Home	569	32.7
Homeless	9	0.5
Transient	2	0.1
Other Residence Type	342	19.6
Not Available	685	39.4
Living Arrangements		
Lives with Family (any relations)	1,029	59.1
Lives with Spouse	202	11.6
Lives with Child	184	10.6
Lives with Parents	374	21.5
Lives with Sibling	84	4.8
Lives with Grandparent(s)	33	1.9
Lives with Friends	216	12.4
Lives with Boyfriend/Girlfriend	207	11.9
Lives with Roommate	66	3.8
Not Available	74	4.3

Table 2 details the offense characteristics that brought the defendant before the court. Just over half (52%) had a public order offense (e.g., weapons, driving-related) as the most serious charge, compared to 19% with property offenses, 17% with drug offenses, and 12% with violent offenses. One-third had a felony as the most serious charge. Just over half had one or two charges, and just over a quarter had between three and five charges. About 7% had 10 or more charges. Approximately one out of every five defendants had a current arrest where drugs were involved, with most of these involving drug possession or a non-drug sale charge. Only 2% of defendants had a current arrest where weapons were involved. Less than two out of every 100 defendants had a current charge that was a warrant.

**Table 2
Current Offense Characteristics**

	N	%
Most Serious Charge - Offense Type		
<i>Violent</i>	201	11.5
Murder	0	0.0
Rape	4	0.2
Robbery	6	0.3
Assault	168	9.6
Other Violent	23	1.3
<i>Property</i>	332	19.1
Burglary	104	6.0
Larceny	184	10.6
Motor Vehicle Theft	6	0.3
Forgery	12	0.7
Fraud	13	0.7
Other Property	13	0.7
<i>Drugs</i>	299	17.2
Drug Sales	85	4.9
Other Drug	214	12.3
<i>Public-Order</i>	909	52.2
Weapons	16	0.9
Driving-Related	721	41.4
Other Public-Order	172	9.9
Most Serious Charge - Felony/Misdemeanor		
Felony	579	33.3
Misdemeanor	1,103	63.4
Not Applicable/Not Available	59	3.4
Most Serious Charge – Degree		
First	662	38.0
Second	581	33.4
Third	408	23.4
No Degree Assigned	90	5.2
Number of Charge Counts		
1-2	929	53.4
3-5	473	27.2
6-9	211	12.1
10-14	85	4.9
15 or More	43	2.4
Number of Felony Charge Counts		
0	1,126	64.7
1	362	20.8
2	130	7.5

3	70	4.0
4 or More	26	1.6
Not Applicable/Not Available	27	1.6
Drugs Among First 10 Charges		
Yes	341	19.6
No	1,440	80.4
Drug Sale		
Yes	94	5.4
No	1,647	94.6
Other Drug		
Yes	317	18.2
No	1,424	81.8
Weapon Involved		
Yes	41	2.4
No	1,700	97.6
Current Charge is a Warrant		
Yes	27	1.6
No	1,714	98.4

Chart 1 shows the extent to which the sample resembles the arrests made in Lee County during 2009. Even though not all defendants who are arrested are released during the pretrial period, if the sample resembles known characteristics of all Lee County arrests during 2009, then we can deem the sample representative of Lee County arrests and thus suitable for use in designing and testing pretrial risk assessment instruments. The chart shows that the sampled defendants strongly resemble the offense profile of arrests that occurred in Lee County according to the Florida Statistical Analysis Center's 2009 Crime in Florida report. This is especially true of violent and property categories, with the sample having a higher percentage of drug defendants than the arrests have of drug arrests (17.2% versus 11.3%) and a lower percentage of public-order defendants than the arrests have of public-order arrests (52.2% versus 61.1%). Overall, the table strongly endorses the representativeness of the sample's 1,741 defendants of the approximately 30,000 (29,724 in 2009) arrests in Lee County during a year.

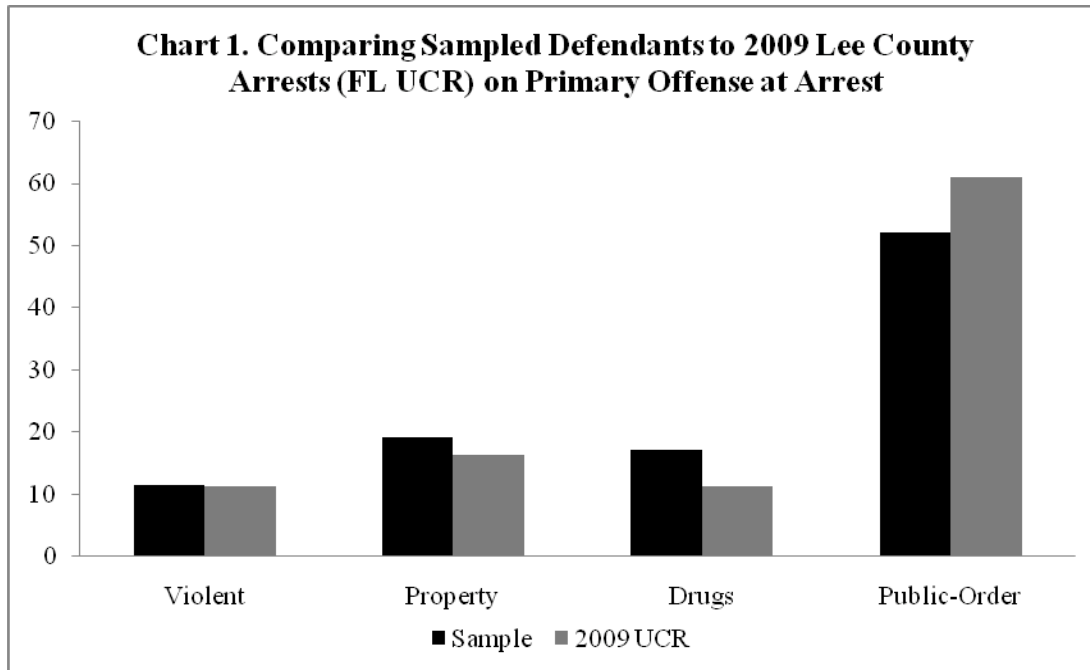


Table 3 shows the prior criminal history of the sample. One-third has no prior misdemeanor arrests and just over half no prior felony arrests. Looking at convictions, two-thirds have no prior felonies and about four out of 10 no prior misdemeanors. Less than 8% have four or more felony convictions and about 12% four or more misdemeanors. Nine out of 10 have no prior violent felony convictions. Roughly one out of every five has a prior failure to appear (FTA). None are in the high-risk sex offender category and less than 1% is in the category of violent felony offenders of special concern due to their prior criminal history.

**Table 3
Prior Criminal History**

	N	%
Prior Misdemeanor Arrests		
None	587	33.7
1-3 Misdemeanors	563	32.3
4-10 Misdemeanors	434	24.9
Over 10 Misdemeanors	157	9.0
Prior Felony Arrests		
None	957	55.0
1-3 Felonies	398	22.9
4-10 Felonies	272	15.6
Over 10 Felonies	113	6.5
Not Applicable/Not Available	1	0.1
Prior Misdemeanor Convictions		
None	746	42.8
1-3 Misdemeanors	539	31.0

4-10 Misdemeanors	201	11.5
Over 10 Misdemeanors	14	.8
Not Applicable/Not Available	241	13.8
Prior Felony Convictions		
None	1,144	65.7
1-3 Felonies	348	20.0
4-10 Felonies	115	6.6
Over 10 Felonies	17	1.0
Not Applicable/Not Available	117	6.7
Prior Violent Felony Convictions		
None	1,547	88.9
1-3 Felonies	132	7.6
4-10 Felonies	10	0.6
Over 10 Felonies	1	0.1
Not Applicable/Not Available	51	2.9
Prior FTA		
Yes	350	20.1
No	1,391	79.9
Prior Arrest Flight Escape Attempted		
Yes	80	4.6
No	1,661	95.4
High Risk Sex Offender		
Yes	0	0.0
No	1,741	100.0
Violent Felony Offender of Special Concern		
Yes	2	0.1
No	1,739	99.9

Table 4 depicts the current involvement of sampled defendants with the criminal justice system. Most have only limited involvement with the criminal justice system. Fewer than 15% have a pending case when arrested for the instant charge.

Table 4
Current Involvement with the Criminal Justice System

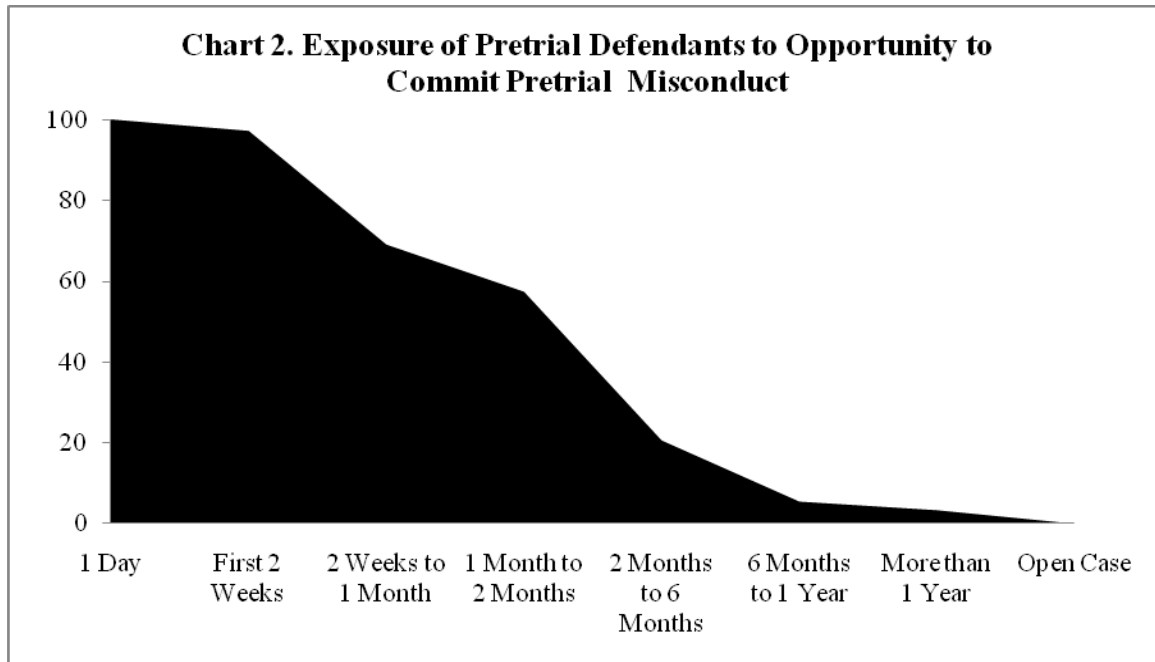
	N	%
On Parole at Arrest		
Yes	14	0.8
No	1,727	99.2
On Probation at Arrest		
Yes	170	9.8
No	1,571	90.2
Pending Case at Arrest		
Yes	252	14.5
No	1,489	88.5

Table 5 describes the suspected prevalence of substance abuse and mental health issues among the sample. About one of every five were recommended for a substance abuse evaluation. Only 5% were recommended for a mental health evaluation.

Table 5
Substance Abuse and Mental Health Issues

	N	%
Recommended for Substance Abuse Evaluation		
Yes	387	22.2
No	1,353	77.8
Recommended for Mental Health Evaluation		
Yes	94	5.4
No	1,647	94.6

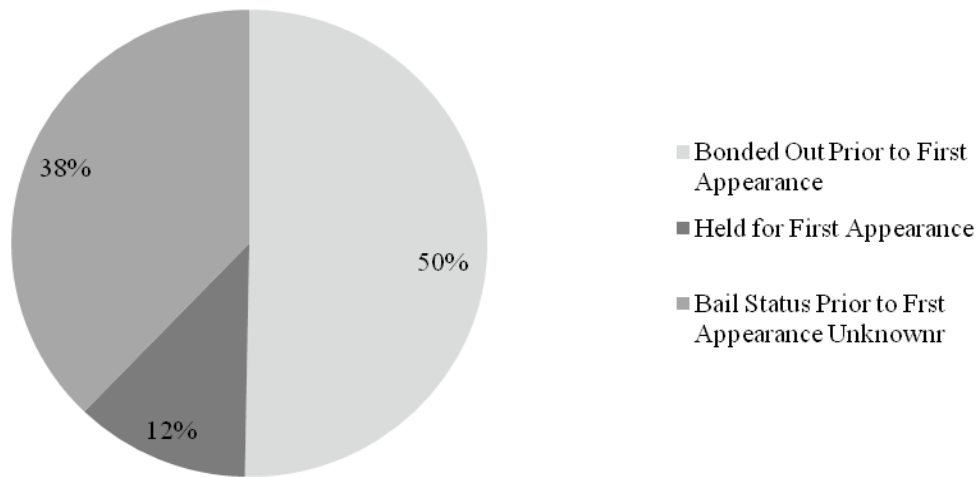
Chart 2 shows the length of time that defendants in the sample are exposed to the opportunity to engage in pretrial misconduct – in other words, the time that they are on pretrial release pending adjudication of their cases. As the chart shows, over 50% of pretrial defendants have more than 2 months in which they can commit pretrial misconduct.



In Lee County, defendants have the opportunity to bond out prior to their first appearance in court. However, some defendants are held between arrest and first appearance, unable to immediately post bond or due to designated criteria preventing their release prior to first appearance court (these are high risk sex offenders, violent felony offenders of special concern, and other reasons specified in Twentieth Judicial Circuit administrative orders, such as Administrative Order No. 323).

Chart 3 shows the fraction of defendants bonded out prior to first appearance or held for first appearance. At least half of all defendants bond out prior to first appearance, perhaps substantially more (as 38% of defendants have an unknown bail status prior to first appearance). Only 12% are known to be held for initial appearance. It is this group, those held for initial appearance, that have the opportunity to obtain release on recognizance or to pretrial supervision (the two available forms of non-financial release). It is also this group that would be subject to the pretrial risk assessment tool. However, once a pretrial risk assessment tool is designed, it is recommended that the use of financial release without risk assessment screening be curtailed so that all defendants can be screened for risk without regard to the defendant's financial resources.

Chart 3. Pretrial Release Status Prior to First Appearance



By the time that first appearance hearings have been concluded, all defendants are placed on one of four forms of pretrial release if they had not already bond out prior to first appearance: cash bond, surety bond, pretrial supervision, and release on recognizance. Chart 4 shows the distribution release types the defendants were granted, whether before or at first appearance. Three-quarters are released on surety bond, with an additional 13% of defendants being released on cash bond. Only 12% of defendants are released through a form of non-financial release.

Chart 4. Type of Pretrial Release

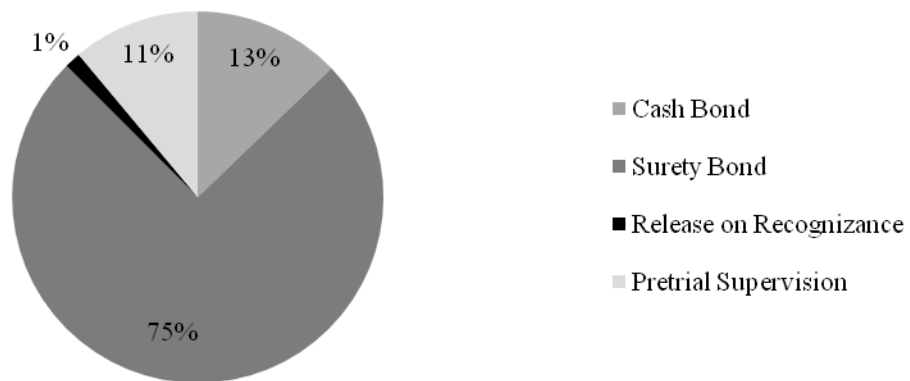


Table 6 indicates that overall, there were low levels of FTA (7.0%), rearrest (19.8%) or a composite failure for either type of failure (23.1%). Most of the rearrests were for public-order

offenses such as the instant FTA or parole violations. More than half of the rearrests were for non-felony offenses.

Table 6
Conduct on Pretrial Release

	N	%
Any Pretrial Misconduct		
Yes	403	23.1
No	1,338	76.9
Defendant Failed to Appear		
Yes	122	7.0
No	1,619	89.3
FTA Warrant Issued		
Yes	86	4.9
No	1,655	95.1
Defendant was Rearrested		
Yes	345	19.8
No	1,396	80.2
Most Serious Rearrest Offense Charge (% of the 345 rearrests)		
Violent	27	7.8
Property	46	13.3
Drugs	49	14.2
Public-Order	222	64.3
Unknown	1	0.3
Most Serious Rearrest Offense Charge - Felony/Misdemeanor (% of the 345 rearrests)		
Felony	157	45.5
Misdemeanor	129	37.4
Violation/Not Available	59	17.1

Comparative Analysis of These Findings With Similar Data From Other Jurisdictions

Previous reviews of the state of the art in pretrial risk assessments (VanNostrand, 2007) have decried the tendency to treat each jurisdiction de novo, as if no useful information can be gleaned by comparing defendants in the immediate study to defendants in other studies. In point of fact, comparisons can serve an extremely useful purpose: to determine if the defendants in the current study systematically differ from defendants in other studies which would make them less likely to be predictable according to currently known predictive factors of pretrial misconduct. To this end, this section presents a comparative review of defendants in this sample to defendants in other recent studies, including a review of felony defendants in the nation's 75 largest urban counties and several major pretrial risk assessment validation studies conducted over the last decade for the state of Virginia (2003 & 2009), the state of Connecticut (2003), New York City, NY (2003), Hennepin County, MN (2006), the state of Ohio (2007), Allegheny County, PA (2008), Polk County, IA (2008), Multnomah County, OR (2010), and the state of Kentucky (2010).

Lee County should be compared to results from other pretrial studies that review the preponderance of defendants. Studies during the last decade have been done in jurisdictions such as Allegheny County, PA, Hennepin County, MN, and New York City, NY where the pretrial program reviews virtually all felony defendants and misdemeanants they can within staffing constraints. The state of Virginia's system takes this approach to a slightly narrower target population by stating that it is charged to conduct reviews for all defendants who are not charged with an offense punishable by death are reviewed for consideration for pretrial release.

Age

Lee County pretrial defendants are sociodemographically similar, but not the same, as pretrial defendants are in many respects to local pretrial defendants nationwide. Thirty-eight percent of felony defendants in the State Court Processing Statistics (SCPS) review of the nations' 75 largest counties are age 35 and older, while in Lee County 32.1% of defendants are age 35 and older. Other single jurisdiction studies of pretrial defendants that include misdemeanants reinforce the suggestion from the SCPS that Lee County defendants are slightly younger than pretrial defendants in other jurisdictions. The mean age for Lee County pretrial defendants is 32, two years older than pretrial defendants in the CT study, one year older than the mean age of pretrial defendants in the VA study, two years younger than the mean age of pretrial defendants in the OH study, and five years younger than the mean age of pretrial defendants in the Multnomah County, OR study. Over 37% of NYC and Allegheny County, PA pretrial defendants were over age 35. This is somewhat surprising, as Lee County is a retirement area, with over 63% of residents being age 35 and older (US Census, 2009 estimates).

Race/Ethnicity

Lee County pretrial defendants are less likely to be Latino than felony defendants in large urban counties nationwide according to the 2002 SCPS (12.2% versus 24%). Studies which include misdemeanants conducted in CT and NYC suggest that Lee County pretrial defendants are less likely to be Latino than pretrial defendants in most large urban counties (Lee 12.2% versus CT 26% and NYC 35%) and more likely to be Latino than in mid-sized counties like Polk, IA (5%). The 44% "other race" in the OH study were mostly Latinos. Other studies that include misdemeanants suggest that Lee County pretrial defendants are less likely to be African-American as well (15.6% Lee County, 24% Polk, IA, 32% CT, 38% Allegheny County, PA, 46% NYC, 58% VA). However, the racial composition of Lee County pretrial defendants is similar to Kentucky pretrial defendants, with both being over 70% white and under 18% African American. To some extent the racial/ethnic composition of Lee County pretrial defendants is a reflection of the county population -- nearly 90% of Lee County residents are white, while 8% are African American and 17.4% are Latino (US Census, 2009 estimates).

Sex

Like pretrial defendants in other jurisdictions in the United States, more than three-quarters of Lee County pretrial defendants are male. However, Lee County's 75.6% male is a lower percentage of males than most other studies conducted around the United States during the

2000s (84% NYC, 83% CT, 80% Multnomah County, OR 78% Allegheny County, PA, 78% VA, 77% Polk County, IA, 74% OH, 72% KY).

Marital Status

Nearly 19% of Lee County pretrial defendants are married. This is well within the range of similar studies in Allegheny County, PA (11%), CT (11%), OH (13%), KY (21%) and VA (22%). About two-thirds of Lee County pretrial defendants were single, never having been married. This is higher than the 54% found in the VA and KY studies, or the 44% found in the Allegheny County, PA study, similar to the 66% in the OH study, and lower than the 76% found in the CT study.

Employment

Similar to KY, VA, Hennepin County in MN, and NYC pretrial defendants, approximately 40% of Lee County defendants were unemployed (42.2% versus 33% in KY, 36% in VA, 39% in Hennepin County in MN, and 53% NYC). The CT study was the highest of the studies, with 47% unemployment. Polk County, IA had a unemployed/primary care giver combination of 53%. In 2008, the unemployment rate in Lee County was 8.1% (US Census).

Community Ties

Lee County pretrial defendants are about as likely as NYC defendants were to live with family (61.8% Lee County, 60% NYC) but more likely than CT defendants (56%) or Allegheny County, PA defendants (47%). Over 63% of Lee County defendants were residents of the same geographical area for over 5 years, while in Allegheny County, PA only 56% were country residents for more than five years. In VA, the median time for defendants living in the same area was 15 years. So evidence suggests that Lee County defendants may be slightly more likely than defendants in other jurisdictions to be long-term residents of the area. The Multnomah County, OR study shows that 77% of pretrial defendants lived in their current residence for less than one year, the Polk County, IA study indicates that 69%, and the CT study indicates 50%, while only 34.8% of Lee County pretrial defendants lived in their current residence for less than one year.

Home Ownership

Lee County defendants are less likely to own their own home than Allegheny County, PA pretrial defendants (7.6% versus 12%).

Given the overall similarities of Lee County pretrial defendants to those in recent studies in that shaped the state-of-the-art in pretrial risk assessment scales during the last decade, we can reasonably expect to find that similar risk assessment instruments developed for those jurisdictions should be able to provide substantial leverage in predicting risk of flight and danger to the community in Lee County.

Current Charge

Just as Lee County defendants in this study are sociodemographically similar to defendants in other pretrial risk assessment studies, they are similar to defendants in other studies in the nature of the severity of the current offense. Like several jurisdictions, about one-third (29.5%) of Lee County defendants being considered for pretrial release have a felony as their most serious charge. For example, in VA, Hennepin County, MN and in Allegheny County, PA, 34% to 36% of defendants were charged with a felony. In NYC, 52% and in Multnomah County, OR, 58% of defendants were charged with a felony. This makes the average Lee County defendant less risky by most pretrial standards.

Similarly, most of the recent risk assessment studies have been conducted in jurisdictions with a majority or a plurality of defendants with one charge and generally less than 10% with more than four charges. Over 56% of Lee County defendants had more than one charge, and 25.6% had more than four charges. In Allegheny County, PA 40% of pretrial defendants had one charge and in VA 68% of pretrial defendants had one charge. In Lee County, 43.9% of pretrial defendants had one charge.

The involvement of drugs in the current offense seems slightly lower than many other studies. In Allegheny County, PA and NYC the defendant's most serious charge was a drug charge around a quarter of the time (27% Allegheny County, PA, 23% Multnomah County, OR, and 22% NYC). In Lee County 19.6% of cases involved a drug charge, similar to Polk County, IA's 18%.

Another indication of the moderately lower severity of Lee County defendants is the presence of a weapon. The 2.4% seen in Lee County is less than half of the fraction of 7% of defendants who had a weapons charge in the Allegheny County, PA study. Lee County's 2.4 % is far lower than the 11.2% seen in Hennepin County, MN.

Lee County pretrial defendants are about as likely to be in court for a violent crime as defendants in Allegheny County, PA (11% versus 12%). However, most other studies have higher violent charge percentages, e.g., VA (23%), and NYC pretrial defendants (between 32 and 36%).

Prior Criminal History

Lee County defendants tend to have more serious prior criminal histories than defendants in other studies. Lee County pretrial defendants are more likely than defendants in other studies to have a prior felony conviction. While in Allegheny County, PA, CT, Hennepin County, MN, NYC, Polk County, IA, and VA, 31% or less of defendants had a prior felony, in Lee County 45% of pretrial defendants had a prior felony. However, this is lower than the 47% found in KY. Lee County pretrial defendants are about at the center of the distribution on the reviewed studies for having a prior misdemeanor conviction. The Allegheny County, PA, CT, Hennepin County, MN, KY, and Polk County, IA studies had lower rates of prior misdemeanor convictions than Lee County's rate of 66%, while NYC and VA had higher rates.

Prior Failure to Appear

Lee County pretrial defendants are less likely than defendants in other studies to have a prior FTA. While in Allegheny County, PA, CT, Hennepin County, MN, NYC between 25% and 32% of pretrial defendants had a prior FTA, in Lee County only 20.1% of pretrial defendants had a prior FTA. In VA even fewer (16%) of defendants had a prior FTA.

Current Involvement with the Criminal Justice System

Compared to other studies, Lee County defendants are slightly less likely to have a current involvement with the criminal justice system at arrest. In Lee County, 14.5% of defendants had a pending case at arrest, a lower rate than any comparable study (CT 33%, NYC 22% and VA 23%). However, Lee County defendants are more likely to be on probation (9.8%) or parole (14.5%) than defendants in Allegheny County, PA (3% & 15%) or KY (a combined 5.6%).

Substance Abuse/Mental Health

Lee County defendants are different than defendants in other studies with regard to substance abuse. Just over 22% of Lee County pretrial defendants were referred for substance abuse evaluations. The closest comparable statistics from other studies are for substance abuse treatment. These vary between VA's 2% and KY's 16.7% of pretrial defendants. Approximately 5% of Lee County pretrial defendants were referred for mental health evaluations. This is similar to Allegheny County, PA's 6% of pretrial defendants who received mental health treatment and higher than Polk County, IA's 3%. While VA, KY and Allegheny County, PA substance abuse treatment rates were lower than Lee County, approximately 24% of CT's pretrial defendants were treated for substance abuse or mental health, which suggests that the prevalence of substance abuse problems may not be atypical.

Pretrial Misconduct

Lee County defendants are slightly less likely to engage in pretrial misconduct than defendants in other studies. Lee County's "failure rates" – FTA (7%), rearrest (19.8%), and either form of pretrial misconduct (23.1%) – are slightly lower than the numbers shown for the nation's large urban counties for felony defendants on pretrial release (18%, 18% and 33%, respectively). Most studies that include misdemeanants also have higher pretrial misconduct rates. The Allegheny County, PA study's FTA rate was 22% and rearrest rate was 17%. The CT study's FTA rate was 21%. The Multnomah County, OR study's FTA rate was 14% and new conviction rate was 5%. The NYC study's FTA rate was approximately 16%. The OH study's FTA rate was 18.4% and new conviction rate was 15.8%. The KY study had lower pretrial misconduct rates: FTA 8%, rearrest 7% and for either form of pretrial misconduct 14.1%. Polk County, IA had a 0.4% FTA rate and an overall pretrial misconduct rate of 8% - unusually low.

Overall, the comparative analysis indicates that Lee County defendants:

- Are demographically similar to pretrial defendants in many other places around the nation;
- Face charges similar to pretrial defendants in many other places around the nation;

- Possess criminal histories involving felonies and FTA similar to pretrial defendants in other places;
- Have an active criminal justice status at arrest similar to pretrial defendants in other places;
- Are modestly more likely to be released than pretrial defendants in some places, but substantially more likely than in others;
- Yet have slightly lower rates of pretrial failure as compared to pretrial defendants in most other places nationwide.

Identification of Valid Risk Assessment Factors in Lee County

This next section attempts to determine what factors in the Lee County risk assessment are associated with pretrial misconduct. In Table 7, all investigated relationships are coded for the direction of any statistically significant relationship found, or the absence of a statistically significant relationship. A statistically significant relationship is a correlation sufficiently large enough that we can say it is unlikely to have occurred by chance in Lee County's pretrial defendants. A "+" indicates a significant positive correlation (as X goes up, Y goes up). A "-" indicates a significant negative correlation (as X goes up, Y goes down). "No" indicates no statistically significant relation was detected.

As Table 7 shows, several variables had a positive or negative correlation with the defendant's pretrial misconduct, but only a few variables that were positively or negatively correlated with pretrial misconduct.

Table 7
Bivariate Analysis of Variables Associated with Pretrial Misconduct
+ Means Significantly More Likely, - Means Significantly Less Likely,
No Means No Significant Difference

Independent Variables	Dependent Variables	
	FTA	Rearrest
Socio-Demographics		
Age		
20 or Younger	No	No
21 to 24	No	+
25 to 35	No	No
More than 35	No	-
Race/Ethnicity		
African-American	+	+
Asian	No	No
Latino	No	-
Native American	No	No
White	-	No
Sex		
Female	No	No
Male	No	No
Marital Status		
Married	No	-
Divorced	No	No
Separated	No	No
Widowed	No	No
Single	No	+
Employment		
6 Months at Same Job	-	No
Less than 6 Months	-	-
Unemployed (at time of arrest)	+	+
Unemployment Length		
6 Months or Less	No	No
Over 6 Months to 1 Year	+	+
Over 1 Year to 2 Years	+	+
More than 2 Years	No	+
Residential Stability		
20 Years or More	No	No
10 Years to Less than 20 Years	No	No
5 Years to Less than 10 Years	No	No
3 Years to Less than 5 Years	No	No
1 Year to Less than 3 Years	No	No
6 Months to Less than 1 Year	No	No
Less than 6 Months	+	No

Time in Geographical Area		
20 Years or More	No	+
10 Years to Less than 20 Years	No	No
5 Years to Less than 10 Years	-	No
3 Years to Less than 5 Years	No	No
1 Year to Less than 3 Years	+	No
6 Months to Less than 1 Year	No	No
Less than 6 Months	No	No
Not a County Resident		
Residence Location		
Lee County	No	No
Florida, Other than Lee County	No	No
Another State	No	No
Type of Residence/Property Ownership		
Own Home	-	-
Rent Home	No	No
Homeless	No	+
Transient	No	No
Other Residence Type	No	No
Living Arrangements		
Lives with Family (any relations)	No	No
Lives with Spouse	No	-
Lives with Child	No	No
Lives with Parents	No	+
Lives with Sibling	No	No
Lives with Grandparent(s)	No	+
Lives with Friends	No	No
Lives with Boyfriend/Girlfriend	No	No
Lives with Roommate	No	No
Current Offense Characteristics		
Most Serious Charge - Offense Type		
<i>Violent</i>	-	No
Murder	No	No
Rape	No	No
Robbery	No	No
Assault	-	No
Other Violent	No	No
<i>Property</i>	No	+
Burglary	No	No
Larceny	No	+
Motor Vehicle Theft	No	No
Forgery	No	No
Fraud	+	No
Other Property	No	No
<i>Drugs</i>	No	+

Drug Sales	No	+
Other Drug	No	+
<i>Public-Order</i>	No	-
Weapons	No	No
Driving-Related	No	-
Other Public-Order	No	No
Most Serious Charge - Felony/Misdemeanor	No	+
Most Serious Charge – Degree		
First	-	-
Second	+	No
Third	No	Yes
Not Degreed	No	-
Number of Charge Counts		
1-2	-	-
3-5	+	+
6-9	No	No
10-14	No	No
15 or More	No	No
Number of Felony Charge Counts		
0	No	-
1	No	+
2	No	+
3	No	+
4 or More	No	No
Drugs Among First 10 Charges		
Drug Sale	No	+
Other Drug	No	+
Weapon Involved	No	No
Current Charge is a Warrant	No	No
Prior Criminal History		
Prior Misdemeanor Arrests		
None	No	-
1-3 Misdemeanors	No	No
4-10 Misdemeanors	+	+
Over 10 Misdemeanors	No	+
Prior Felony Arrests		
None	-	-
1-3 Felonies	No	+
4-10 Felonies	+	+
Over 10 Felonies	No	+
Prior Misdemeanor Convictions		
None	-	-
1-3 Misdemeanors	No	+
4-10 Misdemeanors	No	+
Over 10 Misdemeanors	+	+

Prior Felony Convictions		
None	-	-
1-3 Felonies	No	+
4-10 Felonies	No	+
Over 10 Felonies	No	No
Prior Violent Felony Convictions		
None	-	-
1-3 Felonies	+	+
4-10 Felonies	No	+
Over 10 Felonies	No	+
Prior FTA	+	+
Prior Arrest Flight Escape Attempted	No	+
Violent Felony Offender of Special Concern	No	+
Current Involvement with the Criminal Justice System		
On Parole at Arrest	No	No
On Probation at Arrest	No	+
Pending Case at Arrest	No	+
Substance Abuse and Mental Health Issues		
Recommended for Substance Abuse Evaluation	No	No
Recommended for Mental Health Evaluation	No	No

Chart 5 reviews the types of adverse release outcomes that exist with various types of pretrial release. Defendants released on cash bond, followed by those released on pretrial supervision, are the least likely to have an FTA or rearrest. Those released on personal recognizance, followed by those released on surety bond, are the most likely to have an FTA or rearrest.

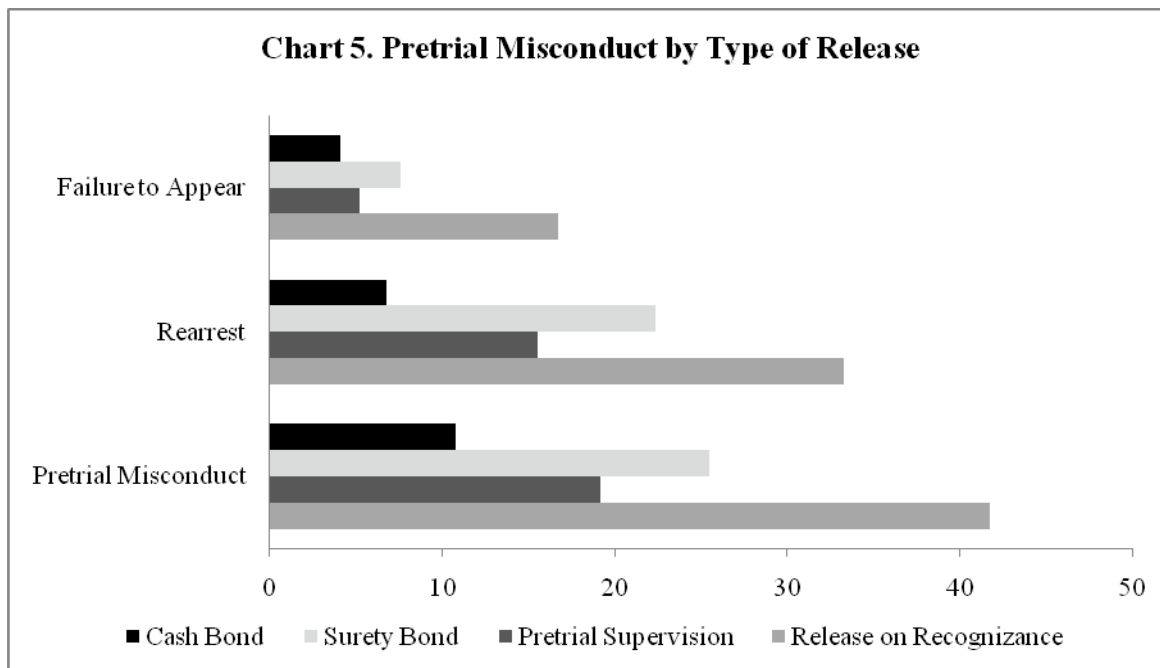
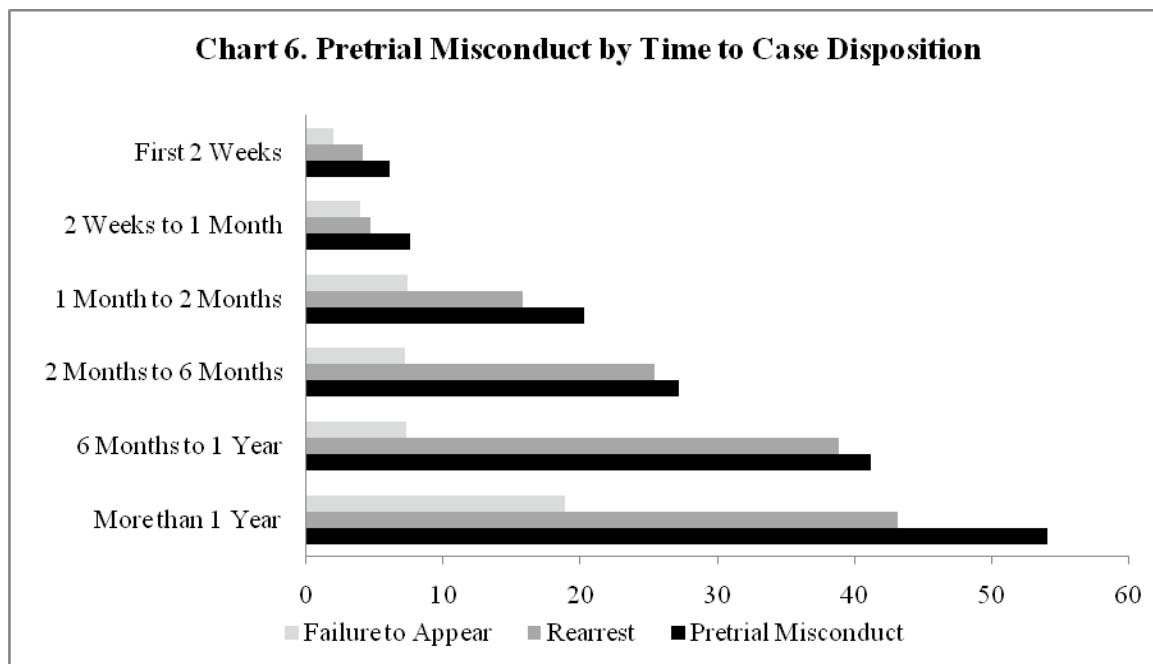
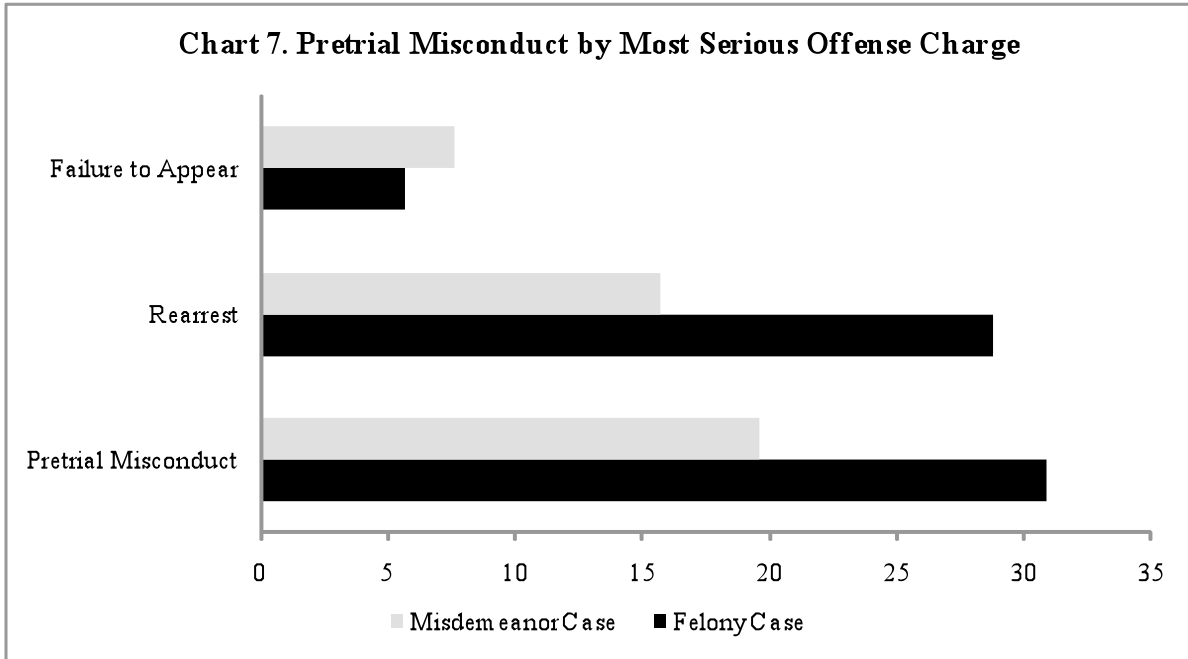


Chart 6 shows that the longer a defendant's case takes, the more likely they are to engage in pretrial misconduct. This suggests that factors associated with case disposition time may be mistakenly assumed to be predictive of pretrial misconduct when what is in play is actually "exposure" or time available for a defendant to engage in pretrial misconduct. One common example is current offense charge level. Felony cases generally take longer than misdemeanor cases to conduct.



According to Chart 7, misdemeanor defendants are more likely to fail to appear, but are less likely to be rearrested than felony defendants.



Construction of Risk Assessment Instrument for Lee County

Multivariate analysis

The next step was to conduct a multivariate analysis to see if the relationships continued after controlling for other variables. Multivariate analyses are tests of association involving two or more independent variables so that the relative strength of individual independent variables can be determined. The dependent variables, FTA and rearrest, are dichotomous – that is, only two outcomes (yes or no) are possible. The most suitable model for multivariate analysis of dichotomous dependent variables is logistic regression. Coefficients in logistic regression are expressed in odds ratios (for example, the probability of an FTA or rearrest occurring over/ the probability of an FTA or rearrest not occurring). An overall measure of model fit/improvement over random guessing is indicated by the log-likelihood ratio and by McFadden’s Adjusted R-squared measure of model fit.

A series of logistic regression models were utilized to pare down the list of potentially statistically significant multivariate factors detailed above to a small set of statistically significant factors that also bore strong resemblance to prior findings from prior risk assessment analyses conducted in jurisdictions across the United States. (See Clark (2008) for a review of that literature.) Some multivariate predictors were initially utilized that were shown to be not significant in the bivariate analysis. This is not unusual. Quite often, independent variables have effects on the dependent variable that can only be clarified to show the true relationship between the independents and dependent when controlling for the effects of the other independent variables simultaneously. As a result, the multivariate analysis starts with the full set of bivariate independent variables but eventually models are reduced to the subset of statistically significant independent variables. However, at all times we controlled for the release type, to avoid

conflating the effects of risk evaluation relevant factors with the effects of release conditions and release supervision mechanisms. As Chart 5 showed, release types differed greatly in the likelihood of pretrial misconduct and the release type is a decision made with the guidance of the pretrial program when defendants are not bonding out prior to initial appearance. One can ask, why then, did we not control for time to case disposition as this is statistically correlated with pretrial misconduct? The reason is that time to case disposition is unknown to the pretrial program at the time of the release decision. To impose such a control variable would be unrealistic.

The models presented in Tables 8 and 9 predict pretrial outcomes statistically significantly better than random chance. The FTA model explains 6% of the variation in FTA outcomes, the rearrest model explains about 24% of the variation in rearrest outcomes, and the pretrial misconduct model explains about 20% of the variation in pretrial misconduct outcomes. Findings of limited variation explained are not unusual when dealing with individual human behavior. What is of greater import for risk assessment scale construction is ascertaining what known attributes of the defendants are connected with the behaviors of concern.

The multivariate analysis yields the following results for FTA:

- Defendants who are charged with a violent, property, or public order offense are approximately 2.3 times as likely to FTA as defendants who are charged with a drug offense
- Defendants whose most serious charge is a misdemeanor are approximately twice as likely to FTA as defendants whose most serious charge is a felony
- Defendants who have one to three charges are approximately three times less likely to FTA as defendants with four or more charges
- Defendants who have three or more prior failures to appear are approximately 2.4 times as likely to FTA as defendants who do not have less than three prior failures to appear
- Defendants who have a prior felony conviction are approximately 2.2 times as likely to FTA as defendants who do not have a prior felony conviction
- Defendants who have lived under six months in their current residence are approximately 1.4 times as likely to FTA as defendants who have lived six months or more at their current residence
- Defendants who have lived in Lee County less than five years are approximately 1.75 times as likely to FTA as defendants who do not have lived in Lee County five years or more
- Defendants who are 30 or younger at the time of arrest are approximately 1.5 times as likely to FTA as defendants who are 31 or older at the time of arrest
- Defendants who are unemployed less than six months are approximately 1.6 times as likely as employed defendants or defendants unemployed for more than two years to FTA
- Defendants who are unemployed six months to a year are approximately 2.4 times as likely as employed defendants or defendants unemployed for more than two years to FTA
- Defendants who are unemployed a year to two years are approximately 2.4 times as likely as employed defendants or defendants unemployed for more than two years to FTA

Controlling for all other factors in the multivariate analysis yields the following results for rearrests:

- Defendants who are charged with a property offense are approximately 1.4 times as likely to be rearrested as defendants who are charged with a violent, drug or an other public order offense
- Defendants whose most serious charge is a felony are approximately 1.3 times as likely to be rearrested as defendants whose most serious charge is a misdemeanor
- Defendants who are on probation or parole at arrest are approximately 4 times as likely to be rearrested as defendants who are not on probation or parole at arrest
- Defendants who have a pending case at arrest are approximately 3.7 times as likely to be rearrested as defendants who do not have a pending case at arrest
- Defendants who have three or more prior failures to appear are approximately 1.8 times as likely to be rearrested as defendants who do not have less than three prior failures to appear
- Defendants who have one to three prior misdemeanor convictions are approximately 1.8 times as likely to be rearrested as defendants who do not have prior misdemeanor convictions
- Defendants who have four to ten prior misdemeanor convictions are approximately 2.5 times as likely to be rearrested as defendants who do not have prior misdemeanor convictions
- Defendants who have eleven or more prior misdemeanor convictions are approximately 4.4 times as likely to be rearrested as defendants who do not have prior misdemeanor convictions
- Defendants who are 30 or younger at the time of arrest are approximately 1.3 times as likely to be rearrested as defendants who are 31 or older at the time of arrest
- Defendants who are unemployed six months to a year are approximately 1.6 times as likely as employed defendants or defendants unemployed for more than two years to be rearrested
- Defendants who are unemployed a year to two years are approximately 1.5 times as likely as employed defendants or defendants unemployed for more than two years to be rearrested.

If we combine having an FTA or a rearrest into a single indicator of pretrial misconduct, we can generate a single model and a corresponding single scale instrument for pretrial release. Controlling for all other factors in the multivariate analysis yields the following results for pretrial misconduct:

- Defendants who are charged with a property offense are approximately 1.3 times as likely to engage in pretrial misconduct as defendants who are charged with a violent, drug or an other public order offense
- Defendants who have one to three charges are approximately 1.4 times less likely to engage in pretrial misconduct as defendants with four or more charges
- Defendants who are on probation or parole at arrest are approximately 3.1 times as likely to engage in pretrial misconduct as defendants who are not on probation or parole at arrest

- Defendants who have a pending case at arrest are approximately 3.2 times as likely to engage in pretrial misconduct as defendants who do not have a pending case at arrest
- Defendants who have three or more prior failures to appear are approximately 1.6 times as likely to engage in pretrial misconduct as defendants who do not have less than three prior failures to appear
- Defendants who have one to three prior misdemeanor convictions are approximately 1.6 times as likely to engage in pretrial misconduct as defendants who do not have prior misdemeanor convictions
- Defendants who have four to ten prior misdemeanor convictions are approximately twice as likely to engage in pretrial misconduct as defendants who do not have prior misdemeanor convictions
- Defendants who have eleven or more prior misdemeanor convictions are approximately 3.6 times as likely to engage in pretrial misconduct as defendants who do not have prior misdemeanor convictions
- Defendants who have lived under six months in their current residence are approximately 1.4 times as likely to engage in pretrial misconduct as defendants who have lived six months or more at their current residence
- Defendants who are 30 or younger at the time of arrest are approximately 1.3 times as likely to engage in pretrial misconduct as defendants who are 31 or older at the time of arrest
- Defendants who are unemployed six months to a year are approximately 1.6 times as likely as employed defendants or defendants unemployed for more than two years to engage in pretrial misconduct
- Defendants who are unemployed a year to two years are approximately 1.5 times as likely as employed defendants or defendants unemployed for more than two years to engage in pretrial misconduct.

Resulting Draft Instruments

The next step was to transform the logistic regression coefficients into units. The standard procedure is to:

1. Identify the smallest significant coefficient.
2. Transform the smallest coefficient to a score of 1.
3. Repeat this transformation for all coefficients, which are then rounded to the nearest whole number.

VanNostrand (2003) and Cuvelier and Potts (1993) have shown that rounding off scores does not substantially attenuate the resulting accuracy of the point scores. The rounding off makes the process of doing instrument calculations easier to understand and to fill out forms by pretrial personnel.

This process results in two draft risk instruments. One tool for assessing FTA and rearrest separately is presented in Table 8. Table 9 shows a tool that combines FTA and rearrest risks into one overall pretrial misconduct category. Each of these tools captures a different aspect of Lee

County pretrial program's statutory mandate to consider both FTA and danger to the community.¹

Both tools are presented here to give Lee County the option of using separate assessments of the risks of FTA and rearrest, or of using one assessment for the risks of overall pretrial misconduct.

**Table 8
Constructed Lee County Risk Assessment Criteria-Separate FTA and Rearrest Scales**

FTA		Rearrest	
	Points		Points
Current Offense		Current Offense	
Misdemeanor	1	Felony	1
Most Serious Offense is Not Drugs	1	Most Serious Offense is Property	1
More than Three Charges	1		
Criminal History		Criminal History	
Three or More Prior FTAs	1	On Probation or Parole at Arrest	3
Prior Violent Felony Conviction	1	Pending Case at Arrest	3
		Three or More Prior FTAs	1
		One to Three Prior Misdemeanor Convictions	1
		Four to Ten Prior Misdemeanor Convictions	1
		Eleven or More Prior Misdemeanor Convictions	3
		Prior Felony Conviction	1
Social Embeddedness		Social Embeddedness	
Time in Residence Under Six Months	1		
Time in County Less than Five Years	1		
Demographics		Demographics	
Age 30 or Younger	1	Age 30 or Younger	1
Unemployed Less than Six Months	1	Unemployed Six Months-One Year	1
Unemployed Six Months-One Year	1	Unemployed One Year-Two Years	1
Unemployed One Year-Two Years	1		

¹ 903.046 **Purpose of and criteria for bail determination.**-- (1) The purpose of a bail determination in criminal proceedings is to ensure the appearance of the criminal defendant at subsequent proceedings and to protect the community against unreasonable danger from the criminal defendant (Florida Senate, 2010).

Table 9
Constructed Lee County Risk Assessment Criteria-Unified Scale

Pretrial Misconduct	
	Points
Current Offense	
Property	1
More than Three Charges	1
Criminal History	
On Probation or Parole at Arrest	2
Pending Case at Arrest	2
Three or More Prior FTAs	1
One to Three Prior Misdemeanor Convictions	1
Four to Ten Prior Misdemeanor Convictions	1
Eleven or More Prior Misdemeanor Convictions	3
Prior Felony Conviction	1
Social Embeddedness	
Time in Residence Under Six Months	1
Demographics	
Age 30 or Younger	1
Unemployed Six Months-One Year	1
Unemployed One Year-Two Years	1

We collapsed each of the scales into low, medium and high-risk defendants. Table 10 shows the conversions. The FTA column of Table 10 corresponds to the left hand column of Table 8, the Rearrest column to the right hand column of Table 8, and the Pretrial Misconduct column to Table 9.

Table 10			
Conversion of Interval Risk Scores to Ordinal Ranks			
	FTA	Rearrest	Pretrial Misconduct
Low Risk	0 to 2	0 to 3	0 to 3
Medium Risk	3 to 4	4 to 8	4 to 8
High Risk	5 thru high	9 thru high	9 thru high

Charts 8, 9 and 10 provide data on how these tools would perform. Chart 8 shows that the FTA scale (as depicted in the left hand column of Table 8) would successfully sort defendants into low, medium and high risks of FTA. About 3% of defendants identified by the tool as low FTA risks would FTA, compared to about 7% for the medium risks and about 14% for the high risks. The scale is not as successful in identifying risks of rearrests, but this should not be surprising because it was not designed to do so.

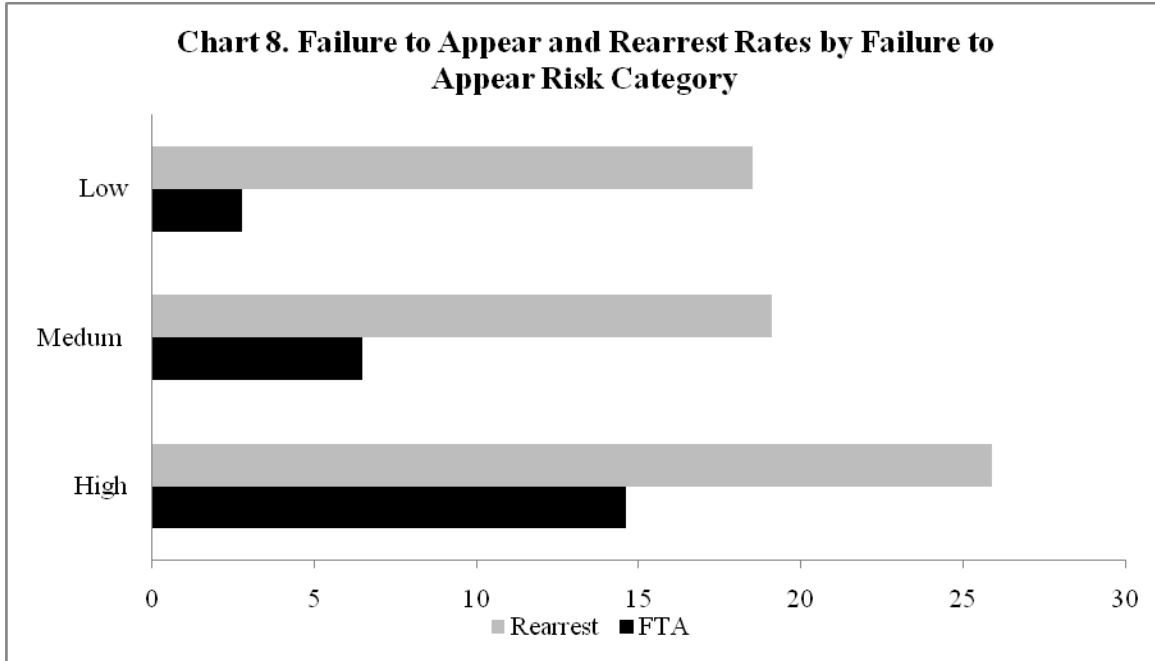


Chart 9 shows that the rearrest scale (as depicted in the right hand column of Table 8) is successful in sorting out rearrest risks. Those identified as low risk of rearrest would be rearrested at a rate of about 8%, compared to about 44% for those identified as medium risk, and 78% for those identified as high risk. This rearrest scale also shows some success in sorting out FTA risks, but it is not as successful as the FTA scale.

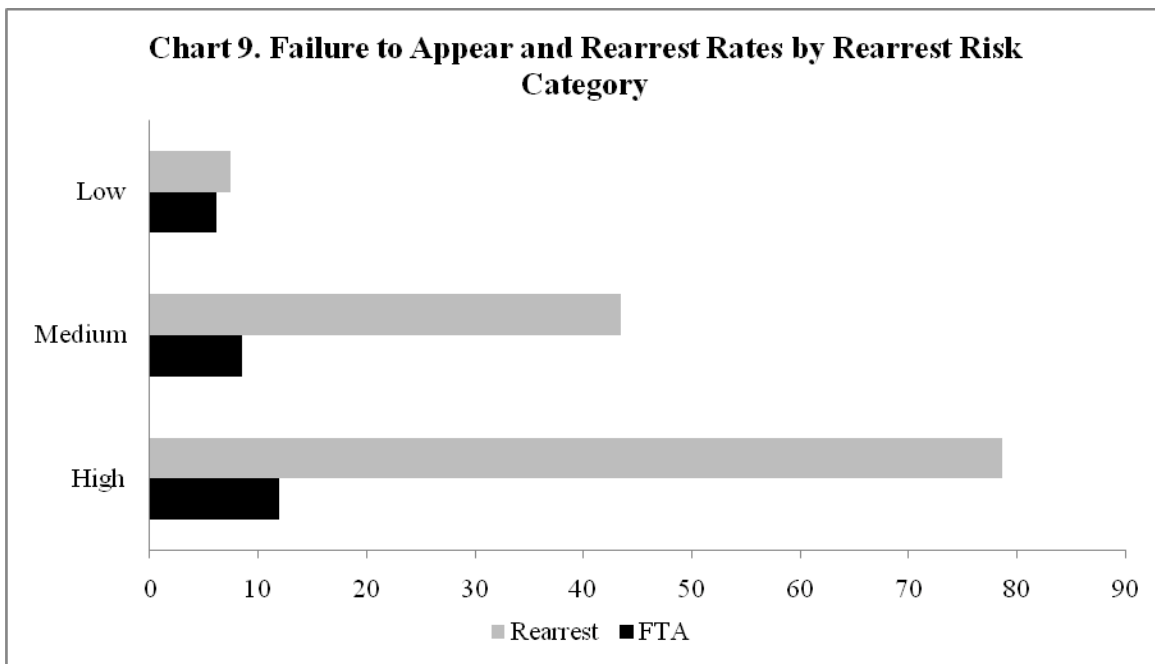
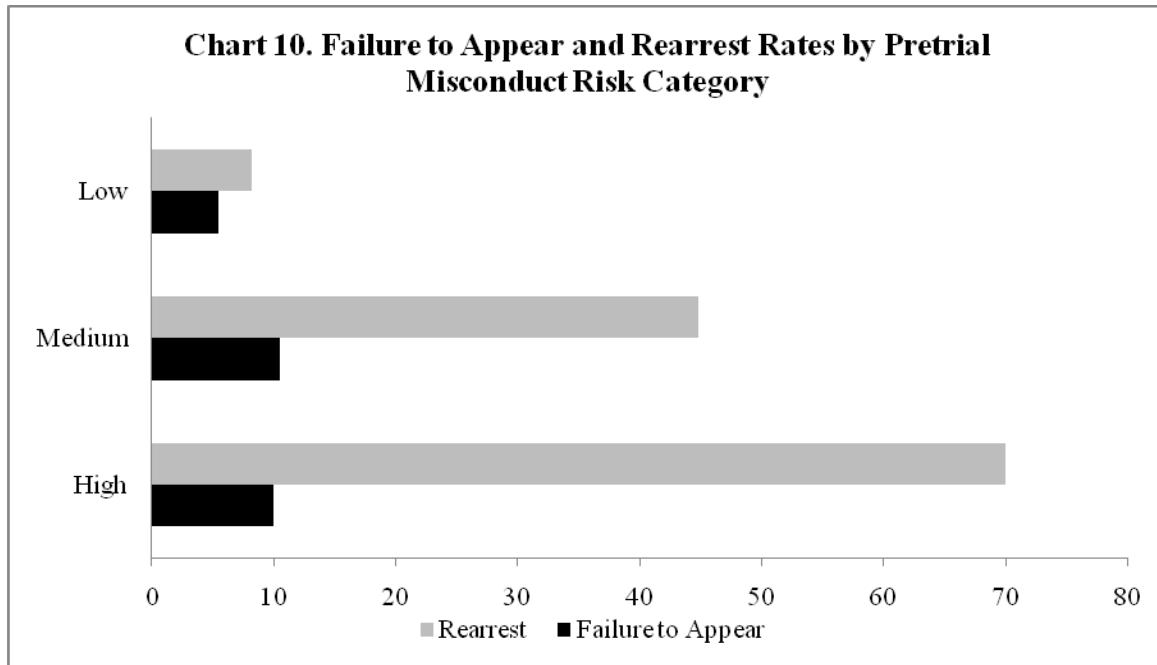


Chart 10 shows what would happen if FTA and rearrest were combined into an assessment of overall pretrial misconduct risks (as depicted in Table 9). As the chart shows, this scale is effective at sorting rearrest risks but fares less well at sorting FTA risks.



In an effort to improve upon the scale that combines FTA and rearrest into one assessment of pretrial misconduct, we weight the FTA assessment scores to be either double or triple their original score to counterbalance the greater contribution to overall variation in outcomes that rearrests have. This presents us with a selection of adjusted assessment schemes that can be selected from, depending on what Lee County officials prefer to predict most accurately, FTA or rearrest.

Table 11
Conversion of Weighted Combined Interval Risk Scores to Ordinal Ranks

	(FTA*2)+(Rearrest*1)	(FTA*3)+(Rearrest*1)
Low Risk	0 to 10	0 to 15
Medium Risk	11 to 20	16 to 25
High Risk	21 thru high	26 thru high

As Charts 11 and 12 show, each of the two combined scales predict FTA more accurately than the equally weighted pretrial misconduct scale, with the three to one FTA – rearrest combined scale predicting FTA with the greatest degree of precision (Chart 12).

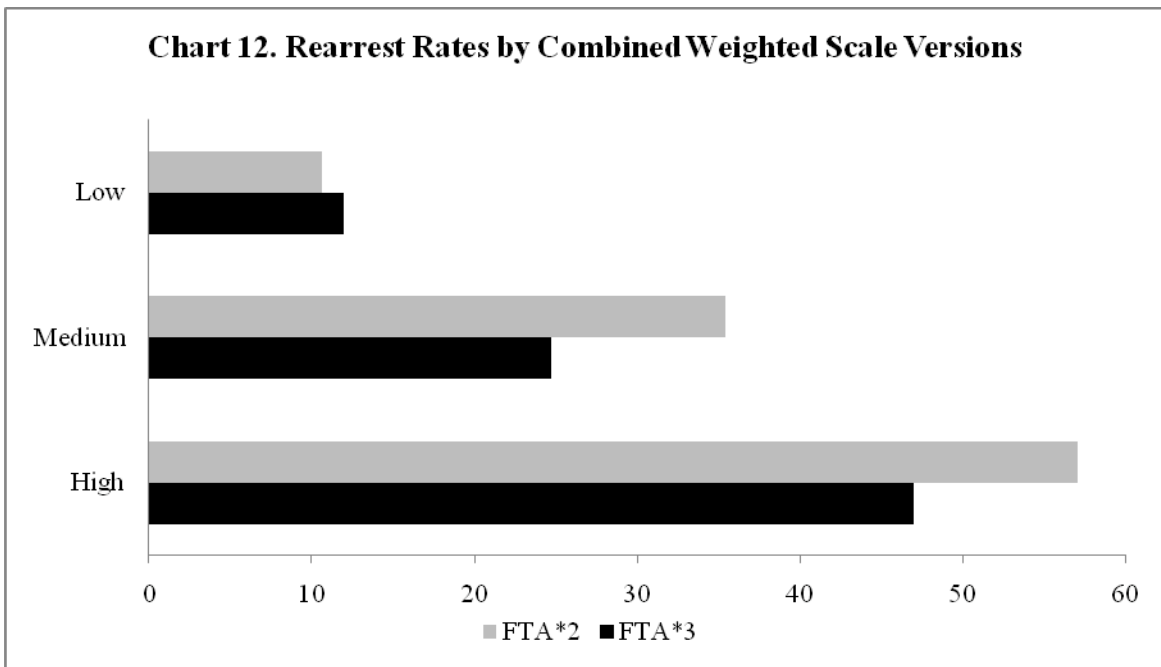
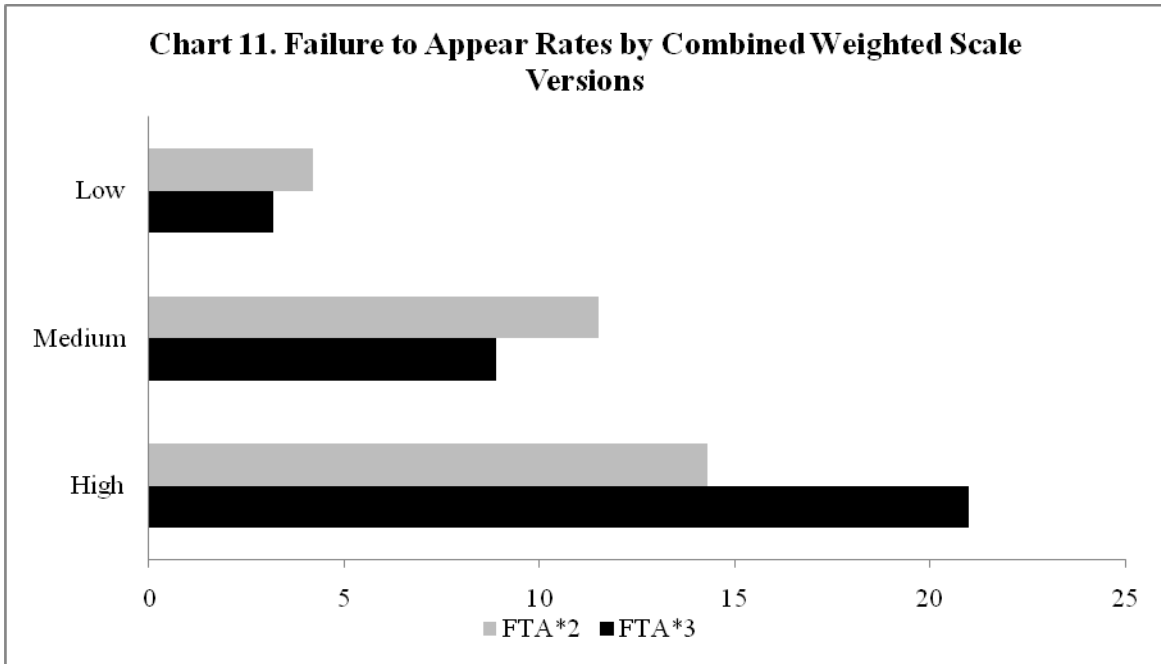


Table 12 shows that under the FTA weighted equally to rearrest risk assessment instrument, ten defendants would be rated as high risk. Under the FTA weighted twice as much as rearrest risk assessment instrument, seven defendants would be rated as high risk. Under the FTA weighted three times as much as rearrest risk assessment instrument, 100 defendants would be high risk.

Table 12
Projected Risk Levels for the Three Risk Scales that Combine FTA and Rearrest Factors

	Pretrial Misconduct	(FTA*2)+(Rearrest*1)	(FTA*3)+(Rearrest*1)
Low Risk	1,162	1,007	756
Medium Risk	516	616	774
High Risk	10	7	100
Unknown Risk*	111	111	111
*In these cases data was missing for one of the predictive variables, so a recommendation could not be made.			

In summary, the findings presented here suggest the following options for a Lee County pretrial risk assessment tool:

- Implement the tool presented in Table 8, which would provide for separate assessments of the risks of FTA and rearrest; or
- Implement the tool presented in Table 9, which would combine the risks of FTA and rearrest into a single outcome of pretrial misconduct.

For both of those options, Table 10 presents the conversion scores, which would rank defendants into low, medium and high-risk categories.

If Lee County chooses the second option, Table 9, three further options are available:

- Weight failure to appear and rearrest evenly;
- Weight failure to appear twice as much as rearrest; or
- Weight failure to appear three times as much as rearrest.

The combination of options that provides the greatest degree of precision would be to weight the FTA risk score three times as much as the rearrest risk score and then combine the FTA and rearrest risk scores into a single pretrial misconduct risk score. Under this combination of options, the Lee County pretrial risk assessment instrument would be as shown on the following page.

Table 13
Constructed Lee County Risk Assessment Criteria-Combined FTA and Rearrest Scales

FTA		Rearrest	
	Points		Points
Current Offense		Current Offense	
Misdemeanor	3	Felony	1
Most Serious Offense is Not Drugs	3	Most Serious Offense is Property	1
More than Three Charges	3		
Criminal History		Criminal History	
Three or More Prior FTAs	3	On Probation or Parole at Arrest	3
Prior Violent Felony Conviction	3	Pending Case at Arrest	3
		Three or More Prior FTAs	1
		One to Three Prior Misdemeanor Convictions	1
		Four to Ten Prior Misdemeanor Convictions	1
		Eleven or More Prior Misdemeanor Convictions	3
		Prior Felony Conviction	1
Social Embeddedness		Social Embeddedness	
Time in Residence Under Six Months	3		
Time in County Less than Five Years	3		
Demographics		Demographics	
Age 30 or Younger	3	Age 30 or Younger	1
Unemployed Less than Six Months	3	Unemployed Six Months-One Year	1
Unemployed Six Months-One Year	3	Unemployed One Year-Two Years	1
Unemployed One Year-Two Years	3		
Sum FTA	Maximum Value=27	Sum Rearrest	Maximum Value=15
Combined Score = Sum FTA + Sum Rearrest			Maximum Value=42

Low Risk = 0 to 15 points

Medium Risk = 16 to 25 points

High Risk = More than 25 points

Additional Thoughts

The risk assessment scales developed here share many features in common with pretrial risk assessment scales across the nation. Based on recent reviews by Clark (2008) and VanNostrand & Rose (2009) the following variables are considered "good predictors of court appearance and/or danger to the community":

- Current Charge(s)
- Outstanding Warrants at Time of Arrest
- Pending Charges at Time of Arrest
- Active Community Supervision at Time of Arrest (e.g., Pretrial, Probation, Parole)
- History of Criminal Convictions
- History of FTA
- History of Violence
- Residence Stability
- Employment Stability
- Community Ties
- History of Substance Abuse.

Moreover, drug offenders have not been shown to be a greater flight risk or danger to the community than other offenders (PJI, 2007; Austin & Murray, 2008; Baradaran, & McIntyre, 2011). Of all the variables enumerated above, the only type of variable that is not included in any version of the risk assessments presented above is history of substance abuse. The information collected on substance abuse and mental health by the Lee County pretrial program is different from most jurisdictions in that it is only a recommendation for an evaluation, rather than the results of findings or prior evaluations. This may have attenuated the impact of substance abuse history and mental health.

We also recommend that future studies be done with Lee County data that incorporate more information about defendants than what was collected by Lee County for this study. Specific information about mental health status (post-evaluation), drug abuse (post-evaluation), education, property ownership, and access to a mobile phone are known correlates of pretrial misconduct, albeit of lesser importance than those listed above (Clark, 2008).

References

- Austin, J. & Murray, T. (2008). *Re-Validation of the Actuarial Risk Assessment Instrument for Harris County Pretrial Services*. Washington, DC: The JFA Institute.
- Austin, J., Ocker, R., & Bhati, A. (2010). *Kentucky Pretrial Risk Assessment Instrument Validation*. Washington, DC: The JFA Institute.
- Baradaran, S., & McIntyre, F. (2011). "Predicting Violence." *Forthcoming*.
- Clark, J. (2008). *Overview of Research Findings on Pretrial Risk Assessment and Pretrial Supervision*. Washington, DC: Pretrial Justice Institute.
- Cohen, T. & Kyckelhahn, T. (2010). *Felony Defendants in Large Urban Counties, 2006*. Washington, DC: Bureau of Justice Statistics, USDOJ, NCJ 228944.
- Department of Community Justice. (2010). *Norming the Virginia Pretrial Risk Assessment for Application in Multnomah County*. Portland, OR: Department of Community Justice, Adult Services Division, Pretrial Services Program.
- Florida Department of Law Enforcement, Statistical Analysis Center. (2010). County and Municipal Arrest Data, 2009. Tallahassee, FL: State of Florida. Retrieved February 6, 2011, <http://www.fdle.state.fl.us/Content/getdoc/a324add7-5dd6-4201-9696-93bfd76bc36c/UCR-Home.aspx>.
- Florida Senate. (2010). 2010 Florida Statutes (including Special Session A). Tallahassee, FL: State of Florida. Retrieved February 6, 2011, <http://www.flsenate.gov/Laws/Statutes/?CFID=1510587&CFTOKEN=16842084>.
- Hedlund, J., Cox, S., & Wichrowski, S. (2003). *Validation of Connecticut's Risk Assessment Pretrial Decision Making*. Britain, CT: Central Connecticut State University, Department of Criminology and Criminal Justice.
- Henry, D., Clark, J., Austin, J., & Naro, W. (1999). *Study of the Maricopa County Superior Court Risk Assessment Instrument*. Washington, DC: Pretrial Services Resource Center.
- Latessa, E., Smith, P., Lemke, R., Makarios, M., & Lowenkamp, C. (2009). *Creation and Validation of the Ohio Risk Assessment System Final Report*. Cincinnati, OH: University of Cincinnati, Center for Criminal Justice Research.
- Podkopacz, M. (2006). *Fourth Judicial District of Minnesota Pretrial Evaluation: Scale Validation Study*. Power Point Presentation.
- Prell, L. (2008). *Validation of the 5th Judicial District Pretrial Release Point Schedule on Polk County Defendants*. Des Moines, IA: Iowa Department of Corrections.

- Pretrial Justice Institute. (2007). *The Transformation of Pretrial Services in Allegheny County, Pennsylvania: Development of Best Practices and Validation of Risk Assessment*. Washington, DC.
- Siddiqi, Q. (2003). *An Examination of the Existing and New Pretrial Release Recommendation Schemes in New York City: A Pre-Implementation Analysis*. New York, NY: New York City Criminal Justice Agency, Inc.
- Siddiqi, Q. (2007). *An Evaluation of CJA's New Release-Recommendation System, Research Brief No. 13*. New York, NY: New York City Criminal Justice Agency, Inc.
- VanNostrand, M. (2003). *Assessing Risk among Pretrial Defendants in Virginia: The Virginia Pretrial Risk Assessment*. Richmond, VA: Virginia Department of Criminal Justice Services.
- VanNostrand, M. (2007). *Legal And Evidence Based Practices: Application of Legal Principles, Laws, and Research to the Field of Pretrial Services*. St. Petersburg, FL: Luminosity, Inc.
- VanNostrand, M., & Keebler, G. (2009). *Pretrial Risk Assessment in the Federal Court*. St. Petersburg, FL: Luminosity, Inc.
- VanNostrand, M., & Rose, K. (2009). *Pretrial Risk Assessment in Virginia*. St. Petersburg, FL: Luminosity, Inc.

APPENDIX 1

TABLES

Employment Types and Pretrial Outcomes

Appendix Table 1

Job Categories		
	N	%
Agriculture	8	0.5
Auto Repair	22	1.3
Construction	97	5.6
Disabled	78	4.5
Food Services	121	7.0
Health Care	20	1.1
Landscaping, Home Cleaning, & Car Cleaning	40	2.3
Manufacturing	27	1.6
Non-Profit	10	0.6
Public Administration	13	0.7
Retail	110	6.3
Self Employed	117	6.7
Service	49	2.8
Student	33	1.9
Tourism, Casino & Golf Club	45	2.6
Transportation	8	0.5
Utilities	1	0.1
White Collar	25	1.4
Other Employment	100	5.7
Unemployed	62	3.6

Appendix Table 2
Bivariate Analysis of Job Categories Associated with Pretrial Misconduct

+ Means Significantly More Likely - Means Significantly Less Likely, No Means No Significant Difference		
	FTA¹	Rearrest
Agriculture	No	No
Auto Repair	No	No
Construction	No	No
Disabled	No	No
Food Services	No	No
Health Care	No	No
Landscaping, Home Cleaning, & Car Cleaning	No	No
Manufacturing	No	No
Non-Profit	No	No
Public Administration	No	No
Retail	No	No
Self Employed	No	No
Service	No	No
Student	No	No
Tourism, Casino & Golf Club	No	No
Transportation	No	No
Utilities	No	No
White Collar	No	No
Other Employment	No	No

Appendix Table 3
Multivariate Analysis of Variables Associated with FTA

Logistic Regression Model of FTA			
Risk Item	Logged Odds Ratio ¹	Standard Error	Probability of FTA when IV is No/Yes ²
Current Offense			
Felony	-0.778**	0.248	0.07 vs. 0.03
Drugs	-0.748*	0.312	0.06 vs. 0.03
One-Three Charges	-0.984**	0.226	0.09 vs. 0.03
Criminal History			
Three or More Prior FTAs	0.938**	0.327	0.05 vs. 0.12
Prior Violent Felony Conviction	0.670*	0.299	0.05 vs. 0.09
Social Embeddedness			
Time in Residence Under Six Months	0.409 ⁺	0.218	0.05 vs. 0.07
Time in County Five or More Years	-0.486*	0.209	0.07 vs. 0.04
Demographics			
Age 30 or Younger	0.436*	0.211	0.04 vs. 0.06
Unemployed Less than Six Months ³	0.524*	0.255	0.05 vs. 0.08
Unemployed Six Months-One Year	0.991**	0.279	0.05 vs. 0.12
Unemployed One Year-Two Years	0.984*	0.385	0.05 vs. 0.12
Release Type			
Cash Bond ⁴	0.109	0.515	
Surety Bond	0.528	0.369	
Release on Recognizance	1.463*	0.693	
Intercept/Constant	-2.798	0.429	
Log Likelihood Ratio Model Improvement		-374.44**	
McFadden Adjusted R-squared Model Fit		0.057	
Sample n		1,630	
⁺ Difference is statistically significant at p>.10 level. [*] Difference is statistically significant at p>.05 level. ^{**} Difference is statistically significant at p>.01 level.			
¹ STATA utilizes the logged odds ratio to produce unstandardized coefficients. ² Prediction when all other independent variables (IVs) are set to mean values. While not a perfect correspondence to the real world, this gives a good estimation of the impact of the independent variable on the dependent variable. ³ Residual categories are employed persons and those unemployed for more than two years. ⁴ Residual category is pretrial supervision.			

Appendix Table 4
Multivariate Analysis of Variables Associated with Rearrest

Logistic Regression Model of Rearrest			
Risk Item	Logged Odds Ratio ¹	Standard Error	Probability of FTA when IV is No/Yes ²
Current Offense			
Felony	0.422*	0.157	0.12 vs. 0.18
Criminal History			
On Probation or Parole at Arrest	1.801**	0.200	0.12 vs. 0.45
Pending Case at Arrest	1.693**	0.177	0.11 vs. 0.41
Three or More Prior FTAs	0.776**	0.275	0.14 vs.0.25
One to three Prior Misdemeanor Convictions ³	0.457*	0.179	0.12 vs. 0.18
Four to Ten Prior Misdemeanor Convictions	0.699**	0.247	0.13 vs. 0.23
Eleven or More Prior Misdemeanor Convictions	2.272**	0.684	0.14 vs. 0.61
Prior Felony Conviction	0.744**	0.159	0.12 vs. 0.22
Demographics			
Age 30 or Younger	0.330*	0.156	0.12 vs. 0.16
Unemployed Six Months- One Year ⁴	0.561**	0.216	0.13 vs. 0.21
Unemployed One Year-Two Years	0.625*	0.298	0.14 vs. 0.23
Release Type			
Cash Bond ⁵	-0.003	0.384	
Surety Bond	0.159	0.262	
Release on Recognizance	0.959	0.619	
Intercept/Constant	-3.287**	0.275	
Log Likelihood Ratio Model Improvement		-580.923**	
McFadden Adjusted R-squared Model Fit		0.239	
Sample n		1,572	
⁺ Difference is statistically significant at p>.10 level. [*] Difference is statistically significant at p>.05 level. ^{**} Difference is statistically significant at p>.01 level.			
¹ STATA utilizes the logged odds ratio to produce unstandardized coefficients. ² Prediction when all other independent variables (IVs) are set to mean values. While not a perfect correspondence to the real world, this gives a good estimation of the impact of the independent variable on the dependent variable. ³ Residual category is no prior misdemeanor convictions. ⁴ Residual categories are employed persons and those unemployed for more than two years. ⁵ Residual category is pretrial supervision.			

Appendix Table 5
Multivariate Analysis of Variables Associated with Pretrial Misconduct

Logistic Regression Model of Pretrial Misconduct			
Risk Item	Logged Odds Ratio ¹	Standard Error	Probability of FTA when IV is No/Yes ²
Current Offense			
Property	0.345*	0.164	0.17 vs. 0.23
One-Three Charges	-0.437**	0.141	0.22 vs. 0.15
Criminal History			
On Probation or Parole at Arrest	1.576**	0.194	0.16 vs. 0.48
Pending Case at Arrest	1.553**	0.168	0.15 vs. 0.46
Three or More Prior FTAs	0.589**	0.262	0.18 vs. 0.28
One to three Prior Misdemeanor Convictions ³	0.439**	0.163	0.16 vs. 0.23
Four to Ten Prior Misdemeanor Convictions	0.565**	0.231	0.17 vs. 0.27
Eleven or More Prior Misdemeanor Convictions	2.172**	0.675	0.18 vs. 0.66
Prior Felony Conviction	0.661**	0.164	0.15 vs. 0.26
Social Embeddedness			
Time in Residence Under Six Months	0.344*	0.155	0.17 vs. 0.22
Demographics			
Age 30 or Younger	0.336*	0.142	0.16 vs. 0.20
Unemployed Six Months- One Year ⁴	0.638**	0.199	0.17 vs. 0.28
Unemployed One Year-Two Years	0.615*	0.276	0.18 vs. 0.27
Release Type			
Cash Bond ⁵	0.164	0.324	
Surety Bond	0.083	0.236	
Release on Recognizance	1.129*	0.557	
Intercept/Constant	-.2619**	0.259	
Log Likelihood Ratio Model Improvement		-683.762**	
McFadden Adjusted R-squared Model Fit		0.197	
Sample n		1,622	
⁺ Difference is statistically significant at p>.10 level. [*] Difference is statistically significant at p>.05 level. ^{**} Difference is statistically significant at p>.01 level.			
¹ STATA utilizes the logged odds ratio to produce unstandardized coefficients. ² Prediction when all other independent variables (IVs) are set to mean values. While not a perfect correspondence to the real world, this gives a good estimation of the impact of the independent variable on the dependent variable. ³ Residual category is no prior misdemeanor convictions. ⁴ Residual categories are employed persons and those unemployed for more than two years. ⁵ Residual category is pretrial supervision.			

APPENDIX 2

Selected Florida Statutes on Bail

903.03 Jurisdiction of trial court to admit to bail; duties and responsibilities of Department of Corrections.--

(1) After a person is held to answer by a magistrate, the court having jurisdiction to try the defendant shall, before indictment, affidavit, or information is filed, have jurisdiction to hear and decide all preliminary motions regarding bail and production or impounding of all articles, writings, moneys, or other exhibits expected to be used at the trial by either the state or the defendant.

(2)(a) The Department of Corrections shall have the authority on the request of a circuit court when a person charged with a noncapital crime or bailable offense is held, to make an investigation and report to the court, including:

1. The circumstances of the accused's family, employment, financial resources, character, mental condition, and length of residence in the community;
2. The accused's record of convictions, of appearance at court proceedings, of flight to avoid prosecution, or failure to appear at court proceedings; and
3. Other facts that may be needed to assist the court in its determination of the indigency of the accused and whether she or he should be released on her or his own recognizance.

(b) The court shall not be bound by the recommendations.

Source:

http://www.flsenate.gov/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=Ch0903/SEC03.HTM&Title=->2003->Ch0903->Section%2003#0903.03

903.046 Purpose of and criteria for bail determination.--

(1) The purpose of a bail determination in criminal proceedings is to ensure the appearance of the criminal defendant at subsequent proceedings and to protect the community against unreasonable danger from the criminal defendant.

(2) When determining whether to release a defendant on bail or other conditions, and what that bail or those conditions may be, the court shall consider:

- (a) The nature and circumstances of the offense charged.
- (b) The weight of the evidence against the defendant.

- (c) The defendant's family ties, length of residence in the community, employment history, financial resources, and mental condition.
- (d) The defendant's past and present conduct, including any record of convictions, previous flight to avoid prosecution, or failure to appear at court proceedings. However, any defendant who had failed to appear on the day of any required court proceeding in the case at issue, but who had later voluntarily appeared or surrendered, shall not be eligible for a recognizance bond; and any defendant who failed to appear on the day of any required court proceeding in the case at issue and who was later arrested shall not be eligible for a recognizance bond or for any form of bond which does not require a monetary undertaking or commitment equal to or greater than \$2,000 or twice the value of the monetary commitment or undertaking of the original bond, whichever is greater. Notwithstanding anything in this section, the court has discretion in determining conditions of release if the defendant proves circumstances beyond his or her control for the failure to appear. This section may not be construed as imposing additional duties or obligations on a governmental entity related to monetary bonds.
- (e) The nature and probability of danger which the defendant's release poses to the community.
- (f) The source of funds used to post bail.
- (g) Whether the defendant is already on release pending resolution of another criminal proceeding or on probation, parole, or other release pending completion of a sentence.
- (h) The street value of any drug or controlled substance connected to or involved in the criminal charge. It is the finding and intent of the Legislature that crimes involving drugs and other controlled substances are of serious social concern, that the flight of defendants to avoid prosecution is of similar serious social concern, and that frequently such defendants are able to post monetary bail using the proceeds of their unlawful enterprises to defeat the social utility of pretrial bail. Therefore, the courts should carefully consider the utility and necessity of substantial bail in relation to the street value of the drugs or controlled substances involved.
- (i) The nature and probability of intimidation and danger to victims.
- (j) Whether there is probable cause to believe that the defendant committed a new crime while on pretrial release.
- (k) Any other facts that the court considers relevant.

Source:

http://www.flsenate.gov/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=Ch0903/SEC046.HTM&Title=->2003->Ch0903->Section%20046#0903.046

903.105 **Appearance bonds.**--Any criminal defendant who is required to meet monetary bail or bail with any monetary component may satisfy such bail by providing a surety bond as otherwise provided by law or by providing an appearance bond as follows:

(1) Any defendant posting an appearance bond shall apply therefor in writing. Each defendant charged with a felony of the second degree or higher, and each defendant appearing before a court in connection with bail, shall sign the application upon oath in open court.

(2) After the application is completed and the quantity and other conditions of the bond are determined as required by law, the defendant may deposit with the clerk of the court before which the action is pending or with the sheriff, if designated by the clerk, a sum of money equal to 10 percent of the bond and any additional collateral for all or part of the remaining portion of the bond as the court may require.

(3) Upon depositing such sum and additional collateral and agreeing in writing to all nonmonetary conditions of the bond which the court may require, the defendant shall be released from custody subject to all conditions of release imposed by the court.

(4)(a) If the conditions of release have been performed and the defendant has been discharged from all obligations in the action, the clerk of the court shall return to the defendant, unless the court orders otherwise, 75 percent of the 10-percent sum deposited, plus any additional required collateral, and shall retain as bail costs 25 percent of the 10-percent sum deposited. At the request of the defendant, the court may order the amount repayable to the defendant from such deposit to be paid to the defendant's attorney of record.

(b) Moneys retained by the clerk under this provision shall be disbursed as directed by the county commission for law enforcement, criminal justice, and criminal court operations relating to pretrial release, including, but not limited to, screening, supervision, and apprehension, subject to the following conditions:

1. The clerk must receive a sum equal to actual, demonstrable increased costs, if any, attributable to the implementation of this section.

2. Moneys distributed to the sheriff must be used for increased expenditures in connection with the apprehension of defendants who fail to appear as required.

(5) If a final judgment for a fine and court costs, or either a fine or court costs, is entered in an action in which a deposit has been made in accordance with this section, the balance of such deposit, after deduction of bail costs as provided for herein, shall be applied to the satisfaction of the judgment.

(6) In the event that this section becomes effective, the Supreme Court shall promulgate rules as necessary to implement this section.

Source:

http://www.flsenate.gov/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=Ch0903/SEC105.HTM&Title=->2003->Ch0903->Section%20105#0903.105