Re-validation of the Nonviolent Offender Risk Assessment Instrument: Study Update
Current Instrument
Nonviolent Risk Assessment  ✦ Section D  Offender Name: 

◆ Ineligibility Conditions
   - A. Was the offender recommended for Probation/No Incarceration on Section B? ☐ Yes ☐ No
   - B. Do any of the offenses at sentencing involve the sale, distribution, or possession with intent, etc. of cocaine of a combined quantity of 2.35 grams (1 ounce) or more? ☐ Yes ☐ No
   - C. Are any prior record offenses violent (Category IV listed in Table A of the Guidelines Manual)? ☐ Yes ☐ No
   - D. Are any of the offenses at sentencing violent (Category IV listed in Table A of the Guidelines Manual)? ☐ Yes ☐ No
   - E. Do any of the offenses at sentencing require a mandatory term of incarceration? ☐ Yes ☐ No

If answered YES to ANY, go to "Nonviolent Risk Assessment Recommendations" on cover sheet and check "Not Applicable." If answered NO to ALL, complete remainder of Section D worksheet.

◆ Offense Type  Select the type of primary offense
   - Drug ............................................................... 3
   - Fraud ............................................................. 3
   - Larceny .......................................................... 11

◆ Additional Offense(s)  If YES, add 5
   - 0

◆ Offender  Score factors A to D and enter the total score
   - A. Offender is a male ........................................... 8
   - B. Offender's age at time of offense
      - Younger than 30 years ........................................ 13
      - 30 - 45 years .................................................. 8
      - 46 - 55 years .................................................. 1
      - Older than 55 years .......................................... 0
   - C. Offender not regularly employed (during 2 years prior to arrest date) ........................................... 9
   - D. Offender age 18 or more and never married (at time of offense) .................................................. 6

     Information above not available (i.e., unable to interview defendant, defendant's lack of cooperation, etc.)

◆ Arrest or Confinement Within Past 18 Months  (prior to instant offenses)  If YES, add 6
   - 0

◆ Prior Felony Convictions and Adjudications  Select the combination of adult and juvenile felony convictions/adjudications that characterizes the offender's prior record.
   - Adult felony convictions only ........................................ 3
   - Juvenile felony convictions or adjudications only ........... 6
   - Both adult and juvenile felony convictions/adjudications .................................................. 9

◆ Prior Adult Incarcerations
   - Number:
     - 1 - 2 .......................................................... 8
     - 3 - 4 .......................................................... 6
     - 5 or more .................................................... 9

   0

Total Score  ☐ 36 or less, check Recommended for Alternative Punishment.
   ☐ 36 or more, check NOT Recommended for Alternative Punishment. Go to Cover Sheet and fill out Nonviolent Risk Assessment Recommendations.
Refined Risk Assessment Instrument: Significant Factors in Assessing Risk

Relative Degree of Importance

- Offender Age
- Prior Felony Record
- Offense Type
- Not Regularly Employed
- Male Offender
- Prior Adult Incarcerations
- Prior Arrest w/in Past 18 Mos.
- Additional Offenses
- Never Married by Age 26
### Risk Assessment Outcomes for Nonviolent Offenders *

<table>
<thead>
<tr>
<th>Year</th>
<th>Recommended for Alternative</th>
<th>Not Recommended for Alternative</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>36%</td>
<td>64%</td>
<td>6,062</td>
</tr>
<tr>
<td>2004</td>
<td>38%</td>
<td>62%</td>
<td>6,141</td>
</tr>
<tr>
<td>2005</td>
<td>48%</td>
<td>52%</td>
<td>6,418</td>
</tr>
<tr>
<td>2006</td>
<td>49%</td>
<td>51%</td>
<td>6,413</td>
</tr>
<tr>
<td>2007</td>
<td>53%</td>
<td>47%</td>
<td>6,981</td>
</tr>
<tr>
<td>2008</td>
<td>51%</td>
<td>49%</td>
<td>7,060</td>
</tr>
<tr>
<td>2009</td>
<td>50%</td>
<td>50%</td>
<td>6,704</td>
</tr>
<tr>
<td>2010</td>
<td>50%</td>
<td>50%</td>
<td>6,204</td>
</tr>
</tbody>
</table>

* Offenders recommended by the sentencing guidelines for prison or jail incarceration
Identification of Offenders for the Study

Offenders were identified from the sentencing guidelines database

Selection criteria:

- Felony fraud, larceny, and drug offenders
- Sentenced in FY2005 and FY2006 (most recent that can be used)
- Recommended for incarceration by the sentencing guidelines (jail or prison)
- Meet risk assessment eligibility requirements
- No worksheet errors
Offenders Meeting Selection Criteria by Most Serious Offense

Drug: 6,099
Larceny: 3,887
Fraud: 2,456

Total = 12,442
Selection of Study Sample (based on approved design)

- Staff drew a sample of 1,799 offenders who met the selection criteria.

- Staff selected cases based on a stratified random sampling technique to increase the likelihood of including offenders with juvenile adjudications of delinquency.

  - Criminological studies have shown that juvenile record and the age of first contact with the juvenile justice system are often correlated with subsequent offense behavior as an adult.
## Composition of the Sample

<table>
<thead>
<tr>
<th></th>
<th>No Juvenile Record</th>
<th>Juvenile Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Larceny</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Fraud</td>
<td>300</td>
<td>299</td>
</tr>
</tbody>
</table>

**Total sample: 1,799 offenders**

For the analysis, the sampled cases were weighted to reflect each subgroup's actual proportion in the population.
Virginia Criminal History Records

- Staff requested and received criminal history records ("rap sheets") from the Virginia State Police
  - These only reflect criminal arrests and convictions within Virginia
  - Records were provided in database format
  - Staff examined the data to remove duplicate records and records incorrectly matched to offenders in the sample, and to identify offenders for whom no rap sheet was found
Virginia Criminal History Records

- For much of this data (25,439 arrest records, or more than 2/3), the VCC offense code was missing (only statute or text description was available)
  - Staff researched cases and filled in VCC offense codes with the best available information
  - Having offense identifiers is helpful in the analysis phase

- For 5,307 of the 36,025 arrest records, there was not a court disposition
  - Staff used other criminal justice databases to identify and fill in convictions wherever possible
Out-of-State Criminal History Records

- Sentencing Commission staff completed the necessary forms and procedures to request out-of-state criminal history records from the FBI
- Request was reviewed by a FBI special board and approved
- Sentencing Commission received out-of-state rap sheets in two forms: paper copies and PDF (image) files on disc
- For the 15 states that do not participate in the FBI’s electronic rap sheet system, these records came on paper (532 rap sheets)
- For the remaining states, the records came in PDF (image) files
Out-of-State Criminal History Records

- Since none of these records were in database format, staff examined the rap sheets
  - Needed information was recorded on a specially-designed data collection form
  - This information was then automated and added to existing databases
- These records were used to supplement prior record, if necessary, as well as to identify recidivism activity
A total of 131 cases had to be excluded from the analysis

<table>
<thead>
<tr>
<th>Reason</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offender has prior violent felony</td>
<td>65</td>
<td>47.4%</td>
</tr>
<tr>
<td>Offender has current violent felony</td>
<td>17</td>
<td>12.4%</td>
</tr>
<tr>
<td>Offender still in prison</td>
<td>53</td>
<td>38.7%</td>
</tr>
<tr>
<td>Rap sheet could not be located</td>
<td>1</td>
<td>0.7%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0.7%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>137</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
Recidivism Measures

- As with prior nonviolent offender risk assessment studies, the official measure of recidivism is a new felony conviction within 3 years.
- However, multiple measures of recidivism were collected:
  - Any new arrest
  - New felony arrest
  - Any new conviction
  - New felony conviction

New conviction is measured as a new arrest within three years of release that ultimately resulted in a conviction.
Two analysts have been working largely independently of one another using two different statistical techniques.

- Staff have been discussing and reconciling differences in the two statistical models to develop an improved final model.
Study Findings to Date
Analysis is based on the sample weighted to reflect the population of offenders eligible for risk assessment.
Criminal History Records

Offenders with Arrests/Charges Outside of Virginia

33.6%

Most common jurisdictions for out-of-state arrests/charges:
- Maryland
- North Carolina
- Washington DC
- Tennessee
- Federal

Offenders with Arrests/Charges in Virginia Only

66.4%

Total = 1,662
### Type of Disposition Received

<table>
<thead>
<tr>
<th>Disposition</th>
<th>Percentage</th>
<th>Median Sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Incarceration</td>
<td>17.6%</td>
<td></td>
</tr>
<tr>
<td>Jail up to 12 months</td>
<td>49.4%</td>
<td>6 months</td>
</tr>
<tr>
<td>Prison 1 year or more</td>
<td>33.0%</td>
<td>18 months</td>
</tr>
</tbody>
</table>

Total = 1,662

Analysis is based on the sample weighted to reflect the population of offenders eligible for risk assessment.
Three-Year Recidivism Rates

Any New Arrest 53.6%

New Felony Arrest 39.5%

Any New Conviction 42.7%

New Felony Conviction 27.1%

New conviction is measured as a new arrest within three years of release that ultimately resulted in a conviction.

1,509 of the 1,662 offenders could be tracked for the full three years.

Analysis is based on the sample weighted to reflect the population of offenders eligible for risk assessment.
Recidivism Rate (New Felony Conviction within Three Years) by Offense Group

Analysis is based on the sample weighted to reflect the population of offenders eligible for risk assessment.
Recidivism Rate (New Felony Conviction within Three Years) by Juvenile Record

Analysis is based on the sample weighted to reflect the population of offenders eligible for risk assessment.
Recidivism Rates (New Felony Conviction within Three Years) by Offender Characteristics

Age
- Under 21: 31.7%
- 21 to 29: 28.7%
- 30 to 43: 25.1%
- 44+: 22.7%

Sex
- Male: 28.7%
- Female: 23.0%

Total = 1,509

Analysis is based on the sample weighted to reflect the population of offenders eligible for risk assessment.
Significant Factors in Assessing Risk for Drug Offenders

Relative Degree of Importance

- Prior Adult Felony Convictions
- Prior Adult Incarcerations
- Gender / Prior Juvenile Adjudication
- Offender Age
- Arrest/Confinement within 12 mos.

This proposed model correctly identifies 84.0% of non-recidivists.
The model currently in use correctly identifies 82.6% of non-recidivists.
### Scoring Significant Risk Assessment Factors for Drug Offenders

<table>
<thead>
<tr>
<th>Offender Age at Time of Offense</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Younger than 21 years</td>
<td>9</td>
</tr>
<tr>
<td>21 to 29 years</td>
<td>6</td>
</tr>
<tr>
<td>30 to 43 years</td>
<td>3</td>
</tr>
<tr>
<td>Over 43 years</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Offender is Male</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prior Juvenile Adjudication</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Female with prior juvenile adjudication</td>
<td>1</td>
</tr>
<tr>
<td>Male with prior juvenile adjudication</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prior Adult Felony Convictions</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number: 0</td>
<td>0</td>
</tr>
<tr>
<td>1 – 2</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>4 or more</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prior Adult Incarcerations</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number: 0</td>
<td>0</td>
</tr>
<tr>
<td>1 – 3</td>
<td>1</td>
</tr>
<tr>
<td>4 or more</td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prior Arrest or Confinement Within Past 12 Months (prior to offense) If YES, add 3</th>
<th>TOTAL SCORE</th>
</tr>
</thead>
</table>
Scoring Significant Risk Assessment Factors for Drug Offenders: Offender Reconviction Rates by Risk Assessment Score

Drug Offenders

Reconviction Rate

0% 5% 10% 15% 20% 25% 30% 35%

Risk Assessment Score

1 41

Reconviction Rate 23.7%
Significant Factors in Assessing Risk for Larceny/Fraud Offenders

Relative Degree of Importance

- Prior Adult Incarcerations
- Offender Age
- Prior Adult Felony Convictions
- Gender / Type of Offense
- Legally Restrained at Time of Offense

This proposed model correctly identifies 79.3% of non-recidivists. The model currently in use correctly identifies 76.3% of non-recidivists.
Scoring Significant Risk Assessment Factors for Larceny/Fraud Offenders

<table>
<thead>
<tr>
<th>Offender Age at Time of Offense</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Younger than 21 years</td>
<td>22</td>
</tr>
<tr>
<td>21 to 29 years</td>
<td>16</td>
</tr>
<tr>
<td>30 to 43 years</td>
<td>7</td>
</tr>
<tr>
<td>Over 43 years</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary offense is Fraud</td>
<td></td>
</tr>
<tr>
<td>Offender is Female</td>
<td>1</td>
</tr>
<tr>
<td>Offender is Male</td>
<td>10</td>
</tr>
<tr>
<td>Primary offense is Larceny</td>
<td></td>
</tr>
<tr>
<td>Offender is Female</td>
<td>13</td>
</tr>
<tr>
<td>Offender is Male</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prior Adult Felony Convictions</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number: 0</td>
<td>0</td>
</tr>
<tr>
<td>1 – 2</td>
<td>5</td>
</tr>
<tr>
<td>3 or more</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prior Adult Incarcerations</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number: 0</td>
<td>0</td>
</tr>
<tr>
<td>1 – 9</td>
<td>4</td>
</tr>
<tr>
<td>10 or more</td>
<td>32</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Legally Restrained at Time of Offense</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>If YES, add 6</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL SCORE
Scoring Significant Risk Assessment Factors for Larceny/Fraud Offenders: Offender Reconviction Rates by Risk Assessment Score

Reconviction Rate

Larceny/Fraud Offenders

Risk Assessment Score

1

79

Reconviction Rate

29.8%

0%

5%

10%

15%

20%

25%

30%

35%
Updated Work Plan

- Staff would like to explore additional research questions and examine the potential impact of implementing revised risk assessment instrument(s)

- Staff will continue such analysis and will present the findings to the Commission in 2012

- If the Commission approves the new instrument(s) and recommends its adoption, it will be included in the 2012 Annual Report