Criminal Justice Reform and Reentry: Understanding Risk, Recidivism, and Redemption

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PA Department of Corrections & Board of Probation and Parole

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Risk Assessment

- Risk-Needs-Responsivity (RNR) - Risk = who to treat; Needs = what to treat; Responsivity = how to treat

- The “risk principle” and resource allocation - focus on higher risk cases (think along the lines of an emergency room triage). “Treatment for all means real treatment for few.”

- Actuarial assessment of risk - think along the lines of what an auto insurance company does

- Long history demonstrates structured/algorithmic assessments of risk is more accurate than unstructured human assessments
Risk Assessment

Uses of Risk Assessment across the Criminal Justice System:

- Aid in informing bail decisions
- Identify appropriate sentencing options
- Identify offenders most in need of interventions/treatment
- Make institutional classification and prison/bed assignments
- Identify ideal candidates for parole release
- Identify appropriate levels of community supervision
- Inform sanctioning decisions for probation/parole violators
Risk Assessment

1. Upon prison admission:
   - The Risk Screen Tool (RST) - triage for treatment
   - PA Additive Classification Tool (PACT) - institutional classification
   - Static 99 - sex offender risk (for treatment programming)
   - Inmate Assignment Decision Support System (IADSS) - prison assignment

2. Pre-parole hearing:
   - Level of Service Inventory-Revised (LSI-R) - general recidivism risk for parole
   - Static 99 - sex offender recidivism risk for parole
   - Offender Violence Risk Typology (OVRT) - violence risk indicator for parole
   - Violence Forecast Model (VFM) - violence risk for parole
   - Parole Decisional Instrument (361) - recommendation guidelines for parole

3. Parole supervision:
   - LSI-R - supervision levels
   - Violation Sanctioning Grid (VSG) - violation guidelines
## Risk Assessment

### Confusion Matrix:

<table>
<thead>
<tr>
<th></th>
<th>Predict Darth Vader</th>
<th>Predict Luke Skywalker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Darth Vader</td>
<td>True Positive</td>
<td>False Negative</td>
</tr>
<tr>
<td>Luke Skywalker</td>
<td>False Positive</td>
<td>True Negative</td>
</tr>
</tbody>
</table>

- Darth Vader = Non-Recidivist
- Luke Skywalker = Recidivist
Risk Assessment

Receiver Operating Characteristic - Area Under the Curve (ROC AUC):

• ROC AUC = if you randomly pick a recidivist and a non-recidivist out of a hat, what percent of the time will the recidivist score higher on the tool than the non-recidivist?

• ROC AUC scores vary between 0 and 1, with the worst score being .5 and the best score being 1.

• A moderately predictive tool has an AUC score between 60% and 70%. A strongly predictive tool has an AUC score above 70%.
Risk Assessment

LSI-R Validations:

1. Austin (2003) - Parolees
2. Bucklen (2005) - Quehanna Boot Camp inmates
4. Welsh (2007) - AOD offenders @ SCI Chester
5. Bucklen (2007) - Representative DOC sample
6. Goldkamp et. al. (2010) - Parole sample
7. Bucklen (2015) - Representative DOC sample

- In these studies, AUC scores for the LSI-R varied between 58% and 65%. 
Risk Assessment

Problems/Issues with the LSI-R:

• LSI-R does not include current age, thus missing one of the strongest known predictors of criminal risk

• Only a few LSI-R items are strongly correlated with risk, leaving the rest to create statistical “noise” and to diminish the overall predictive ability

• Risk assessment and Needs assessment are combined in one score

• The LSI-R is proprietary, thus costing jurisdictions $$ per test to purchase

• The LSI-R is lengthy, taking significant staff time to score

• A fair amount of training is required to administer, given interpretation of many questions on the tool
Gold Industry Standards for Risk Assessment:

1. Efficiency
   - Automated scoring, to reduce staff time and improve reliability

2. Effectiveness
   - Advanced algorithms (e.g., machine learning) improve predictive accuracy - “squeeze more juice”
   - Customization rather than off-the-shelf (“home field advantage”)
   - Maximize use of dynamic needs factors (“big data” connections, deeper data dives), to inform treatment planning

3. Communication
   - Communicate drivers of risk (e.g., credit score)
   - Develop case plans (e.g., “4th generation tool”)
Justice Reinvestment

What is Justice Reinvestment?

Justice Reinvestment is a data-driven approach to reducing spending and reinvesting savings into strategies that can decrease crime and strengthen neighborhoods; it has the dual benefit of paying for itself while at the same time reducing crime and recidivism rates.

1. Analyze drivers of the prison population
2. Develop evidence-based strategies for addressing drivers of population increase, in order to reduce population and lower costs
3. Reinvest the money saved into additional long-term proven strategies which reduce costs further and increase public safety

GOAL: LESS CRIME & LESS PUNISHMENT
Justice Reinvestment

Examples of Possible Justice Reinvestment Strategies:

- Early childhood and youth intervention
- Diversionary treatment programming (drug courts, etc.)
- Better probation supervision
- Better policing
- Community support
Justice Reinvestment


- TPV/Pre-release redesign
- M3 and UM diversion
- Modify eligibility for Boot Camp/RRRI/SIP
- Parole to deportation non-violent illegal immigrants
- County HOPE probation
Justice Reinvestment

➢ Since 2012, the PA DOC prison population has declined by 5,275 inmates (a 10% reduction)

➢ Since 2012, the Commonwealth of PA has reinvested $24.9 million as a result of prison savings from JRI

➢ Reinvestment categories include:
  ➢ Innovate Policing Practices grants
  ➢ Effective County Probation Practices grants
  ➢ Diversion of “Short Min” offenders
  ➢ Community Reentry Services
  ➢ Development of a Sentencing Risk Assessment Tool
# Justice Reinvestment

<table>
<thead>
<tr>
<th>Property and Drug Offenses</th>
<th>Probation</th>
<th>CIP</th>
<th>D&amp;A RIP</th>
<th>Jail</th>
<th>Prison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Annual Admissions</td>
<td>22,000</td>
<td>1,400</td>
<td>1,000</td>
<td>12,000</td>
<td>4,700</td>
</tr>
<tr>
<td>Estimated Average Length of Stay</td>
<td>20.0 months</td>
<td>18.0 months</td>
<td>15.8 months</td>
<td>4.5 months</td>
<td>30.5 months</td>
</tr>
<tr>
<td>Annual Cost per Participant</td>
<td>$1,000 ³</td>
<td>$1,300 ⁴</td>
<td>$4,130</td>
<td>$24,500 ⁵</td>
<td>$36,500 ⁶</td>
</tr>
<tr>
<td>Cost per Sentence (Length of Stay x Cost per Day)</td>
<td>$1,667</td>
<td>$1,950</td>
<td>$5,438</td>
<td>$9,188</td>
<td>$92,771</td>
</tr>
<tr>
<td>Total Cost per Year (Cost per Sentence x Annual Admissions)</td>
<td>$37M</td>
<td>$3M</td>
<td>$5M</td>
<td>$110M</td>
<td>$436M</td>
</tr>
<tr>
<td>Bearer of Cost</td>
<td>County</td>
<td>County with some state support</td>
<td>State</td>
<td>County</td>
<td>State</td>
</tr>
<tr>
<td>Likelihood of Receiving Risk-reduction Programs/Treatment</td>
<td>Possible</td>
<td>Possible</td>
<td>Certain</td>
<td>Unlikely</td>
<td>Likely</td>
</tr>
<tr>
<td>Recidivism Rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Initial explorations of comparative recidivism rates are included later in this presentation.

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1. State Funded D&A RIP only.
2. Average LOS for all offense types.
3. Legislative Budget and Finance Committee, Funding of County Adult Probation Services, February 2015.
4. Cost estimate based on blend of state and county funds.
5. Average statewide county jail cost per day in 2014.
6. Fully loaded cost per year.

Note that these cost estimates do not include the additional cost of post-incarceration supervision.
Two measures of recidivism: rearrest, and rearrest or incarceration, within three years of a defined starting point.

<table>
<thead>
<tr>
<th></th>
<th>Statewide Rearrest Analysis</th>
<th>Five-County Overall Recidivism Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cohort</strong></td>
<td>Level 2, 3, and 4 sentences only from two sentencing years combined (2009 and 2012). Person-based sentencing, looking at the first sentence of the year per individual. Sentencing data excludes Philadelphia Municipal court cases.</td>
<td>Level 2, 3, and 4 sentences only from two sentencing years combined (2009 and 2012) in five counties (Allegheny, Lackawanna, Lehigh, Northampton, Westmoreland). Person-based sentencing, looking at the first sentence of the year per individual.</td>
</tr>
<tr>
<td><strong>Treatment Groups</strong></td>
<td>• Probation • CIP • D&amp;A RIP subgroup of CIP (state funded only) • Jail • Jail + Probation</td>
<td>• SIP • Prison • Prison + probation • Subgroups of DUI vs. Non-DUI offenses when needed for CIP comparisons</td>
</tr>
<tr>
<td><strong>Recidivism Measure</strong></td>
<td>3-year rearrest rate For probation/CIP/D&amp;A RIP/SIP sentences, the clock starts at sentence date. For jail sentences, the clock starts at the estimated jail release date (min date). For prison sentences, the clock starts at the actual release date.</td>
<td>3-year overall recidivism rate including rearrest and incarceration in jail or prison For probation/CIP/D&amp;A RIP/SIP sentences, the clock starts at sentence date. For jail and prison sentences, the clock starts at the actual release date.</td>
</tr>
</tbody>
</table>
Justice Reinvestment

Observed recidivism rates alone are insufficient because they may reflect selection bias rather than effects of the treatment.

The rates to the left should not be compared across sanction categories because they often reflect the type of individual sentenced to that option rather than representing the effect of the sanction on the individual.

Covariates in sentencing analysis:
- Age
- Race
- Sex
- County Class
- Offense Type
- OGS
- Sentencing Level
- PRS
- Prior Arrest Offense Categories
- Age at First Arrest

PA DOC, CSG, UMD, Commission on Sentencing, PCCD sentencing recidivism analysis.
## Justice Reinvestment

<table>
<thead>
<tr>
<th>Covariate Descriptive Stats</th>
<th>Probation</th>
<th>CIP</th>
<th>D&amp;A RIP</th>
<th>Jail</th>
<th>SIP</th>
<th>Prison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Age</td>
<td>33</td>
<td>36</td>
<td>37</td>
<td>34</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>Percent White / Black</td>
<td>65% / 27%</td>
<td>77% / 16%</td>
<td>78% / 16%</td>
<td>69% / 24%</td>
<td>80% / 16%</td>
<td>57% / 34%</td>
</tr>
<tr>
<td>Percent Male</td>
<td>74%</td>
<td>78%</td>
<td>76%</td>
<td>83%</td>
<td>82%</td>
<td>91%</td>
</tr>
<tr>
<td>Percent Violent Offense</td>
<td>17%</td>
<td>4%</td>
<td>1%</td>
<td>14%</td>
<td>&lt;1%</td>
<td>13%</td>
</tr>
<tr>
<td>Percent Drug Offense</td>
<td>27%</td>
<td>13%</td>
<td>28%</td>
<td>15%</td>
<td>41%</td>
<td>39%</td>
</tr>
<tr>
<td>Percent Property Offense</td>
<td>29%</td>
<td>7%</td>
<td>8%</td>
<td>18%</td>
<td>19%</td>
<td>22%</td>
</tr>
<tr>
<td>Percent DUI Offense</td>
<td>5%</td>
<td>71%</td>
<td>59%</td>
<td>39%</td>
<td>31%</td>
<td>10%</td>
</tr>
<tr>
<td>Average OGS</td>
<td>3.1</td>
<td>3.4</td>
<td>5.1</td>
<td>3.3</td>
<td>5.5</td>
<td>5.5</td>
</tr>
<tr>
<td>Percent Level 2</td>
<td>79%</td>
<td>12%</td>
<td>5%</td>
<td>30%</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td>Percent Level 3</td>
<td>19%</td>
<td>84%</td>
<td>80%</td>
<td>63%</td>
<td>66%</td>
<td>45%</td>
</tr>
<tr>
<td>Percent Level 4</td>
<td>2%</td>
<td>4%</td>
<td>15%</td>
<td>7%</td>
<td>24%</td>
<td>47%</td>
</tr>
<tr>
<td>Average PRS</td>
<td>1.3</td>
<td>1.1</td>
<td>1.5</td>
<td>1.7</td>
<td>2.3</td>
<td>3.1</td>
</tr>
<tr>
<td>Percent with Prior Violent Offense</td>
<td>45%</td>
<td>29%</td>
<td>27%</td>
<td>44%</td>
<td>28%</td>
<td>58%</td>
</tr>
<tr>
<td>Percent with Prior Drug Offense</td>
<td>50%</td>
<td>33%</td>
<td>45%</td>
<td>42%</td>
<td>65%</td>
<td>64%</td>
</tr>
<tr>
<td>Percent with Prior Property Offense</td>
<td>65%</td>
<td>38%</td>
<td>40%</td>
<td>56%</td>
<td>61%</td>
<td>67%</td>
</tr>
<tr>
<td>Percent with Prior Public Order Offense</td>
<td>56%</td>
<td>86%</td>
<td>81%</td>
<td>75%</td>
<td>71%</td>
<td>67%</td>
</tr>
<tr>
<td>Average Age at First Arrest</td>
<td>24</td>
<td>26</td>
<td>27</td>
<td>24</td>
<td>23</td>
<td>22</td>
</tr>
</tbody>
</table>
Justice Reinvestment

Three-year Matched Group Recidivism Rates, 2009 and 2012 Sentencing Cohorts

- **Probation vs. Jail**
  - Statewide Rearrests: 46%
  - 5-county Recidivism: 61%

- **Probation - DUI only vs. CIP - DUI only**
  - Statewide Rearrests: 32%
  - 5-county Recidivism: 44%

- **Probation - Non-DUI vs. CIP - Non-DUI**
  - Statewide Rearrests: 46%
  - 5-county Recidivism: 61%

None of these differences significant

Significantly lower recidivism

PA DOC, CSG, UMD, Commission on Sentencing, PCGD sentencing recidivism analysis.

*The overall recidivism results for the five counties should not necessarily be considered representative of the state as a whole.*
Justice Reinvestment

Three-year Matched Group Recidivism Rates, 2009 and 2012 Sentencing Cohorts

- **Statewide Rearrests**
- **5-county Recidivism**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Statewide Rearrests</th>
<th>5-county Recidivism</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>22%</td>
<td>45%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>86%</td>
<td>23%</td>
<td>49%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td>43%</td>
<td>69%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>95%</td>
<td>43%</td>
<td>64%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99% (100%)</td>
<td>27%</td>
<td>40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td>26%</td>
<td>55%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>49%</td>
<td>45%</td>
<td>75%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50%</td>
<td>43%</td>
<td>60%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Few differences statistically significant

*PA DOC, CSG, UMD, Commission on Sentencing, PCCD sentencing recidivism analysis.*
Justice Reinvestment

Three-year Matched Group Recidivism Rates, 2009 and 2012 Sentencing Cohorts

Statewide Rearrests

5-county Recidivism*

D&A RIP vs. CIP

98% 99%

26%

31%

47%

57%

Significantly lower recidivism

D&A RIP vs. Probation

100% 73%

26%

37%

50%

56%

PA DOC, CSG, UMD, Commission on Sentencing, PCCD sentencing recidivism analysis.
Justice Reinvestment

Three-year Matched Group Recidivism Rates, 2009 and 2012 Sentencing Cohorts

- Statewide Rearrests
- 5-county Recidivism*

**SIP vs. CIP**
- SIP: 27%
- CIP: 33%
- 5-county Recidivism: 71%

**SIP vs. D&A RIP**
- SIP: 30%
- D&A RIP: 28%
- 5-county Recidivism: 71%

**SIP vs. Prison**
- SIP: 27%
- Prison: 32%
- 5-county Recidivism: 51%

Significantly lower recidivism

No other differences statistically significant

*PA DOC, CSG, UMD, Commission on Sentencing, PCCD sentencing recidivism analysis.*
Justice Reinvestment

Three-year Matched Group Recidivism Rates, 2009 and 2012 Sentencing Cohorts

<table>
<thead>
<tr>
<th>Group</th>
<th>Statewide Rearrests</th>
<th>5-county Recidivism*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jail</td>
<td>44%</td>
<td>67%</td>
</tr>
<tr>
<td>Jail + Probation</td>
<td>43%</td>
<td>66%</td>
</tr>
<tr>
<td>Prison</td>
<td>43%</td>
<td>59%</td>
</tr>
<tr>
<td>Prison + Probation</td>
<td>43%</td>
<td>63%</td>
</tr>
</tbody>
</table>

None of these differences statistically significant

PA DOC, CSG, UMD, Commission on Sentencing, PCCD sentencing recidivism analysis.
Justice Reinvestment

Three-year Matched Group Recidivism Rates, 2009 and 2012 Sentencing Cohorts

- Statewide Rearrests
- 5-county Recidivism*

Jail vs. Prison Short Min

- 100%
- 100%

Jail 2–5 Max vs. Prison 2–5 Max

- 78%
- 60%

Only comparison with significantly lower recidivism

PA DOC, CSG, UMD. Commission on Sentencing, PCCD sentencing recidivism analysis.
The Pennsylvania Community Corrections Story
By Vincent Schiraldi
April 25, 2018

Background
The sentencing of Philadelphia rap artist Meek Mill to imprisonment for probation violations committed a decade after his original offense has focused attention on probation and parole practices nationally and in Pennsylvania (NBC News 2017; Jay-Z 2017).

Figure 1: Rates of Probation and Parole in the U.S. and Pennsylvania out of 100,000

Justice Reinvestment

- 50,715: Inactive or Absconders
- 16,498: Supervision through a County Intermediate Punishment (CIP) program
- 36,629: Supervision through a diversion (Accelerated Rehabilitative Disposition or Probation Without a Verdict) or on bail supervision
- 61,931: County post-release supervision following a jail incarceration
- 74,017: County probation

County supervision and jail combined comprise 75% of the state criminal justice population.

- County Supervision
- County Jail*
- State Supervision (PBPP)
- State Prison

Pennsylvania Department of Corrections
Justice Reinvestment
THE GOAL:
Increase Public Safety. Reduce Taxpayer Costs.

49.6% of DOC admissions are REPEAT OFFENDERS.

A 10% DROP in reincarceration rates = $44.7 MILLION SAVINGS/Year
(475,035 bed days)

A 10% REDUCTION in repeat offender prison admissions = $16.5 MILLION SAVINGS/year
(257,573 bed days)

COMMUNITY CORRECTIONS FACILITY (Halfway House)
Inmates released to a CCC recidivated 7% HIGHER than inmates released to the street. (2008 data)

OVERALL RECIDIVISM RATES BY PAROLE RELEASE TYPE

<table>
<thead>
<tr>
<th>RELEASE YEAR</th>
<th>6-MONTH OVERALL RECIDIVISM</th>
<th>1-YEAR OVERALL RECIDIVISM</th>
<th>3-YEAR OVERALL RECIDIVISM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parole to Street</td>
<td>Parole to Center</td>
<td>Parole to Street</td>
</tr>
<tr>
<td>2005-06 Releases</td>
<td>18.6%</td>
<td>22.8%</td>
<td>35.5%</td>
</tr>
<tr>
<td>2008-09 Releases</td>
<td>17.4%</td>
<td>22.1%</td>
<td>33.8%</td>
</tr>
<tr>
<td>2010-11 Releases</td>
<td>16.1%</td>
<td>24.0%</td>
<td>32.7%</td>
</tr>
</tbody>
</table>

RECIDIVISM IN PENNSYLVANIA
Meeting the Challenge of the New Normal

RECIDIVISM (prob) - the return to crime or to prison of former inmates; typically measured by nearest reconviction, or reincarceration.

DOWNLOAD THE FULL REPORT HERE
Act 196 of 2012: Reinvestment Funding

Reinvestment funding streams include:

- Sentencing Commission for developing sentencing risk assessment tool
- Grant program for effective policing practices
- Grant program for effective county probation practices
- Reimbursement for county diversion of "short mins"

One in Two Hundred adult Pennsylvanians is currently incarcerated in a Pennsylvania State Correctional Institution.

90% of state prisoners will eventually be released.

6 in 10 released inmates are rearrested or reincarcerated within 3 years of release—most within the first year.

60% of all reincarcerations within 3 years are for technical parole violations.

10 Percent of all police arrests in PA involve Released Inmates.

In the past 10 years, recidivism rates have remained largely unchanged.

Reasons for Rearrest:

17% Violence
22% Property
29% Drugs
32% Public Order/Other

Profile of Returning Inmates:

Urban and Rural:

- Rearrest rates are higher in urban areas.
- Reincarceration rates are higher in rural areas.

Young and Old:

- Released inmates under 21 are 2x more likely to recidivate within 3 years than released inmates over the age of 50.

Returning to Prison (2008 Data):

- 43% of inmates released were reincarcerated within 3 years.
- 50% of inmates were rearrested within 3 years.
- 75% of ex-inmates who return to prison will do so within 19 months.

Violent Offenders:

Per capita arrest rates for violent crimes are 14x higher among released inmates compared to the general public.
Recidivism

- Release from Prison
  - Parole
  - Max Out
  - Rearrest

- Reincarceration
  - Technical Parole Violation
  - Convicted Parole Violation
  - New Court Commitment

[Source: Pennsylvania Department of Corrections]
Recidivism

Overall Recidivism Rate
Reincarceration Rate
Rearrest Rate

Year of Release

# Recidivism

## Table 12: 3-Year Recidivism Rates by Commitment Crime Type for 2008 Releases

<table>
<thead>
<tr>
<th>Offense Category</th>
<th>3-Year Rearrests</th>
<th>3-Year Reincarcerations</th>
<th>3-Year Overall Recidivism</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Rate</td>
<td>Number</td>
</tr>
<tr>
<td><strong>Part I</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Murder/Manslaughter</td>
<td>144</td>
<td>33.0%</td>
<td>145</td>
</tr>
<tr>
<td>Forcible Rape</td>
<td>78</td>
<td>25.8%</td>
<td>71</td>
</tr>
<tr>
<td>Robbery</td>
<td>881</td>
<td>52.8%</td>
<td>806</td>
</tr>
<tr>
<td>Aggravated Assault</td>
<td>567</td>
<td>48.8%</td>
<td>516</td>
</tr>
<tr>
<td>Burglary</td>
<td>504</td>
<td>52.6%</td>
<td>457</td>
</tr>
<tr>
<td>Theft/Larceny</td>
<td>526</td>
<td>53.7%</td>
<td>449</td>
</tr>
<tr>
<td>Arson</td>
<td>17</td>
<td>21.3%</td>
<td>21</td>
</tr>
<tr>
<td><strong>Total: Part I</strong></td>
<td>2,717</td>
<td>48.6%</td>
<td>2,465</td>
</tr>
<tr>
<td><strong>Part II</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Assault</td>
<td>103</td>
<td>51.8%</td>
<td>59</td>
</tr>
<tr>
<td>Fraud</td>
<td>20</td>
<td>47.6%</td>
<td>15</td>
</tr>
<tr>
<td>Stolen Property</td>
<td>148</td>
<td>63.0%</td>
<td>116</td>
</tr>
<tr>
<td>Forgery</td>
<td>100</td>
<td>49.5%</td>
<td>85</td>
</tr>
<tr>
<td>Statutory Rape</td>
<td>5</td>
<td>41.7%</td>
<td>3</td>
</tr>
<tr>
<td>Other Sexual Offenses</td>
<td>120</td>
<td>31.8%</td>
<td>99</td>
</tr>
<tr>
<td>Drug Offenses</td>
<td>2,143</td>
<td>50.6%</td>
<td>1,695</td>
</tr>
<tr>
<td>Weapons</td>
<td>279</td>
<td>60.0%</td>
<td>206</td>
</tr>
<tr>
<td>DUI</td>
<td>184</td>
<td>27.6%</td>
<td>169</td>
</tr>
<tr>
<td>Prison Breach</td>
<td>126</td>
<td>62.4%</td>
<td>103</td>
</tr>
<tr>
<td>Kidnapping</td>
<td>16</td>
<td>39.0%</td>
<td>16</td>
</tr>
<tr>
<td>Part II Other</td>
<td>670</td>
<td>48.4%</td>
<td>625</td>
</tr>
<tr>
<td><strong>Total: Part II</strong></td>
<td>3,914</td>
<td>48.5%</td>
<td>3,191</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>6,631</td>
<td>48.6%</td>
<td>5,656</td>
</tr>
</tbody>
</table>
Recidivism

Figure 19: 3-Year Rearrest Rates as a Percent of Total Rearrests

- Public Order/Other: 32%
- Violent: 17%
- Property: 22%
- Drugs: 29%
# Recidivism

## Table 15: 3-Year Rearrest by Commitment and Rearrest Crime Types (2008 Releases)

<table>
<thead>
<tr>
<th>Crime Type for Original Commitment</th>
<th>Rearrest Crime Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Violent</td>
</tr>
<tr>
<td>Violent</td>
<td>13.1%</td>
</tr>
<tr>
<td>Property</td>
<td>7.1%</td>
</tr>
<tr>
<td>Drugs</td>
<td>7.3%</td>
</tr>
<tr>
<td>Public Order/Other</td>
<td>7.7%</td>
</tr>
</tbody>
</table>
### Table 19: 2010 Pennsylvania Crime Types by Released Offenders

<table>
<thead>
<tr>
<th></th>
<th>Violent</th>
<th>Property</th>
<th>Drugs</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrests of Released Inmates in 2010</td>
<td>2,506</td>
<td>4,661</td>
<td>5,087</td>
<td>12,254</td>
</tr>
<tr>
<td>Total Arrests in 2010</td>
<td>20,275</td>
<td>48,739</td>
<td>51,443</td>
<td>120,457</td>
</tr>
<tr>
<td>% of Arrests Attributable to Released Inmates</td>
<td>12.4%</td>
<td>9.6%</td>
<td>9.9%</td>
<td>10.2%</td>
</tr>
</tbody>
</table>

### Table 20: 2010 Pennsylvania Crime Types by Released Offenders as a Ratio of General Population

<table>
<thead>
<tr>
<th></th>
<th>Violent</th>
<th>Property</th>
<th>Drugs</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrest Rate for Released Inmates in 2010</td>
<td>2,905</td>
<td>5,403</td>
<td>5,896</td>
<td>14,203</td>
</tr>
<tr>
<td>Arrest Rate for General Population in 2010</td>
<td>205</td>
<td>492</td>
<td>519</td>
<td>1,216</td>
</tr>
<tr>
<td>Ratio (Released Inmate/General Public)</td>
<td>14-to-1</td>
<td>11-to-1</td>
<td>11-to-1</td>
<td>12-to-1</td>
</tr>
</tbody>
</table>
### Table 21: Cost Savings by Reduction in 1-Year Reincarceration Rate

<table>
<thead>
<tr>
<th>1-Year Reincarceration Rate</th>
<th>Annual Bed Days</th>
<th>Annual Cost Savings (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced by 1 Percentage Points</td>
<td>48,768</td>
<td>$0.8</td>
</tr>
<tr>
<td>Reduced by 5 Percentage Points</td>
<td>234,930</td>
<td>$15.0</td>
</tr>
<tr>
<td>Reduced by 10 Percentage Points</td>
<td>475,035</td>
<td>$44.7</td>
</tr>
</tbody>
</table>
### Table 26: Modeled Overall Recidivism Rates by Parole Release Type

<table>
<thead>
<tr>
<th>Release Year</th>
<th>6-Month Overall Recidivism</th>
<th>1-Year Overall Recidivism</th>
<th>3-Year Overall Recidivism</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parole to Street</td>
<td>Parole to Center</td>
<td>Parole to Street</td>
</tr>
<tr>
<td>2005-06 Releases</td>
<td>17.0%</td>
<td>20.2%</td>
<td>34.1%</td>
</tr>
<tr>
<td>2008-09 Releases</td>
<td>16.4%</td>
<td>19.7%</td>
<td>33.1%</td>
</tr>
<tr>
<td>2010-11 Releases</td>
<td>17.6%</td>
<td>22.6%</td>
<td>32.3%</td>
</tr>
</tbody>
</table>
Recidivism

- “Performance Contracting” for contract Community Corrections Centers

- Under new contracts, Centers are required to maintain a baseline recidivism rate
  - Centers that reduce their recidivism rate below the baseline will be paid extra $ per offender (1% increase in per diem rate)
  - Centers that increase their recidivism rate above the baseline will receive a warning in the first period, and will have their contract canceled in the second consecutive period above baseline
Recidivism

Results from the first “marking period”:

- The overall recidivism rate went down 16%
- 11 of the 46 Centers (24%) significantly reduced their recidivism below baseline, and received the 1% incentive
- Only 1 of the 46 Centers received a warning for increasing their recidivism above baseline
- The recidivism drop for the contract Centers during this time period was nearly 4 times that of the State run Centers
- It is estimated that perhaps as many as 58 criminal victimizations in PA were prevented in just a short 3-month period as a result
Recidivism

Results from the second “marking period”:

- The overall recidivism rate went down 11.3%
- 6 of the 42 Centers (14%) significantly reduced their recidivism below baseline, and received the 1% incentive
- Only 1 of the 46 Centers received a warning for increasing their recidivism above baseline
- It is estimated that perhaps as many as 122 criminal victimizations in PA were prevented in this 6-month period as a result
- Seems to be early evidence that contractors are responding to incentives and that incentives might work to reduce recidivism
### Recidivism

**Example Assumptions:**
- There are 3 total prisons (A, B, and C), and 3 total inmates released (1, 2, and 3).
- Inmate 1 is the only recidivist in a 3-yr follow-up.
- Inmate 1 and 2 are released from Prison A.
- Inmate 3 is released from Prison B.
- No inmates are released from Prison C.

<table>
<thead>
<tr>
<th>PRISON</th>
<th>INMATE 1</th>
<th>INMATE 2</th>
<th>INMATE 3</th>
<th>TOTAL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>50%</td>
<td>33%</td>
<td>75%</td>
<td>1.58</td>
</tr>
<tr>
<td>B</td>
<td>25%</td>
<td>33%</td>
<td>15%</td>
<td>0.73</td>
</tr>
<tr>
<td>C</td>
<td>25%</td>
<td>33%</td>
<td>10%</td>
<td>0.68</td>
</tr>
</tbody>
</table>

**Standard Recidivism Calculation**

\[
\frac{1}{2} = 50\%
\]

**New Recidivism Calculation**

\[
\frac{0.5}{1.58} = 32\%
\]

**Recidivism Rate (New)**

\[
R_A = \frac{\sum R_P A}{\sum T_P A}
\]

Where:
- \( R = \) Recidivism Rate;
- \( A = \) Prison A;
- \( R_P = \) recidivists percent time served;
- \( T_P = \) total percent time served.
NEW 2020 PA DOC RECIDIVISM REPORT:

- Offender-based recidivism instead of event-based recidivism (Rhodes et. al., 2019)
- Recidivism rates adjusted for deaths and out-of-state recidivism
- Desistance
- Recidivism harm index
- Reconviction rate
- Recidivism by individual prisons