## DIVERSION VS. INCARCERATION

## A RECIDIVISM STUDY AMONG NONVIOLENT, MEDIUM-RISK, SUBSTANCE-DEPENDENT OFFENDERS

Infographic submitted to the Bureau of Justice Statistics and Pennsylvania Commission on Crime and Delinquency

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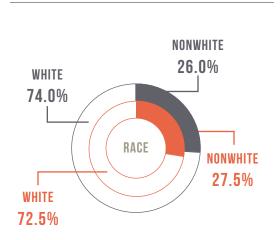
THE STUDY

Criminal history and characteristics of offenders receiving a state-funded diversionary sentence of restrictive intermediate punishment (RIP) which includes intensive supervision and probation, were matched with offenders receiving a state prison sentence, to understand the impact of diversion on recidivism among nonviolent, medium-risk, substance-dependent offenders in Pennsylvania.

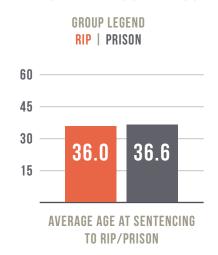
## THE SAMPLE 229 SENTENCED TO RIP SENTENCED TO PRISON

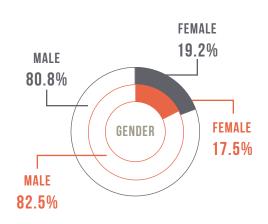
### THE MATCH

RIP offenders diverted from incarceration were matched to a pool of released state prisoners that shared similar criminal history, sentence information, and demographics. Propensity score matching was used to counteract the effects of sentence selection bias due to a lack of random assignment to the treatment (RIP) and control (Prison) groups. Prior to matching, all offenders were sentenced at Levels 3/4 (mediumrisk) of the Sentencing Guidelines, diagnosed to have a substance dependency, had a history of nonviolence, and were sentenced on lead charges stemming from either a Drug or DUI offense.

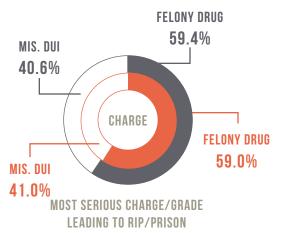


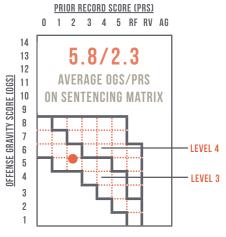
### MATCHED DEMOGRAPHICS

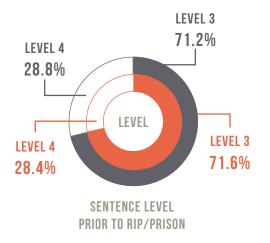




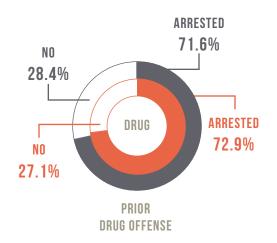
### MATCHED SENTENCING INFORMATION





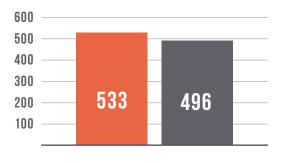


# ARRESTED 12.2% 87.8% JUVENILE ARRESTED 13.1% ARRESTED AS JUVENILE



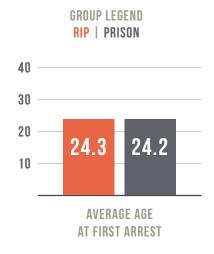
### RECIDIVISM DEFINITION

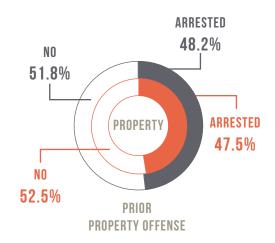
Recidivism is defined broadly as any arrest within 3 years. In the case of the prisoner group, we began measuring recidivism upon release from a state correctional institution (SCI), whereas for the RIP treatment group, recidivism was measured at the imposition of the RIP sentence.



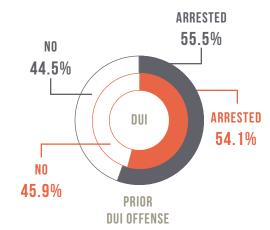
AVERAGE DAYS BEFORE REARREST

### MATCHED CRIMINAL HISTORY









### MATCHED RECIDIVISM



### STUDY FINDINGS

Offenders diverted into RIP had a lessened three-year recidivism rate (25.7%) when compared to similar characteristic substance-dependent, medium-risk, nonviolent offenders receiving a state prison sentence (34.9%). RIP offenders were rearrested 26.4% less during the same timeframe, and on average, took 7.5% longer (533 days) to be rearrested than their state prison counterparts (496 days). The significance of these findings is that it will provide the primary benefit of informing the Commonwealth's Justice Reinvestment Initiative (JRI) conversation and may elevate efforts to expand diversionary programming for drug/alcohol addicted offenders, particularly as the Commonwealth continues to grapple with a heightened opioid crisis.

### METHODOLOGY

A simple random sample of 500 offenders beginning their RIP sentence in FY 2010/11 was extracted from the records of the Pennsylvania Commission on Crime and Delinquency (PCCD), the Commonwealth's criminal justice planning agency tasked with providing state funding to counties in an effort to support and encourage diversion in RIP for eligible offenders. Simultaneously, state prisoner records were requested from the Department of Corrections (DOC) for offenders released during the same timeframe with a Drug or DUI offense as the controlling/lead charge on the sentence. This was done because it was found that the overwhelming majority of RIP offenders are sentenced to RIP due to either a Drug or DUI offense. Offender identifying information was sent to three separate agencies, the Pennsylvania State Police (PSP) to request criminal history RAP Sheets, the Administrative Office of Pennsylvania Courts (AOPC) to request conviction records, and the Pennsylvania Commission on Sentencing (PCS) to request sentencing records. These data sets were then matched up to obtain the following information on offenders: race, gender, age at sentencing, criminal history (e.g. prior arrests for Violent, Drug, Property, DUI, and Other offenses, age at first arrest, juvenile arrests, and rearrests (i.e. recidivating events) following the beginning of an RIP sentence, or the release from state prison). Offense gravity scores and prior record scores corresponding to a sentence level on Pennsylvania's Sentencing Matrix, along with the most serious charge and charge grade for which they were convicted were also analyzed. These were the group covariates highlighted on the previous pages. Drug and alcohol dependency was ascertained through the Pennsylvania Client Placement Criteria tool (for RIP) and the TCU Drug Screen (for Prisoners).

Offenders that were found to be nonviolent (i.e., no prior arrests for violent offense charges, such as assaults, etc.) medium-risk (Levels 3 and 4 of the Sentencing Matrix), substance-dependent, and sentenced on either a Drug or DUI offense into RIP/Prison, created our RIP treatment (n=279) and Prison control (n=585) groups. After running descriptive statistics and t-tests, it was evident that significant biases in sentencing options between the treatment and control groups existed. Specifically, the RIP treatment group tended to have a higher percentage of white and female offenders at lesser risk levels, while the opposite was true for the Prison control group. Propensity score matching (PSM) was undertaken to account for and control sentence selection biases associated with treatment effects. After multiple refinements of PSM, it was found that 229 RIP offenders were matched among the Prison control group using nearest-neighbor matching and a caliper to isolate those cases with too high of a difference in propensity scores. This allowed the groups to achieve balance and common support among the covariates to mitigate any overt or hidden biases. The balanced/matched covariates are presented in visual detail on the previous pages.

Survival Analysis using Kaplan-Meier Survivor Functions and Cox Proportional Hazard regression was undertaken in order to calculate the timeframe to which the groups were rearrested. As a result, the number of days in which an offender "survived" the threat of recidivism, and the number of days to rearrest were uncovered.

All data analysis was performed in Stata 14.0 statistical software.

### LIMITATIONS

A limitation of this study is that it does not utilize random assignment. It is the opinion of the researcher that random assignment is unachievable for this study due to ethical considerations, as it would be highly unethical for a judge to arbitrarily sentence one person to confinement while another is diverted and remains in the community. As a result, the study instead utilized a quasi-experimental design to more accurately control for potential sentence selection bias, which greatly helped bolster internal validity.

The dependent variable in the analysis is rearrest within three years (after sentence for RIP; after release for Prison). Coupled with rearrest, many researchers will also include whether an offender was incarcerated as a measure of recidivism. This study purposefully does not account for an incarceration recidivism measure, because the groups are not similar in regards to the environment in which the exposure to incarceration recidivism is occurring. RIP offenders remain in the community, whereas prisoners are reentering into communities. Literature on the subject shows that released prisoners have a more difficult transition to make, and are more prone to committing technical violations which oftentimes leads to a return to prison without a new crime occurring. It was the opinion of the researcher that this would inject bias into the model as it would be expected to see a higher reincarceration rate for a group that was previously incarcerated versus a group that was diverted. As such, the sole recidivism focus is on arrest for a crime, and not violations of probation/parole (presumably leading to incarceration).

### DATA SOURCES

Data for this study was sourced from internal record-keeping at the Pennsylvania Commission on Crime and Delinquency (PCCD), Department of Corrections (DOC), Pennsylvania Commission on Sentencing (PCS), Administrative Office of Pennsylvania Courts (AOPC), and Pennsylvania State Police (PSP).