



Recidivism Among Offenders Receiving
Retroactive Sentence Reductions:
The 2007 Crack Cocaine Amendment



UNITED STATES SENTENCING COMMISSION



United States Sentencing Commission

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In 2007, the United States Sentencing Commission amended the Drug Quantity Table in section 2D1.1 of the sentencing guidelines¹ for offenses involving crack cocaine. The amendment, which became effective November 1, 2007, reduced by two levels the base offense levels assigned by the Drug Quantity Table for each quantity of crack cocaine (the “2007 Crack Cocaine Amendment”). Also in 2007, the Commission voted to give retroactive effect to the amendment, which allowed judges to consider motions for retroactive application of the amendment and reduce sentences for those incarcerated under the previous guidelines. The retroactive application of the 2007 Crack Cocaine Amendment took effect on March 3, 2008.

This publication reports on recidivism of crack cocaine offenders who were released immediately before and after implementation of the 2007 Crack Cocaine Amendment, and followed in the community for five years. In order to study the impact of retroactive sentence reduction on recidivism rates, staff analyzed the recidivism rate for a group of crack cocaine offenders whose sentences were reduced pursuant to retroactive application of the 2007 Crack Cocaine Amendment. Staff then compared that rate to the recidivism rate for a comparison group of offenders who would have been eligible to seek a reduced sentence under the 2007 Crack Cocaine Amendment, but were released before the effective date of that amendment after serving their full prison terms less good time and other earned credits.

The question addressed by this study is: “Were offenders who received a reduced sentence retroactively under the 2007 Crack Cocaine Amendment more likely to recidivate than similarly situated offenders who did not receive a reduced sentence?” As discussed more fully below, there is no evidence that offenders whose sentence lengths were reduced pursuant to retroactive application of the 2007 Crack Cocaine Amendment had higher

recidivism rates than a comparison group of crack cocaine offenders who were released before the effective date of the 2007 Crack Cocaine Amendment and who served their full prison terms less earned credits.

Retroactive Application of the 2007 Crack Cocaine Amendment

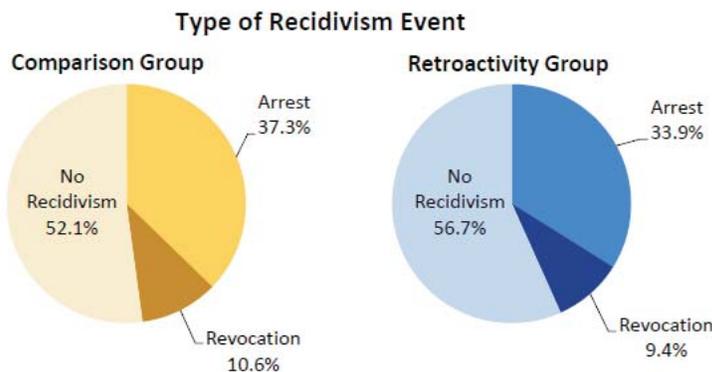
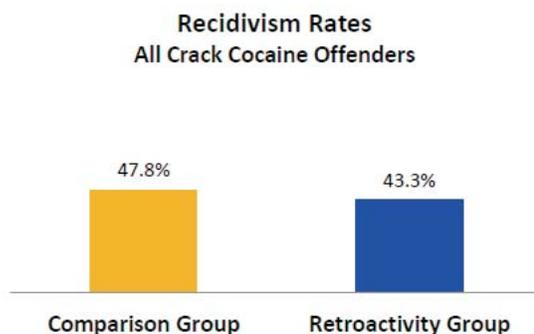
The Commission is required by statute to determine whether a guideline amendment that reduces the sentencing range applied to a particular offense or category of offender may be retroactively applied.² If the Commission determines that a guideline amendment may be retroactively applied, sentencing courts are then authorized upon a motion of the offender, the Director of the Bureau of Prisons, or the court itself to reduce the term of imprisonment, provided the sentencing range that would apply in the case would be lowered by the guideline that was amended,³ and the reduction is consistent with any applicable policy statements issued by the Commission. Within this framework, sentencing courts have discretion in determining whether, and to what extent, to reduce the sentence for any offender legally eligible to be considered for retroactive application of the amended guideline. In making this determination sentencing courts must consider the factors listed at 18 U.S.C. § 3553(a), which are also considered at the time an offender is first sentenced, as well as the risk to public safety that might result from a reduction in the sentence of an offender.⁴

On December 11, 2007, the Commission voted to authorize courts to apply the 2007 Crack Cocaine Amendment retroactively, beginning on March 3, 2008.⁵ As of June 29, 2011, the courts had decided 25,736 motions for retroactive application of the amendment.⁶ Of those motions, 16,511 (64.2%) were granted, and 9,225 (35.8%) were denied. Among the motions denied, 7,795 (77.2%) were filed on behalf of offenders who were legally ineligible for any sentence reduction.⁷ The courts denied 14.8 percent of motions on the merits as an exercise of the courts' discretion, and no more than 6.0 percent of all motions were denied for reasons that may be related to public safety.⁸

The Commission's Recidivism Study

The Study Results

The overall recidivism rate for the offenders who received retroactive application of the 2007 Crack Cocaine Amendment (the "Retroactivity Group") was similar to the recidivism rate for offenders who were released prior to the effective date of the 2007



For this study, recidivism was defined as any of the following criminal record events occurring within a five-year period following release from incarceration:

- a re-conviction for a new offense;
- a re-arrest with no case disposition information available; or
- a revocation of an offender's supervised release.

Retroactive sentence reductions did not result in higher recidivism rates for the Retroactivity Group.

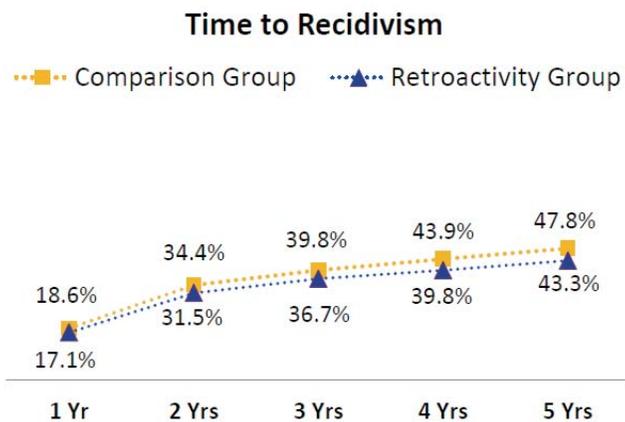
Crack Cocaine Amendment and who had therefore served their full sentence (the "Comparison Group").⁹

Of the Retroactivity Group, 43.3 percent of the offenders re-offended within five years. In the Comparison Group, 47.8 percent of offenders re-offended within five years. This difference was not statistically significant.

New arrests were the most common indication of offender recidivism in both groups. In the Retroactivity Group, new arrests

occurred in 33.9 percent of the cases, and revocations without an arrest were recorded in 9.4 percent. Similarly, in the Comparison Group, new arrests occurred in 37.3 percent of cases, and revocations without an arrest were recorded in 10.6 percent. Again, these differences were not statistically significant.

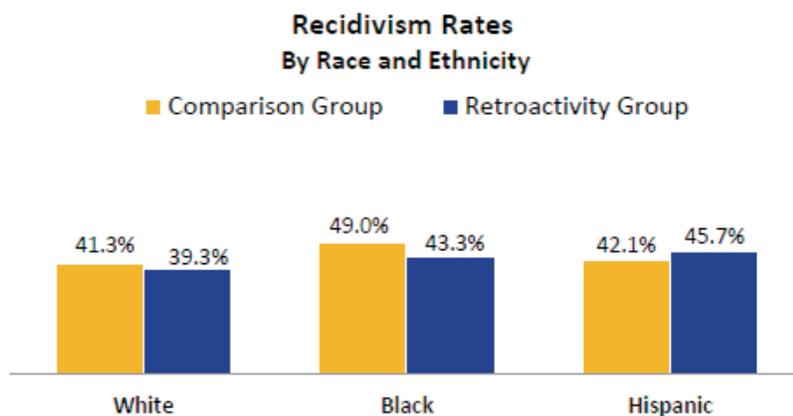
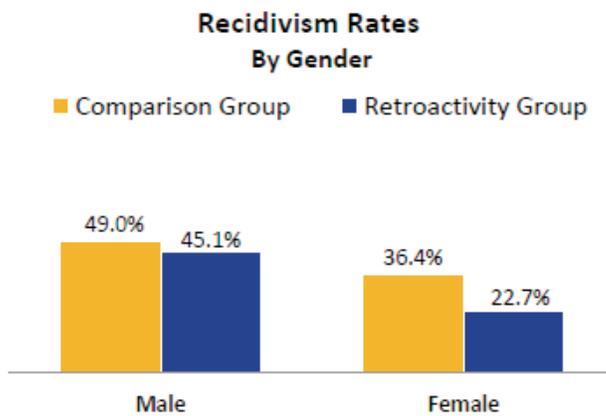
The time period within which offenders in both groups re-offended was also similar, and the recidivism rate climbed steadily throughout the five year period. For example, at one year after release, 17.1 percent of the Retroactivity Group had re-offended and 18.6 percent of the Comparison Group had re-offended. At two years, 31.5 percent of the Retroactivity Group and 34.4 percent of



the Comparison Group had re-offended. During the last three years of the five year period, some offenders from each group who had not re-offended in the preceding year were discovered to have re-offended in the following year, until the overall five year recidivism rates were reached.

As discussed more fully below, the Retroactivity Group and the Comparison Group were demographically similar. The vast majority of offenders in both groups were male and Black, and the

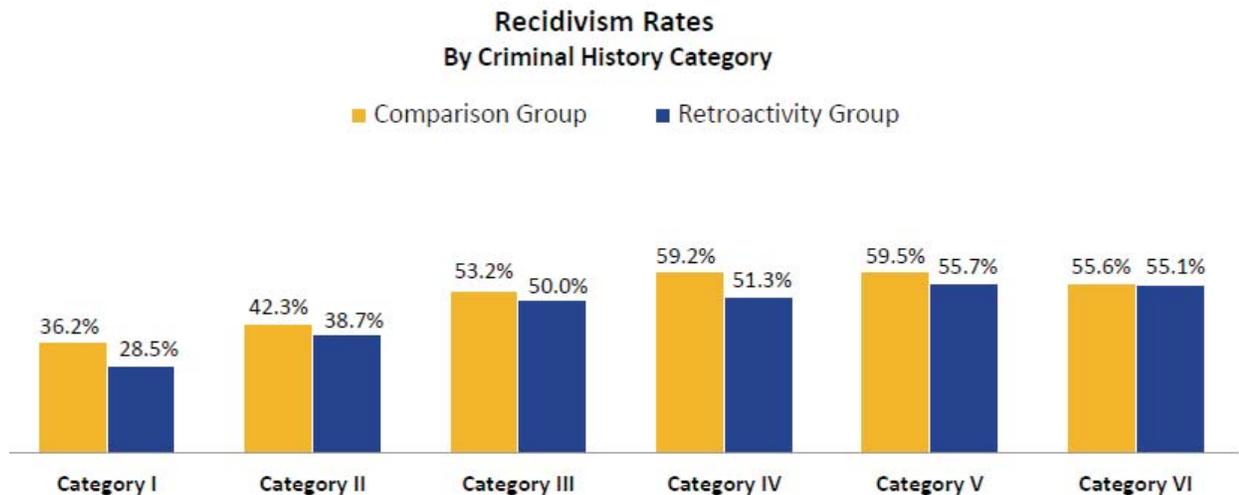
recidivism rates for these demographic groups were similar in both groups and any differences were not statistically significant.¹⁰ The average age at release of recidivists was similar (33.5 years and 33.8 years, respectively), and recidivists in both groups were younger than the average of all released offenders (36.3 years and 35.4 years, respectively). Younger offenders were more likely to re-offend in both groups, but the difference between the two groups was not statistically significant.



Recidivism rates between the two groups are similar when broken out by criminal history category (CHC). Higher CHCs (resulting from more prior crimes and/or more serious crimes) are common risk factors in recidivism.¹¹ In this study, recidivism rates rose with CHC in both groups at similar levels. Although there were slight differences between the recidivism rates of the Retroactivity Group

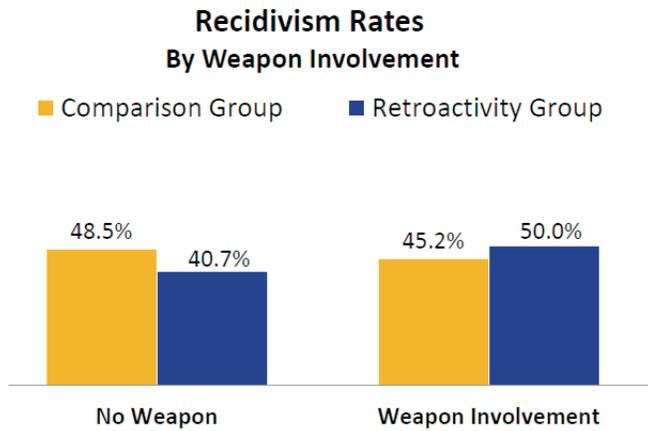
and the Comparison Group, these differences were not statistically significant.

In the Retroactivity Group, recidivism rates ranged from 28.5 percent (CHC I) to 55.7 percent (CHC V). In the Comparison Group, recidivism rates ranged from 36.2 percent (CHC I) to

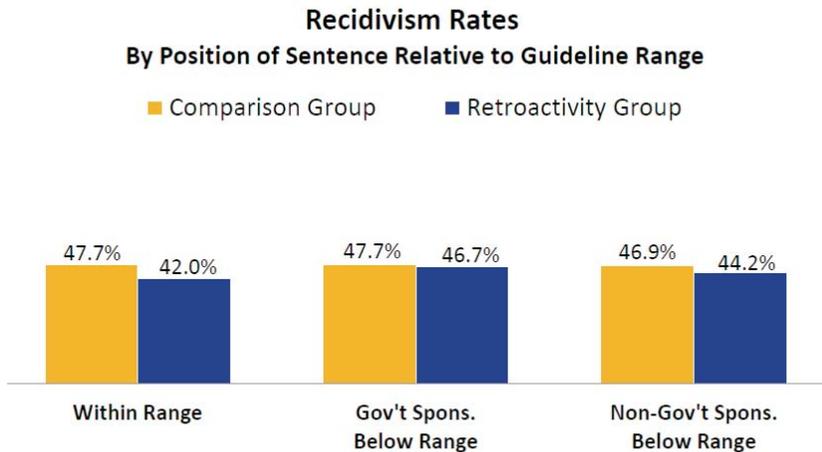


59.5 percent (CHC V). Offenders with higher CHCs were more likely to re-offend in both groups, but the difference between the two groups was not statistically significant.

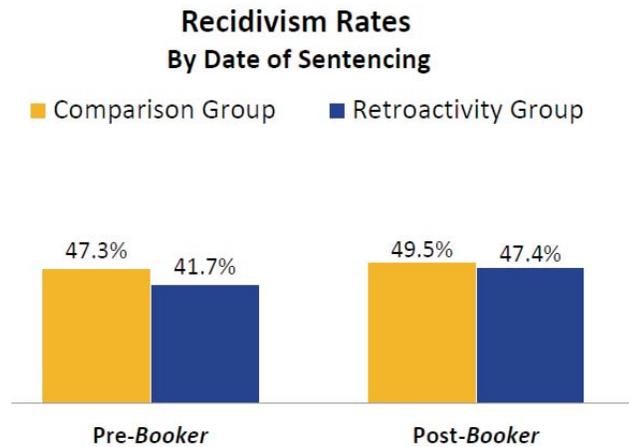
The Retroactivity Group was more likely to have received a sentence increase for weapon involvement as part of the instant offense than was the Comparison Group. However, this difference was not associated with a statistically significant difference in recidivism rates. Recidivism rates among offenders with weapon involvement were similar, at 50.0 percent in the Retroactivity Group and 45.2 percent in the Comparison Group. As a result, despite the fact that the two groups differ with respect to sentence increases for weapon involvement as discussed later in this report, this difference did not affect the overall conclusions of this report.



The position of the original sentence relative to the guideline range also was not associated with statistically significant differences in recidivism rates. Among those sentenced within the range, 42.0 percent of the Retroactivity Group re-offended as compared to 47.7 percent of the Comparison Group. Among those sentenced below the range at the request of the government, the recidivism rates were 46.7 percent and 47.7 percent, respectively. The recidivism rates for offenders with non-government sponsored below range sentences, 44.2 percent for the Retroactivity Group and 46.9 percent for the Comparison Group, were based on small numbers of cases and the differences were not statistically significant.



Regarding the date of the original sentence, the United States Supreme Court's decision in *United States v. Booker*¹² made the sentencing guidelines advisory and is a useful point of comparison. Among those sentenced Pre-*Booker*, 41.7 percent of the Retroactivity Group re-offended as compared to 47.3 percent of the Comparison Group. Post-*Booker* differences were 47.4 percent and 49.5 percent respectively. As with the other offense and offender factors, the date of sentencing did not differentiate the Retroactivity Group and Comparison Group from each other, and the recidivism differences were not statistically significant.



The Study Subjects

Two groups were identified for study: the Retroactivity Group who received retroactive application of the 2007 Crack Cocaine Amendment and the Comparison Group of offenders who were released prior to the effective date of the 2007 Crack Cocaine Amendment and who had, therefore, served their full sentence. The current study expands on a previous study¹³ and followed released offenders for five years, or until their first recidivism event.¹⁴

For the Retroactivity Group, Commission staff reviewed all available criminal records for offenders released during the period July 1, 2008 through November 30, 2008 pursuant to the 2007 Crack Cocaine Amendment.¹⁵ The Comparison Group was drawn from a sample of otherwise eligible¹⁶ crack cocaine offenders who were released during the 12 months prior to the effective date of the 2007 Crack Cocaine Amendment (March 3, 2008). The Comparison Group's available criminal records were also reviewed. Commission staff then compared the recidivism rates of the two groups.¹⁷

The study included crack cocaine offenders who:

1. received a modified sentence pursuant to the retroactive application of the 2007 Crack Cocaine Amendment – for offenders in the Retroactivity Group;
2. met the eligibility requirements set forth in the 2007 Crack Cocaine Amendment – for offenders in the Comparison Group;
3. were available to be tracked in the community for five years immediately after release following service of the prison sentence for the federal crack cocaine offense (not detained or deported or otherwise lost to the study) or until their first recidivism event, whichever came first – for both groups; and
4. could be matched successfully to FBI criminal records using Commission sentencing records – for both groups.

The Study Methodology

The study methodology was consistent with previous Commission studies of offender recidivism and was similar to other protocols such as those previously followed by the Bureau of Justice Statistics. The data on the offender's criminal history was supplied by the FBI under an agreement with the Commission. The recidivism literature recognizes that the FBI offender criminal records are sufficiently reliable and constitute a nationwide source from which to measure repeat criminal behavior.

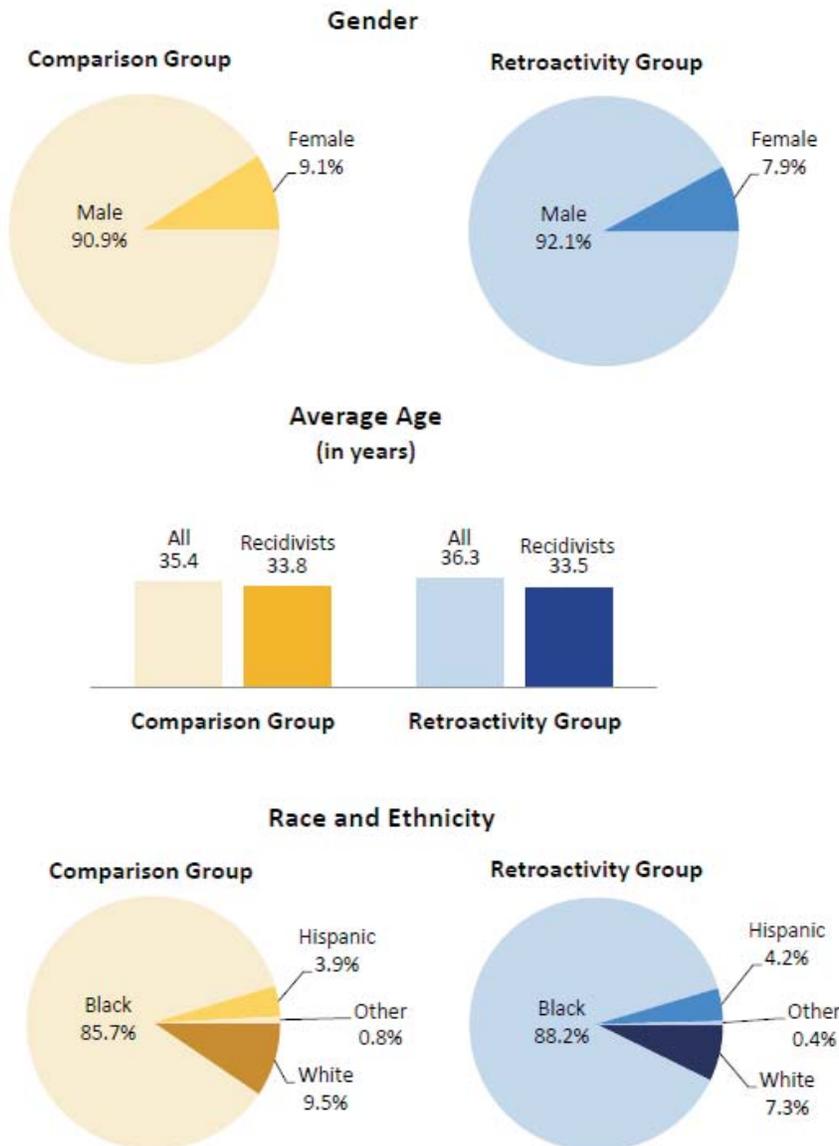
In summary, the Commission collected criminal records on all crack cocaine offenders released pursuant to retroactive application of the 2007 Crack Cocaine Amendment between July 1, 2008 and November 30, 2008 and examined the chronology of criminal events in those records for five years after release. This resulted in a study group of 836 offenders for inclusion in the Retroactivity Group. The Comparison Group consisted of a random sample of 483 similarly situated crack cocaine offenders who met all requirements and were released between March 1, 2007 and February 29, 2008—too early to benefit from retroactive application of the 2007 Crack Cocaine Amendment.

Foundation of a Natural Experiment: Similar Groups

In a conventional experiment, an intervention (e.g., retroactive sentence reduction) is introduced to a randomly selected group, and one can observe the intervention’s effect on an outcome of interest (e.g., recidivism). The outcome is also observed in a comparison (or control) group who is otherwise like the treatment group, but who is randomly selected not to receive the intervention. In contrast, the 2007 Crack Cocaine Amendment created a “natural” experiment, with treatment and comparison groups of offenders, in which the Retroactivity Group was granted a sentence reduction at the court’s discretion which was not available to an otherwise eligible set of offenders (the Comparison Group), as previously discussed. The effect of the sentence reduction, if any, may be observed by comparing subsequent offender recidivism between the two groups. Because the offenders were not randomly assigned to the two groups under experimental conditions, it is important to rule out initial group differences which may produce differential levels of recidivism. This section of the publication demonstrates that the Retroactivity and Comparison Groups were substantially similar across a range of characteristics, except that one group benefitted from sentence reduction.

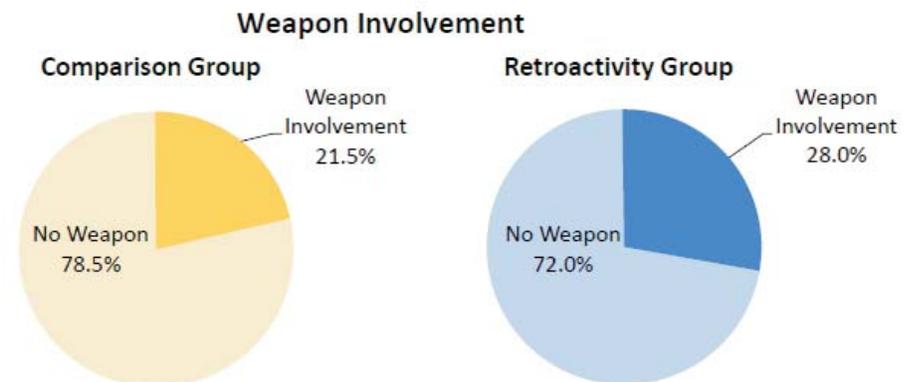
Crack cocaine offenders in the Retroactivity and Comparison Groups were demographically similar. The Retroactivity Group was 92.1 percent male and 88.2 percent Black. The Comparison

Group was 90.9 percent male and 85.7 percent Black. The average ages of the two groups upon prison release was also similar (36.3 years and 35.4 years, respectively).

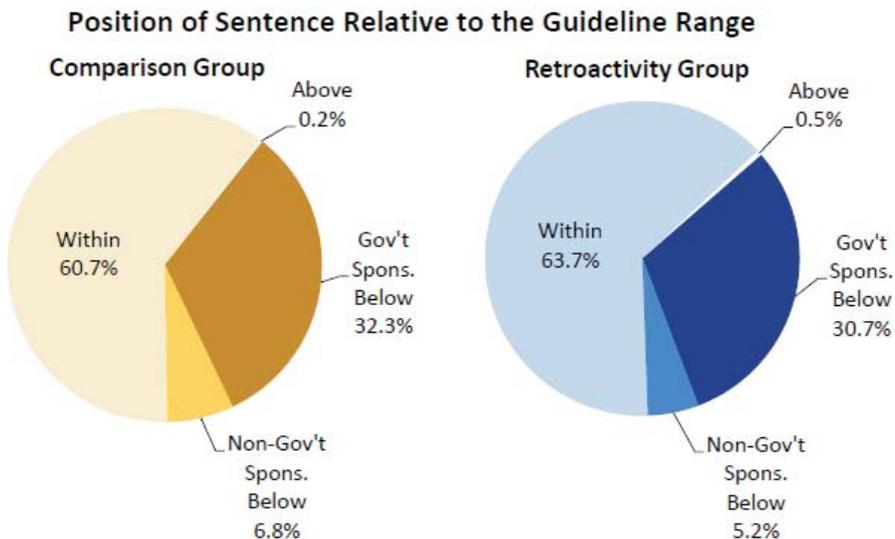


The distribution of CHCs of the two groups also was very similar. The most common CHC in both groups was CHC I (27.3% in the Retroactivity Group and 29.4% in the Comparison Group), while the next most common category in both groups was CHC III (25.4% and 25.8%, respectively). In each group, approximately 30 percent of the crack cocaine offenders were in CHCs IV through VI, which indicates that many crack cocaine offenders in each group had substantial criminal records prior to their instant offense.

Drug offenders may receive sentence increases for involvement of a weapon, and there was a statistically significant difference between the two groups on this factor. Over 28 percent (28.0%) of Retroactivity Group offenders received sentence increases for weapon involvement as part of the instant offense, as compared to almost 22 percent (21.5%) of offenders in the Comparison Group. The Retroactivity Group offenders were significantly more likely to have received sentence increases for weapon involvement as part of the instant offense.



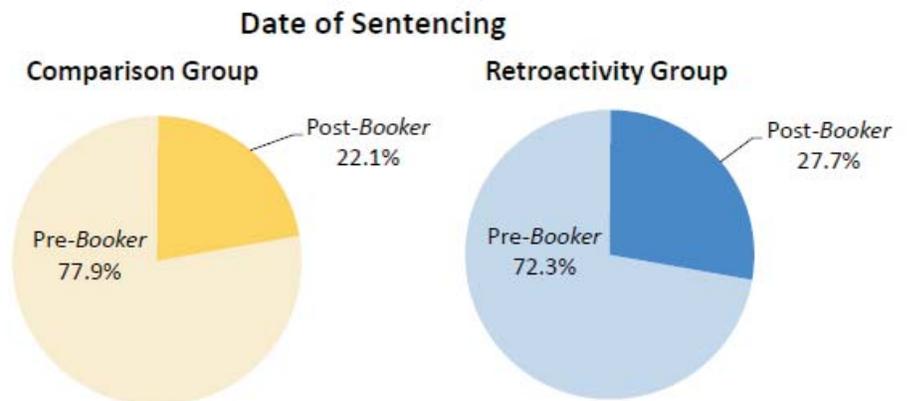
Most offenders in both groups were originally sentenced within the applicable guideline range (63.7% in the Retroactivity Group and 60.7% in the Comparison Group). In the Retroactivity Group, 30.7 percent were sentenced below the range based upon a motion sponsored by the government, as compared to 32.3 percent of the Comparison Group. An additional 5.2 percent in the Retroactivity Group were sentenced below the range for a reason not



sponsored by the government, as compared to 6.8 percent in the Comparison Group. The remainder in both groups received an above range sentence (0.5% and 0.2%, respectively).

Most offenders in both groups were sentenced prior to the *Booker* decision in 2005 which rendered the guidelines advisory in nature (72.3% and 77.9% respectively).

The average length of imprisonment for crack cocaine offenders in the Retroactivity Group before the reduction pursuant to the 2007 Amendment was 107.1 months, and almost one year longer than the average length of imprisonment for the Comparison Group, 96.8 months.¹⁸ However, the average sentence for the Retroactivity Group, after the offenders were resentenced pursuant to retroactive application of the amendment, was 85 months.¹⁹



In summary, when considering whether the sentence reduction due to the 2007 Crack Cocaine Amendment increased recidivism rates, these two groups represent an unbiased comparison. The Retroactivity and Comparison Groups were well matched on demographic, criminal history, and original sentencing characteristics.

Conclusion

The analysis compared the recidivism rates of two groups of crack cocaine offenders. Offenders in the Retroactivity Group were estimated to receive retroactive sentences which were approximately twenty percent shorter than their original sentences due to retroactive application of the 2007 Crack Cocaine Amendment. The Comparison Group included offenders released

prior to the effective date of the 2007 Crack Cocaine Amendment, who served their full prison terms, and matched the Retroactivity Group on eligibility criteria. A comparison of the two groups revealed substantial similarities in selected factors measuring offender demographic characteristics, offender criminal history categories, and original sentence characteristics.

The Commission study found that the offenders in the two groups re-offended at similar rates. Among those who re-offended, the ratio of new arrests to revocations and timing of recidivism were all comparable. The two groups' recidivism rates remained comparable over the entire period. While two factors were found to be related to greater recidivism—higher criminal history category and younger age—this relationship was found within each group in similar numbers. In summary, the analysis showed no statistically significant difference in the recidivism rates of the two groups.

Endnotes

1. U.S. SENT'G COMM'N, GUIDELINES MANUAL § 2D1.1 ((UNLAWFUL MANUFACTURING, IMPORTING, EXPORTING, OR TRAFFICKING (INCLUDING POSSESSION WITH INTENT TO COMMIT THESE OFFENSES); ATTEMPT OR CONSPIRACY) (hereinafter USSG).
2. See 18 U.S.C. § 994(u).
3. 18 U.S.C. § 3582(c)(2).
4. *Id.* That section requires courts to act in a manner “consistent with the applicable policy statements issued by the ‘Sentencing Commission.’” *Id.* See also USSG §1B1.10 (Reduction in the Term of Imprisonment as a Result of Amended Guideline Range), comment. (n.1(B)) (providing factors that a court shall consider in determining whether and to what extent to reduce a term of imprisonment). USSG §1B1.10 is the policy statement that a court must consider when deciding a motion to reduce a sentence of imprisonment based on the retroactive application of an amended guideline.
5. USSG, App. C, Amend. 713 (effective Mar. 3, 2008) (hereinafter USSG) (adding Amendment 706 as amended by 711 to the amendments listed in subsection (c) of USSG §1B1.10 that apply retroactively).
6. U.S. SENT'G. COMM'N., PRELIMINARY CRACK COCAINE RETROACTIVITY DATA REPORT, TABLE 1 (JUNE 2011).
7. *Id.* at Table 9.
8. *Id.*
9. Offenders served their full sentences, less reductions for earned credit.
10. Specifically, recidivism rates for males in the two groups were very similar (45.1% and 49.0%, respectively). The recidivism rates of female offenders in the Retroactivity Group and the Comparison Group were based on small sample sizes, but also were similar (22.7% and 36.4%). Recidivism rates for Blacks in the two groups differed slightly (43.3% and 49.0%, respectively). The recidivism rates of White offenders in the Retroactivity Group and the Comparison Group were similar (39.3% and 41.3%), as were the rates for Hispanic offenders (45.7% and 42.1%). The results for White and Hispanic offenders were based on relatively small number of cases.
11. See generally USSG, Ch. 4.
12. *United States v. Booker*, 543 U.S. 220 (2005).
13. Memorandum from Kim Steven Hunt and Andrew Peterson to Commissioners & Staff Director, “Recidivism Among Offenders with Sentence Modifications Made Pursuant to Retroactive Application of 2007 Crack Cocaine Amendment,” (May 31, 2011) available at http://www.ussc.gov/sites/default/files/pdf/research-and-publications/research-projects-and-surveys/miscellaneous/20110527_Recidivism_2007_Crack_Cocaine_Amendment.pdf.
14. Some offenders could not be reliably tracked for a full five years or until after the first recidivism event following completion of their sentence, such as offenders who died, were deported or otherwise detained following completion of their drug sentence. Those offenders were removed from the study.
15. Staff selected July 1, 2008 as the earliest release date for inclusion for offenders in the Retroactivity Group, rather than the March 3, 2008 effective date of the retroactive application of the 2007 Crack Cocaine Amendment. Using the July 1 date allowed staff to avoid analysis of offenders released during the weeks immediately following the effective date of retroactive application of the 2007 Crack Cocaine Amendment when disruptions to Bureau of Prisons programming and re-entry procedures, caused by the large volume of crack cocaine offenders released in the first few weeks, would have been greatest. For example, the retroactive application of the reduction in time served for crack offenders saw hundreds of inmates removed from waiting lists for those awaiting treatment in residential drug abuse programs. See FEDERAL BUREAU OF PRISONS, U.S. DEP'T OF JUSTICE, STATE OF THE BUREAU 2009, 26 (2010).
16. The eligibility criteria included: the drug involved was crack cocaine; the base offense level was between 14 and 42; the quantity of crack cocaine was less than 4,500 grams; the offender's final offense level was not derived from the Career Offender (USSG §4B1.1) or Armed Career Criminal (USSG §4B1.4) guideline; and the offender's original sentence was greater than any applicable statutory minimum punishment, unless relief from the mandatory minimum was provided through the statutory safety valve or the offender received a departure under USSG §5K1.1 for substantial assistance when originally sentenced.

17. The Retroactivity Group included 836 offenders and the Comparison Group included 483 offenders. The sample size of each group, while different, is sufficient to perform the statistical analyses that follow.

18. The 10.3 month difference in original length of imprisonment between the Retroactivity Group and the Comparison Group may appear larger than expected. However, under ordinary release procedures such as those followed for the Comparison Group, prisoners released at any given time “are more likely to be those with shorter sentences” and estimates tied to releases “understate actual time served” for all prisoners. See Alfred Blumstein & Allen J. Beck, *Population Growth in U.S. Prisons*, 26 CRIME & JUST. 17, 34 (1999). It follows that extraordinary release procedures such as those followed under the 2007 Crack Cocaine Amendment, which advanced the release dates of many prisoners, including many with longer than average sentences, may lessen this tendency to understate sentence length and associated time served in prison, and may have contributed to the difference between the two groups.

19. Forty-nine offenders in the Retroactivity Group received a sentence reduction of unspecified length and subsequently were released, and as a result the reduction from their original sentence cannot be calculated.