FEDERAL COCAINE OFFENSES:
AN ANALYSIS OF CRACK
AND POWDER PENALTIES

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EXECUTIVE SUMMARY

Public debate over sentences for federal cocaine offenses has focused on the 100:1 differential in the amounts of powder and crack cocaine that trigger the 5- and 10-year mandatory minimum sentences. The 100:1 differential in powder and crack cocaine amounts at sentencing is commonly distorted to imply that sentences for crack cocaine are vastly greater than sentences for powder cocaine. A closer examination of the federal penalty structure for cocaine offenses reveals that the 100:1 differential is misleading. A facial comparison of the guideline ranges for equal amounts of crack and powder cocaine reveals that crack penalties range from 6.3 times greater to approximately equal to powder sentences.

In order to determine how this facial disparity played out in actual sentences, the Office of Legal Policy (with assistance from the Bureau of Justice Statistics and the Criminal Division’s Office of Policy and Legislation) conducted a number of different analyses of the federal sentencing data for cocaine offenses collected by the U.S. Sentencing Commission between 1996 and 2000. The results of these analyses demonstrate that:

- Controlling for like amounts of cocaine, in 2000, crack defendants convicted of trafficking in less than 25 grams of cocaine received an average sentence that was 4.8 times longer than the sentence received by equivalent powder defendant. The ratio between average crack and powder sentences for defendants convicted of trafficking in between 15 and 49.9 kilograms of cocaine was 2.4:1.

- For defendants who possessed weapons, the ratio between average crack and powder sentences for lower amounts of cocaine was 2.9:1. For the highest amounts of cocaine, the ratio was only 1.6:1.

- For defendants with the highest criminal history levels, the average sentence for crack defendants ranged from 1.6 to 1.3 times longer (depending on the amount of cocaine) than the average sentence for similarly-situated powder defendants.

- For defendants with the lowest criminal histories, the ratio between average crack and powder sentences for the lowest amounts of drug 8.3:1. (This disparity affected 1,637 (or 7%) of the 22,896 crack defendants examined in this study.) But for offenders convicted of trafficking in higher amounts of cocaine, the ratio of average crack to powder sentences was only 2:1.
Crack cocaine is an especially dangerous drug. It is more likely to be psychologically addictive than powder cocaine, and it is more likely to result in chronic, heavy use. In 1999, about 73% of all individuals admitted into those state treatment organizations that receive federal funding used crack. Crack is often sold in small quantities – rocks – for between $3 and $35. By contrast, powder cocaine is sold by the gram (grams cost, on average, about $100). And crack cocaine use is more associated than powder cocaine use with systemic violence. For instance, in 2000, crack defendants were twice as likely to possess or use a weapon as powder defendants.

If the debate over the appropriate sentences for crack and powder is to have any real meaning, it must be based on actual data, and it must take into account the more dangerous nature of crack cocaine. This paper aims to contribute to the larger policy debate by presenting data reflecting the actual ratio between crack and powder cocaine sentences.
INTRODUCTION

The sentences imposed in federal cocaine cases are based on a combination of sentencing guidelines and statutory rules (referred to throughout this paper as the “federal sentencing scheme”). The U.S. Sentencing Guidelines (the “Guidelines”) specify ranges of imprisonment based on offense and offender characteristics. A set of overlapping statutes define the federal cocaine offenses – possession of cocaine base and trafficking in cocaine base or cocaine powder – and prescribe mandatory minimum and maximum penalties that may be imposed for these offenses.

These mandatory minimums establish two tiers of mandatory prison terms for first-time drug traffickers:

• a five-year minimum sentence for individuals convicted of trafficking 5 grams of cocaine base or 500 grams of powder, and

• a ten-year minimum sentence for individuals convicted of trafficking 50 grams of cocaine base or 5,000 grams of powder.

The Guidelines are based on the mandatory minimums in a way that perpetuates the 100:1 differential in the amount of powder and crack cocaine required for the imposition of a given sentence. Thus, for instance, a first-time, non-violent offender convicted of trafficking in 15,000 grams (15 kg.) of powder cocaine or 150 grams of crack cocaine would face the same penalty range of 151 to 188 months.

The federal sentencing scheme has been criticized on several fronts. Congress’s decision to treat crack offenses more severely than powder offenses has been criticized on the basis that crack and powder are pharmacologically identical. The degree of addictiveness and pattern of abuse of cocaine is attributed to the method of ingestion (i.e. smoked and injected vs. snorted), rather than the form of the drug (i.e. powder or crack). In addition, Blacks make up a majority of crack cocaine defendants, and the fact that crack cocaine is treated more severely than powder is criticized as having a disproportionate impact on Blacks. Finally, the sentencing scheme is criticized because of evidence that the mandatory minimums apply to low-level crack dealers, rather than the mid-level dealers the legislative history indicates that Congress intended to reach.

Proposals to amend the federal sentencing scheme for crack and powder cocaine offenses have focused primarily on changing the underlying ratio between powder and crack cocaine amounts. This paper aims to contribute to the larger policy debate by presenting data reflecting the actual ratio between crack and powder cocaine sentences. To collect this data, the Office of Legal Policy (with

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1 The federal statutes defining cocaine offenses distinguish between cocaine powder and “cocaine base.” Cocaine base technically occurs in two forms: freebase cocaine and crack cocaine. In 1993, the Sentencing Commission amended the sentencing guidelines by clarifying that, for the purposes of the guidelines, “cocaine base” means crack cocaine. See United States Sentencing Commission Guidelines Manual (U.S.S.G.) § 2D1.1(c) (Nov. 1, 1993)
assistance from the Bureau of Justice Statistics and the Criminal Division’s Office of Policy and Legislation) conducted a number of different analyses of the federal sentencing data for cocaine offenses collected by the U.S. Sentencing Commission between 1996 and 2000. The analyses described in this paper attempt to compare crack and powder sentences for like amounts of cocaine. These analyses show that, examined on this basis, crack cocaine sentences are between 1.3 and 8.3 times longer than powder cocaine sentences, depending on the amount of cocaine involved and the specific characteristics of the offender.²

PART I. BACKGROUND

This section provides background data on the pharmacology, use, trafficking patterns, and violence associated with both powder and crack cocaine. This brief discussion provides the broader context for the data and observations about the sentences for crack and powder cocaine offenses presented by this paper.

A. Pharmacology

Cocaine is a naturally occurring substance that is derived from the leaves of erythroxylon plants indigenous to South America.³ Pharmacologically, cocaine is (1) a potent analgesic and (2) a powerful stimulant.⁴ Cocaine alkaloid is available in many forms: coca leaves, coca paste, powder cocaine, and cocaine base.⁵ Cocaine powder and cocaine base are the two forms most commonly abused in the United States.

**Powder cocaine** is a white, powdery substance that is produced by combining coca paste and hydrochloric acid.⁶ Powder cocaine is usually abused by snorting (intranasal administration) or by dissolving in water and injecting into a vein (intravenous administration). Powder cocaine cannot be smoked.⁷

**Cocaine base** is produced from powder cocaine and is abused by smoking. It occurs in two forms: freebase cocaine and crack cocaine.⁸

- **Freebase cocaine** is derived from powder cocaine that has been dissolved in water and ammonia and combined with ether. Ether is a highly volatile and flammable

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² Not controlling for amount, the average crack sentence is 1.6 times longer than the average powder sentence.
⁴ U.S.S.C., supra n.3, at 7.
⁵ Id. at 9-11.
⁶ Id. at 12.
⁷ Id.
⁸ Id. at 13.
solvent that will ignite or explode if the freebase cocaine is smoked before the ether has evaporated entirely.\textsuperscript{9}

- **Crack cocaine**, by contrast, can be easily and safely manufactured in a home microwave by combining powder cocaine, water, and baking soda and drying the mix into a solid mass. This mass is “cracked” into rocks which are then smoked. One gram of powder cocaine yields approximately .89 grams of crack cocaine.\textsuperscript{10}

**The effects** produced by cocaine are largely dependent on how much and how fast the cocaine reaches the central and peripheral nervous systems.

- **Smoked cocaine** results in the quickest onset and fastest penetration. Generally, smoked cocaine reaches the brain within 20 seconds; the effects last for about 30 minutes.\textsuperscript{11}

- **Intravenously administered cocaine** reaches the brain within one minute; the effects are also sustained for about 30 minutes.\textsuperscript{12} Intravenous administration results in greater bioavailability than smoked cocaine – 40 to 70 percent of smoked cocaine is destroyed by heating or is not inhaled.\textsuperscript{13}

- **Intranasally administered cocaine** has a slower onset. The maximum psychotropic effects are felt within 20 minutes and the maximum physiological effects within 40 minutes. The effects from intranasally administered cocaine usually last for about 60 minutes after the peak effects are attained. Only about 30 to 60 percent of the amount of cocaine snorted is bioavailable.\textsuperscript{14}

Although intravenously administered and smoked cocaine result in similar effects, smoking cocaine is easier. (A crack smoker is spared the difficulty of repeatedly filling a syringe and locating a good injection site). At least one study has shown that smoking crack cocaine is more likely to be psychologically addictive and lead to chronic, heavy cocaine use than the predominant method for administering powder cocaine (snorting).\textsuperscript{15}

Although cocaine is not physiologically addictive, it is psychologically addictive. The euphoric effects of the drug result in intense psychological cravings that supersede any adverse effects that may occur on account of increased dependence on the drug. The pattern of cocaine abuse

\textsuperscript{9} Id. \\
\textsuperscript{10} Id. at 14. \\
\textsuperscript{11} Id. at 20. \\
\textsuperscript{12} Id. at 21. \\
\textsuperscript{13} Id. at 22. \\
\textsuperscript{14} Id. at 20-21. \\
\textsuperscript{15} For example, one study showed that 66% of crack users smoked on a daily basis, but only 18% of cocaine snorters used on a daily basis. See Hatsukami & Fischman, supra n. 3, at 1583.
by any method is associated with escalation in the amount of cocaine used and increased frequency of use.\textsuperscript{16}

B. Dosage

Because of the pattern of escalation in the amount and frequency of use that is associated with cocaine abuse, determining what constitutes a single dose of cocaine is complex. The Drug Enforcement Administration has concluded that it is “reasonable” to assume 100 mg as the dosage unit for crack or powder cocaine.\textsuperscript{17}

**Crack cocaine:** The Drug Enforcement Administration’s general dosage estimates indicate that 5 grams of crack – the amount that triggers the five-year mandatory minimum – contains between 10 and 50 dosage units.\textsuperscript{18} A single dose of crack cocaine ranges from 100 to 500 milligrams.\textsuperscript{19} DEA intelligence indicates that a crack user is likely to consume anywhere from 3.3 to 16.5 grams of crack a week.\textsuperscript{20}

**Powder cocaine (injected):** 500 grams of powder – the amount that triggers the five-year mandatory minimum – contains between 1,000 and 5,000 individual doses, and a typical dose of powder cocaine ranges from 30 to 150 milligrams.\textsuperscript{21} The typical intravenous cocaine user injects between 7.2 and 9.6 grams of cocaine per week.\textsuperscript{22}

**Powder Cocaine (intranasal):** A line of cocaine consists of between 40 and 50 milligrams, and a typical user snorts between two and three lines at a time.\textsuperscript{23} The typical intranasal powder user consumes about 2 grams per month.\textsuperscript{24}

\textsuperscript{16} \textit{Id.} at 24-26.
\textsuperscript{17} \textit{See Memo from Tony P. Teresi, Chief, Office of Congressional Affairs, Drug Enforcement Administration to Stacy Shrader, Office of Congressman Asa Hutchinson, at 4 (March 8, 2001) (concluding that dosages for crack range from 25 to 100 mg, and dosages for powder range from 30 to 100 mg).}
\textsuperscript{18} \textit{But see Hatsukami & Fischman, supra n.3, at 1580-88 (concluding that 5 grams of crack yielded 50 to 200 doses and that 500 grams of powder yielded 10,000 doses).}
\textsuperscript{19} \textit{But see id. (concluding that crack cocaine doses range from 25 to 100 milligrams).}
\textsuperscript{20} \textit{See Memo from Tony P. Teresi, supra n.17, at 1.}
\textsuperscript{21} \textit{Id.}
\textsuperscript{22} \textit{See id at 2; Gawin & Kleber, Cocaine Use in a Treatment Population, in Cocaine in America: Epidemiological and Clinical Perspectives 182-92 (NIDA Monogram #61 1985).}
\textsuperscript{23} \textit{See Memo from Tony P. Teresi, supra n.17, at 2.}
C. Use Data

According to the National Household Survey on Drug Abuse, overall use of cocaine in the United States has decreased over the past 15 years. In 2000, 1.2 million Americans were current cocaine users.\textsuperscript{25} This compares to 1.5 million Americans in 1999\textsuperscript{26} and 5.7 million current users in 1985.\textsuperscript{27}

There are roughly five times as many powder cocaine users in the United States as there are crack cocaine users. In 2000, 1.2 million people reported using powder cocaine in the past month, compared to 265,000 people who reported using crack.\textsuperscript{28}

Children and young adults also use crack cocaine less prevalently than powder cocaine. Of students surveyed in 2001, 3.3% of 8\textsuperscript{th} graders reported having used cocaine during their lifetime, compared with 3.0% who had used crack. For 10\textsuperscript{th} graders, 5.0% had used cocaine and 3.1% had used crack. And for 12\textsuperscript{th} graders, 7.4% had used cocaine and 3.7% had used crack.\textsuperscript{29}

Finally, the Office of Applied Studies at the Substance Abuse and Mental Health Services Administration collects an annual Treatment Episode Data Set from all state organizations that receive federal drug funding for drug treatment. In 1999, 228,206 individuals were admitted to treatment for cocaine abuse (this is down from 292,340 in 1994).\textsuperscript{30} About 73% of all individuals admitted into treatment used crack.\textsuperscript{31} The remaining 27% of individuals were admitted for powder cocaine abuse.\textsuperscript{32} Sixty-nine percent of powder users reported that they ingested the drug intranasally (42,515); 17% reported intravenously administering powder cocaine (10,490).\textsuperscript{33}

\begin{itemize}
\item \textsuperscript{25} Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, \textit{Summary of Findings from the 2000 National Household Survey on Drug Abuse} App. F, Table F.1 (2001). “Current users” are defined as those individuals who have used cocaine within the past month.
\item \textsuperscript{26} Id.
\item \textsuperscript{28} Supra n.25, Table F.1 at 131. (For 2000, 24.9 million people reported having used powder cocaine in their lifetime, compared to 5.3 million lifetime crack users.)
\item \textsuperscript{29} National Institute of Drug Abuse, \textit{Monitoring the Future Study} Table 1 (2001).
\item \textsuperscript{30} Department of Health and Human Services, Office of Applied Studies, Substance Abuse and Mental Health Services Administration, \textit{Treatment Episode Data Set} (1999).
\item \textsuperscript{31} Id. at 23.
\item \textsuperscript{32} Id. at 24.
\item \textsuperscript{33} Id.
\end{itemize}
D. Race Data

Data from the United States Sentencing Commission for the year 2000 indicates that 85% of all individuals convicted of crack cocaine trafficking were Black.34 By contrast, only 30.5% of powder cocaine convicts were Black (17.8% were White and 50.8% were Hispanic).35 The racial and ethnic breakdowns of crack and powder trafficking defendants in 2000 were as follows:

| Table A. Race and Ethnicity of Crack and Powder Trafficking Defendants, 2000 (By Percentage). |
|-------|-------|-------|-------|
|       | White | Black | Hispanic | Other |
| POWDER |       |       |         |       |
| <500g  | 34.8  | 29.9  | 33.8    | 1.5   |
| 500g-5kg | 16.3  | 36.0  | 46.6    | 1.1   |
| >5kg   | 12.7  | 25.5  | 61.2    | 0.6   |
| CRACK  |       |       |         |       |
| <5g    | 13.1  | 74.9  | 11.0    | 1.0   |
| 5-50g  | 7.1   | 85.7  | 6.7     | 0.5   |
| >50g   | 3.9   | 85.5  | 9.9     | 0.7   |

Source: Office of Policy and Legislation, Criminal Division.

A 1996 study of crack and cocaine powder use reported that, overall, more Whites used powder and crack cocaine than Blacks or Hispanics.36 However, within racial groups, a higher percentage of Blacks and Hispanics use crack cocaine than Whites.37

Evidence that Blacks are more likely to use crack cocaine than Whites can also be found in the Office of Applied Studies' annual Treatment Episode Data Set, which shows that 58% of the individuals admitted for treatment for crack cocaine abuse were Black.38 By contrast, only 33% of powder cocaine users who entered treatment in 1999 were Black.39

34 The United States Sentencing Commission collects data on the race of defendants according to the following categories: White, Black, Native American or Alaska Native, and Asian or Pacific Islander. Ethnicity data indicate whether a defendant is of Hispanic origin. Individuals who are identified as Hispanic are categorized as such in the Sentencing Commission data regardless of their racial background.

35 Data from the United States Sentencing Commission, 2000 Data File, compiled by the Office of Policy Legislation, Criminal Division, U.S. Department of Justice.

36 Hatsukami & Fischman, supra n.3, at 1581 (Whites = 3.6 million; Black = 1.0 million; Hispanic = 0.7 million).

37 Id.

38 TEDS, supra n.30, at Table 3.1b.

39 Id.
E. Trafficking Data

According to the Drug Enforcement Administration, all cocaine is imported into the United States as powder.40 Distribution in the United States is conducted at three broad levels: wholesale trafficking, mid-level distribution, and retail selling.

Wholesale cocaine traffickers purchase cocaine from importers and regional distributors in kilogram or multikilogram allotments.41 Local Wholesalers deal generally in quantities of 15 kilograms or less.42

Distributors purchase cocaine in one-kilogram or less quantities and package the cocaine into ounce quantities or convert it into crack and package it into ounces for sale by retail sellers.43 The DEA has noted that, in an effort to avoid the severe federal penalties for crack cocaine, some distributors deal only in powder cocaine.44

Retail Sellers generally deal in ounce and gram quantities. Powder is usually sold in larger amounts than crack. Retail crack sellers usually carry dosage units totaling no more than a few grams at any one time (although during the course of a single shift, the amount of crack sold by one retail seller can be substantial.)45

Prices for powder cocaine typically mirror or are slightly lower than crack prices, although crack cocaine can be purchased in smaller and less expensive amounts. A report issued in 2000 by the Office of National Drug Control Policy reported that crack cocaine is most commonly sold by the rock, and prices per rock ranged from $3 to $35.46 The cost of crack by the gram ranged from $20 per gram in Miami to $28 per gram in New York City to $100 per gram in Los Angeles, Billings, MT, and Washington, DC, to $250 per gram in Hawaii.47 Prices for powder cocaine ranged from $20 per gram in Sioux Falls, SD, to $200 in Hawaii, with most regions reporting prices of around $100 per gram.48

Method of Delivery: Crack cocaine is sold mostly on street corners, in private residences, and in crack houses in hand-to-hand transactions.49 Crack sellers are seldom affiliated with

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40 See also U.S.S.C., supra n.3, at 66-67.
41 Id.
42 Id.
43 One ounce = 28.5 grams.
44 See also U.S.S.C., supra n.3, at 66-67.
45 Report to the U.S. Sentencing Commission by Paul Daly, Assistant Administrator of the Intelligence Division, Drug Enforcement Administration at 2-3 (October 9, 1996).
47 Id.
48 Id. at 24-25.
49 Id. at 34.
trafficking organizations; some geographic regions report that crack sellers are often involved in
gangs (Chicago, Columbia, Denver, Honolulu, Los Angeles, Portland, and Washington, DC).50

By contrast, powder cocaine is most often sold using a delivery method whereby a customer
places an order over the phone and the seller delivers the product to the customer.51 Street-level
powder sellers are equally likely to sell as part of a gang or independently.52

**Powder Seizures:** In 2000, the DEA made 4,100 seizures of powder cocaine (a total of
55,523,225 grams). The average powder seizure was 13,542 grams. In 2001, the DEA made 3,671
powder seizures, with an average size of 12,322 grams. More than 60% of the DEA’s seizures of
powder cocaine in 2000 and 2001 were for amounts less than 500 grams. For instance, in 2001,
DEA made 2,764 seizures of less than 500 grams of powder. This compares to 454 seizures of
powder in amounts between 500 and 2500 grams and 453 seizures of powder in amounts greater than
2500 grams.53

**Crack Seizures:** In 2000, the DEA made 3,866 seizures of crack cocaine (a total of 338,936
grams). The average crack seizure was 88 grams. In 2001, the DEA made 3,916 seizures of crack
cocaine, with an average seizure of 72 grams. In 2001, the majority of cocaine seizures were
between 5 and 249 grams (2,649 seizures), compared with 1,121 seizures of less than 5 grams and
146 seizures of more than 250 grams.54

**F. Data on Related Violence**

Although the reason for the link is not entirely clear, crack cocaine use is more associated
than powder cocaine use with systemic violence. A partial explanation of the greater degree of
systemic violence associated with crack cocaine arises from the nature of crack and powder
transactions. Crack transactions tend to be hand-to-hand and often involve gang members; crack
users are less likely to use a regular supplier or a main source,55 and the pattern of crack use (a short
high followed by additional drug use) may mean that users and sellers interact in a manner that
elevates personal and aggregate risk.56 (Users coming off crack often feel an intense need for more
crack and frequently suffer from dysphoria and extreme agitation.57)

A November 2000 study examined the effect of the crack epidemic on urban crime rates and
concluded that, in the absence of crack, urban crimes rates in 1991 (the most recent peak year for

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50 Id. at 33.
51 Id. at 37.
52 Id. at 35.
53 Figures from DEA, on file with the Department of Justice.
54 Id.
55 ONDCP, supra n.46, at 34.
57 Id. at 197-98.
urban crime) would have been 10% lower.\textsuperscript{58} The study further found that the most prevalent form of violence related to crack cocaine abuse was aggravated assault.\textsuperscript{59} The authors also noted an increase in property crimes associated with crack use.\textsuperscript{60} In addition, a 1998 study identified crack as the drug most closely linked to trends in homicide rates.\textsuperscript{61}

Crack does not appear to cause violence \textit{per se} – rather it appears that crack abuse intensifies criminal behaviors in which the users were already involved.\textsuperscript{62} Several studies have noted that crack sales may be more violent because crack is sold in smaller units and involves a higher volume of transactions.\textsuperscript{63} The crack market is highly decentralized with many small, independent groups competing for territory and profits; this may lead to a greater reliance on violence as a means of "regulating" the crack market.\textsuperscript{64}

Crack also is much more associated with weapons use than is powder cocaine: in FY 2000, weapons were involved in 10.6% of powder convictions, and 21.3% of crack convictions.\textsuperscript{65}

One of the best-documented links between increased crime and cocaine abuse is the link between crack use and prostitution. According to the authors of one study, "[h]ypersexuality apparently accompanies crack use."\textsuperscript{66} In this study, 86.7% of women surveyed were not involved in prostitution in the year before starting crack use; one-third become involved in prostitution in the year after they began use.\textsuperscript{67} Women who were already involved in prostitution dramatically increased their involvement after starting to use crack, with rates nearly four times higher than before beginning crack use.\textsuperscript{68}

In another 1991 survey of drug users, crack cocaine smokers reported more sex partners, more acts of unprotected sex, a higher frequency of exchanging sex for drugs or money, and a higher frequency of drug use before or during sex than IV cocaine users who did not smoke cocaine. Because of this, crack cocaine smokers have been found to have rates of HIV infection as high as those among IV drug users.\textsuperscript{69} Crack users were also more likely to contract other sexually transmitted diseases, such as gonorrhea and syphilis, compared with cocaine hydrochloride users.\textsuperscript{70}

\textsuperscript{58} Jeff Grogger and Michael Willis, \textit{The Emergence of Crack Cocaine and the Rise in Urban Crime Rates}, 4 Review of Econ. and Stats. 519, 526 (2000).
\textsuperscript{59} \textit{Id.} at 525.
\textsuperscript{60} \textit{Id.}
\textsuperscript{61} Riley, \textit{supra} n.56, at 196-97.
\textsuperscript{63} \textit{Id.} at 5.
\textsuperscript{64} \textit{Id.}
\textsuperscript{65} Data from the United States Sentencing Commission, 2000 Data File, compiled by the Office of Policy Legislation, Criminal Division, U.S. Department of Justice.
\textsuperscript{66} Chin & Fagan, \textit{supra} n. 62, at 21.
\textsuperscript{67} \textit{Id.} at 15.
\textsuperscript{68} \textit{Id.} at 15.
\textsuperscript{69} Hatsukami & Fischman, \textit{supra} n.3, at 1585.
\textsuperscript{70} \textit{Id.}
PART II. LEGISLATIVE AND STATUTORY BACKGROUND

The sentences imposed in federal cocaine cases are based on a combination of sentencing guidelines and statutory rules (referred to throughout this paper as the “federal sentencing scheme”). The U.S. Sentencing Guidelines (the “Guidelines”) are promulgated by the United States Sentencing Commission, a judicial branch agency that issues rules and policies governing sentencing in federal cases. A set of overlapping statutes define the federal cocaine offenses — possession of cocaine base and trafficking in cocaine base or cocaine powder — and prescribe mandatory minimum and maximum penalties that may be imposed for these offenses.

A. The U.S. Sentencing Guidelines and the Mandatory Minimum Penalties

The Guidelines are a result of the Sentencing Reform Act of 1984. This legislation provided for a comprehensive statement of federal sentencing laws, appellate review of sentences, and the abolition of parole. This legislation also created the United States Sentencing Commission, whose members are appointed by the President subject to Senate confirmation, and directed it to develop a detailed system of guidelines to structure and direct the sentencing discretion of federal district court judges.

At the same time that the Commission was developing and promulgating the sentencing guidelines, Congress enacted a number of mandatory minimum statutes for drug, weapon, and recidivist offenders. In 1986, prior to the implementation of the sentencing guidelines, Congress enacted the Anti-Drug Abuse Act (the “1986 Act”) which established mandatory minimum penalties for persons convicted of trafficking in powder and crack cocaine, among other substances.71 The 1986 Act also initiated the federal criminal law distinction between “cocaine base” and other forms of cocaine,72 and established two tiers of mandatory prison terms for first-time drug traffickers:

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71 This legislation moved quickly through Congress and the legislative history is sparse. The legislative history, as evidenced mainly by the statements of individual legislators, suggests that Congress perceived crack cocaine to be at the forefront of a national drug-abuse epidemic. See, e.g., 132 Cong. Rec. 26,436 (Sept. 26, 1986) (statement of Sen. Biden); id. at 26,444 (statement of Sen. Deconcini); 132 Cong. Rec. 8,091 (June 20, 1986) (statement of Sen. D’Amato). Additionally:

• Congress’s decision to differentiate crack cocaine from powder cocaine in the penalty structure was deliberate and reflected Congress’s conclusion that crack cocaine was more dangerous and associated with greater social harms than powder cocaine. See U.S.S.C., supra n.3, at 118.

• Congress intended quantity levels triggering the ten-year mandatory minimum penalties to be those associated with major traffickers; quantity levels triggering the five-year mandatory minimum penalties were intended to be associated with serious/mid-level traffickers. Id. at 118-19.

• In 1986, some members of Congress pushed in favor of stronger crack penalties because crack was seen as disproportionately victimizing African-Americans, particularly in urban neighborhoods. Id.

72 Although “cocaine base” technically includes both freebase and crack cocaine, the sentencing guidelines define the term to apply only to crack cocaine. See U.S.S.G. § 2D1.1 note C.
• a five-year minimum sentence for individuals convicted of trafficking 5 grams of cocaine base or 500 grams of cocaine powder, and

• a ten-year minimum sentence for individuals convicted of trafficking 50 grams of cocaine base or 5,000 grams of cocaine powder.

The sentencing provisions of the 1986 Act were implemented in August 1986. In 1987, the Sentencing Commission used the same 100:1 quantity ratio to set drug penalties under the Guidelines.73 The initial set of sentencing guidelines was promulgated in November 1987. The Supreme Court upheld the constitutionality of the Sentencing Commission and the guidelines in January 1989 in Mistretta v. United States, 488 U.S. 361 (1989). Full nationwide implementation of the sentencing guidelines followed.

B. The Federal Sentencing Scheme

The provisions that define federal cocaine offenses differentiate between trafficking74 – the production or distribution of controlled substances – and possession.75 Sentences for trafficking in crack or powder cocaine are linked to the statutory mandatory minimums established by the 1986 Act.76 Simple possession of powder cocaine – regardless of amount – is treated as a misdemeanor, punishable by up to a year of imprisonment. However, possession of more than five grams of a mixture or substance containing crack cocaine base is punishable by imprisonment for at least five years.77

All federal defendants convicted of a felony or Class A misdemeanor offense are sentenced according to the Guidelines, which are pegged to the applicable mandatory minimums. The Guidelines, which are set out in the Federal Sentencing Guidelines Manual, specify a range of imprisonment based on offense and offender characteristics. To determine the applicable guidelines

73 U.S.S.C., supra n.3, at 1.
74 21 U.S.C. § 841(a) makes it unlawful for any person “knowingly or intentionally (1) to manufacture, distribute, or dispense, or possess with intent to manufacture, distribute, or dispense, a controlled substance; or (2) to create, distribute, or dispense, or possess with intent to distribute or dispense, a counterfeit substance.”
75 21 U.S.C. § 844 makes it unlawful for any person “knowingly or intentionally to possess a controlled substance unless such substance was obtained directly, or pursuant to a valid prescription or order, from a practitioner, while acting in the course of his professional practice, or except as otherwise authorized by this subchapter or subchapter II of this chapter.”
76 For cases involving trafficking in at least 5 grams of cocaine base or 500 grams of cocaine powder, 21 U.S.C. § 841(b)(1)(B) prescribes a mandatory minimum prison term of not less than 5 years. For cases involving trafficking in at least 50 grams of cocaine base or 5,000 grams of cocaine powder, 21 U.S.C. § 841(b)(1)(A) prescribes a mandatory minimum prison term of not less than 10 years. In cases where the drug amount criteria for the basic five-year or ten-year mandatory penalties are satisfied, 21 U.S.C. § 841 provides higher mandatory penalties if certain additional aggravating factors are present. Specifically, higher mandatories are provided – in some circumstances up to life imprisonment – where the offender has prior drug offense convictions or death or serious injury results from use of the drugs involved in the offense.
77 21 U.S.C. § 844. This provision was enacted as part of the Anti-Drug Abuse Act of 1988.
range in particular cases, a base offense level is assigned according to nature of the offense, and a criminal history category is assigned on the basis of the seriousness of the offender’s criminal history. These two factors in combination (and as adjusted to reflect aggravating and mitigating factors) determine the applicable guidelines range of imprisonment.

The base offense levels for crack and powder cocaine trafficking offenses are based on the quantity of drug involved in the offense. For offenders who have no other adjustments made to their offense level, the base offense level would correspond to the final offense levels listed in the following table.78

### Table B. Penalties for Crack and Powder Cocaine Trafficking by Offense Level.

<table>
<thead>
<tr>
<th>Guideline offense level (§2D1.1)</th>
<th>Quantity of Drugs</th>
<th>Guideline Range (CH I)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>0 to &lt;250 mg</td>
<td>0 to &lt;25 g</td>
</tr>
<tr>
<td>14</td>
<td>250 to &lt;500</td>
<td>25 to &lt;50 g</td>
</tr>
<tr>
<td>16</td>
<td>500 mg to &lt;1 g</td>
<td>50 to &lt;100 g</td>
</tr>
<tr>
<td>18</td>
<td>1 to &lt;2 g</td>
<td>100 to &lt;200 g</td>
</tr>
<tr>
<td>20</td>
<td>2 to &lt;3 g</td>
<td>200 to &lt;300 g</td>
</tr>
<tr>
<td>22</td>
<td>3 to &lt;4 g</td>
<td>300 to &lt;400 g</td>
</tr>
<tr>
<td>24</td>
<td>4 to &lt;5 g</td>
<td>400 to &lt;500 g</td>
</tr>
<tr>
<td>26</td>
<td>5 to &lt;20 g</td>
<td>500 g to &lt;5 kg</td>
</tr>
<tr>
<td>28</td>
<td>20 to &lt;35 g</td>
<td>2 to &lt;3.5 kg</td>
</tr>
<tr>
<td>30</td>
<td>35 to &lt;50 g</td>
<td>3.5 to &lt;5 kg</td>
</tr>
<tr>
<td>32</td>
<td>50 to &lt;150 g</td>
<td>5 to &lt;15 kg</td>
</tr>
<tr>
<td>34</td>
<td>150 to &lt;500 g</td>
<td>15 to &lt;50 kg</td>
</tr>
<tr>
<td>36</td>
<td>500 g to &lt;1.5 kg</td>
<td>50 to &lt;150 kg</td>
</tr>
<tr>
<td>38</td>
<td>&gt;1.5 kg</td>
<td>&gt;150 kg</td>
</tr>
</tbody>
</table>

Source: Office of Legal Policy based on the U.S. Sentencing Guidelines Tables

As demonstrated by Table B, the 100:1 differential in amount that Congress established when it created the mandatory minimums in the 1986 Act is embodied in the offense levels for powder and crack trafficking offenses. The base offense level for trafficking in 500 grams of powder cocaine or 5 grams of crack cocaine is the same: level 26.

The defendant is next assigned a criminal history category. These categories range from I to VI and are based on the defendant’s prior criminal acts.79 The defendant’s criminal history category in combination with his base offense level determines the applicable guideline range of

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78 See U.S.S.G. § 2D1.1(c)(12), Ch. 5 Pt. A (sentencing table).
79 See U.S.S.G. §4A and §5A (Table).
imprisonment. For instance, for an offender convicted of trafficking in 5 grams of crack with a criminal history level I and no other adjustments, the applicable guidelines range would be between 63 and 78 months of imprisonment. A defendant with the same base offense level but a criminal history level V would face between 110 and 137 months of imprisonment.

A defendant’s base offense level and criminal history category can be altered by certain predetermined **aggravating and mitigating factors**. For example, possession of a firearm is a “special offense characteristic” that increases a defendant’s offense level by two points.80

Judges are generally expected to impose a sentence within the applicable range, but the Guidelines permit the courts to impose sentences outside of the range if the circumstances of the cases are not adequately addressed by the Guidelines or the defendant provided substantial assistance to prosecutors. Sentences outside of the guidelines range are referred to as **upward and downward departures**. Downward departures, most frequently on the basis of cooperation by the offender with the government, are relatively common in drug cases. One common downward departure is as follows:

- **Substantial Assistance**: In addition to this specific exception to drug law mandatory penalties, 18 U.S.C. 3553(e) allows the court, on the motion of the government, to impose a sentence below any statutory minimum penalty to reflect substantial assistance by the offender to the government in the investigation or prosecution of an offense.81 This exception is applied frequently in drug cases, which often involve “trading up” – according more lenient treatment to low-level participants in drug trafficking organizations in return for their assistance in investigating and prosecuting the organization’s supervisors and leadership.

Upward departures very rarely occur in drug cases.82

Defendants may also qualify for exemption from the mandatory minimum penalties:

- **Safety Valve**: Under a special statutory exception, mandatory minimum penalties under the drug laws are inapplicable in certain cases involving nonviolent, low-level drug offenders.83 The specific criteria for this exemption, commonly referred to as a “safety valve,” are that: (1) the offender does not have a very serious criminal

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80 See U.S.S.G. § 2D1.1 Unlawful Manufacturing, Importing, Exporting, or Trafficking. Mandatory penalty provisions which are defined outside of the drug laws also can affect the sentences imposed in drug cases. In particular, 18 U.S.C. 924(c) generally requires a prison term of at least five years for a person who uses, carries, or possesses a firearm during the commission of a federal crime of violence or drug trafficking crime.

81 See U.S.S.G. § 5K1.1.

82 See Bureau of Justice Statistics, *Federal Drug Offenders, 1999 with Trends 1984-99*, at 9 (Table 7), 10-11 (Aug. 2001) (in drug cases in 1999, sentence was within guidelines range for 56.2% of defendants, above guidelines range for 0.2% of defendants, and below guidelines range for 43.6% of defendants).

history, (2) the offender was not armed or violent, (3) the offense did not result in death or serious injury, (4) the offender was not a leader or supervisor in drug trafficking activities, and (5) the offender did not withhold information or evidence from the government.

Finally, the Sentencing Reform Act abolished parole. Prisoners can receive a reduction of time served for good behavior in prison of no more than 54 days for each year served. Prisoners with drug abuse problems who successfully complete residential substance abuse treatment can have their imprisonment reduced by up to a year. In addition, offenders who are not sentenced to imprisonment may be sentenced to a period of supervision, which is referred to as “probation.” In cases where a term of imprisonment is imposed, the sentence usually includes as well a period of post-imprisonment supervision.

C. Legal Challenges

Every appellate court that has heard a challenge to the crack and powder cocaine sentencing structure has upheld it as constitutional. Defendants challenged the federal sentencing scheme under the Equal Protection and Due Process clauses, and the Eighth Amendment. Defendants have also asserted that the federal sentencing statutes are unconstitutionally vague. These constitutional challenges to the federal sentencing scheme have failed.

1. Equal Protection

 Defendants have made two arguments under the Equal Protection Clause. Defendants have argued that Congress and the Sentencing Commission acted with discriminatory intent in creating the sentencing differential in amount, as evidenced by allegedly racist language in Congressional hearings and the sparse legislative history. Courts have rejected this argument, stating that there is no evidence of discriminatory intent sufficient to warrant application of strict scrutiny. In the alternative, defendants argue that the federal sentencing scheme is unconstitutional because it has a disproportionate impact on Blacks. Many such arguments rely on the Sentencing Commission’s 1995 report to Congress, discussed in Section II.D, infra at 17, which recommended adjusting the guideline quantity ratio so that the base offense levels would be the same for both powder cocaine and crack cocaine offenses and setting the mandatory five-year minimums for both crack and powder.

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84 18 U.S.C. § 3621(b) & (e) require that “every prisoner with a substance abuse problem have the opportunity to participate in appropriate substance abuse treatment.” Only non-violent prisoners are eligible to have their term of imprisonment reduced.


cocaine at 500 grams. Courts have rejected this argument after applying rational basis analysis, holding that, despite the Sentencing Commission’s proposals to reduce the sentencing differential in amount, racially neutral justifications for the sentencing scheme exist sufficient to find the differential constitutional.

In addition, at least one defendant has argued that courts should apply intermediate scrutiny to the sentencing differential because of proposals by federal officials that have advocated its elimination or reduction. The court in this case refused consider crack and powder cocaine as quasi-suspect classifications, and did not applied intermediate scrutiny.

At least one district court has ruled that the sentencing differential violated the Equal Protection Clause, relying on the “unconscious racism” of Congress. The Eighth Circuit rejected the district court’s ruling, holding that no evidence of purposeful discrimination by Congress existed.

However, despite the fact that circuit courts have upheld harsher penalties for crack offenses, some do so reluctantly. Appellate judges have criticized the rationality of the sentencing differential for its disproportionate impact on minorities, especially in light of proposals to reduce or amend it.

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88 See Jackson, 84 F.3d at 1161 (“we do not agree that the Commission’s report, of Congress’s decision to reject it, affects the precedential value of our ruling that Congress had a rational basis for the 100:1 ratio”); see also Singleterry, 29 F.3d at 741; Moore, 54 F.3d at 98; Frazier, 981 F.2d at 95; United States v. Burgos, 94 F.3d 849, 877 (4th Cir. 1995), cert. denied, 117 S. Ct. 1087 (1997); United States v. Fisher, 58 F.2d 96, 100-01 (4th Cir. 1995), cert. denied, 116 S. Ct. 329 (1995); United States v. Fonts, 95 F.3d 372, 375 (5th Cir. 1996); Washington, 127 F.3d at 516-17; United States v. Reddrick, 90 F.3d 1276, 1282 (7th Cir. 1996); United States v. Clary, 34 F.3d 709, 713 (8th Cir. 1995), cert. denied, 15 S. Ct. 1172 (1995); United States v. Willis, 967 F.2d 1220, 1225 (8th Cir. 1992); Johnson, 40 F.3d at 440-41; United States v. Robinson, 97 F.2d 1554, 1565 (10th Cir. 1992), cert. denied, 113 S. Ct. 2938 (1993); Hanna, 153 F.3d at 1289.


91 See Clary, 34 F.3d at 713.

92 See United States v. Eirby, 262 F.3d 31, 41 (1st Cir. 2001) (noting “severity” of crack penalties); Singleterry, 29 F.3d at 741 (defendant, although without a valid constitutional claim, properly questions fairness of cocaine sentencing); Washington, 127 F.3d at 518-19 (Jones, J., concurring) (Sentencing Commission’s conclusion to eliminate the 100:1 differential should be given “controlling weight” under administrative law principles); Reddick, 90 F.3d at 1283 (Cudahy, J., concurring) (extraordinary impact of 100:1 sentencing ratio requires additional examination and has been questioned by at least two other circuit court judges); Willis, 967 F.2d at 1226-27 (Heaney, J., concurring) (Congress lacked a rational basis to create such a harsh distinction in sentencing between crack and powder cocaine); William Spade, Jr., Beyond the 100:1 Ratio: Towards a Rational Cocaine Sentencing Policy, 38 ARIZ. L. REV. 1233, 1279-84.
2. **Due Process**

Courts have also unanimously rejected challenges to the federal sentencing scheme under the Due Process Clause. Defendants have argued that the Sentencing Guidelines’ differentiation between crack and powder cocaine constitutes an irrational classification in violation of substantive due process because both substances are chemically equivalent and have similar effects on a user’s health. Courts have rejected this argument, holding that crack’s lower price and higher propensity to cause addiction constitute a rational justification sufficient to impose higher penalties for crack offenses.93

3. **Cruel and Unusual Punishment under the Eighth Amendment**

Defendants have argued that the higher sentences for crack offenses are so disproportionate to their offenses as to constitute cruel and unusual punishment in violation of the Eighth Amendment. Courts have rejected this contention in every circuit, holding that Congress and the Sentencing Commission have reasonable grounds to impose a longer sentence on crack offenders because of differences between crack and powder cocaine in the societal effects of trafficking in the drug, the method of the drug’s use, and the drug’s effect on the user.94

4. **Vagueness**

Circuit courts have upheld the federal sentencing scheme against vagueness challenges. Cocaine and crack are two forms of the same drug, cocaine alkaloid. Defendants have argued that distinctions embedded in the federal sentencing scheme between “cocaine” and “cocaine base” are unconstitutionally vague. Courts have rejected this argument, holding that sufficient precision between the terms exist to defeat a vagueness attack.95 Vagueness arguments have also been defeated on the grounds that penalty provisions are not unconstitutionally vague “merely because they expose defendants to the risk that legally significant factors within their criminal conduct may trigger enhanced sentences.”96

Although no federal circuit court has upheld a vagueness challenge to the federal cocaine sentencing scheme, a district court in the Northern District of Georgia found that the distinction between cocaine and cocaine base was a “scientifically meaningless distinction,” and ordered that

93 See Singleterry, 29 F.3d at 740; United States v. Pickett, 941 F.2d 411, 418 (6th Cir. 1991); United States v. Buckner, 894 F.2d 975, 978-80 (8th Cir. 1990); Robinson, 978 F.2d at 1565; United States v. Turner, 928 F.2d 956, 959-60 (10th Cir. 1991), cert. denied, 112 S. Ct. 230.
94 See United States v. Levy, 904 F.2d 1026, 1034 (6th Cir. 1990) (citing United States v. Cyrus, 890 F.2d 1245, 1248 (D.C. Cir. 1989)) (the only three cases where disproportionality in sentencing has resulted in an Eighth Amendment violation illustrated examples of “gross inequity”); see also Frazier, 981 F.2d at 95-6; Pickett, 941 F.2d at 419; Buckner, 894 F.2d at 980-81; Angulo-Lopez, 7 F.3d at 1509-10.
95 See Frazier, 981 F.2d at 94-95; Turner, 928 F.2d at 960.
96 United States v. Levy, 904 F.2d 1026, 1032-34 (6th Cir. 1990); see also United States v. Smith, 73 F.3d 1414, 1417-18 (6th Cir. 1996).
the heightened penalties for crack offenses could not be applied in the instant case based on the rule of lenity. The court, based on testimony from four experts, found that cocaine and cocaine base are scientifically identical due to their molecular substance, weight, and melting point.

D. Past Legislative and Commission Proposals to Amend

In the early 1990s, the Sentencing Commission began collecting data on federal offenders that for the first time differentiated among drug offenders based on the type of drug involved in the offense. An analysis of the data revealed a fact that proved to be startling to many: about 90 percent of all crack cocaine offenders were Black. This fact, in light of the stronger penalties for crack offenses, raised significant concerns for many at the Sentencing Commission, the Department of Justice, and in Congress. A series of reports, recommendations, and administrative and legislative actions followed.

In 1994, Congress directed the Sentencing Commission to issue a report and recommendations on cocaine and federal sentencing policy. In response, the Commission issued a report to Congress in 1995 recommending changes to the current cocaine sentencing scheme. The proposed amendments would have adjusted the guideline quantity ratio so that the base offense levels would be the same for both powder cocaine and crack cocaine offenses; set the mandatory five-year minimums for both crack and powder cocaine at 500 grams; and eliminated the unique five-year mandatory minimum for simple possession of more than five grams of crack cocaine.

The Department of Justice formally opposed the Commission's recommendation and sought legislation overturning the Commission's proposed guideline amendments. In October 1995, Congress passed and the President signed legislation rejecting these amendments. In this legislation, Congress directed the Commission to submit recommendations regarding changes to the statutes and guidelines governing cocaine sentencing. Congress directed that the recommendations reflect certain principles, including that the "sentence imposed for trafficking in a quantity of crack cocaine should generally exceed the sentence imposed for trafficking in a like quantity of powder cocaine," that high-level traffickers should receive higher sentences than lower-level ones, and that there should be enhancements for (among other things) use of weapons, violence, or victimizing pregnant women or children.

In April 1997, the Commission issued a second report on federal cocaine sentencing policy, but did not issue specific proposed Guidelines amendments. For powder cocaine, the Commission concluded that the current 500-gram trigger for the five-year mandatory minimum sentence should

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98 See id. at 1306.
102 Id.
be reduced to a level between 125 and 375 grams. For crack cocaine, the Commission recommended increasing the five-gram trigger to between 25 and 75 grams.\textsuperscript{103}

In mid-1997 the Department of Justice and the Office of National Drug Control Policy ("ONDCP") reviewed the Commission's recommendations. Attorney General Janet Reno and ONDCP Director Barry R. McCaffrey sent a recommendation to President Clinton to increase the five-year trigger for crack cocaine to 25 grams and to decrease the trigger for powder cocaine to 250 grams. President Clinton endorsed that recommendation, and also endorsed the repeal of the mandatory minimum sentence for simple possession.

In the 105\textsuperscript{th}, 106\textsuperscript{th}, and 107\textsuperscript{th} Congresses, various bills were introduced to revise federal cocaine sentencing policy. Some of the bills would have equated powder and crack penalties by increasing powder cocaine penalties. Others would have equated penalties by lowering crack penalties. Still others would have reduced the differential by a combination of increases to powder cocaine sentences and reductions in crack cocaine sentences. While none of these bills became law, a bill introduced by then-Senator Spencer Abraham that would have increased powder cocaine penalties (moving the trigger from 500 grams to 50 grams, thus creating a 10-to-1 ratio) passed the Senate by one vote as an amendment to the Bankruptcy Reform Act of 2000.\textsuperscript{104}

E. Current Proposals to Amend

The U.S. Sentencing Commission is in the process of reviewing the current cocaine sentencing policy. In the fall of 1999, seven new members of the Sentencing Commission were appointed by President Clinton and confirmed by the Senate. Since being seated, this new Commission has repeatedly expressed concern over current cocaine sentencing policy and the continued sentencing differential. The Commission formally sought comments from the public on January 17, 2002, on possible changes to cocaine sentencing policy.

In addition, on December 12, 2001, Senators Leahy and Hatch, on behalf of the Senate Judiciary Committee, asked the Commission "to update its 1997 report for Congressional review to provide us with guidance as we continue to evaluate the appropriateness of the penalty differential between powder and crack cocaine."\textsuperscript{105}

On December 20, 2001, Senators Sessions and Hatch introduced a bill titled the Drug Sentencing Reform Act of 2001 that would, among other things, create a 20-to-1 ratio by moving the triggers for the five-year mandatory minimum to 20 grams for crack and 400 grams for powder. The triggers for the 10-year mandatory minimum would be moved to 200 grams for crack and 4,000


\textsuperscript{104} See Bankruptcy Reform Act of 2000, H.R. 833, 106\textsuperscript{th} Cong. § 1772 (2000).

\textsuperscript{105} See Letter from Senators Orrin Hatch and Patrick Leahy to Diana E. Murphy, Chair, U.S. Sentencing Commission (Dec. 12, 2001).
grams for powder. Additionally, the legislation reduces the five-year mandatory minimum sentence for simple possession of five grams of crack to one year.\textsuperscript{106}

\textbf{PART III: DATA AND FINDINGS}

Proposals to amend the federal sentencing scheme for crack and powder cocaine offenses have focused on concerns that the 100:1 differential in the amounts of powder and crack cocaine that gives rise to five- and ten-year mandatory minimum sentences (and by proxy the Guideline’s base offense levels) is unjustified, contrary to Congress’s intent, and has a disproportionately harsh effect on Blacks.

Some have argued that the 100:1 differential in powder and crack cocaine amounts at sentencing gives rise to sentences for crack cocaine that are far longer than sentences for powder cocaine.\textsuperscript{107} A 1996 Washington Post editorial criticized the disparity between crack and powder cocaine treatment, and supported instead “doubling or tripling the sentence for crack instead of leaving the disparity at a hundred fold.”\textsuperscript{108} However, in the extensive body of literature on the federal sentencing scheme for crack and powder, there is little analysis of the actual disparity in the sentences served by similarly situated defendants.

In order to determine the actual ratio between crack and powder cocaine sentences, the Office of Legal Policy (with assistance from the Bureau of Justice Statistics and the Criminal Division’s Office of Policy and Legislation) conducted a number of different analyses of the federal sentencing data for cocaine offenses collected by the U.S. Sentencing Commission between 1996 and 2000. The analyses described in this paper each attempt to compare the sentences for offenders where crimes involved like amounts of cocaine. Our analyses show that, examined on this basis, crack cocaine sentences are 1.3 to 8.3 times longer than powder sentences, depending on the amount of cocaine involved and the specific characteristics of the offender. In 2000, the average crack sentence was 1.6 times the average powder sentence.

\textit{Two caveats:} There are limitations to the analyses performed for this study. Most crack cocaine offenses involve between five grams and 1.5 kilograms of cocaine. Most powder cocaine offenses involve between 500 grams and 150 kilograms of cocaine. It is easy to compare these two offenses where the amount of drug overlaps (e.g. from 500 grams to 1.5 kilograms). At the margins, however, the comparison is more difficult because the number of defendants is so skewed. For instance, in the year 2000, there were 1,391 crack defendants convicted of trafficking less than 25 grams of crack, compared to only 205 powder defendants. At the upper end of the spectrum, there were 3,181 defendants convicted for trafficking in more than 2 kilograms of powder, compared with

\textsuperscript{106} See Drug Sentencing Reform Act of 2001, S. 1874, 107th Cong.

\textsuperscript{107} A recent article in the Los Angeles Times stated that “[d]isparities built into the sentencing laws also provide for a 100-to-1 difference between sentencing of powder and crack cocaine offenders.” Lisa Richardson, \textit{Season of Hope: Inmates serving lengthy prison terms for drug offenses find that the last days of a presidency – when an outgoing chief has little to lose – may bring their best chance at clemency}, L.A. Times, at E1 (Dec. 19, 2001).

488 crack defendants. In order to minimize the effect of this unequal distribution, we amalgamated data for 5 years (1996 to 2000) for many of our analyses. Nevertheless, the data at the upper and lower ends of the spectrums are less reliable because the sample sizes are so disparate.

Additionally, our review of crack and powder sentences does not account for the effect of the exercise of prosecutorial discretion. The available data show that the number of crack and powder cocaine convictions increase sharply at the level at which the statutory mandatory minimum sentences apply for each drug. The number of convictions in each category is highest for base offense levels 26 and 32, the two levels that correspond with the five- and ten-year mandatory minimum sentences. (See Table C, below.) Although it is difficult to draw conclusions from this data alone, it is possible that Assistant U.S. Attorneys (AUSAs) aggregate drug amounts in order to reach the mandatory minimums. It is also possible that AUSAs decline to prosecute crimes involving amounts of drugs below the mandatory minimums. Because the effect of prosecutorial discretion is difficult to isolate, our models do not control for it.

<table>
<thead>
<tr>
<th>Base Offense Level</th>
<th>Crack Cocaine Count</th>
<th>Crack Cocaine Percent</th>
<th>Powder Cocaine Count</th>
<th>Powder Cocaine Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>32</td>
<td>0.7%</td>
<td>146</td>
<td>2.8%</td>
</tr>
<tr>
<td>14</td>
<td>19</td>
<td>0.4%</td>
<td>67</td>
<td>1.3%</td>
</tr>
<tr>
<td>16</td>
<td>40</td>
<td>0.8%</td>
<td>105</td>
<td>2.0%</td>
</tr>
<tr>
<td>18</td>
<td>96</td>
<td>2.0%</td>
<td>143</td>
<td>2.7%</td>
</tr>
<tr>
<td>20</td>
<td>77</td>
<td>1.6%</td>
<td>175</td>
<td>3.3%</td>
</tr>
<tr>
<td>22</td>
<td>62</td>
<td>1.3%</td>
<td>86</td>
<td>1.6%</td>
</tr>
<tr>
<td>24</td>
<td>64</td>
<td>1.3%</td>
<td>145</td>
<td>2.8%</td>
</tr>
<tr>
<td>26</td>
<td>747</td>
<td>15.5%</td>
<td>1182</td>
<td>22.6%</td>
</tr>
<tr>
<td>28</td>
<td>420</td>
<td>8.7%</td>
<td>524</td>
<td>10.0%</td>
</tr>
<tr>
<td>30</td>
<td>277</td>
<td>5.8%</td>
<td>398</td>
<td>7.6%</td>
</tr>
<tr>
<td>32</td>
<td>1176</td>
<td>24.5%</td>
<td>851</td>
<td>16.2%</td>
</tr>
<tr>
<td>34</td>
<td>722</td>
<td>15.0%</td>
<td>649</td>
<td>12.4%</td>
</tr>
<tr>
<td>36</td>
<td>395</td>
<td>8.2%</td>
<td>327</td>
<td>6.2%</td>
</tr>
</tbody>
</table>

These numbers are based on the amount of cocaine reported in the U.S. Sentencing Commission's data files. However, for some cases the actual quantity of drug was not specified in the presentence investigation reports from which the Sentencing Commission extracts data. For instance, in 2000, the amount of drug was missing from 28.8% of powder convictions and 20.9% of crack convictions. However, for those cases were an actual quantity was not specified but the base offense level determined pursuant to U.S.S.G. § 2D1.1 was specified, a quantity was estimated based on the quantity range associated with the applicable base offense level. The estimated quantity was determined using an algorithm that assumed a uniform distribution of cases within the guideline quantity range.

It should be noted that other factors, not readily quantified, may affect the sentencing ratios described herein.
The sections that follow analyze sentences for crack and powder cocaine in several ways. First we present a discussion of the general sentencing characteristics of crack and powder cocaine offenders. Then we present an analysis of actual crack and powder sentences by amount. Next we analyze the sentences for crack and powder by amount while attempting to control for certain special offender characteristics such as possession of a weapon or high criminal history level. Finally we present a brief analysis of the effect that certain proposed changes would have on current crack and powder sentences.

A. General Characteristics of Crack and Powder Sentences

In 2000, federal courts sentenced 59,486 defendants. Drug defendants represented the largest subcategory of federal defendants, comprising roughly 40% (24,179) of all individuals sentenced in 2000. Nearly 97% of all drug defendants were sentenced for drug trafficking offenses. Of these defendants, 23% (5,239) were sentenced for trafficking in powder cocaine; 21.3% (4,805) were sentenced for trafficking crack cocaine. Over the preceding five years, the number of powder defendants increased by 20% and the number of crack defendants increased by roughly 10%.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Powder</td>
<td>4355</td>
<td>4414</td>
<td>4633</td>
<td>4914</td>
<td>5239</td>
</tr>
<tr>
<td>Crack</td>
<td>4350</td>
<td>4626</td>
<td>4665</td>
<td>4863</td>
<td>5239</td>
</tr>
</tbody>
</table>

The average sentence for trafficking in cocaine powder in the year 2000 was 74 months; the median sentence was 57 months. For crack cocaine traffickers, the average sentence was 117 months; the median sentence was 96 months. The ratio of the average crack and powder sentences was 1.6:1 — in other words, crack defendants received an average sentence that was 1.6 times greater than the average powder sentence.

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\[111\] Data from the Office of Policy and Legislation, Criminal Division. The average sentence is the sum of all sentences divided by the number of defendants sentenced. The median sentence represents the sentence at the 50th percentile of all defendants.
The majority of both crack and powder defendants received a sentence between 1 and 10 years imprisonment (72.3% of all powder defendants and 52.2% of all crack defendants). However, 33.8% of crack defendants received a sentence between 10 and 20 years, compared to only 15.8% of powder defendants.

Table E. Drug Trafficking Defendants Sentenced by Primary Drug and Prison Length, 2000

<table>
<thead>
<tr>
<th>Imprisonment</th>
<th>Crack Cocaine</th>
<th></th>
<th>Powder Cocaine</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Percent</td>
<td>Count</td>
<td>Percent</td>
</tr>
<tr>
<td>No prison</td>
<td>107</td>
<td>2.2%</td>
<td>246</td>
<td>4.7%</td>
</tr>
<tr>
<td>Time served</td>
<td>24</td>
<td>0.5%</td>
<td>35</td>
<td>0.7%</td>
</tr>
<tr>
<td>&lt;1</td>
<td>56</td>
<td>1.2%</td>
<td>151</td>
<td>2.9%</td>
</tr>
<tr>
<td>1 to &lt;5</td>
<td>1007</td>
<td>21.1%</td>
<td>2215</td>
<td>42.5%</td>
</tr>
<tr>
<td>5 to &lt;10</td>
<td>1486</td>
<td>31.1%</td>
<td>1554</td>
<td>29.8%</td>
</tr>
<tr>
<td>10 to &lt;20</td>
<td>1612</td>
<td>33.8%</td>
<td>824</td>
<td>15.8%</td>
</tr>
<tr>
<td>20 to &lt;30</td>
<td>322</td>
<td>6.7%</td>
<td>122</td>
<td>2.3%</td>
</tr>
<tr>
<td>30 to Life</td>
<td>101</td>
<td>2.1%</td>
<td>39</td>
<td>0.7%</td>
</tr>
<tr>
<td>Life</td>
<td>56</td>
<td>1.2%</td>
<td>30</td>
<td>0.6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4771</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>5216</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

Source: Office of Policy and Legislation, Criminal Division.

Crack and powder cocaine defendants in 2000 were roughly equally likely to have been convicted for a trafficking offense (96.9% versus 96.4%), and received approximately equal numbers of upward and downward departures. However, powder cocaine defendants were convicted of possessing a larger amount of drugs than were crack defendants (3,400 grams vs. 83 grams). Powder cocaine defendants were also more like to receive a lower sentence based on their role in the offense (21.6% of powder defendants received this reduction, compared to only 8.3% of crack defendants). Finally powder defendants were more likely to benefit from “safety valve” exemptions from mandatory minimum penalties (31% of powder vs. 12.6% of crack). (See Appendix A for supporting data.)

Conversely, crack cocaine defendants were more likely than cocaine powder defendants to have a criminal history. During 2000, approximately 29% of crack defendants were categorized in the lowest guideline criminal history category, I, compared to 61% of cocaine powder defendants. Crack defendants were three times as likely to be categorized in the highest criminal history category, VI, as were cocaine powder defendants (17% vs. 5.6%). (See Appendix A for supporting

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112 These numbers represent the median amounts, not the average amounts, of drugs.
data.) Crack defendants were also twice as likely to carry a weapon – 20.9% received an enhancement for carrying a weapon, compared to only 10.1% of powder defendants.\textsuperscript{113}

\section*{B. \hspace{1em} Comparison by Amount of Drug}

As stated above, crack defendants received an average sentence in 2000 that was 1.6 times greater than the average powder sentence. To further examine the relationship between the sentences imposed on crack and powder defendants, we asked the Bureau of Justice Statistics to compare the sentences for crack and powder cocaine by the amount of drug underlying each conviction – in other words, where offenders in each group committed crimes involving the same amount of drug.\textsuperscript{114}

The results, listed in Table F, below, show that crack defendants received higher average sentences than powder defendants, and that the ratio of crack to powder sentences was greater for lower amounts of cocaine than for higher amounts of the drug. For instance, in 2000, crack defendants convicted of trafficking in less than 25 grams of cocaine received an average sentence that was 4.8 times longer than the sentence received by an equivalent powder defendant. However, at the upper end of the spectrum, defendants convicted of trafficking in between 15 and 49.9 kilograms of crack received an average sentence that was only 2.4 times longer than the average powder sentence for an equivalent amount of drug. (In the middle of the spectrum (400 to 499 grams), the ratio of the two average sentences was 3.4:1).

\begin{table}[h]
\centering
\caption{Average Prison Term Imposed on Trafficking Defendants by Type of Drug and Drug Quantity, 2000.}
\begin{tabular}{|c|c|c|c|c|c|}
\hline
Drug quantity & \multicolumn{2}{|c|}{Crack Cocaine} & \multicolumn{2}{|c|}{Powder Cocaine} & Ratio \\
& Number & Prison term & Number & Prison term & Crack: Powder \\
\hline
Less than 25 g & 1391 & 64.8 & 205 & 13.6 & 4.8:1 \\
25 - 49.9 g & 579 & 89.1 & 78 & 20.1 & 4.4:1 \\
50 - 99.9 g & 726 & 116.4 & 115 & 24.8 & 4.7:1 \\
100 - 199.9 g & 641 & 116.5 & 153 & 26.3 & 4.4:1 \\
200 - 299.9 g & 252 & 123.4 & 177 & 30.3 & 4.0:1 \\
300 - 399.9 g & 156 & 138.2 & 87 & 34.2 & 4.0:1 \\
400 - 499.9 g & 137 & 138.2 & 150 & 40.4 & 3.4:1 \\
\hline
\end{tabular}
\end{table}

\textsuperscript{113} Data from the United States Sentencing Commission, 2000 Data File, compiled by the Office of Policy Legislation, Criminal Division, U.S. Department of Justice.

\textsuperscript{114} For those cases in which the actual quantity of drug was not specified in the presentence investigation reports, a quantity was estimated based on the quantity range associated with the applicable base offense level. See \textit{supra} n.108.
Comparison by Specific Offender Characteristics

Finally we examined the data by isolating certain offender characteristics (such as criminal history level and whether or not the individual had a gun) to determine what effect these characteristics had on crack and powder sentences. To do so, we aggregated the sentencing data for the years 1996 through 2000 and looked at sentences for similar amounts of crack and powder cocaine according to specific offender characteristics.

However, because the Sentencing Commission did not begin collecting data on the specific amount of cocaine for each conviction until 1996, and because even the most recent data is missing specific drug amounts for at least 20% of convictions, we compared the data using the base offense levels (BOLs) as proxies for the amounts. As an example, we equated base offense levels 28 and 30 for crack (which correspond to between 20 and 50 grams) with base offense level 14 for powder (which corresponds to 25 to 50 grams). The rough outline of this structure is as follows:

<table>
<thead>
<tr>
<th>Crack Range</th>
<th>Crack BOL</th>
<th>Powder Range</th>
<th>Powder BOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 20g</td>
<td>12-26</td>
<td>&lt; 25g</td>
<td>12</td>
</tr>
<tr>
<td>20g to &lt;50g</td>
<td>28 &amp; 30</td>
<td>25g to &lt;50g</td>
<td>14</td>
</tr>
<tr>
<td>50g to &lt;150g</td>
<td>32</td>
<td>50g to &lt;200g</td>
<td>16 &amp; 18</td>
</tr>
<tr>
<td>150g to &lt;500g</td>
<td>34</td>
<td>200g to &lt;500g</td>
<td>20 - 24</td>
</tr>
<tr>
<td>500g to &lt;1.5kg</td>
<td>36</td>
<td>500g to &lt;2kg</td>
<td>26</td>
</tr>
<tr>
<td>&gt; 1.5kg</td>
<td>38</td>
<td>&gt;2kg</td>
<td>28 - 38</td>
</tr>
</tbody>
</table>

For 2000, 28.8% of powder convictions were missing amount data and 20.9% of crack convictions were missing amount data. The number of convictions for which amount data is not available has been fairly consistent for each of the five years in which such data has been collected.
This comparison has several limitations. First, the amount of cocaine in each base offense level is not precisely equivalent (in other words, the amount of crack in BOL 36 is not precisely equivalent to the amount of powder in BOL 26). Secondly, because the scale for crack is so much lower than the scale for powder, the outlying categories compare a large set of data to a much smaller and less diverse set of data. For instance, defendants convicted of trafficking more than 2 kilograms of powder cocaine fall between base offense levels 28 and 38 and number 14,463. This subset of data was compared to all defendants convicted of trafficking more than 1.5 kilograms of crack, all 3,701 of whom fell into base offense level 38. The same problem in reverse (better crack data than powder data) is true at the lower end of the guideline ranges.

Nonetheless, despite the limitations of this data, this analysis helps to clarify the effect of certain offender characteristics on overall sentences. This analysis, shown in Table H, demonstrates that the ratio between the average sentences for crack and powder cocaine decreases as the amount of drug increases. For instance, for the lowest category of drug amount, the average crack sentence was 4.8 times longer than the average powder sentence. For the highest category of drug amount, the average crack sentence was 2.1 times longer than the average powder sentence.

We then compared crack and powder defendants who possessed a weapon. For those offenses where the defendant possessed a weapon, the ratio of crack to powder sentences was less than the average ratio. For the lowest category of drug amount, the average sentence for crack defendants who possessed a weapon was 2.9 times longer than the average sentence for similarly-situated powder defendants. For the highest category of drug amount, the average sentence for crack defendants who possessed a weapon was only 1.6 times longer than the average sentence for similarly-situated powder defendants.

We also compared crack and powder offenders by amount and criminal history categories. For offenders with a high criminal history category, the ratio between the sentences was also lower than the ratio between the average crack and powder sentences. Crack defendants with criminal history level VI received an average sentence that ranged from 1.6 to 1.3 times longer (depending on the amount of drug) than the average sentence for similarly-situated powder defendants.

Conversely, the ratio between crack and powder sentences for offenders with a low criminal history levels was higher. The ratio between average crack and powder sentences for the lowest category of drug amount and criminal history category I was 8.3:1. (This disparity affected 1,637 (or 7%) of the 22,896 crack defendants examined in this study.) The ratio of crack to powder sentences was only 2:1 for offenders in the highest category of drug amount and the lowest criminal history category. (The complete results of this analysis can be found in Appendix B.)
Table H. Ratio of Average Crack to Average Powder Sentences by Equivalent BOL, Controlling for Specific Characteristics, 1996-2000.

<table>
<thead>
<tr>
<th>Crack Amount Range</th>
<th>Powder Amount Range</th>
<th>Average Ratio</th>
<th>Defendants with Weapons</th>
<th>Defendants without Weapons</th>
<th>Defendants with Criminal History I</th>
<th>Defendants with Criminal History VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 20 g</td>
<td>&lt; 25 g</td>
<td>4.8:1</td>
<td>2.9:1</td>
<td>5.8:1</td>
<td>8.3:1</td>
<td>1.6:1</td>
</tr>
<tr>
<td>20 to &lt;50 g</td>
<td>25 to &lt;50 g</td>
<td>4.4:1</td>
<td>3.1:1</td>
<td>4.8:1</td>
<td>5.9:1</td>
<td>2.1:1</td>
</tr>
<tr>
<td>50 to &lt;150 g</td>
<td>50 to &lt;200 g</td>
<td>4.9:1</td>
<td>3.6:1</td>
<td>5.2:1</td>
<td>5.4:1</td>
<td>2.2:1</td>
</tr>
<tr>
<td>150 to &lt;500 g</td>
<td>200 to &lt;500 g</td>
<td>3.8:1</td>
<td>3:1</td>
<td>3.7:1</td>
<td>3.5:1</td>
<td>2.2:1</td>
</tr>
<tr>
<td>500g to &lt;1.5kg</td>
<td>500g to &lt;2kg</td>
<td>3.2:1</td>
<td>2.3:1</td>
<td>3.2:1</td>
<td>3.1:1</td>
<td>1.7:1</td>
</tr>
<tr>
<td>&gt; 1.5 kg</td>
<td>&gt; 2 kg</td>
<td>2.1:1</td>
<td>1.6:1</td>
<td>2:1</td>
<td>2:1</td>
<td>1.3:1</td>
</tr>
</tbody>
</table>

Source: Office of Policy and Legislation, Criminal Division

D. Brief Analysis of Proposals to Amend the Federal Sentencing Scheme

In order to make a rough estimate of the effect that the proposals for changing the ratio of crack and powder cocaine would have on the resulting sentences, we also created a simulated sentencing model. This was done by adjusting known parameters applied at sentencing and theoretically re-sentencing defendants based on the adjusted parameters. Resentencing defendants convicted of trafficking crack cocaine to reflect varying ratios of cocaine powder to crack cocaine involved changing the guideline base offense levels and the applicable statutory minima to reflect the adjusted quantity thresholds. Table I, below, describes the guideline base offense levels and the corresponding quantity thresholds corresponding to the various quantity ratios examined. All other sentencing factors – including the actual quantity of drug involved – remained constant in the model. (See Appendix C for further information on this model.)
Table I. Quantity Thresholds for Crack Cocaine Corresponding to Various Quantity Ratios Between Cocaine Powder and Crack Cocaine.

<table>
<thead>
<tr>
<th>Guideline base offense level (§2D1.1)</th>
<th>Powder</th>
<th>Minimum crack quantity threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>100:1 (actual)</td>
</tr>
<tr>
<td>12</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>14</td>
<td>25 g</td>
<td>250 mg</td>
</tr>
<tr>
<td>16</td>
<td>50 g</td>
<td>500 mg</td>
</tr>
<tr>
<td>18</td>
<td>100 g</td>
<td>1 g</td>
</tr>
<tr>
<td>20</td>
<td>200 g</td>
<td>2 g</td>
</tr>
<tr>
<td>22</td>
<td>300 g</td>
<td>3 g</td>
</tr>
<tr>
<td>24</td>
<td>400 g</td>
<td>4 g</td>
</tr>
<tr>
<td>26</td>
<td>500 g</td>
<td>5 g</td>
</tr>
<tr>
<td>28</td>
<td>2 kg</td>
<td>20 g</td>
</tr>
<tr>
<td>30</td>
<td></td>
<td>3.5 kg</td>
</tr>
<tr>
<td>32</td>
<td>5 kg</td>
<td>50 g</td>
</tr>
<tr>
<td>34</td>
<td>15 kg</td>
<td>150 g</td>
</tr>
<tr>
<td>36</td>
<td>50 kg</td>
<td>500 g</td>
</tr>
<tr>
<td>38</td>
<td>150 kg</td>
<td>1.5 kg</td>
</tr>
</tbody>
</table>

Source: Office of Legal Policy

Under current practice, defendants convicted of trafficking crack cocaine received an average prison sentence of 120 months during 1999 and 117.6 months during 2000. If federal sentencing law and policy were changed to reflect a different quantity ratio, average prison sentences for crack cocaine defendants could – assuming constant quantities of drugs – range from approximately 45 months, at a quantity ratio of 1:1, to 111 months, at a quantity ratio of 50:1. At quantity ratios of 20:1 and lower, all crack defendants would receive a reduction in the sentence imposed. Changes to the ratio of crack to powder cocaine amounts used in determining base offense levels would have the following effects:

---

116 Reflects the sentence imposed on those defendants included in the model, 4,867 during 1999 and 4,691 during 2000. Observations were excluded from the model if complete guideline application and/or sentencing information was not available.

117 Estimates represent combined 1999-2000 data.

<table>
<thead>
<tr>
<th>Ratio of cocaine powder to crack cocaine</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average prison term imposed (mos.)</td>
<td>Proportion of defendants impacted</td>
</tr>
<tr>
<td>100:1 (actual)</td>
<td>120.0</td>
<td>---</td>
</tr>
<tr>
<td>50:1</td>
<td>112.4</td>
<td>56%</td>
</tr>
<tr>
<td>20:1</td>
<td>95.6</td>
<td>99%</td>
</tr>
<tr>
<td>10:1</td>
<td>80.7</td>
<td>99%</td>
</tr>
<tr>
<td>5:1</td>
<td>70.6</td>
<td>100%</td>
</tr>
<tr>
<td>2:1</td>
<td>56.2</td>
<td>100%</td>
</tr>
<tr>
<td>1:1</td>
<td>46.3</td>
<td>100%</td>
</tr>
</tbody>
</table>


Notes:
1. Excludes observations for which complete guideline application and/or sentencing information was not available.

It is important to note that this model cannot account for changes in law enforcement or prosecutorial behavior.

Moreover, it is not clear that changing the ratio will have any effect on the number of minorities sentenced for committing cocaine crimes (although it would affect the number of months served by a proportion of those defendants). A Sentencing Commission analysis using 1999 data showed that Hispanics (who accounted for 44.0% of powder cocaine cases in 1999) would constitute 42.9% of cases affected by reducing the mandatory minimum trigger from 500 grams to 400. Blacks, who comprised 35.7% of all powder offenders, constituted 31.6% of affected cases; Whites, who comprised 18.8% of all offenders, constituted 24.3% of affected cases.

Reductions in crack offense penalties would primarily affect Black defendants. Based on FY1999 data, the Sentencing Commission estimates that if crack mandatory minimum triggers were moved from five grams to 20 grams, 85.6% of defendants affected by the change would be Black. (In FY1999, 84.8% of convicted crack offenders were Black.)
CONCLUSIONS:

• Controlling for like amounts of cocaine, in 2000, crack defendants convicted of trafficking in less than 25 grams of cocaine received an average sentence that was 4.8 times longer than the sentence received by an equivalent powder defendant. However, at the upper end of the spectrum, the average sentence for a defendant convicted of trafficking in between 15 and 49.9 kilograms of crack was only 2.4 times longer than the average sentence for a similarly-situated powder defendant. (In the middle of the spectrum (400 to 499 grams), the ratio of the two sentences was 3.4:1).

• For defendants who possessed weapons, the ratio between average crack and powder sentences for lower amounts of cocaine was 2.9:1. For the highest amounts of cocaine, the ratio was only 1.6:1. Defendants who possessed weapons had less of a disparity in their sentences.

• For defendants with the highest criminal history levels, the average sentence for crack defendants ranged from 1.6 to 1.3 times longer (depending on the amount of cocaine) than the average sentence for similarly-situated powder defendants.

• For defendants with the lowest criminal histories, the ratio between average crack and powder sentences for the lowest amounts of drug 8.3:1. (This disparity affected 1,637 (or 7%) of the 22,896 crack defendants examined in this study.) But for offenders convicted of trafficking in higher amounts of cocaine, the ratio of average crack to powder sentences was only 2:1.

• The average sentence for trafficking in powder cocaine in 2000 was 74 months; the average sentence for trafficking in crack cocaine was 117 months. The ratio of the average crack and powder sentences was 1.6:1.
Appendix A. Selected sentencing characteristics of defendants convicted in the federal courts for crack and powder cocaine offenses, 1999-2000.

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>CRACK</th>
<th>POWDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight of drugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>1.6 kg</td>
<td>85.0 kg</td>
</tr>
<tr>
<td>Median (50th percentile)</td>
<td>83 g</td>
<td>3.4 kg</td>
</tr>
<tr>
<td>Criminal History Category</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>28.9 %</td>
<td>61.3 %</td>
</tr>
<tr>
<td>II</td>
<td>13.0 %</td>
<td>12.4 %</td>
</tr>
<tr>
<td>III</td>
<td>21.9 %</td>
<td>13.2 %</td>
</tr>
<tr>
<td>IV</td>
<td>12.0 %</td>
<td>5.1 %</td>
</tr>
<tr>
<td>V</td>
<td>7.2 %</td>
<td>2.4 %</td>
</tr>
<tr>
<td>VI</td>
<td>17.0 %</td>
<td>5.6 %</td>
</tr>
<tr>
<td>Type of drug offense</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trafficking</td>
<td>96.9 %</td>
<td>96.4 %</td>
</tr>
<tr>
<td>Communication facility</td>
<td>1.7 %</td>
<td>2.7 %</td>
</tr>
<tr>
<td>Simple possession</td>
<td>1.4 %</td>
<td>0.9 %</td>
</tr>
<tr>
<td>Departure Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upward</td>
<td>0.2 %</td>
<td>0.2 %</td>
</tr>
<tr>
<td>Substantial assistance</td>
<td>30.6 %</td>
<td>29.4 %</td>
</tr>
<tr>
<td>Other downward</td>
<td>8.1 %</td>
<td>8.9 %</td>
</tr>
<tr>
<td>Mandatory minimum based on drug quantity (21 U.S.C. § 841)</td>
<td>82.0 %</td>
<td>75.7 %</td>
</tr>
<tr>
<td>Mandatory minimum for firearm use or possession (18 U.S.C. § 924(c))</td>
<td>4.3 %</td>
<td>2.5 %</td>
</tr>
<tr>
<td>Guideline enhancement for weapon use or possession (U.S.S.G. §2D1.1(b)(1))</td>
<td>16.6 %</td>
<td>8.6 %</td>
</tr>
<tr>
<td>'Safety-valve' exemption from mandatory penalties (18 U.S.C. § 3553(c))</td>
<td>12.6 %</td>
<td>31.0 %</td>
</tr>
<tr>
<td>Acceptance of responsibility (U.S.S.G. §3E1.1)</td>
<td>85.4 %</td>
<td>88.3 %</td>
</tr>
<tr>
<td>Obstruction of justice (U.S.S.G. Ch.3, Pt.C.)</td>
<td>4.5 %</td>
<td>3.9 %</td>
</tr>
<tr>
<td>Mitigating role adjustment (U.S.S.G. §3B1.2)</td>
<td>8.3 %</td>
<td>21.6 %</td>
</tr>
<tr>
<td>Aggravating role adjustment (U.S.S.G. §3B1.1)</td>
<td>7.4 %</td>
<td>7.9 %</td>
</tr>
<tr>
<td>Number of defendants¹</td>
<td>5,012</td>
<td>5,345</td>
</tr>
</tbody>
</table>

Notes:
1. Excludes observations for which complete guideline application and/or sentencing information was not available.

Data source: U.S. Sentencing Commission, Monitoring data file, fiscal year
Source: Bureau of Justice Statistics, Federal Justice Statistics Program.

<table>
<thead>
<tr>
<th>Crack BOL (Range)</th>
<th>Powder BOL (Range)</th>
<th>Average Crack Sentence</th>
<th>Average Powder Sentence</th>
<th>Ratio</th>
<th>Number of Crack Defendants</th>
<th>Number of Powder Defendants</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-26 (0-20 g)</td>
<td>12 (0-25 g)</td>
<td>58</td>
<td>12</td>
<td>4.8:1</td>
<td>5,194</td>
<td>527</td>
</tr>
<tr>
<td></td>
<td>No Weapon</td>
<td>52</td>
<td>9</td>
<td>5.8:1</td>
<td>4,292</td>
<td>462</td>
</tr>
<tr>
<td></td>
<td>Weapon</td>
<td>90</td>
<td>31</td>
<td>2.9:1</td>
<td>793</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>No Departure</td>
<td>67</td>
<td>12</td>
<td>5.6:1</td>
<td>3,473</td>
<td>370</td>
</tr>
<tr>
<td></td>
<td>Substantial Assistance</td>
<td>38</td>
<td>9</td>
<td>4.2</td>
<td>1,271</td>
<td>113</td>
</tr>
<tr>
<td></td>
<td>Safety Valve</td>
<td>31</td>
<td>--</td>
<td>--</td>
<td>502</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Other Downward Departure</td>
<td>47</td>
<td>29*</td>
<td>1.6:1</td>
<td>360</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Criminal History I</td>
<td>33</td>
<td>4</td>
<td>8.3:1</td>
<td>1,637</td>
<td>321</td>
</tr>
<tr>
<td></td>
<td>Criminal History II</td>
<td>44</td>
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<td>4.4:1</td>
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**Notes:**
* = n<50

Source: Office of Policy and Legislation, Criminal Division.
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Notes:
* = n<50
Source: Office of Policy and Legislation, Criminal Division.
### Crack Powder

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**Notes:**

* = n<50

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* = n<50
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  - 46
  - 3.2:1
  - 1,561
  - 4,618

- Weapon
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  - 84
  - 2.3:1
  - 524
  - 493

- No Departure
  - 210
  - 60
  - 3.5:1
  - 1,091
  - 3,221

- Substantial Assistance
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  - 31
  - 3.2:1
  - 898
  - 1,492

- Safety Valve
  - 73
  - 28
  - 2.6:1
  - 333
  - 2,164

- Other Downward Departure
  - 132
  - 38
  - 3.5:1
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- Criminal History I
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- Criminal History II
  - 154
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  - 2.9:1
  - 282
  - 645

- Criminal History III
  - 166
  - 58
  - 2.9:1
  - 440
  - 743

- Criminal History IV
  - 193
  - 68
  - 2.8:1
  - 217
  - 228

- Criminal History V
  - 182
  - 82
  - 2.2:1
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- Criminal History VI
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Notes:
* n<50

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Notes:
* = n<50
Source: Office of Policy and Legislation, Criminal Division.
Appendix C: Simulated sentencing model

The effect of the 100:1 quantity ratio between applicable sentences imposed on defendants convicted of trafficking crack cocaine can also be measured by adjusting known parameters applied at sentencing and theoretically re-sentencing defendants based on the adjusted parameters. For instance, for defendants sentenced under the Federal sentencing guidelines, the applicable guideline sentencing range can be adjusted through such factors as the guideline base offense level, specific offense characteristics, criminal history category, and/or applicable statutory minima and maxima.

One of the fundamental concepts of the simulated sentencing model is the method for re-sentencing defendants. Assuming a starting point of the midpoint of the applicable guideline range, the sentencing court fashions a sentence within the guideline range – upward or downward – to reflect the specific circumstances of the case. Additionally, if the applicable guideline range does not adequately reflect the circumstances of the case, the sentencing court may fashion a sentence outside of the guideline range through a departure. Accordingly, the position relative to the guideline range, or \( D \), reflects the exercise of judicial discretion. Algebraically, \( D \) is expressed as –

\[
D = \frac{S - GL_{MIN}}{GL_{MAX} - GL_{MIN}}
\]

(Equation 2)

where:
- \( S \) is the prison term imposed
- \( GL_{MIN} \) is the minimum of the effective guideline sentencing range
- \( GL_{MAX} \) is the maximum of the effective guideline sentencing range

Following adjustments to applicable sentencing parameters, a new sentence must be assigned to reflect the changed circumstances. In most instances, the new sentence, \( S' \), is a reflection of the actual sentence in the new guideline range. Algebraically, \( S' \) is expressed as –

\[
S' = GL_{MIN}' + (GL_{MAX}' - GL_{MIN}') D
\]

(Equation 3)

where:
- \( GL_{MIN}' \) is the minimum of the adjusted guideline sentencing range
- \( GL_{MAX}' \) is the maximum of the adjusted guideline sentencing range

For example, if a defendant originally received a sentence of 65 months in the guideline range of 63 to 78 months, the defendant would receive a sentence of 42 months in the guideline range of 41 to 51 months.

In certain circumstances, however, the proportional re-sentencing model (equation # 3) will not accommodate the changed circumstances such as in those cases where the defendant was originally sentenced to life in prison and/or the guideline sentencing range included life imprisonment as a sentencing option, sentences within Zones A, B, and C of the guideline sentencing table, and certain departure sentences. The model accommodates these circumstances as follows –

A. For defendants who originally received life imprisonment and the adjusted guideline sentencing range does not include life, the defendant is re-sentenced to the mid-point of the adjusted range. For defendants who did not receive life imprisonment and the new guideline range includes life, the defendant will be re-sentenced to life if the original sentence was above the midpoint of the guideline range; otherwise the defendant will receive a sentence proportionate to the original sentence.
B. Sentences within Zones A, B, and C of the guideline sentencing table pose a unique problem due to the availability of probationary sentences and alternatives to incarceration such as home confinement, community confinement, and intermittent confinement. For defendants re-sentenced to a sentencing range within Zones A, B, and C, the new sentence reflects the average term of imprisonment actually imposed on defendants sentenced within that guideline range.

C. In the case of non-substantial assistance departures, it was assumed that the sentencing court fashioned the particular sentence for a specific reason. Consequently, in these cases, new sentence would not differ from the original sentence except where (1) the new guideline range is below the original sentence in which case the defendant would receive a sentence at the guideline minimum, and (2) the new guideline range is above the original sentence in which case the defendant would receive a sentence at the guideline maximum.