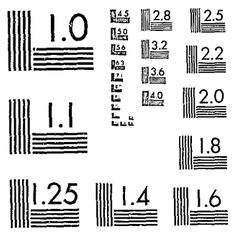

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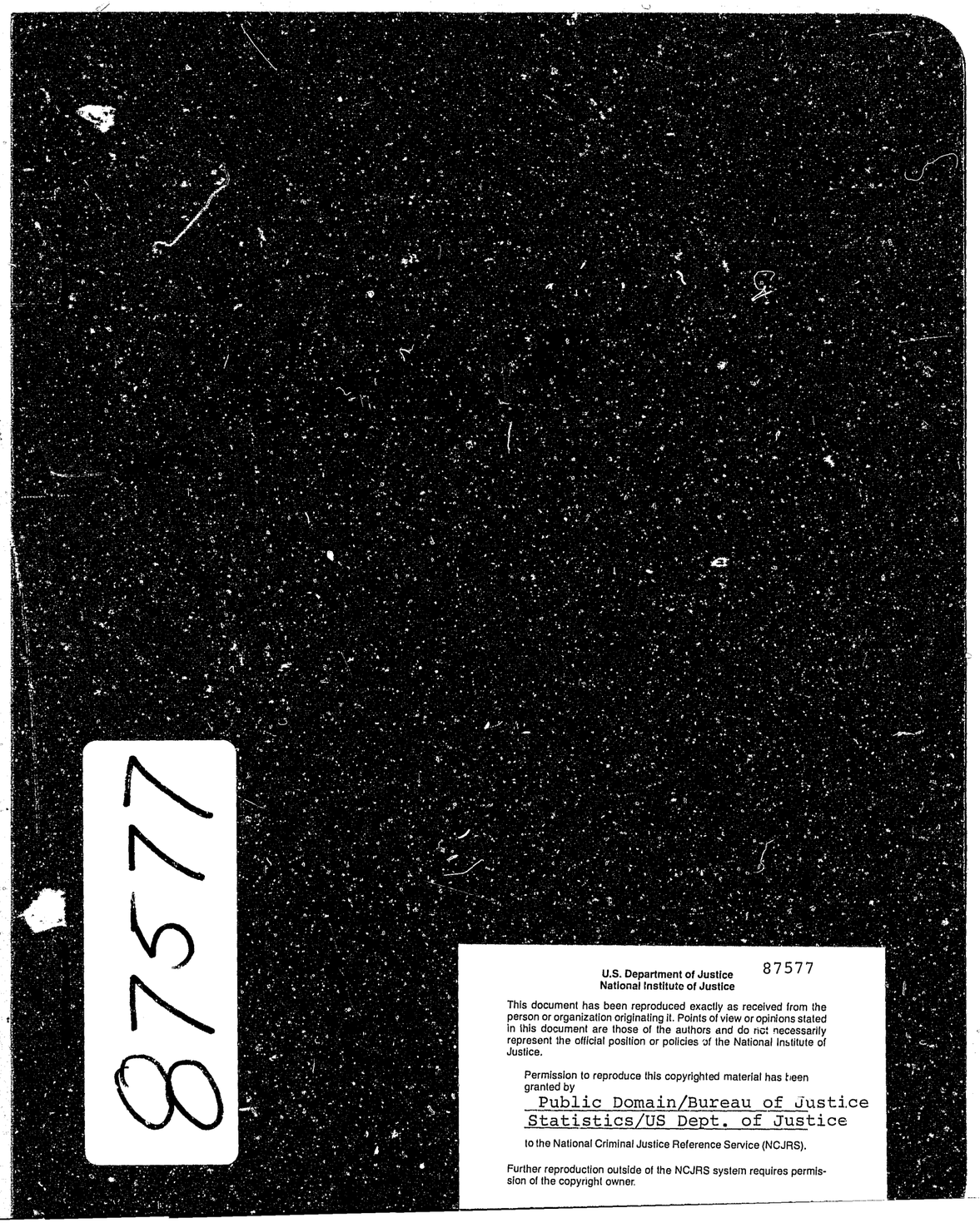

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1980-81 Changes Based on New Estimates

Criminal Victimization in the U.S.

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National Crime Survey (NCS) data for 1981 are being released as a technical report to document the use of population figures based on the 1980 census in the estimation procedure, as well as to describe a refinement in that procedure. While bringing increased reliability to the estimates, use of the most recent census-based population and household controls affected the historical continuity of the NCS statistical series. In order to bridge the series, data for 1980 have been computed using both the new and old population control figures. Selected results from both sets of 1980 estimates are examined in this report.

In general, the estimation changes made in the NCS resulted in higher counts, or levels, of victimization for 1980. This is because post-1970 estimates of the U.S. population, used in weighting the sample results, had understated the number of inhabitants.[1] Relative figures, such as victimization rates and the percentages of crime reported to the police, did not change appreciably, as the population adjustments generally had similar proportionate effects on numerators and denominators used in deriving such figures.

NCS data for 1981 were collected and processed in the same manner as those for 1980, and the estimation procedure used in generating the most recent results was identical to that used in producing the revised 1980 data. Thus, the summary discussion of 1980-to-1981 changes in victimization is based on compatible figures.

An overview of crime trends since the inception of the NCS (1973) derives from an examination of victimization rates for general offense categories. As will be shown, the change in estimation made a relatively small impact upon victimization rates, the basic measures of trends since 1973. While the continuity and comparability of victimization rates were not significantly affected, the revised 1980 levels of victimization are not comparable with those published for 1973-79. The new 1980 victimization levels will serve as a baseline for the amount of victimization during the current decade, or until any future redesign or other substantive change in the NCS.

NCS police reporting rates--i.e., the percentages of victimizations that victims said they personally reported or that otherwise were made known to the police--also are examined. In order to measure the relative impact of (as well as any changes in) crimes known to the police, a companion set of victimization rates was calculated for 1980 and 1981, based solely on those offenses that victims said were known to the authorities.

Following a summary discussion of the 1981 NCS findings, the second section of this report gives additional details concerning the re-estimation of 1980 data, along with examples of the effects of the changes that resulted.

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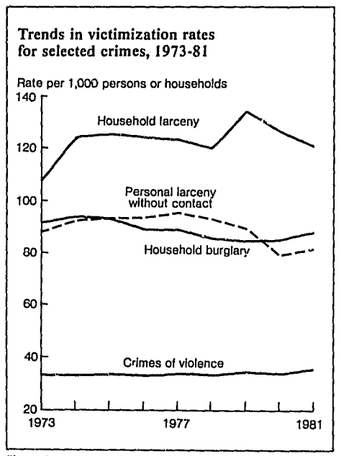

Figure 1

Summary results for 1981

For several of the offenses measured by the NCS, victimization levels and rates were higher in 1981 than in 1980.[2] It was generally the less serious forms of crime that contributed to the increases. The proportions of victimizations that victims said they had reported to the police during 1981 remained basically unchanged from what they were in 1980.

The numbers of personal robberies without victim injury and of attempted assaults without a weapon increased sharply, while the more serious robberies or assaults did not change

[1] Based on an extrapolation of the 1970 census count, the mid-1980 civilian population--the resident population, including institutionalized persons but excluding Armed Forces personnel stationed in the United States--was estimated to be 220.8 million. (The figure cited is an unpublished estimate that is compatible with the 1970-based intercensal estimates issued by the Census Bureau in its Current Population Reports, Series P-25, and with population controls used in the estimation of NCS and other survey-derived data.) Incorporating results of the census of April 1, 1980, the preliminary estimate of the mid-1980 civilian population was 225.6 million. (See, U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 917, Preliminary Estimates of the Population of the United States, by Age, Sex, and Race: 1970 to 1981, Washington, D.C., July 1982; this publication carries postcensal estimates for 1980 and 1981 and intercensal estimates that are compatible with results of both the 1970 and 1980 censuses.) The difference between the two figures--220.8 vs. 225.6 million--is largely attributable to a net population undercount in the 1970 census. The 1970-based estimates of the population within the scope of the NCS--those age 12 and over, excluding institutionalized persons but including military personnel not living in barracks--were similarly affected, and this in turn caused an underestimation in the levels of victimization.

[2] Throughout this section of the report and in tables 1-6, comparisons involving 1980 are based on the re-estimated victimization levels and rates for that year.

significantly (table 1).[3] Similarly, a substantial increase took place in the number of attempted residential break-ins, but the numbers of forced or unlawful entries did not change significantly. And, while attempts at motor vehicle theft rose by 23 percent, the number of completed vehicle thefts did not change significantly.

For all NCS crimes, a total of 41.5 million victimizations occurred in 1981, 3 percent more than in 1980. The exception to this general rise was household larceny, for which there was some indication of a decrease in the number of victimizations.

As indicated, some of the NCS victimization rates were higher in 1981 than in 1980 (figure 1). Such was the case for the overall violent crime rate. In fact, the rate for 1981--35.3 victimizations per 1,000 persons age 12 and over--also was higher than each of the corresponding figures for the first 4 years of the survey (tables 2 and 3).

Robbery and assault contributed to the overall rise in the violent crime rate for 1981. The rate of 7.4 robbery victimizations per 1,000 persons was the highest observed since the survey's inception (figure 2).[4] The 1981 rate of simple assault--17.3 per 1,000--was also relatively high. It was significantly greater than rates recorded in 1973-76. The rate for the third violent crime, rape, has not changed significantly since 1973. Based on the entire population, the 1981 rate for rape was 1.0 per 1,000; for women alone, the rate was 1.8.

After declining between 1978 and 1980, the rate for personal larceny without contact showed no significant change from 1980 to 1981, averaging 81 victimizations per 1,000 individuals. The rates for 1980 and 1981 were lower than those in the 1970's.

With respect to the residential crimes, the rate of household larceny dropped for the second consecutive year, but there was some indication of an increase in the burglary rate during 1981. The motor vehicle theft rate did not change significantly between 1980 and 1981.

The overall proportion of crimes that victims said they had reported to the police during 1981--35.5 percent of all victimizations measured--was not significantly different from what it was in 1980.[5] By contrast, there was a fairly substantial increase--from 32.8 to 35.8--in the overall share of crimes reported to the authorities between 1979 and 1980.

[3]Comparisons made in this report passed a hypothesis test at the 0.10 level of statistical significance (i.e., the 90-percent "confidence level"), or better. In fact, most comparisons passed the test at the minimum level of 0.05 (or the 95-percent confidence level). Thus, for most comparisons cited, the estimated difference between values being examined was greater than twice the standard error of the difference. Statements of comparison qualified by the expression "some indication" denote that the estimated difference between values being examined was within the range of 1.6 and 2.0 standard errors--statistically significant at the 0.10 level but not at the 0.05 level (or a confidence level of between 90 and 95 percent). The presence and level of statistically significant differences are noted on tables 1, 3, 5, and 6.

[4]Statistically significant differences (at the 0.05 level) were found between the robbery rates for 1981 and for each of the preceding 5 years. There were no significant differences between the figures for 1981 and 1973-75.

[5]The aggregate rate of police reporting (35.5 percent) is an average calculated for all of the crime categories shown in table 4.

Table 1. Change in victimization levels and rates for personal and household crimes, 1980-81

Sector and type of crime	Victimization levels (1,000s) 1980	1981	Percent change	Victimization rates 1980	1981	Percent change
Personal sector						
Crimes of violence	6,130	6,582	*7.4	33.3	35.3	*6.2
Rape	174	178	2.3	0.9	1.0	1.1
Completed rape	39	51	30.8	0.2	0.3	28.6
Attempted rape	134	126	-6.0	0.7	0.7	-6.8
Robbery	1,209	1,381	*14.2	6.6	7.4	*13.0
Robbery with injury	416	440	5.8	2.3	2.4	4.9
From serious assault	210	215	2.4	1.1	1.2	0.9
From minor assault	205	225	9.8	1.1	1.2	9.0
Robbery without injury	793	941	*18.7	4.3	5.1	*17.4
Assault	4,747	5,024	*5.8	25.8	27.0	4.7
Aggravated assault	1,707	1,796	5.2	9.3	9.6	4.1
With injury	588	591	0.5	3.2	3.2	-0.6
Attempted with weapon	1,119	1,205	7.7	6.1	6.5	6.6
Simple assault	3,041	3,228	*6.1	16.5	17.3	5.0
With injury	850	843	-0.8	4.6	4.5	-2.0
Attempted without weapon	2,191	2,385	*8.9	11.9	12.8	**7.7
Crimes of theft	15,300	15,863	*3.7	83.0	85.1	2.6
Personal larceny with contact	558	605	8.4	3.0	3.3	7.3
Purse snatching	199	195	-2.0	1.1	1.0	-2.8
Completed purse snatching	144	146	1.4	0.8	0.8	1.3
Attempted purse snatching	55	49	-10.9	0.3	0.3	-13.3
Pocket picking	359	410	**14.2	2.0	2.2	12.8
Personal larceny without contact	14,742	15,258	*3.5	80.0	81.9	2.4
Total population age 12 and over	184,324	186,336	1.1			
Household sector						
Household burglary	6,973	7,394	*6.0	84.3	87.9	**4.3
Forcible entry	2,462	2,587	5.1	29.8	30.8	3.4
Unlawful entry without force	3,033	3,078	1.5	36.7	36.6	-0.1
Attempted forcible entry	1,477	1,729	*17.0	17.9	20.6	*15.2
Household larceny	10,468	10,176	**-2.8	126.5	121.0	*-4.3
Less than $50	5,063	4,904	-3.1	61.2	58.3	**-4.7
$50 or more	4,149	4,034	-2.8	50.1	48.0	-4.3
Amount not available	500	508	1.5	6.1	6.0	-0.2
Attempted larceny	757	731	-3.4	9.1	8.7	-4.9
Motor vehicle theft	1,381	1,439	4.2	16.7	17.1	2.5
Completed theft	937	891	-4.9	11.3	10.6	-6.4
Attempted theft	444	548	*23.4	5.4	6.5	**21.4
Total number of households	82,753	84,095	1.6			

NOTE: Detail may not add to total shown because of rounding. Percent change based on unrounded figures. Victimization rates are calculated on the basis of the number of victimizations per 1,000 persons age 12 and over (personal sector) or per 1,000 households (household sector).
* The difference is statistically significant at the 0.05 level.
** The difference is statistically significant at the 0.10 level.

Trends in victimization rates for violent crimes, 1973-81

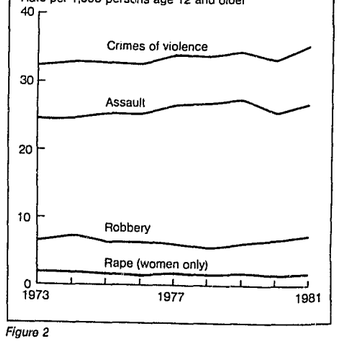

Figure 2

Consistent with the lack of a change in the aggregate proportion of crimes reported to the police, none of the police reporting rates for specific offenses changed significantly between 1980 and 1981 (tables 4 and 5). Nevertheless, the 1981 police reporting rate for burglary was higher than the corresponding figures during the 1970's; the 1981 rate for personal larceny without contact was comparatively high as well (figure 3). No general pattern of changes in police reporting was evident for the violent crimes or the remaining property-type offenses measured by the NCS.

Personal larceny without contact and household larceny, which together made up roughly three-fifths of all offenses, had reporting rates of only 26 percent in 1981. The overall police reporting rate for violent crime was 47 percent, essentially unchanged from 1980. Only 35 percent of attempted residential break-ins (as compared with 76 percent of forced entries) were reported to the police, and the difference between attempted and completed vehicle thefts (34 vs. 87 percent) also was large.[6]

[6]Table 4 displays the overall percentages of burglaries and motor vehicle thefts reported to the police, but the component categories cited here are not shown.

Table 2. Victimization rates for personal and household crimes, 1973-81

(Rate per 1,000)

Sector and type of crime	1973	1974	1975	1976	1977	1978	1979	1980	1981
Personal sector									
Crimes of violence	32.6	33.0	32.8	32.6	33.9	33.7	34.5	33.3	35.3
Rape	1.0	1.0	0.9	0.8	0.9	1.0	1.1	0.9	1.0
Robbery	6.7	7.2	6.8	6.5	6.2	5.9	6.3	6.6	7.4
Assault	24.9	24.8	25.2	25.3	26.8	26.9	27.2	25.8	27.0
Aggravated assault	10.1	10.4	9.6	9.9	10.0	9.7	9.9	9.3	9.6
Simple assault	14.8	14.4	15.6	15.4	16.8	17.2	17.3	16.5	17.3
Crimes of theft	91.1	95.1	96.0	96.1	97.3	96.8	91.9	83.0	85.1
Personal larceny with contact	3.1	3.1	3.1	2.9	2.7	3.1	2.9	3.0	3.3
Personal larceny without contact	88.0	92.0	92.9	93.2	94.6	93.6	89.0	80.0	81.9
Household sector									
Household burglary	91.7	93.1	91.7	88.9	88.5	86.0	84.1	84.3	87.9
Household larceny	107.0	123.8	125.4	124.1	123.3	119.9	133.7	126.5	121.0
Motor vehicle theft	19.1	18.8	19.5	16.5	17.0	17.5	17.5	16.7	17.1

NOTE: Detail may not add to total shown because of rounding. Statistically significant differences between the rates for 1981 and each preceding year are identified on table 3. Estimated population control figures based on the 1980 census were used in calculating the 1980 and 1981 rates. Controls for the 1973-79 rates were derived from the 1970 census.

Table 3. Comparison of changes in victimization rates for personal and household crimes, 1973-81

Sector and type of crime	Percent change in victimization rate 1973-81	1974-81	1975-81	1976-81	1977-81	1978-81	1979-81	1980-81
Personal sector								
Crimes of violence	*8.5	*7.1	*7.6	*8.4	4.2	4.7	2.3	*6.2
Rape	0.0	-3.1	4.4	13.1	6.7	-2.1	-12.0	1.1
Robbery	9.9	3.2	9.6	*14.7	*19.1	*25.8	*18.4	*13.0
Assault	*8.4	*8.6	*7.1	*6.7	0.6	0.4	-0.9	4.7
Aggravated assault	-4.3	-7.2	0.3	-2.2	-3.4	-0.5	-2.8	4.1
Simple assault	*17.0	*19.9	*11.3	*12.4	3.0	0.9	0.2	5.0
Crimes of theft	*-6.5	*-10.5	*-11.4	*-11.4	*-12.5	*-12.0	*-7.4	2.6
Personal larceny with contact	5.9	4.5	5.2	12.5	*22.6	4.2	13.2	7.3
Personal larceny without contact	*-7.0	*-11.0	*-11.9	*-12.2	*-13.5	*-12.6	*-8.0	2.4
Household sector								
Household burglary	**-4.1	*-5.6	**-4.1	-1.1	-0.7	2.3	**4.6	**4.3
Household larceny	*13.1	-2.2	**-3.5	-2.5	-1.8	0.9	*-9.5	*-4.3
Motor vehicle theft	*-10.3	**-9.1	*-12.2	3.9	0.8	-2.3	-2.3	2.5

NOTE: Percent change calculated using rates that were rounded to the nearest hundredth.
* The difference is statistically significant at the 0.05 level.
** The difference is statistically significant at the 0.10 level.

As indicated previously, a special kind of victimization rate--based only on those offenses that victims said were known to the police--was calculated in order to gauge possible changes between 1980 and 1981 in the incidence of crimes reported to the authorities. For each NCS offense, victimizations reported to the police (numerator) were divided by either the population age 12 and over or the number of households (denominator), as appropriate. The resulting rates (table 6) show that household larceny was the only crime to change significantly--a decline of about 9 percent between 1980 and 1981 in the victimization rate for police-reported crimes. All subcategories of household larceny contributed to this decrease, but the declines were not statistically significant for each subcategory.[7]

The 1980 census and NCS estimation

NCS data are gathered for the Bureau of Justice Statistics (BJS) by the Bureau of the Census through interviews with the residents of a scientifically designed and selected national sample of housing units.[8]

[7]An 11-percent drop in the rate for household larcenies of less than $50, not shown in table 6, was statistically significant at the 0.10 level. The observed rate for larcenies of $50 or more declined by 7 percent, a change that fell very short of the 0.10 level of significance. The apparent increase in robbery without injury (by 18.5 percent, as shown in table 6), also narrowly failed to be statistically significant at the 0.10 level.

[8]The effective size of the NCS sample has fluctuated over the years. Annual estimates for the period from 1973 to 1980 were generated from interviews with an average of about 132,000 persons, living in some 58,000 housing units.

Trends in police reporting rates for selected crimes, 1973-81

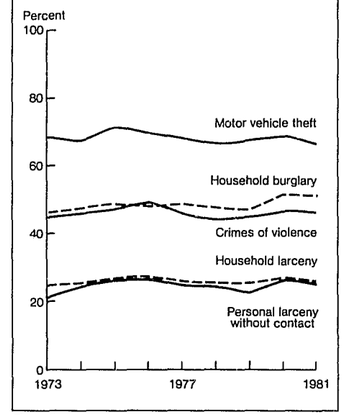

Figure 3

Raw data collected in the sample survey are transformed--through several computer-performed steps that comprise the estimation procedure--into results that are representative of the noninstitutional U.S. population age 12 and over.[9] In generating the revised 1980 data used in the preceding section of this report, each person in the sample represented an average of approximately 1,500 individuals age 12 and over, and the ratio for households was similar:

[9]The NCS estimation is a multi-step procedure that is described, together with the sample design and rotation, in an appendix to an annual BJS report entitled Criminal Victimization in the United States. The NCS Survey Documentation, prepared by and available from the Census Bureau, provides details about the estimation procedure, as well as particulars about field operations and all aspects of data processing. For the purpose of this report, the estimation procedure can be summarized as follows:
(1) The application of a basic weight, the reciprocal of the probability of being in the sample, to the data from each person interviewed; this weight is a rough measure of the population within the scope of the NCS that is represented by each person in the sample.
(2) An upward adjustment in the weight for each interviewed housing unit, to the extent required to account for noninterviews at occupied housing units within the sample; in addition, a personal noninterview adjustment is made to account for situations where it is not possible to secure an interview with every eligible member of a sample unit.
(3) A first-stage ratio adjustment in each person's weight--applied for various categories of race, type of locality, and major U.S. region to data obtained from persons living in sample areas that are not self-representing--to reduce the portion of variance that results from associating the characteristics (and victimization experiences) of such persons with those of individuals living in areas not encompassed by the sample; census data form the basis for this adjustment. And,
(4) a second-stage (or final) ratio adjustment in the weight for each person in the sample to reduce the variance by bringing the composition of the sample population into close agreement with that of the U.S. population within the scope of the NCS; census-derived estimates (or controls) of the age-sex-race distribution of the civilian population are used in making this adjustment.

Table 4. Police reporting rates for personal and household crimes, 1973-81

Sector and type of crime	Percent of victimizations reported to the police								
	1973	1974	1975	1976	1977	1978	1979	1980	1981
Personal sector									
Crimes of violence	45.5	46.9	47.2	48.8	46.1	44.2	45.1	47.1	46.6
Rape	48.9	51.8	56.2	52.7	58.4	48.8	50.5	41.4	55.7
Robbery	52.5	53.6	53.3	53.3	55.5	50.5	55.5	56.8	55.8
Robbery with injury	63.4	61.9	65.0	62.9	66.1	65.4	62.2	69.6	66.6
Robbery without injury	46.6	49.6	47.9	48.6	49.6	43.6	52.0	50.1	50.7
Assault	43.5	44.7	45.2	47.5	43.5	42.7	42.4	44.9	43.7
Aggravated assault	51.6	53.1	55.2	58.4	51.5	52.7	51.3	54.0	52.2
Simple assault	38.0	38.7	39.0	40.6	38.8	37.0	37.4	39.8	39.0
Crimes of theft	22.1	24.6	26.3	26.6	24.8	24.6	24.0	26.9	26.7
Personal larceny with contact	32.8	33.8	34.5	36.2	37.2	33.7	35.6	35.7	40.4
Personal larceny without contact	21.8	24.2	26.0	26.3	24.5	24.3	23.6	26.5	26.2
Household sector									
Household burglary	46.6	47.7	48.6	48.1	48.8	47.1	47.6	51.3	51.1
Household larceny	24.8	25.2	27.1	27.0	25.4	24.5	25.1	27.5	26.2
Motor vehicle theft	68.3	67.3	71.1	69.5	68.4	66.1	68.2	69.3	66.6

NOTE: Statistically significant differences between the rates for 1981 and each preceding year are identified on table 5. Estimated population control figures based on the 1980 census were used in calculating the percentages for 1980 and 1981. Controls for the 1973-79 percentages were derived from the 1970 census.

Table 5. Comparison of changes in police reporting rates, 1973-81

Sector and type of crime	Percent change in police reporting rate							
	1973-81	1974-81	1975-81	1976-81	1977-81	1978-81	1979-81	1980-81
Personal sector								
Crimes of violence	2.3	-0.6	-1.3	**-4.6	1.0	5.3	3.4	-1.2
Rape	13.9	7.6	-0.8	5.7	-4.7	14.2	10.2	34.5
Robbery	6.3	4.1	4.7	4.7	0.5	10.4	0.5	-1.8
Robbery with injury	5.1	7.7	2.5	5.9	0.8	1.9	7.1	-4.3
Robbery without injury	8.7	2.3	6.0	4.3	2.2	**16.3	-2.5	1.2
Assault	0.5	-2.2	-3.3	*-8.0	0.4	2.5	3.0	-2.6
Aggravated assault	1.2	-1.8	-5.4	*-10.6	1.4	1.0	1.9	-3.4
Simple assault	2.7	0.9	-0.1	-3.9	0.5	5.5	4.4	-1.9
Crimes of theft	*20.8	*8.9	1.8	0.6	*7.7	*8.6	*11.4	-0.4
Personal larceny with contact	**23.3	19.5	17.1	11.5	8.7	20.1	13.6	13.0
Personal larceny without contact	*20.5	*8.0	0.8	-0.3	*7.0	*7.7	*10.9	-1.2
Household sector								
Household burglary	*9.5	*7.2	*5.1	*6.1	**4.7	*8.5	*7.4	-0.4
Household larceny	5.9	4.0	-3.1	-3.0	3.1	**7.2	4.3	-4.7
Motor vehicle theft	-2.5	-1.0	**-6.3	-4.1	-2.6	0.9	-2.3	-3.9

NOTE: Percent change calculated using rates that were rounded to the nearest hundredth.
* The difference is statistically significant at the 0.05 level.
** The difference is statistically significant at the 0.10 level.

Table 6. Change in victimization rates based on crimes reported to the police, 1980-81

(Rate per 1,000)

Sector and type of crime	Victimization rates for NCS crimes reported to the police		
	1980	1981	Percent change
Personal sector			
Crimes of violence	15.7	16.5	4.9
Rape	0.4	0.5	35.9
Robbery	3.7	4.1	10.7
Robbery with injury	1.6	1.6	--
Robbery without injury	2.2	2.6	18.5
Assault	11.6	11.8	2.0
Aggravated assault	5.0	5.0	0.6
Simple assault	6.6	6.8	3.0
Crimes of theft	22.3	22.8	2.1
Personal larceny with contact	1.1	1.3	21.3
Personal larceny without contact	21.2	21.5	1.1
Household sector			
Household burglary	43.2	44.9	3.9
Household larceny	34.8	31.7	*-8.8
Motor vehicle theft	11.6	11.4	-1.5

NOTE: Detail may not add to total shown because of rounding. In calculating the rates, victimizations reported to the police were divided either by the population age 12 and over (personal sector) or by the total number of households (household sector). Percent change calculated using rates that were rounded to the nearest hundredth.
-- Represents no change.
* The difference is statistically significant at the 0.05 level.

Sector	Number interviewed	Population represented
Persons age 12 and over	123,000	184,324,000
Households	57,000	82,753,000

Independent population estimates, derived and updated from decennial censuses, are used to improve the precision of the national statistics on victimization. Besides enabling the updating of population controls that are used in weighting the sample data, availability of the latest census counts also gives an opportunity for introducing estimation refinements that further enhance the reliability of the estimates.

NCS field operations were begun during 1972, and results of the 1970 census served as the benchmark for producing all victimization estimates pertaining to the period from 1973 to 1979, as well as initial results for 1980 and 1981.[10] Availability of data from the 1980 census afforded the first opportunity for revising the NCS estimation procedure. The discussion that follows centers on two aspects of that procedure--use of the latest census results in weighting the sample data and the introduction of a change in one of the ratio estimation adjustments.

The independent population estimates, or controls, used in the second stage of the NCS ratio adjustment (see item 4, footnote 9), are developed from population counts--by age, sex, and race--emanating from decennial census results. Those controls are estimated by the Census Bureau on a monthly basis throughout the decade to account for changes in the population.

The most recent census results revealed that the last 1970-based estimates of the population age 12 and over, used in the initial estimation of 1980 NCS data, had understated the size of that population by about 2.2 percent. Consequently, when NCS data were re-estimated for 1980 using estimates based on the latest census, most victimization levels were increased by 2-3 percent (table 7).[11]

[10]Results of the 1980 census were not available for use in the initial estimation of 1980 and 1981 NCS data. Because of this, two BJS reports--Criminal Victimization in the U.S., 1979-80 Changes, 1973-80 Trends (NCJ-80838, July 1982) and Households Touched by Crime 1981 (NCJ-84406, September 1982)--gave 1980 and/or 1981 NCS results that derived from the application of population estimates based on the 1970 census. Data in a report being prepared for publication, Criminal Victimization in the United States, 1980, also were derived using 1970-based population controls.

[11]To show more precisely the effects of the changes in estimation, the rates and percentages found in tables 7-9 are given to the nearest hundredth. Such figures normally are rounded to the nearest tenth for publication purposes.

While the revised 1980 population estimates underlying the second set of NCS results for that year brought about significant changes in the measurement of victimization (and incident) levels, rates of victimization and other proportionate measures of the occurrence of crime were not appreciably altered. This is because the various computer-performed steps that comprise the estimation procedure generally had roughly comparable effects on the numerator and denominator used in calculating each relative measure of crime. For the population as a whole, the revised 1980 victimization rates differed from those previously released by no more than 0.2 per thousand. Drawing upon figures appearing in table 7, for example, the 1980 overall rate for violent crime was affected in the following way by changes in the components of the fraction used in the calculation:

Component	Based on 1970 controls	Based on 1980 controls
Victimizations (numerator)	5,974,000	6,130,000
Population (denominator)	180,350,000	184,324,000
Rate per 1,000 persons	33.1	33.3

The revisions that resulted from the re-estimation of victimization rates for 1980 can be attributed largely to differential changes in the Nation's demographic composition--revealed by the 1980 census but not reflected in the preceding intercensal estimates. In general, the 1980 census indicated that 1970-based population control

Table 7. Old and revised victimization levels and rates, 1980

(Rate per 1,000)

Sector and type of crime	Victimization levels (1,000s)			Victimization rates		
	Old	Rev.	Percent difference	Old	Rev.	Percent difference
Personal sector						
Crimes of violence	5,974	6,130	2.61	33.12	33.26	0.42
Rape	169	174	2.96	0.94	0.94	--
Completed rape	38	39	2.63	0.21	0.21	--
Attempted rape	130	134	3.08	0.72	0.73	1.39
Robbery	1,179	1,209	2.54	6.54	6.56	0.31
Robbery with injury	405	416	2.47	2.25	2.25	--
From serious assault	205	210	2.44	1.14	1.14	--
From minor assault	200	205	2.50	1.11	1.11	--
Robbery without injury	774	793	2.45	4.29	4.30	0.23
Assault	4,626	4,747	2.62	25.65	25.75	0.39
Aggravated assault	1,661	1,707	2.83	9.21	9.26	0.65
With injury	572	588	2.80	3.17	3.19	0.63
Attempted with weapon	1,088	1,119	2.85	6.03	6.07	0.66
Simple assault	2,966	3,041	2.56	16.44	16.50	0.30
With injury	829	850	2.53	4.60	4.61	0.22
Attempted without weapon	2,136	2,191	2.57	11.84	11.88	0.34
Crimes of theft	14,936	15,300	2.44	82.82	83.01	0.23
Personal larceny with contact	546	558	2.20	3.03	3.03	--
Purse snatching	194	199	2.58	1.08	1.08	--
Completed purse snatching	140	144	2.86	0.78	0.78	--
Attempted purse snatching	54	55	1.85	0.30	0.30	--
Pocket picking	352	359	1.99	1.95	1.95	--
Personal larceny without contact	14,390	14,742	2.45	79.79	79.98	0.24
Total population age 12 and over	180,350	184,324	2.20			
Household sector						
Household burglary	6,817	6,973	2.28	84.19	84.26	0.08
Forcible entry	2,407	2,462	2.28	29.73	29.75	0.07
Unlawful entry without force	2,970	3,033	2.13	36.68	36.65	-0.08
Attempted forcible entry	1,440	1,477	2.59	17.78	17.85	0.39
Household larceny	10,247	10,468	2.16	126.54	126.50	-0.03
Less than $50	4,954	5,063	2.20	61.17	61.18	0.02
$50 or more	4,064	4,149	2.09	50.18	50.13	-0.10
Amount not available	490	500	2.19	6.05	6.05	--
Attempted larceny	740	757	2.26	9.14	9.14	--
Motor vehicle theft	1,355	1,381	1.93	16.73	16.69	-0.24
Completed theft	920	937	1.84	11.36	11.32	-0.35
Attempted theft	435	444	2.11	5.37	5.37	--
Total number of households	80,977	82,753	2.19			

NOTE: Detail may not add to total shown because of rounding. Percent difference for levels based on unrounded figures. "Old" refers to estimates that were derived using 1970-based population controls. "Rev." denotes re-estimation based on population controls derived from the 1980 census and a modified second-stage ratio adjustment.
-- Represents no difference.

figures applied in generating NCS data for the black inhabitants (and young black males in particular) had been substantially underestimated. NCS results have demonstrated conclusively that members of that group have comparatively high personal-crime victimization rates. This largely accounts for the increases in the average rates for most of the major personal offense categories displayed in table 7. Rounding differences between the old and revised sets of victimization rates for 1980 also account for some of the changes in the published rates. Similar results are known to have occurred in re-estimating other statistical series, notably the labor force participation and employment status figures derived from the Current Population Survey, on the basis of the latest census results.[12]

Coupled with the introduction of new population controls, the NCS estimation procedure was modified further to improve the reliability of the estimates. The change was in the second-stage ratio adjustment (see footnote 9) and entailed the manner of adjusting for race. Previously, a distinction was made between the "white and other-than-white" populations. The new procedure, adopted to improve estimates for the black population, adjusts according to "black and other-than-black," without adversely affecting estimates for the white population.

The effects of these changes in the NCS estimation procedure were not uniform across crime categories or demographic groups. Although victimization rates for aggregate categories of personal crime generally increased when the 1980 data were re-estimated, the relative changes in rates for household crimes generally were smaller and some of the categories decreased fractionally. Drawing for illustration from data in table 7, it can be seen that the 1980 residential burglary rate was affected slightly by changes in the components of the fractions used in the calculation:

Component	Based on 1970 controls	Based on 1980 controls
Victimizations (numerator)	6,817,000	6,973,000
Households (denominator)	80,977,000	82,753,000
Rate per 1,000 households	84.2	84.3

There were differences between, as well as within, population groups in the direction and degree of change associated with the re-estimation of victimization rates for 1980. In general, the revised rates of personal crime changed more markedly for minority populations than for whites. Among blacks, for example, the victimization rate by violent crime changed from 40.2 to 40.6, while the figure for personal larceny without contact rose a full point (table 8). The corresponding rates for Hispanics also increased, but considerably less.[13] Among whites, the violent crime rate rose from 32.15 to 32.24 (a change not observable if the rates are rounded to the nearest tenth), and the rate for personal larceny without contact increased from 80.63 to 80.73. There were differences in the extent to which the rates for specific age groups changed, with some of the figures declining rather than increasing. Comparable changes also resulted from the re-estimation of victimization rates for the household crimes (table 9).

[12]See, Deborah Pisetzner Klein, "Labor Force Data: The Impact of the 1980 Census," a Technical Note in Monthly Labor Review, Vol. 105, No. 7, pp. 39-43 (Bureau of Labor Statistics, July 1982).

[13]Estimates for the Hispanic population derive from the weighting of individual responses to a question on ethnic background, and they are not based on controls developed independently for this group.

Table 8. Old and revised victimization rates for selected personal crimes and population groups, 1980

(Rate per 1,000 persons in each age group)

Population group	Crimes of violence						Personal larceny without contact	
	Total		Robbery		Assault			
	Old	Rev.	Old	Rev.	Old	Rev.	Old	Rev.
White (all ages)	32.15	32.24	5.70	5.71	25.53	25.61	80.63	80.73
12-15	48.65	48.68	7.09	7.10	40.79	40.82	119.90	119.94
16-19	69.52	69.45	10.07	10.04	56.77	56.75	125.89	125.91
20-24	69.01	68.98	9.61	9.60	56.99	56.97	135.59	135.51
25-34	38.38	38.42	6.20	6.21	30.95	30.97	95.88	95.91
35-49	20.52	20.53	4.28	4.28	15.75	15.77	72.37	72.35
50-64	11.53	11.48	4.09	4.08	7.44	7.40	47.55	47.43
65 and over	6.21	6.20	2.65	2.65	3.44	3.43	21.57	21.51
Black (all ages)	40.20	40.59	13.94	14.00	25.19	25.52	72.87	73.90
12-15	53.39	52.43	17.16	16.85	35.54	34.86	93.67	93.34
16-19	69.12	69.56	18.59	18.60	46.02	46.53	83.00	83.17
20-24	65.48	65.65	18.43	18.72	44.43	44.32	119.73	119.12
25-34	47.53	47.86	17.49	17.59	29.30	29.53	100.09	100.60
35-49	25.78	25.78	8.99	9.02	16.79	16.76	57.71	58.32
50-64	15.43	15.23	7.52	7.40	7.91	7.84	36.13	36.02
65 and over	14.25	13.56	11.99	11.43	2.27	2.12	16.08	15.50
Hispanic (all ages)	39.79	39.90	11.95	11.97	27.17	27.25	70.47	70.59
12-15	37.83	37.92	9.54	9.46	27.23	27.36	90.10	90.08
16-19	61.39	61.25	16.21	16.20	45.17	45.05	78.90	78.73
20-24	67.73	67.70	10.29	10.17	55.42	55.42	105.13	105.11
25-34	38.37	38.45	13.23	13.39	24.43	24.45	78.11	78.14
35-49	27.77	27.87	10.02	10.02	17.14	17.24	57.04	57.09
50-64	29.31	29.25	16.01	15.96	13.38	13.30	39.52	39.58
65 and over	9.89	10.01	4.68	4.75	5.20	5.09	22.03	21.72

NOTE: Under crimes of violence, "total" includes data on rape, not shown separately. "Old" refers to estimates that were derived using 1970-based population controls. "Rev." denotes re-estimation based on population controls derived from the 1980 census and a modified second-stage ratio adjustment. Race and ethnicity are not mutually exclusive, and most Hispanics are classified as white.

Table 9. Old and revised victimization rates for household crimes and selected population groups, 1980

(Rate per 1,000 households headed by persons in each age group)

Population group	Burglary		Household larceny		Motor vehicle theft	
	Old	Rev.	Old	Rev.	Old	Rev.
White (all ages)	80.55	80.55	125.23	125.09	15.63	15.59
20-34	103.86	103.87	165.70	165.72	24.80	24.73
35-49	90.58	90.56	150.69	150.72	17.66	17.66
50-64	64.97	64.86	98.23	97.92	11.88	11.84
65 and over	46.14	46.14	56.11	56.02	2.81	2.80
Black (all ages)	114.65	115.40	133.65	134.28	25.14	25.07
20-34	134.94	135.29	171.50	172.28	26.75	26.50
35-49	128.03	128.56	122.72	121.77	30.52	30.44
50-64	98.25	97.96	126.78	126.50	26.53	26.48
65 and over	71.39	70.81	77.29	76.16	13.24	13.13

NOTE: For each racial group, the "all ages" category includes a relatively small number of households headed by persons under age 20. "Old" refers to estimates that were derived using 1970-based population controls. "Rev." denotes re-estimation based on population controls derived from the 1980 census and a modified second-stage ratio adjustment.

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