Violent Crime in Massachusetts

By Asheley Van Ness, Senior Policy Analyst and Sarah Lawrence, Director, Research and Policy Analysis Division April 2007

The purpose of the *Crime Policy Brief Series* is to increase knowledge about crime in Massachusetts through improved dissemination of crime data. In partnership with the State Police Crime Reporting Unit (CRU), the Executive Office of Public Safety, Research and Policy Analysis Division hopes to provide an overview of crime in Massachusetts in order to better understand the trends, nature, and context of crime in Massachusetts.

Highlights

- Looking at violent crime levels in Massachusetts over the last 26 years reveals that violent crime in recent years is at levels last seen in the late 1980s (Figure 1).
- Massachusetts generally mirrors the national violent crime rate trends between 1980 and 2005 (Figure 4).
- The violent crime rate decreased by 22 percent over the 11-year period 1995 to 2005.

Massachusetts Violent Crime Rates: Percent Decrease 1995 to 2005

Offense	Percent Decrease				
Total Violent Crime	22%				
Aggravated Assault	25%				
Murder	21%				
Robbery	15%				
Rape	3%				
Data Source: Massachusetts State Police, Crime Reporting Unit					

Background

Uniform Crime Reporting Program

The national Uniform Crime Reporting (UCR) program began in 1930 when Congress authorized the Federal Bureau of Investigation (FBI) to collect crime statistics from local police departments across the nation. The goal of the UCR program is to produce reliable statistical information on the magnitude and trends of crime for use by law enforcement agencies (FBI 2004). Over the years the utilization of the program has increased and today the general public, media, legislators, criminologists, and others use the UCR data to track the rise and fall of crime levels and rates (FBI 2004).

In the 1970's, the FBI changed responsibility for data collection to state-run UCR programs (FBI 2004). Now local law enforcement agencies report data to a state-operated program that then forwards the information to the national program. In Massachusetts, the State Police CRU is the liaison between state, local, and campus police departments and the national program.

Data

Offense Classifications

There are seven main offense classifications that are used to measure the prevalence of crime in the nation. Violent crime includes murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault. Property crime includes burglary, larceny-theft, and motor vehicle theft. In 1979 a congressional mandate added arson to the property crime classification (FBI 2004).

Counts and Rates

Counts and rates are often used in crime reports to illustrate the amount of crime in a locality. Counts of crime are "raw" numbers of offenses and represent the volume of crime. Rates are the number of offenses divided by the population. Rates allow for the comparison of the amount of crime between localities by controlling for population. Crime rates are typically calculated as a rate per 100,000 persons in this *Crime Policy Brief Series*.

For purposes of this *Crime Policy Brief Series*, U.S. Census Bureau population estimates for the years 2001, 2002, 2003, 2004, and 2005 were used to calculate rates. Decennial Census counts were used for 1980, 1990, and 2000 and for the respective years in between. The Appendix provides the raw counts, rates, and population figures for Massachusetts and the nation that were used in this report.

This brief includes data voluntarily submitted by local agencies to the CRU. The CRU's estimation method was used which only includes agencies that have submitted at least three months of data for any given year. For agencies which submitted at least three months of data but less than 12 months of data, estimates were calculated for the missing months for each crime category except murder. Estimates were calculated as follows: (Count of Crimes/Number of Months Data Submitted) x 12.

The crime counts included in this policy brief are based on counts from the CRU as of September 12, 2006. The data may not reflect the exact figures published by the CRU or the FBI due to submission of late and/or adjusted data.

How much violent crime is there in Massachusetts?

The volume of violent crime over the last 26 years (1980 to 2005) reveals that violent crime in recent years has declined to levels last seen in the late 1980's. Violent crime in Massachusetts peaked in the early to mid 1990's, mirroring national trends (Figures 1 and 2).

For Massachusetts, the highest volume of violent crime reported was in 1993 (40,239) and the lowest volume reported was in 1984 (27,595). In 2005, 31,145 violent crimes were reported in the state (Figure 1).

Nationally, the highest volume of violent crime reported was in 1992 (1,932,270) and the lowest reported was in 1983 (1,258,090). In 2005, 1,390,695 violent crime offenses were reported (Figure 2).

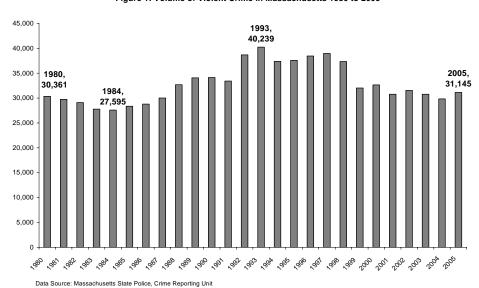


Figure 1: Volume of Violent Crime in Massachusetts 1980 to 2005

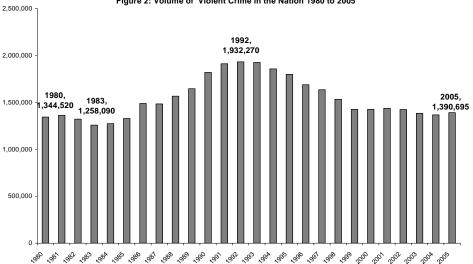


Figure 2: Volume of Violent Crime in the Nation 1980 to 2005

Data Source: U.S. Department of Justice, Bureau of Justice Statistics

In 2005 there were 31,145 reported violent crimes in the state (Figure 3). The majority of violent crimes in 2005 were comprised of aggravated assaults (70 percent), followed by robbery (24 percent), forcible rape (5 percent), and murder and non-negligent manslaughter (0.6 percent).

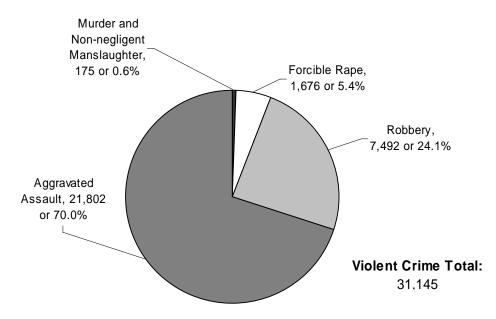


Figure 3: Massachusetts Violent Offenses 2005

Data Source: Massachusetts State Police, Crime Reporting Unit

What are the trends in violent crime rates in Massachusetts?

Massachusetts generally mirrors the national violent crime rate trends between 1980 and 2005 (Figure 4). Notably, Massachusetts' violent crime rates were consistently below the national rates until 1996 when Massachusetts surpassed the nation's violent crime rate. Since 1999 the violent crime rates for the state and the nation have generally converged. While national violent crime rates have been generally declining since 1991, Massachusetts' rates began a general decline in the late 1990's. In other words, the violent crime drop in Massachusetts lagged the nation by a few years.

The highest violent crime rate in the state was in 1993 (669 per 100,000) and the lowest violent crime rate was in 2004 (465). Nationally, the highest violent crime rate was in 1991 (758) and the lowest violent crime rate was in 2004 (466).

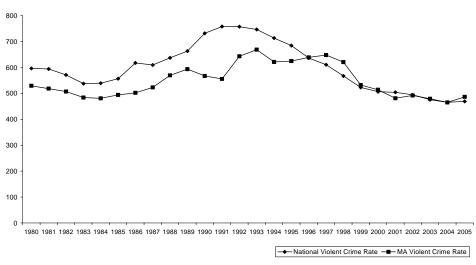


Figure 4: National and Massachusetts Violent Crime Rate (per 100,000 persons) 1980 to 2005

Data Source: U.S. Department of Justice, Bureau of Justice Statistics; Massachusetts State Police, Crime Reporting Unit

Focusing on the 11-year period 1995 to 2005, the national violent crime rate decreased 32 percent (from 685 to 469) and the state violent crime rate decreased by 22 percent (from 625 to 487) (Figure 5).

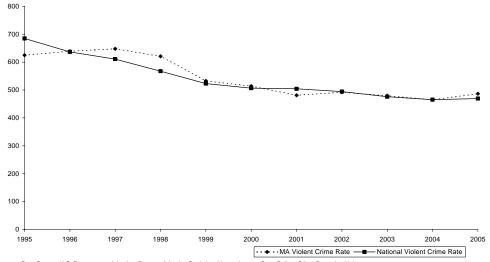


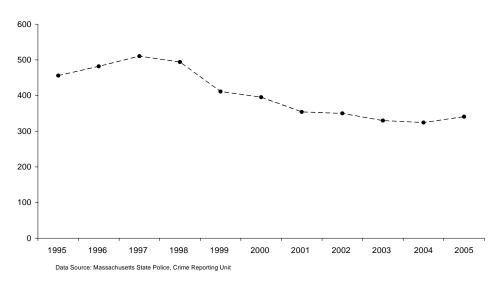
Figure 5: National and Massachusetts Violent Crime Rate (per 100,00 persons) 1995 to 2005

Data Source: U.S. Department of Justice, Bureau of Justice Statistics; Massachusetts State Police, Crime Reporting Unit

A closer look at the violent crime rate by individual offenses for Massachusetts from 1995 to 2005 reveals that each offense has been declining during this time period.

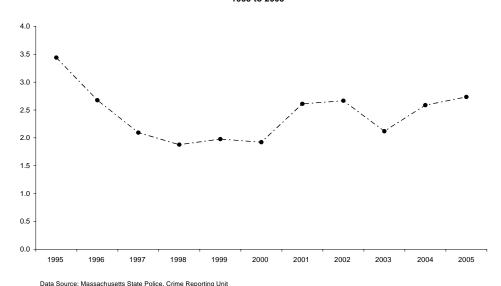
- The aggravated assault rate increased from 1995 to 1997 and slightly from 2004 to 2005 (Figure 6 and Table 1).
- The aggravated assault rate experienced the greatest decrease in percentage terms (25 percent or 456 to 341) compared to the other violent crime offenses over the 11-year time period.
- The aggravated assault rate was at an 11-year low in 2004 (324).
- Between 1995 and 2005 the aggravated assault rate peaked in 1997 (510).

Figure 6: Massachusetts Aggravated Assault Rate (per 100,000 persons) 1995 to 2005

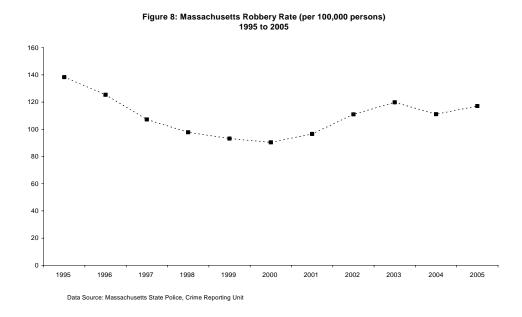


- During this same period, the murder rate in Massachusetts declined by 21 percent (from 3.4 to 2.7) (Figure 7).
- The murder rate peaked in 1995 and declined in the late 1990's.
- Since 2000 the murder rate has fluctuated.

Figure 7: Massachusetts Murder and Non-negligent Manslaughter Rate (per 100,000 persons) 1995 to 2005



- The robbery rate decreased in percentage terms between 1995 and 2005 (15 percent or 138 to 117) (Figure 8).
- Between 1995 and 2005 the robbery rate was highest in 1995.
- The robbery rate experienced a decline in the late 1990's and a general increase since 2000.



The rape rate declined slightly between 1995 and 2005 (3 percent or 27.0 to 26.2) (Figure 9).

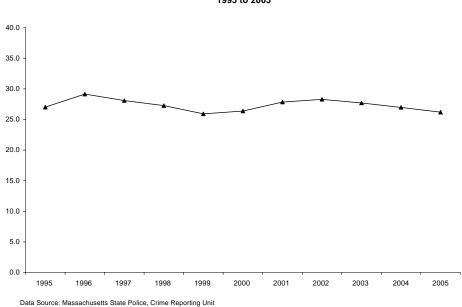


Figure 9: Massachusetts Forcible Rape Rate (per 100,000 persons) 1995 to 2005

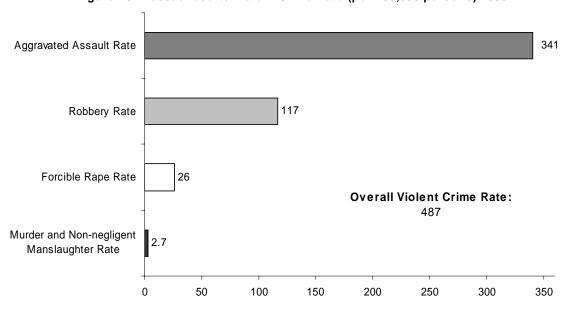
As the previous set of graphs shows, individual violent offenses (aggravated assault, murder and non-negligent manslaughter, robbery, and forcible rape) in Massachusetts have generally declined between 1995 and 2005 (Table 1), although some violent offenses have started to increase in recent years.

Table 1: Massachusetts Violent Crime Rates: Percent Decrease 1995 to 2005

Offense	Percent Decrease				
Total Violent Crime	22%				
Aggravated Assault	25%				
Murder	21%				
Robbery	15%				
Rape	3%				
Data Source: Massachusetts State Police, Crime Reporting Unit					

Turning from changes in rates over time for individual offenses, Figure 10 compares the rates of violent crime across individual offenses in a single year, 2005. In 2005 the violent crime rate was 487 per 100,000 persons. In terms of rates of individual offenses within the violent crime category, aggravated assault had the highest rate, at 341, nearly three times higher than the next largest offense rate. In addition, 117 robberies, 26 forcible rapes, and 2.7 murders per 100,000 persons were reported in 2005.

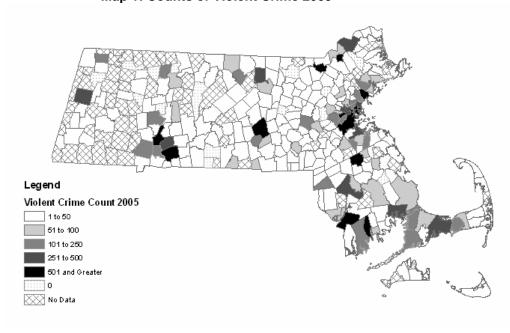
Figure 10: Massachusetts Violent Crime Rate (per 100,000 persons) 2005



Data Source: Massachusetts State Police, Crime Reporting Unit

Where does violent crime occur?

An examination of the volume of violent crime in 2005 at the community level illustrates the distribution of violent crime across the state (Map 1). Based on violent crime counts, the ten communities with the highest number of reported violent crimes in declining order are: Boston, Springfield, Worcester, Fall River, Brockton, Lynn, New Bedford, Lowell, Holyoke, and Chelsea. Not surprisingly the majority of the communities with the highest number of reported violent crimes are some of the largest communities in the state (Table 2).



Map 1: Counts of Violent Crime 2005¹

Table 2: Top Ten Communities in Massachusetts by Violent Crime Count 2005

Town/City	Violent Crime Count	Population	Population Ranking (out of 351 communities)			
Boston	7,479	559,034	1			
Springfield	2,692	151,732	3			
Worcester	1,391	175,898	2			
Fall River	1,174	91,802	8			
Brockton	1,159	94,632	6			
Lynn	1,070	88,792	10			
New Bedford	1,036	93,102	7			
Lowell	1,009	103,111	4			
Holyoke	721	39,958	36			
Chelsea	585	32,518	47			

Data Source: 2005 Crime Data, Massachusetts State Police, Crime Reporting Unit. Population from U.S. Census 2005 estimates.

¹ No Data indicates that data was missing for a particular community in 2005. Data Source: 2005 Crime Data, Massachusetts State Police, Crime Reporting Unit.

Examining the volume of violent crime alone does not allow comparisons across communities as population is not taken into consideration. A more accurate comparison of violent crime at the community level is to examine the communities with the highest violent crime *rate* in 2005 (Table 3)². Accounting for population, Worcester is no longer in the top ten for 2005 and Fitchburg is added to the list. Boston moves down from the community with the highest *number* of violent crimes to the fourth community when ranked by violent crime *rates*. Of those cities on both lists, Holyoke and Chelsea move the most; from the ninth and tenth spots when ranked by volume to the first and second spots, respectively, when ranked by rates.

Table 3: Top Ten Communities in Massachusetts by Violent Crime Rate 2005

Town/City	Violent Crime Rate	Population	Population Ranking (out of 351 communities)			
Holyoke	1,804.4	39,958	36			
Chelsea	1,799.0	32,518	47			
Springfield	1,774.2	151,732	3			
Boston	1,337.8	559,034	1			
Fall River	1,278.8	91,802	8			
Brockton	1,224.7	94,632	6			
Lynn	1,205.1	88,792	10			
New Bedford	1,112.8	93,102	7			
Lowell	978.6	103,111	4			
Fitchburg	864.0	40,045	34			

Data Source: 2005 Crime Data, Massachusetts State Police, Crime Reporting Unit. Population from U.S. Census 2005 estimates. Rate is per 100,000 persons.

² For purposes of identifying the top ten communities by violent crime rates, communities were not included in the analysis if their 2005 population less than 25,000.

Data Sources:

Federal Bureau of Investigation, *Preliminary Annual Uniform Crime Report*, January – December 2005, June 12, 2006

Federal Bureau of Investigation, Crime in the United States, 2004, October 17, 2005

Massachusetts State Police, Crime Reporting Unit

- U.S. Census Bureau, Population Division, *Subcounty Population Estimates, April 1, 2000 to July 1, 2005,* June 20, 2006, (http://www.census.gov/popest/cities/files/SUB-EST2005_25.csv)
- U.S. Census Bureau, Census 2000 Summary Tape File 1 (STF 1); generated using American Factfinder, (http://factfinder.census.gov/), Feburay 15, 2006
- U.S. Census Bureau, Census 1990 Summary Tape File 1 (STF 1); generated using American Factfinder, (http://factfinder.census.go v), Feburay 15, 2006
- U.S Census Bureau, 1980 Census of Population, Number of Inhabitants, Massachusetts, December 1981, (http://www2.census.gov/prod2/decennial/documents/1980a maABC-01.pdf)
- U.S. Department of Justice, Bureau of Justice Statistics, *FBI, Uniform Crime Reports, Reported Crime in the United States--Total 1980 2004*, February 2, 2006, (http://www.ojp.usdoj.gov/bjs)

Appendix

Massachusetts Violent Crime, by Counts and Rates (per 100,000 persons)

Year	Population	Violent Crime Count	Murder and Non- negligent Manslaughter	Forcible Rape	Robbery	Aggravated Assault	Violent Crime Rate	Murder and Non- negligent manslaughter Rate	Forcible Rape Rate	Robbery Rate	Aggravated Assault Rate
1980	5,737,037	30,361	207	1,367	12,121	16,666	529.2	3.6	23.8	211.3	290.5
1981		29,740	178	1,311	13,165	15,086	518.4	3.1	22.9	229.5	263.0
1982		29,095	199	1,296	11,050	16,550	507.1	3.5	22.6	192.6	288.5
1983		27,776	186	1,258	10,525	15,807	484.2	3.2	21.9	183.5	275.5
1984		27,595	192	1,491	9,268	16,638	481.0	3.3	26.0	161.5	290.0
1985		28,361	183	1,607	10,122	16,448	494.4	3.2	28.0	176.4	286.7
1986		28,799	186	1,560	10,235	16,810	502.0	3.2	27.2	178.4	293.0
1987		30,019	175	1,677	9,620	18,546	523.2	3.1	29.2	167.7	323.3
1988		32,674	184	1,687	9,424	21,376	569.5	3.2	29.4	164.3	372.6
1989		34,062	182	1,560	10,750	21,561	593.7	3.2	27.2	187.4	375.8
1990	6,016,425	34,132	212	1,500	10,502	21,914	567.3	3.5	24.9	174.6	364.2
1991		33,440	213	1,444	9,172	22,606	555.8	3.5	24.0	152.5	375.7
1992		38,692	171	1,794	9,443	27,284	643.1	2.8	29.8	157.0	453.5
1993		40,239	209	1,705	9,090	29,232	668.8	3.5	28.3	151.1	485.9
1994		37,394	199	1,621	9,326	26,247	621.5	3.3	26.9	155.0	436.3
1995		37,594	207	1,625	8,321	27,441	624.9	3.4	27.0	138.3	456.1
1996		38,449	161	1,753	7,541	28,994	639.1	2.7	29.1	125.3	481.9
1997		38,974	126	1,689	6,450	30,706	647.8	2.1	28.1	107.2	510.4
1998		37,355	113	1,640	5,883	29,714	620.9	1.9	27.3	97.8	493.9
1999		32,038	119	1,559	5,606	24,755	532.5	2.0	25.9	93.2	411.4
2000	6,349,097	32,642	122	1,675	5,738	25,106	514.1	1.9	26.4	90.4	395.4
2001	6,395,585	30,785	167	1,780	6,178	22,657	481.4	2.6	27.8	96.6	354.3
2002	6,412,549	31,543	171	1,814	7,116	22,440	491.9	2.7	28.3	111.0	349.9
2003	6,420,289	30,783	136	1,778	7,692	21,177	479.5	2.1	27.7	119.8	329.8
2004	6,416,553	29,838	166	1,731	7,126	20,815	465.0	2.6	27.0	111.1	324.4
2005	6,398,743	31,145	175	1,676	7,492	21,802	486.7	2.7	26.2	117.1	340.7

Data Source: Massachusetts State Police, Crime Reporting Unit. U.S. Census Bureau estimates are used in 2001 through 2005. Decennial Census counts were used in 1980, 1990, 2000, and the years in between.

National Violent Crime, by Counts and Rates (per 100,000 persons)

Year	Population	Violent Crime Count	Murder and Non- negligent Manslaughter	Forcible Rape	Robbery	Aggravated Assault	Violent Crime Rate	Murder and Non negligent manslaughter Rate	Forcible Rape Rate	Robbery Rate	Aggravated Assault Rate
1980	225,349,264	1,344,520	23,040	82,990	565,840	672,650	596.6	10.2	36.8	251.1	298.5
1981	229,146,000	1,361,820	22,520	82,500	592,910	663,900	594.3	9.8	36.0	258.7	289.7
1982	231,534,000	1,322,390	21,010	78,770	553,130	669,480	571.1	9.1	34.0	238.9	289.1
1983	233,981,000	1,258,090	19,310	78,920	506,570	653,290	537.7	8.3	33.7	216.5	279.2
1984	236,158,000	1,273,280	18,690	84,230	485,010	685,350	539.2	7.9	35.7	205.4	290.2
1985	238,740,000	1,328,800	18,980	88,670	497,870	723,250	556.6	8.0	37.1	208.5	302.9
1986	241,077,000	1,489,170	20,610	91,460	542,780	834,320	617.7	8.5	37.9	225.1	346.1
1987	243,400,000	1,484,000	20,100	91,110	517,700	855,090	609.7	8.3	37.4	212.7	351.3
1988	245,807,000	1,566,220	20,680	92,490	542,970	910,090	637.2	8.4	37.6	220.9	370.2
1989	248,239,000	1,646,040	21,500	94,500	578,330	951,710	663.1	8.7	38.1	233.0	383.4
1990	248,709,873	1,820,130	23,440	102,560	639,270	1,054,860	731.8	9.4	41.2	257.0	424.1
1991	252,177,000	1,911,770	24,700	106,590	687,730	1,092,740	758.1	9.8	42.3	272.7	433.3
1992	255,082,000	1,932,270	23,760	109,060	672,480	1,126,970	757.5	9.3	42.8	263.6	441.8
1993	257,908,000	1,926,020	24,530	106,010	659,870	1,135,610	746.8	9.5	41.1	255.9	440.3
1994	260,341,000	1,857,670	23,330	102,220	618,950	1,113,180	713.6	9.0	39.3	237.7	427.6
1995	262,755,000	1,798,790	21,610	97,470	580,510	1,099,210	684.6	8.2	37.1	220.9	418.3
1996	265,284,000	1,688,540	19,650	96,250	535,590	1,037,050	636.5	7.4	36.3	201.9	390.9
1997	267,637,000	1,634,770	18,210	96,120	497,950	1,022,490	610.8	6.8	35.9	186.1	382.0
1998	270,296,000	1,533,887	16,974	93,144	447,186	976,583	567.5	6.3	34.5	165.4	361.3
1999	272,691,000	1,426,044	15,522	89,411	409,371	911,740	523.0	5.7	32.8	150.1	334.3
2000	281,421,906	1,425,486	15,586	90,178	408,016	911,706	506.5	5.5	32.0	145.0	324.0
2001	284,796,887	1,436,611	15,980	90,491	422,921	907,219	504.4	5.6	31.8	148.5	318.5
2002	287,973,924	1,423,677	16,229	95,235	420,806	891,407	494.4	5.6	33.1	146.1	309.5
2003	290,788,976	1,383,676	16,528	93,883	414,235	859,030	475.8	5.7	32.3	142.5	295.4
2004	293,655,404	1,367,009	16,137	94,635	401,326	854,911	465.5	5.5	32.2	136.7	291.1
2005	296,410,404	1,390,695	16,692	93,934	417,122	862,947	469.2	5.6	31.7	140.7	291.1

Data Source: Bureau of Justice Statistics, FBI, Uniform Crime Reports, prepared by the National Archive of Criminal Justice Data (http://www.ojp.usdoj.gov/bjs). Note: 2005 data from FBI, Uniform Crime Reports, http://www.fbi.gov/ucr/05cius/data/table_01.html

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