



## Bureau of Justice Statistics Special Report

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# Police Departments in Large Cities, 1990-2000

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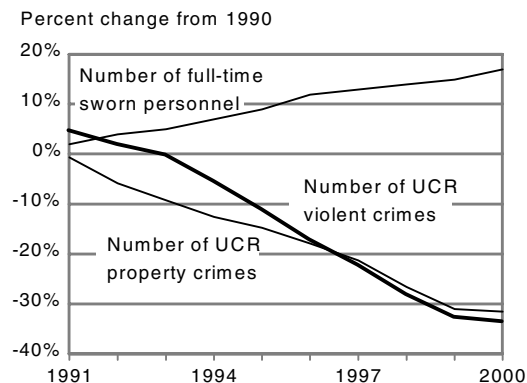
From 1990 to 2000, 62 local police departments served cities with a population of 250,000 or more. During this time, the number of residents served by these agencies increased by 10%, from 45 million to 49.4 million; their number of full-time employees by 20%, from 166,823 to 199,627; and their number of full-time sworn personnel by 17%, from 130,242 to 152,858.

In contrast to the increases noted above, the volume of serious crime reported in these cities was substantially lower in 2000 than in 1990. According to the FBI Uniform Crime Reports program, the number of violent Crime Index offenses declined by 34%, and the number of property Crime Index offenses by 31%.

In addition to employment and crime trends, this report presents other data comparisons based on the 1990 and 2000 Law Enforcement Management and Administrative Statistics (LEMAS) surveys. Topics include staffing levels, race and ethnicity of officers, officer education and training requirements, operating budgets, officer salaries and special pay, types of special units operated, drug enforcement activities, sidearm and armor policies, types of vehicles operated, and computerization.

### Highlights

From 1990 to 2000, in cities with 250,000 or more residents, the number of UCR violent crimes decreased 34%, the number of UCR property crimes decreased 31%, and the number of full-time local police officers increased 17%.



### Among large city police departments, 1990-2000, changes included —

- The number of residents served increased by 10%, accompanied by a 7% increase, from 289 to 310, in the number of full-time sworn personnel per 100,000 residents.
- The percentage of full-time sworn personnel who were members of a racial or ethnic minority increased from 30% to 38%.
- Hispanic representation among officers increased from 9% to 14%, blacks from 18% to 20%, and women from 12% to 16%.
- The percent of departments requiring new officers to have at least some college rose from 19% to 37%, and the percent requiring a 2-year or 4-year degree grew from 6% to 14%.
- Annual operating costs per resident rose 10%, from \$242 to \$266, but annual per officer costs increased by just 2%, from \$83,814 to \$85,786.
- The percent of departments using bicycles rose from 39% to 98%. The average number of bicycles in use went from 8 to 95.
- The percent of departments using in-field computers increased from 73% to 92%, the percent using automated fingerprint ID systems from 60% to 97%, and the percent with enhanced 9-1-1 from 76% to 97%.
- The percent of departments with full-time domestic violence units rose from 50% to 81%; with full-time victim assistance units, from 32% to 47%.

## Staffing levels

From 1990 to 2000, the average number of full-time personnel in police departments serving cities with a population of 250,000 or more increased by 20%, from 2,691 to 3,220 (table 1). New York City's police department (NYPD), the Nation's largest, had about 53,000 full-time employees as of June 2000. (See appendix table A for employment data for all 62 local police departments serving cities with a population of 250,000 or more.)

In 2000, police departments in large cities employed 404 full-time personnel per 100,000 residents. This represented an increase of 9% over the 1990 level of 370 per 100,000. On a land area served basis, employment increased from 85 full-time personnel per 10 square miles in 1990 to 101 per 10 square miles in 2000.

From 1990 to 2000 the average number of full-time sworn personnel among police departments in large cities increased by 17%, from 2,101 to 2,465 (table 2). The NYPD had more than 40,000 full-time sworn personnel as of June 2000 (see box below). This was about 3 times the next largest department in Chicago, with 13,466.

**Table 1. Number of full-time employees in police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population served	Number of full-time employees					
	Per agency		Per 100,000 residents		Per 10 square miles	
	1990	2000	1990	2000	1990	2000
Total	2,691	3,220	370	404	85	101
1,000,000 or more	9,047	11,267	422	470	82	102
500,000-999,999	2,113	2,349	348	355	80	89
350,000-499,999	1,113	1,334	289	317	86	103
250,000-349,999	932	1,068	305	343	133	153

**Table 2. Number of full-time sworn personnel in police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population served	Number of full-time sworn personnel					
	Per agency		Per 100,000 residents		Per 10 square miles	
	1990	2000	1990	2000	1990	2000
Total	2,101	2,465	289	310	66	78
1,000,000 or more	7,113	8,717	331	364	65	79
500,000-999,999	1,647	1,810	271	274	63	69
350,000-499,999	841	972	219	231	65	75
250,000-349,999	730	796	239	256	105	114

In terms of land area, employment increased from 66 full-time sworn personnel per 10 square miles in 1990 to 78 per 10 square miles in 2000.

In 2000 these agencies employed 310 full-time sworn personnel per 100,000 residents. This represented an increase of 21 per 100,000, or 7%, compared to 1990.

The Washington (DC) Metropolitan Police Department continued to have the highest ratio, with 631 officers per 100,000 residents in 2000, although this was down 15% from the 1990 ratio of 742 per 10,000. Other large city police departments with at least 500 full-time officers per 100,000 residents in 2000 were the Newark (NJ) Police (536) and the NYPD (505).

**Fifteen largest local police departments serving cities with a population of 250,000 or more, by number of full-time sworn personnel and number of full-time sworn personnel per 100,000 residents served, 1990 and 2000**

Number of full-time sworn personnel				Number of full-time sworn personnel per 100,000 residents			
City	1990	City	2000	City	1990	City	2000
New York (NY)	31,236	New York (NY)	40,435	Washington (DC)	742	Washington (DC)	631
Chicago (IL)	11,837	Chicago (IL)	13,466	Detroit (MI)	447	Newark (NJ)	536
Los Angeles (CA)	8,295	Los Angeles (CA)	9,341	New York (NY)	427	New York (NY)	505
Philadelphia (PA)	6,523	Philadelphia (PA)	7,024	Chicago (IL)	425	Baltimore (MD)	466
Detroit (MI)	4,595	Houston (TX)	5,343	Philadelphia (PA)	411	Chicago (IL)	465
Washington (DC)	4,506	Detroit (MI)	4,154	Atlanta (GA)	396	Philadelphia (PA)	463
Houston (TX)	4,104	Washington (DC)	3,612	Baltimore (MD)	389	Detroit (MI)	437
Baltimore (MD)	2,861	Baltimore (MD)	3,034	St. Louis (MO)	389	St. Louis (MO)	428
Dallas (TX)	2,635	Dallas (TX)	2,862	Newark (NJ)	368	Cleveland (OH)	381
Boston (MA)	2,053	Phoenix (AZ)	2,626	Boston (MA)	357	Boston (MA)	367
Phoenix (AZ)	1,949	San Francisco (CA)	2,227	Cleveland (OH)	348	Atlanta (GA)	354
Milwaukee (WI)	1,866	Las Vegas (NV)	2,168	Buffalo (NY)	315	New Orleans (LA)	343
San Diego (CA)	1,816	Boston (MA)	2,164	Pittsburgh (PA)	312	Milwaukee (WI)	335
Honolulu (HI)	1,781	San Diego (CA)	2,022	Miami (FL)	310	Buffalo (NY)	317
San Francisco (CA)	1,777	Milwaukee (WI)	1,998	Milwaukee (WI)	297	Cincinnati (OH)	311

**Table 3. Female and minority representation among full-time sworn personnel in police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population served	Percent of full-time sworn personnel who were:											
	Any minority		Black, non-Hispanic		Hispanic, any race		Asian/Pacific Islander		American Indian		Female	
	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000
Total	29.8%	38.1%	18.4%	20.1%	9.2%	14.1%	2.0%	2.8%	0.3%	0.4%	12.1%	16.3%
1,000,000 or more	27.6%	37.6%	15.1%	16.9%	11.4%	17.5%	0.9%	2.1%	0.2%	0.3%	12.3%	16.8%
500,000-999,999	35.8	41.1	25.2	27.0	5.0	7.7	5.3	5.3	0.3	0.5	12.6	16.1
350,000-499,999	30.7	36.4	18.9	20.4	10.2	12.7	1.0	2.1	0.6	1.0	10.9	14.4
250,000-349,999	24.0	32.7	17.4	20.9	6.2	10.4	0.3	0.7	0.2	0.4	10.5	15.8

**Average ratio of percent minority local police officers to percent minority city residents, cities with a population of 250,000 or more, 1990 and 2000**

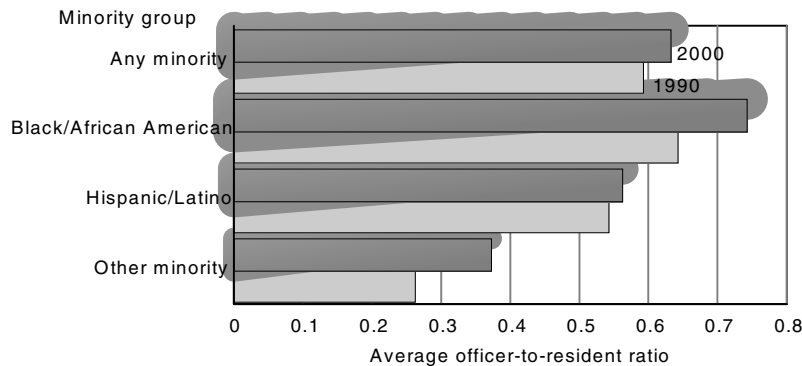


Figure 1

**Minority and female representation**

Minority representation among local police officers in large cities increased from 29.8% in 1990 to 38.1% in 2000 (table 3). Hispanics recorded the greatest increase, from 9.2% to 14.1%. Black representation also increased, from 18.4% in 1990 to 20.1% in 2000. Asian and Pacific Islander representation was 2.8% in 2000, up from 2.0% in 1990. The percentage of female officers rose from 12.1% in 1990 to 16.3% in 2000. (See appendix table B for minority and female officer percentages for all 62 local police departments serving cities with a population of 250,000 or more.)

Using a ratio based on the percentage of sworn personnel who were members of a racial or ethnic minority relative to the percentage of city residents who were members of that minority group indicates that, on average, police departments in large cities were slightly more representative of the cities they served in 2000 than in 1990.

From 1990 to 2000, the average ratio increased from .59 to .63 for minorities overall (figure 1). That is, on average, police departments in large cities had 63 minority police officers for every 100 minority residents in 2000, compared to 59 for every 100 in 1990. For blacks or African Americans, the average ratio increased from .64 in 1990 to .74 in 2000, for Hispanics or Latinos from .54 to .56, and for other minority groups (such as Asians and American Indians) from .26 to .37.

**Education and training requirements**

The percentage of police departments in large cities that required a 4-year degree of new officers rose from 1.6% in 1990 to 4.8% in 2000 (table 4). The percentage requiring a 2-year degree increased from 4.8% to 9.7% during this time, and the percentage with a non-degree college requirement went from 12.9% to 22.6%. Overall, about twice as many departments had some type of college education requirement for new officers in 2000 (37.1%) as did in 1990 (19.3%).

**Table 4. Minimum education requirement for new officers in police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Minimum requirement	Percent of agencies	
	1990	2000
Total	100%	100%
4-year degree	1.6%	4.8%
2-year degree	4.8	9.7
Some college*	12.9	22.6
High school	79.0	62.9
None	1.6	0.0

\*Non-degree requirements only.

**Table 5. Minimum training requirement for new officers in police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Type of training and population served	Median number of training hours required	
	1990	2000
<b>Classroom training</b>		
All sizes	760	880
1,000,000 or more	831	1,111
500,000-999,999	760	852
350,000-499,999	760	897
250,000-349,999	756	880
<b>Field training</b>		
All sizes	520	600
1,000,000 or more	500	500
500,000-999,999	540	560
350,000-499,999	520	648
250,000-349,999	490	610

From 1990 to 2000, the median number of classroom training hours required of new officer recruits in police departments in large cities increased from 760 to 880 (table 5). The median field training requirement also increased during this time — from 520 hours to 600 hours. In 2000, police departments in large cities had a median annual in-service training requirement for officers of 40 hours (data were not collected in 1990).

**Table 6. Annual operating budget of police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population served	Annual operating budget							
	Per agency		Per resident		Per employee		Per sworn employee	
	1990	2000	1990	2000	1990	2000	1990	2000
Total	\$176,134,761	\$211,581,036	\$242	\$266	\$64,493	\$64,323	\$83,814	\$85,786
1,000,000 or more	\$586,494,149	\$695,642,921	\$272	\$290	\$64,024	\$60,061	\$82,450	\$79,804
500,000-999,999	138,511,331	165,117,265	228	250	64,667	69,391	84,109	91,127
350,000-499,999	77,063,388	99,818,601	200	237	67,715	73,811	91,352	102,539
250,000-349,999	59,757,009	71,229,731	196	229	62,470	65,788	81,747	89,364

Note: All data are presented in 2000 dollars.

### Operating budgets

The operating budgets of police departments serving cities with a population of 250,000 or more totaled about \$13.1 billion in fiscal 2000. Controlling for inflation (see methodological note on page 15), this was 20% more than in 1990. The per agency average was nearly \$212 million in 2000 compared to about \$176 million in 1990 (table 6).

Operating budgets for 2000 totaled \$266 per resident, \$24 higher than in 1990. Per employee operating costs were \$64,323 for 2000, about the same as in 1990 (\$64,493). The overall operating budget per sworn officer increased 2% during this period, from \$83,814 to \$85,786.

In 2000, departments serving 1 million or more residents had the highest per resident operating budget, \$290. Departments serving a population of 350,000 to 499,999 had the highest per employee (\$73,811), and per officer (\$102,539) budgets. (See appendix table C for budgetary data for all 62 local police departments serving cities with a population of 250,000 or more.)

### Salaries and special pay

From 1990 to 2000, the average base starting salary for police chiefs in cities with a population of 250,000 or more increased by about 2%, from \$95,393 to \$97,215 (table 7). The average starting salary for chiefs was highest in departments serving 500,000 or more residents — about \$105,500.

Average starting salaries for sergeants or equivalent first-line supervisors

**Table 7. Minimum starting salaries in police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Position and population served	Average minimum starting annual salary	
	1990	2000
<b>Chief</b>		
All sizes	\$95,393	\$97,215
1,000,000 or more	\$113,150	\$105,524
500,000-999,999	98,401	105,488
350,000-499,999	88,789	89,050
250,000-349,999	86,430	87,989
<b>Sergeant or equivalent</b>		
All sizes	\$49,081	\$50,541
1,000,000 or more	\$50,444	\$49,726
500,000-999,999	49,042	51,265
350,000-499,999	48,279	48,718
250,000-349,999	49,143	52,298
<b>Entry-level patrol officer</b>		
All sizes	\$35,002	\$34,556
1,000,000 or more	\$34,986	\$34,153
500,000-999,999	34,306	34,454
350,000-499,999	35,742	34,476
250,000-349,999	35,158	35,095

Note: All data are presented in 2000 dollars.

increased by 3% from 1990 (\$49,081) to 2000 (\$50,541), while starting salaries for entry-level officers declined by about 1%, from \$35,002 to \$34,556.

From 1990 to 2000, the percentage of police departments in large cities that offered shift differential pay to officers increased from 66% to 76% (table 8). Nearly all (93%) of the departments serving 250,000 to 349,999 residents offered this type of special pay in 2000.

About 3 in 5 departments offered education incentive pay in 1990 (60%) and 2000 (61%). Those serving 250,000 to 349,999 residents (71%) were the most likely to offer it in 2000.

**Table 8. Types of special pay for sworn personnel in police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Type of pay and population served	Percent of agencies:	
	1990	2000
<b>Shift differential pay</b>		
All sizes	66%	76%
1,000,000 or more	70%	80%
500,000-999,999	62	71
350,000-499,999	53	65
250,000-349,999	86	93
<b>Education incentive pay</b>		
All sizes	60%	61%
1,000,000 or more	60%	60%
500,000-999,999	62	57
350,000-499,999	65	59
250,000-349,999	50	71
<b>Hazardous duty pay</b>		
All sizes	56%	50%
1,000,000 or more	50%	50%
500,000-999,999	57	57
350,000-499,999	71	47
250,000-349,999	43	43
<b>Merit pay</b>		
All sizes	35%	34%
1,000,000 or more	60%	50%
500,000-999,999	19	19
350,000-499,999	35	47
250,000-349,999	43	29

From 1990 to 2000, the percentage of departments offering hazardous duty pay declined slightly, from 56% to 50%. In 2000, a majority of the departments serving 500,000 to 999,999 residents (57%) offered this type of special pay.

The percentage of departments with merit pay in 2000 (34%) was about the same as in 1990 (35%). Those serving 1 million or more residents (50%) or 350,000 to 499,999 residents (47%) were the most likely to offer merit pay.

### UCR violent crimes

From 1990 to 2000, according to the FBI's Uniform Crime Reports (UCR), the number of violent Crime Index offenses (murder, forcible rape, robbery, and aggravated assault) reported to police departments in cities with 250,000 or more residents declined 34% — from an average of 13,091 per department to 8,686 (table 9).

The drop in the rate of violent crimes per 100,000 residents was even larger, falling from a rate of 1,802 violent crimes per 100,000 residents in 1990, to 1,091 per 100,000 in 2000 — a reduction of 39%. Cities with 1 million or more residents had the largest decrease (46%), led by a 60% drop in New York City. (See appendix table D for UCR violent crime data for all 62 local police departments serving cities with a population of 250,000 or more.)

A large reduction in violent crime also occurred in the number reported per officer employed. In 2000 there were 353 violent crimes per 100 sworn personnel, 43% fewer than the 1990 rate of 623 per 100. Among cities with 1 million or more residents, the decline was 51%, including 57% in New York.

By specific type of violent crime, the number of murders per 100,000 residents declined from an average of 21 per city in 1990 to 13 in 2000; forcible rapes, from 84 to 52; robberies, from 671 to 399; and aggravated assaults, from 786 to 603 (figure 2).

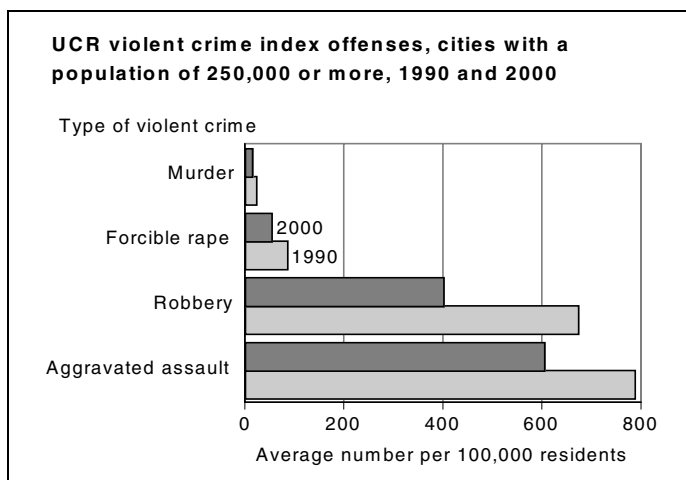


Figure 2

**Table 9. UCR violent crime index offenses reported to police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population served	Number of UCR violent crime index offenses					
	Per agency		Per 100,000 residents		Per 100 sworn personnel	
	1990	2000	1990	2000	1990	2000
All sizes	13,091	8,686	1,802	1,091	623	353
1,000,000 or more	44,123	26,558	2,056	1,108	620	305
500,000-999,999	9,154	7,083	1,506	1,072	556	397
350,000-499,999	6,579	4,696	1,710	1,115	782	483
250,000-349,999	4,739	3,171	1,553	1,018	649	397

**Table 10. UCR property crime index offenses reported to police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population served	Number of UCR property crime index offenses					
	Per agency		Per 100,000 residents		Per 100 sworn personnel	
	1990	2000	1990	2000	1990	2000
All sizes	60,653	41,571	8,352	5,221	2,887	1,692
1,000,000 or more	172,513	103,346	8,038	4,312	2,425	1,186
500,000-999,999	51,205	39,208	8,424	5,933	3,109	2,197
350,000-499,999	35,348	26,959	9,190	6,398	4,201	2,773
250,000-349,999	25,652	18,732	8,407	6,013	3,514	2,344

### UCR property crimes

From 1990 to 2000, the number of UCR property Crime Index offenses (larceny-theft, burglary, motor vehicle theft) in large cities decreased 31%, from an average of 60,653 per city to 41,571. In 2000, there were 5,221 property crimes per 100,000 residents compared to 8,352 in 1990, a decrease of 37%. In cities with 1 million or more residents, the drop was 46%, led by New York (64%). (See appendix table E for UCR property crime data for all 62 local police departments serving cities with a population of 250,000 or more.)

There were 41% fewer reported UCR property crimes per 100 sworn personnel in 2000 (1,692) than in 1990 (2,887). Departments serving 1 million or more residents reported a drop in property crimes per 100 officers that exceeded 50% (from 2,425 to 1,186), with a 69% drop in New York.

The burglary rate in cities with a population of 250,000 or more declined from an average of 2,122 per 100,000 residents in 1990, to 1,167 per 100,000 residents in 2000 (figure 3). For larceny-theft, the average rate declined from 5,082 to 3,798, and for motor vehicle theft from 1,529 to 1,005.

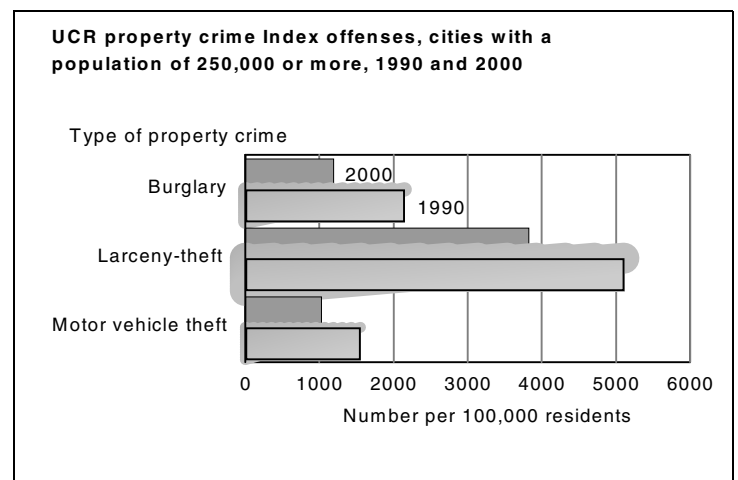


Figure 3

### Special units

Police departments in large cities operated various types of special units to address crime-related problems and to provide resources to those affected by crime. In 1990 and 2000, more than three-fourths of departments had full-time special units or part-time personnel assigned to general crime prevention, child abuse, juvenile crime, drug education in schools, missing children, drunk drivers, and gangs (table 11).

In 2000 a majority of departments had personnel assigned full time to special units for gangs (84%), domestic violence (81%), child abuse (77%), crime prevention (76%), drug education in schools (73%), juvenile crime (68%), and missing children (66%).

Seventy-one percent of departments operated a full-time unit or had part-time personnel assigned to victim assistance in 2000 compared to 45% in 1990. The percentage with full-time victim assistance units rose from 32% to 47% during this time.

Ninety-seven percent of departments operated either a full-time domestic violence unit or had personnel assigned part-time to deal with the problem in 2000, compared to 61% in 1990. The percentage with full-time units increased from 50% to 81% during this time.

From 1990 to 2000, the percentage with personnel assigned on at least a part-time basis to address gang-related

problems rose from 89% to 98%, and the percentage with a full-time gang unit increased from 69% to 84%.

The percentage of departments with personnel assigned at least part-time to handle bias-related crimes increased from 58% in 1990 to 71% in 2000; however, the percentage with a full-time unit dropped from 34% to 26% during this time.

**Table 11. Special units operated by police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Type of special unit	Percent of agencies with:			
	Full-time special unit:		Full-time special unit or part-time personnel	
	1990	2000	1990	2000
Victim assistance	32%	47%	45%	71%
Crime prevention	95	76	100	97
Repeat offenders	68	34	77	57
Prosecutor relations	66	31	76	58
Domestic violence	50	81	61	97
Child abuse	87	77	95	92
Missing children	89	66	95	95
Juvenile crime	81	68	94	84
Gangs	69	84	89	98
Drug education	90	73	98	95
Drunk drivers	56	40	76	81
Bias-related crimes	34	26	58	71

### Community policing initiatives of police departments in large cities, 2000

Since the enactment of the 1994 Crime Act and the subsequent creation of the Department of Justice's Office of Community Oriented Policing Services (COPS), most police departments have taken steps to implement community policing.

The COPS office facilitated this effort by providing funding to deploy community policing officers, facilitate problem solving efforts, encourage interactions with communities by officers, promote innovations in policing, and enhance existing technologies.

Although such data were not collected in 1990, the 2000 LEMAS survey provided several measures of large city police departments' community policing efforts. For example, 94% of the departments provided all new officer recruits with at least 8 hours of community policing training during the 12-month period ending June 30, 2000.

Also, nearly all departments had full-time sworn personnel serving as community policing officers with a mean of 21% and a median of 5% of all officers so assigned.

Seventy-one percent of departments had a formal, written community policing plan, while 29% had an informal plan. Other indicators of community policing in large cities:

Type of community policing activity during 12-month period ending June 30, 2000	Percent of agencies
Met at least quarterly with citizen groups to discuss crime-related problems	100%
Gave patrol officers responsibility for specific geographic areas/beats	90%
Conducted a citizen police academy	87%
Assigned detectives to cases based on geographic areas/beats	84%
Trained citizens in community policing techniques such as community mobilization and problem solving	79%
Actively encouraged patrol officers to engage in SARA-type problem-solving projects on their beats	77%
Upgraded technology to support community policing	76%
Conducted or sponsored a survey of citizens on crime or police-related topics	63%
Formed problem-solving partnerships through specialized contracts or written agreements	61%

**Table 12. Officers assigned to a multi-agency drug task force by police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population served	Officers assigned full-time to drug task force:			
	1990		2000	
	Average number	Average percent	Average number	Average percent
All sizes	13	1.0%	15	0.9%
1,000,000 or more	21	0.3%	48	0.7%
500,000-999,999	15	0.8	11	0.7
350,000-499,999	10	1.5	10	1.1
250,000-349,999	6	1.1	8	1.2

**Drug enforcement**

All but 1 of the 62 local police departments serving cities with a population of 250,000 or more reported in the 2000 LEMAS survey that they had receipts from a drug asset forfeiture program during the prior year, as did 60 departments in the 1990 survey. Although data on the value of the goods, money, and property received were not collected in 1990, it totalled an estimated \$108.2 million in 1999, or about \$708 per sworn officer.

Estimated value of drug asset forfeiture receipts, police departments serving cities with a population of 250,000 or more, 1999

Population served	Total (in millions)	Per officer
All sizes	\$108.2	\$708
1,000,000 or more	\$58.7	\$674
500,000 - 999,999	25.0	657
350,000 - 499,999	14.0	845
250,000 - 349,999	10.5	939

**Table 13. Officers assigned to a special drug enforcement unit in police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population served	Officers assigned full-time to special drug unit			
	1990		2000	
	Average number	Average percent	Average number	Average percent
All sizes	86	4.4%	123	3.5%
1,000,000 or more	289	3.5%	474	3.6%
500,000-999,999	55	3.6	69	3.3
350,000-499,999	48	6.3	33	3.4
250,000-349,999	28	3.7	30	4.0

**Equipment**

In 1990 nearly all police departments serving 250,000 or more residents authorized the use of both semiautomatic (98%) and revolver (97%) sidearms; however, the percentage authorizing revolvers had dropped to 65% by 2000 (table 14). All departments authorized semiautomatic sidearms in 2000.

From 1990 to 2000, the percentage of police departments in large cities requiring all patrol officers to wear protective body armor increased from 21% to 48%. During this time, the percentage of departments that required at least some patrol officers to wear armor rose from 31% to 69% (table 15). Departments serving 250,000 to 349,999 residents (43%) were the least likely to have a body armor requirement for patrol officers during 2000.

Departments had an average of 15 full-time officers each assigned to a multi-agency drug enforcement task force in 2000, compared to 13 in 1990. As a percentage of all officers, the average decreased slightly, from 1.0% in 1990 to 0.9% in 2000 (table 12).

From 1990 to 2000, departments serving a population of 1 million or more increased their average number of officers assigned to a task force from an average of 21, or 0.3% of all officers, to an average of 48, or 0.7%.

The average number of officers per department assigned to a special unit for drug enforcement increased from 86 in 1990 to 123 in 2000; however, the average percentage of all officers so assigned in 2000 (3.5%) was lower than in 1990 (4.4%) (table 13). The largest drop was among departments serving 350,000 to 499,999 residents — from an average of 6.3% of officers in 1990 to 3.4% in 2000.

**Table 14. Types of sidearms authorized by police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population served	Percent of agencies authorizing field/patrol officers to use semi-automatic sidearms or revolvers			
	Semiautomatic		Revolver	
	1990	2000	1990	2000
All sizes	98%	100%	97%	65%
1,000,000 or more	100%	100%	90%	80%
500,000-999,999	95	100	95	71
350,000-499,999	100	100	100	59
250,000-349,999	100	100	100	50

**Table 15. Body armor policies for field/patrol officers in police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population served	Percent of agencies requiring field/patrol officers to wear protective body armor					
	1990			2000		
	Total	All	Some	Total	All	Some
All sizes	31%	21%	10%	69%	48%	21%
1,000,000 or more	50%	30%	20%	70%	60%	10%
500,000-999,999	29	19	10	81	43	38
350,000-499,999	30	18	12	77	59	18
250,000-349,999	21	21	0	43	36	7

## Vehicles

In 2000, 29% of police departments in large cities operated airplanes, about the same percentage as in 1990 (26%) (table 16). Nearly all departments with planes had just one, with no more than four operated by any department. In 2000 those serving a population of 1 million or more (50%) were the most likely to operate an airplane.

Sixty-six percent of departments operated at least one helicopter in 2000, compared to 55% in 1990. The median number of helicopters operated was 2 with a maximum of 19. Ninety percent of departments serving a population of 1 million or more operated helicopters during 2000.

From 1990 to 2000, the percentage of departments using boats increased from 48% to 58%. Among those using boats in 2000, the median number operated was 3, and the maximum was 27. About three-fourths of the departments serving a population of 500,000 or more used boats during 2000.

Among land vehicles, motorcycle use increased slightly, from 90% of departments in 1990 to 95% in 2000. A much more substantial increase was observed for bicycles, with 98% of departments using them in 2000, compared to 39% in 1990 (table 18). On average, departments operated 44 bicycles per 1,000 sworn personnel in 2000 compared to 3 per 1,000 in 1990 (figure 4).

Police departments in large cities operated 307 marked cars per 1,000 sworn personnel in 2000, 17% more than in 1990 (263). The ratio of unmarked cars also increased, from 188 per 1,000 sworn personnel in 1990 to 207 per 1,000 in 2000.

The percentage of departments allowing officers to drive marked vehicles between work and home increased from 39% in 1990 to 55% in 2000 (table 19). However, the percentage of departments allowing officers to use these vehicles for personal errands decreased from 24% to 13%.

**Table 16. Use of off-land vehicles by police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population served	Percent of agencies using:					
	Airplanes		Helicopters		Boats	
	1990	2000	1990	2000	1990	2000
Total	26%	29%	55%	66%	48%	58%
1,000,000 or more	40%	50%	80%	90%	70%	70%
500,000-999,999	33	24	67	62	62	76
350,000-499,999	24	41	53	82	29	35
250,000-349,999	7	7	21	36	36	50

**Table 17. Use of motorcycles by police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population served	Percent of agencies using motorcycles	
	1990	2000
All sizes	90%	95%
1,000,000 or more	100%	100%
500,000-999,999	95	95
350,000-499,999	94	94
250,000-349,999	71	93

**Table 18. Use of bicycles by police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population served	Percent of agencies using bicycles	
	1990	2000
All sizes	39%	98%
1,000,000 or more	50%	100%
500,000-999,999	38	100
350,000-499,999	41	100
250,000-349,999	29	93

**Number of vehicles per 1,000 sworn personnel operated by police departments in large cities, 1990 and 2000**

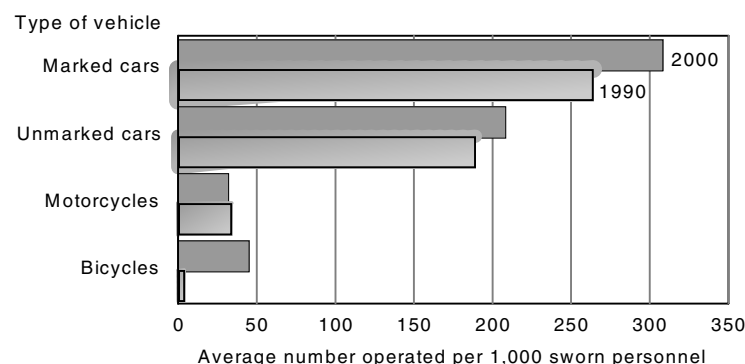


Figure 4

**Table 19. Marked vehicle use policies of police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population served	Percent of agencies allowing officers to take marked vehicles home					
	Total	1990		2000		Personal use not allowed
		Personal use allowed	Personal use not allowed	Personal use allowed	Personal use not allowed	
All sizes	39%	24%	15%	55%	13%	42%
1,000,000 or more	20%	20%	0%	10%	0%	10%
500,000-999,999	33	19	14	67	19	48
350,000-499,999	59	35	24	71	18	53
250,000-349,999	36	21	14	50	7	43

Note: Detail may not add to total because of rounding.



**Table 20. Use of computer-aided dispatch by police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population served	Percent of agencies using computer-aided dispatch	
	1990	2000
All sizes	90%	100%
1,000,000 or more	90%	100%
500,000-999,999	90	100
350,000-499,999	94	100
250,000-349,999	86	100

**Table 21. Use of an enhanced 9-1-1 system by police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population served	Percent of agencies with enhanced 9-1-1	
	1990	2000
All sizes	76%	97%
1,000,000 or more	80%	90%
500,000-999,999	76	100
350,000-499,999	82	100
250,000-349,999	64	93

**Table 22. Use of in-field computers or terminals by police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population served	Percent of agencies using in-field computers or terminals	
	1990	2000
All sizes	73%	92%
1,000,000 or more	90%	100%
500,000-999,999	81	100
350,000-499,999	77	88
250,000-349,999	43	79

*Computers and information systems*

The increase in computerization among police departments in large cities from 1990 to 2000 was evident in a variety of areas. For example, all departments were using computer-aided dispatch systems in 2000, compared to 90% in 1990 (table 20).

Participation in enhanced 9-1-1 emergency systems, capable of pinpointing a caller's location automatically, increased from 76% of departments in 1990 to 97% in 2000 (table 21). In 2000, all departments serving 250,000 to 999,999 residents were using enhanced 9-1-1.

Increases in the percentage of departments using in-field computers or terminals were also observed. Ninety-two percent of police departments in large cities used them in 2000, compared to 73% in 1990 (table 22). All departments serving 500,000 or more residents were using in-field computers or terminals during 2000.

The use of Automated Fingerprint Identification Systems (AFIS) rose from 60% of departments in 1990 to 97% in 2000 (table 23). In 2000 all departments serving 350,000 or more residents had AFIS access. The percentage of departments with exclusive or shared ownership of an AFIS system increased from 57% to 71% during this time.

**Table 23. Automated Fingerprint Identification System (AFIS) capabilities of police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population served	Percent of agencies with AFIS capability through —					
	Total	1990		Total	2000	
		Owned system	Remote terminal		Owned system	Remote terminal
All sizes	60%	57%	3%	97%	71%	26%
1,000,000 or more	60%	60%	0%	100%	90%	10%
500,000-999,999	62	57	5	100	71	29
350,000-499,999	77	71	6	100	65	35
250,000-349,999	36	36	0	85	64	21

Note: System ownership may have been exclusive or shared.

**Technological capabilities of police departments in large cities, 1990 and 2000**

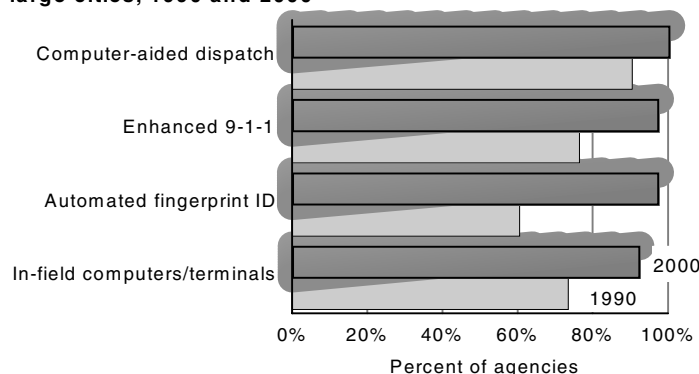


Figure 5

In terms of the technological measures provided by LEMAS, nearly all police departments in large cities had advanced capabilities in 2000 (figure 5). This included the use of computer-aided dispatch, enhanced 9-1-1, automated fingerprint identification, and in-field computers.

**Appendix table A. Full-time employees of police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population category and city	Full-time employees						Full-time sworn personnel					
	Total number			Per 100,000 residents			Total number			Per 100,000 residents		
	1990	2000	Percent change	1990	2000	Percent change	1990	2000	Percent change	1990	2000	Percent change
<b>1,000,000 or more</b>												
New York (NY)	39,398	53,029	34.6%	538	662	23.1%	31,236	40,435	29.4%	427	505	18.4%
Los Angeles (CA)	10,695	12,409	13.2	315	336	6.8	8,295	9,341	12.6	238	253	6.2
Chicago (IL)	14,909	16,466	10.4	536	569	6.2	11,837	13,466	13.8	425	465	9.4
Houston (TX)	5,579	7,440	33.4	342	381	11.3	4,104	5,343	30.2	252	273	8.7
Philadelphia (PA)	7,354	7,928	7.8	464	522	12.6	6,523	7,024	7.7	411	463	12.5
Phoenix (AZ)	2,584	3,394	31.3	263	257	-2.2	1,949	2,626	34.7	198	199	0.3
San Diego (CA)	2,498	2,746	9.9	225	224	-0.2	1,816	2,022	11.3	164	165	1.1
Dallas (TX)	3,487	3,586	2.8	346	302	-12.9	2,635	2,862	8.6	262	241	-8.0
San Antonio (TX)	1,912	2,387	24.8	204	209	2.1	1,576	1,882	19.4	168	164	-2.4
Las Vegas (NV)	1,782	3,286	84.4	289	322	11.4	1,162	2,168	86.6	189	213	12.7
<b>500,000 to 999,999</b>												
Detroit (MI)	5,203	4,804	-7.7%	506	505	-0.2%	4,595	4,154	-9.6%	447	437	-2.3%
San Jose (CA)	1,465	1,812	23.7	187	202	8.1	1,110	1,408	26.8	142	157	10.9
Honolulu (HI)	2,220	2,270	2.3	265	259	-2.4	1,781	1,792	0.6	213	205	-4.0
San Francisco (CA)	2,566	2,520	-1.8	354	324	-8.5	1,777	2,227	25.3	245	287	16.8
Indianapolis (IN)	2,113	2,402	13.7	299	313	4.5	1,436	1,592	10.9	203	207	1.9
Jacksonville (FL)	2,080	2,541	22.2	327	345	5.5	1,181	1,530	29.6	186	208	11.9
Columbus (OH)	1,724	2,144	24.4	272	301	10.6	1,381	1,744	26.3	218	245	12.3
Austin (TX)	1,082	1,656	53.0	232	252	8.5	795	1,144	43.9	171	174	2.1
Baltimore (MD)	3,414	3,649	6.9	464	560	20.8	2,861	3,034	6.0	389	466	19.9
Memphis (TN)	2,092	2,791	33.4	343	429	25.3	1,382	1,904	37.8	226	293	29.3
Charlotte (NC)	1,201	1,864	55.2	261	298	14.1	930	1,442	55.1	202	231	14.0
Milwaukee (WI)	2,274	2,472	8.7	362	414	14.4	1,866	1,998	7.1	297	335	12.7
Boston (MA)	2,741	3,046	11.1	477	517	8.3	2,053	2,164	5.4	357	367	2.7
Washington (DC)	5,259	4,468	-15.0	867	781	-9.9	4,506	3,612	-19.8	742	631	-15.0
Nashville (TN)	1,319	1,693	28.4	258	297	15.0	1,020	1,249	22.5	200	219	9.8
El Paso (TX)	928	1,351	45.6	180	240	33.1	738	1,057	43.2	143	188	30.9
Seattle (WA)	1,775	1,918	8.1	344	340	-1.0	1,271	1,261	-0.8	246	224	-9.1
Denver (CO)	1,558	1,802	15.7	333	325	-2.5	1,318	1,489	13.0	282	268	-4.8
Fort Worth (TX)	1,255	1,510	20.3	280	282	0.7	950	1,196	25.9	212	224	5.4
Portland (OR)	955	1,347	41.0	218	255	16.6	769	1,007	30.9	176	190	8.2
Oklahoma City (OK)	1,158	1,269	9.6	260	251	-3.7	863	1,011	17.1	194	200	2.9
<b>350,000 to 499,999</b>												
Tucson (AZ)	989	1,253	26.7%	244	257	5.5%	745	928	24.6%	184	191	3.8%
New Orleans (LA)	1,686	2,050	21.6	339	423	24.7	1,397	1,664	19.1	281	343	22.1
Cleveland (OH)	2,060	2,386	15.8	407	499	22.4	1,761	1,822	3.5	348	381	9.3
Long Beach (CA)	968	1,363	40.8	225	295	31.0	643	881	37.0	150	191	27.5
Albuquerque (NM)	1,184	1,236	4.4	308	276	-10.5	808	859	6.3	210	191	-8.8
Kansas City (MO)	1,718	1,848	7.6	395	419	6.0	1,148	1,253	9.1	264	284	7.6
Fresno (CA)	657	1,011	53.9	185	236	27.5	429	683	59.2	121	160	31.9
Virginia Beach (VA)	796	881	10.7	203	207	2.3	597	721	20.8	152	170	11.6
Atlanta (GA)	1,916	1,984	3.5	486	476	-2.0	1,560	1,474	-5.5	396	354	-10.6
Sacramento (CA)	866	1,008	16.4	234	248	5.6	599	650	8.5	162	160	-1.5
Oakland (CA)	944	1,088	15.3	254	272	7.4	616	710	15.3	165	178	7.4
Mesa (AZ)	582	1,132	94.5	202	286	41.4	384	717	86.7	133	181	35.7
Tulsa (OK)	881	977	10.9	240	249	3.6	702	819	16.7	191	208	9.0
Omaha (NE)	741	933	25.9	221	239	8.4	594	750	26.3	177	192	8.7
Minneapolis (MN)	912	1,163	27.5	248	304	22.8	806	902	11.9	219	236	7.7
Miami (FL)	1,436	1,487	3.6	401	410	2.4	1,110	1,110	0.0	310	306	-1.1
Colorado Springs (CO)	591	873	47.7	210	242	15.1	406	586	44.3	144	162	12.4
<b>250,000 to 349,999</b>												
St. Louis (MO)	2,244	2,078	-7.4%	566	597	5.5%	1,544	1,489	-3.6%	389	428	9.9%
Wichita (KS)	578	1,097	89.8	190	319	67.6	423	609	44.0	139	177	27.1
Santa Ana (CA)	563	704	25.0	192	208	8.7	382	404	5.8	130	120	-8.1
Pittsburgh (PA)	1,239	1,315	6.1	335	393	17.3	1,153	1,036	-10.1	312	310	-0.7
Arlington (TX)	462	643	39.2	177	193	9.4	356	485	36.2	136	146	7.1
Cincinnati (OH)	1,166	1,321	13.3	320	399	24.5	938	1,030	9.8	258	311	20.7
Anaheim (CA)	493	588	19.3	185	179	-3.1	344	397	15.4	129	121	-6.3
Toledo (OH)	737	810	9.9	221	258	16.7	683	690	1.0	205	220	7.2
Tampa (FL)	1,083	1,229	13.5	387	405	4.7	824	939	14.0	294	309	5.2
Buffalo (NY)	1,177	1,135	-3.6	359	388	8.1	1,032	928	-10.1	315	317	0.8
St. Paul (MN)	718	798	11.1	264	278	5.4	532	576	8.3	195	201	2.6
Corpus Christi (TX)	514	592	15.2	200	213	6.9	367	407	10.9	143	147	2.9
Newark (NJ)	1,260	1,635	29.8	458	598	30.6	1,013	1,466	44.7	368	536	45.6
Louisville (KY)	812	1,009	24.3	302	394	30.5	630	689	9.4	234	269	14.8

**Appendix table B. Percent of full-time sworn personnel who are women and minorities, and ratio of minority officers to minority residents, in police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population category and city	Female		Any minority			Black or African American			Hispanic or Latino		
	Percent of sworn personnel		Percent of sworn personnel		Officer-to-resident ratio, 2000	Percent of sworn personnel		Officer-to-resident ratio, 2000	Percent of sworn personnel		Officer-to-resident ratio, 2000
	1990	2000	1990	2000		1990	2000		1990	2000	
<b>1,000,000 or more</b>											
New York (NY)	12.3%	15.5%	25.5%	34.7%	0.53	12.6%	13.3%	0.50	12.1%	17.8%	0.66
Los Angeles (CA)	12.5	18.4	37.5	53.9	0.77	13.4	13.6	1.21	21.0	33.1	0.71
Chicago (IL)	13.0	21.3	30.4	40.3	0.59	23.6	25.9	0.70	6.3	12.7	0.49
Houston (TX)	9.6	12.4	26.3	39.7	0.57	14.4	19.4	0.77	11.4	17.9	0.48
Philadelphia (PA)	14.7	24.2	26.5	41.1	0.71	23.2	34.5	0.80	2.8	5.6	0.66
Phoenix (AZ)	8.1	15.0	15.5	17.9	0.40	3.6	3.9	0.76	11.0	12.0	0.35
San Diego (CA)	12.7	14.5	24.0	30.7	0.61	7.7	8.7	1.10	11.4	15.9	0.63
Dallas (TX)	13.3	15.8	22.7	36.8	0.56	15.5	21.4	0.83	6.2	13.5	0.38
San Antonio (TX)	5.7	6.0	43.9	48.0	0.70	5.8	5.8	0.85	37.9	41.7	0.71
Las Vegas (NV)	10.2	10.9	13.4	19.3	0.48	7.5	9.3	1.02	3.7	7.3	0.33
<b>500,000 to 999,999</b>											
Detroit (MI)	20.0%	25.3%	53.4%	66.2%	0.74	51.8%	62.9%	0.77	1.3%	3.0%	0.60
San Jose (CA)	6.8	8.6	29.6	36.6	0.57	3.8	5.6	1.60	19.3	22.7	0.75
Honolulu (HI)	8.3	10.3	80.4	82.5	1.03	0.8	1.6	0.67	1.1	1.7	0.39
San Francisco (CA)	11.1	15.5	29.9	40.1	0.71	8.8	9.7	1.24	10.1	13.5	0.96
Indianapolis (IN)	13.9	13.4	16.5	17.9	0.58	15.8	16.6	0.69	0.7	0.7	0.18
Jacksonville (FL)	5.0	11.0	18.9	22.6	0.60	17.5	19.5	0.67	1.1	1.2	0.29
Columbus (OH)	12.1	14.0	14.3	15.5	0.47	14.3	14.4	0.59	0.0	0.3	0.12
Austin (TX)	11.3	11.8	24.9	28.8	0.61	9.8	10.8	1.07	14.7	16.6	0.54
Baltimore (MD)	10.9	15.7	27.7	41.5	0.60	26.5	38.6	0.60	0.5	1.6	0.94
Memphis (TN)	14.6	16.2	32.2	47.8	0.72	32.1	45.7	0.74	0.0	1.9	0.63
Charlotte (NC)	15.5	13.9	20.6	20.5	0.52	20.3	17.9	0.64	0.3	1.5	0.23
Milwaukee (WI)	8.6	16.3	17.5	33.4	0.61	11.8	21.2	0.57	4.4	9.6	0.80
Boston (MA)	8.4	13.0	25.9	31.7	0.63	20.5	24.1	0.95	4.8	6.0	0.42
Washington (DC)	18.5	24.1	67.8	72.4	1.00	64.4	66.4	1.11	2.6	5.0	0.63
Nashville (TN)	7.8	21.9	13.0	21.5	0.60	12.5	19.3	0.72	0.5	1.1	0.23
El Paso (TX)	6.4	9.0	63.8	76.3	0.93	2.2	2.2	0.71	60.7	72.1	0.94
Seattle (WA)	10.2	14.4	16.1	24.3	0.76	6.5	9.9	1.18	2.4	4.6	0.87
Denver (CO)	9.4	11.1	23.7	30.7	0.64	6.8	10.0	0.90	16.2	19.1	0.60
Fort Worth (TX)	12.4	16.8	19.4	25.0	0.46	10.7	12.0	0.59	8.1	11.9	0.40
Portland (OR)	11.7	16.6	7.6	10.4	0.42	3.1	3.3	0.50	2.0	2.4	0.35
Oklahoma City (OK)	10.8	11.3	11.0	12.9	0.37	7.3	7.6	0.49	1.0	2.4	0.24
<b>350,000 to 499,999</b>											
Tucson (AZ)	12.2%	15.7%	24.4%	26.7%	0.58	3.1%	3.4%	0.79	20.0%	20.7%	0.58
New Orleans (LA)	12.0	14.5	40.1	54.0	0.74	39.4	51.4	0.76	0.6	1.9	0.61
Cleveland (OH)	12.8	16.9	27.9	33.5	0.55	24.6	27.0	0.53	3.3	5.9	0.81
Long Beach (CA)	8.7	10.6	17.3	32.7	0.49	5.3	6.5	0.44	10.1	18.5	0.52
Albuquerque (NM)	11.3	11.4	42.0	39.7	0.79	2.4	2.0	0.65	37.9	36.3	0.91
Kansas City (MO)	11.7	14.9	15.5	16.9	0.40	12.9	12.1	0.39	2.3	3.8	0.55
Fresno (CA)	6.1	10.7	30.1	38.1	0.61	7.7	6.3	0.75	20.3	26.8	0.67
Virginia Beach (VA)	9.5	10.4	11.2	14.4	0.47	8.0	9.6	0.51	1.5	1.7	0.40
Atlanta (GA)	12.9	16.6	54.1	59.2	0.86	52.5	57.1	0.93	1.6	1.3	0.29
Sacramento (CA)	9.7	13.7	25.7	29.4	0.49	6.3	6.5	0.42	11.9	11.5	0.53
Oakland (CA)	7.0	10.1	44.6	54.5	0.71	25.3	25.9	0.73	10.7	16.2	0.74
Mesa (AZ)	8.9	10.2	8.0	19.7	0.74	1.0	2.6	1.04	6.0	14.8	0.75
Tulsa (OK)	11.1	14.0	13.8	21.4	0.65	9.1	10.9	0.70	0.4	1.6	0.22
Omaha (NE)	8.2	19.7	14.0	18.1	0.74	10.8	11.1	0.83	2.7	5.5	0.73
Minneapolis (MN)	10.5	15.7	8.4	15.7	0.42	3.2	6.2	0.34	2.1	3.4	0.45
Miami (FL)	12.1	17.6	64.7	81.4	0.92	19.9	27.2	1.22	44.5	53.6	0.81
Colorado Springs (CO)	7.1	12.5	14.3	18.6	0.75	4.9	5.5	0.83	8.4	10.6	0.88
<b>250,000 to 349,999</b>											
St. Louis (MO)	7.1%	13.3%	26.8%	33.8%	0.61	26.3%	31.9%	0.62	0.5%	1.1%	0.55
Wichita (KS)	5.9	10.7	7.8	17.9	0.68	4.7	9.2	0.81	2.8	5.3	0.55
Santa Ana (CA)	3.9	10.4	29.6	42.1	0.76	2.4	1.2	0.71	24.6	36.9	0.48
Pittsburgh (PA)	22.8	24.6	24.6	24.9	0.80	24.3	24.9	0.92	0.2	0.0	0.00
Arlington (TX)	8.1	14.8	12.9	30.5	0.85	6.7	12.0	0.88	6.2	12.6	0.69
Cincinnati (OH)	10.1	19.6	17.2	30.0	0.65	16.5	28.7	0.67	0.3	0.0	0.00
Anaheim (CA)	6.4	10.3	15.4	23.7	0.49	2.3	2.0	0.74	10.2	17.6	0.38
Toledo (OH)	13.9	21.0	21.2	26.2	0.86	17.0	19.1	0.81	4.1	6.8	1.24
Tampa (FL)	15.5	15.4	23.7	27.2	0.57	11.8	12.4	0.48	11.3	12.9	0.67
Buffalo (NY)	12.9	20.9	25.7	31.9	0.68	19.2	23.5	0.63	6.0	8.1	1.07
St. Paul (MN)	7.1	16.1	9.2	13.4	0.41	4.9	6.6	0.56	2.3	3.3	0.42
Corpus Christi (TX)	6.0	6.6	46.0	45.0	1.07	4.1	3.2	0.68	41.1	41.3	0.76
Newark (NJ)	3.0	11.9	42.0	64.3	0.83	31.3	36.8	0.69	10.7	27.5	0.93
Louisville (KY)	11.1	16.3	16.5	17.7	0.48	16.5	16.8	0.51	0.0	0.4	0.21

**Appendix table C. Annual operating budget of police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population category and city	Annual operating budget (in 2000 dollars)								
	Total			Per resident			Per sworn employee		
	1990	2000	Percent change	1990	2000	Percent change	1990	2000	Percent change
<b>1,000,000 or more</b>									
New York (NY)	\$2,728,353,656	\$3,210,000,000	17.7%	\$373	\$401	7.6%	\$87,346	\$79,387	-9.1%
Los Angeles (CA)	653,646,007	891,679,649	36.4	188	241	28.7	78,800	95,459	21.1
Chicago (IL)	990,285,433	910,000,000	-8.1	356	314	-11.7	83,660	67,578	-19.2
Houston (TX)	299,064,866	425,867,364	42.4	183	218	18.9	72,872	79,706	9.4
Philadelphia (PA)	385,153,889	384,625,924	-0.1	243	253	4.3	59,046	54,759	-7.3
Phoenix (AZ)	184,396,384	217,617,984	18.0	188	165	-12.1	94,611	82,871	-12.4
San Diego (CA)	163,299,058	232,910,664	42.6	147	190	29.5	89,922	115,188	28.1
Dallas (TX)	203,703,864	246,000,000	20.8	202	207	2.3	77,307	85,954	11.2
San Antonio (TX)	117,910,059	197,013,318	67.1	126	172	36.6	74,816	104,683	39.9
Las Vegas (NV)	139,128,276	240,714,303	73.0	226	236	4.5	119,732	111,031	-7.3
<b>500,000 to 999,999</b>									
Detroit (MI)	\$437,808,244	\$352,453,163	-19.5%	\$426	\$371	-13.0%	\$95,279	\$84,847	-10.9%
San Jose (CA)	161,496,212	182,962,392	13.3	206	204	-1.0	145,492	129,945	-10.7
Honolulu (HI)	129,355,317	140,782,160	8.8	155	161	3.9	72,631	78,561	8.2
San Francisco (CA)	239,437,393	255,706,971	6.8	331	333	0.7	134,742	114,821	-14.8
Indianapolis (IN)	110,034,203	146,520,013	33.2	156	189	21.0	76,625	92,035	20.1
Jacksonville (FL)	136,543,217	185,377,073	35.8	215	252	17.2	115,617	118,717	2.7
Columbus (OH)	111,587,657	177,210,599	58.8	176	249	41.3	80,802	101,612	25.8
Austin (TX)	66,511,125	107,687,988	61.9	143	164	14.8	83,662	94,133	12.5
Baltimore (MD)	224,811,682	231,297,485	2.9	305	355	16.3	78,578	76,235	-3.0
Memphis (TN)	93,875,910	140,000,000	49.1	154	215	40.0	67,928	73,529	8.2
Charlotte (NC)	56,903,544	111,642,098	96.2	124	179	44.3	61,187	77,368	26.4
Milwaukee (WI)	146,967,579	149,812,727	1.9	234	251	7.2	78,761	74,981	-4.8
Boston (MA)	160,676,235	204,000,000	27.0	280	346	23.8	78,264	94,270	20.5
Washington (DC)	278,822,171	316,666,268	13.6	459	554	20.5	61,878	87,671	41.7
Nashville (TN)	86,455,724	101,829,813	17.8	169	179	5.6	84,761	81,529	-3.8
El Paso (TX)	48,256,985	82,040,937	70.0	94	146	55.4	65,389	77,617	18.7
Seattle (WA)	109,287,078	135,604,854	24.1	212	241	13.7	85,985	107,538	25.1
Denver (CO)	107,833,358	123,318,114	14.4	231	222	-3.6	81,816	82,819	1.2
Fort Worth (TX)	63,928,322	119,119,884	86.3	143	223	56.0	67,293	99,599	48.0
Portland (OR)	78,432,681	110,000,000	40.2	179	208	15.9	101,993	108,857	6.7
Oklahoma City (OK)	59,713,305	93,430,016	56.5	134	185	37.5	69,193	92,413	33.6
<b>350,000 to 499,999</b>									
Tucson (AZ)	\$61,914,634	\$88,406,720	42.8%	\$153	\$182	18.9%	\$83,107	\$95,266	14.6%
New Orleans (LA)	101,768,157	102,000,000	0.2	205	210	2.8	72,848	61,298	-15.9
Cleveland (OH)	133,221,062	252,000,000	89.2	263	527	99.9	75,651	138,310	82.8
Long Beach (CA)	108,313,041	135,574,459	25.2	252	294	16.5	168,450	151,649	-10.0
Albuquerque (NM)	62,636,736	76,068,000	21.4	163	170	4.2	77,521	88,554	14.2
Kansas City (MO)	114,926,917	134,445,917	17.0	264	304	15.3	100,111	107,299	7.2
Fresno (CA)	61,407,976	75,786,100	23.4	173	177	2.2	143,142	110,961	-22.5
Virginia Beach (VA)	47,703,647	57,960,815	21.5	121	136	12.3	79,906	80,389	0.6
Atlanta (GA)	93,699,529	119,407,023	27.4	238	287	20.6	60,064	81,009	34.9
Sacramento (CA)	74,702,843	75,721,000	1.4	202	186	-8.0	117,550	116,494	-0.9
Oakland (CA)	109,871,167	127,724,062	16.2	295	320	8.3	178,362	179,893	0.9
Mesa (AZ)	38,777,844	90,261,296	132.8	135	228	69.2	100,984	125,887	24.7
Tulsa (OK)	59,854,715	63,359,000	5.9	163	161	-1.1	85,263	77,361	-9.3
Omaha (NE)	37,453,397	63,943,172	70.7	112	164	47.0	63,053	84,413	33.9
Minneapolis (MN)	61,355,681	91,481,322	49.1	167	239	43.6	76,124	101,421	33.2
Miami (FL)	103,882,805	86,595,193	-16.6	290	239	-17.5	93,588	78,014	-16.6
Colorado Springs (CO)	38,587,451	56,182,134	45.6	137	156	13.4	95,043	95,874	0.9
<b>250,000 to 349,999</b>									
St. Louis (MO)	\$110,560,099	\$114,000,000	3.1%	\$279	\$327	17.5%	\$71,606	\$76,561	6.9%
Wichita (KS)	29,577,966	48,000,000	62.3	97	139	43.3	69,924	78,818	12.7
Santa Ana (CA)	53,915,241	80,752,086	49.8	184	239	30.2	141,139	199,881	41.6
Pittsburgh (PA)	101,701,014	65,452,306	-35.6	275	196	-28.8	88,206	63,178	-28.4
Arlington (TX)	27,047,667	44,900,000	66.0	103	135	30.5	75,977	92,577	21.8
Cincinnati (OH)	58,843,766	78,148,540	32.8	162	236	45.9	62,733	75,872	20.9
Anaheim (CA)	\$49,977,230	65,848,988	31.8	188	201	7.0	139,407	160,217	14.9
Toledo (OH)	55,377,750	64,182,050	15.9	166	205	23.0	81,080	93,017	14.7
Tampa (FL)	65,982,033	89,570,060	35.7	236	295	25.3	80,075	95,389	19.1
Buffalo (NY)	87,801,103	64,510,224	-26.5	268	220	-17.6	85,079	69,515	-18.3
St. Paul (MN)	51,257,595	63,607,453	24.1	188	222	17.6	96,349	110,430	14.6
Corpus Christi (TX)	28,825,332	38,531,910	33.7	112	139	24.0	78,543	94,673	20.5
Newark (NJ)	70,650,798	114,991,157	62.8	257	420	63.8	69,744	78,439	12.5
Louisville (KY)	45,080,533	64,721,454	43.6	168	253	50.8	71,556	93,375	31.3

**Appendix table D. UCR violent crime index offenses reported to police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population category and city	UCR violent crime index offenses								
	Total number			Per 100,000 residents			Per 100 sworn employees		
	1990	2000	Percent change	1990	2000	Percent change	1990	2000	Percent change
<b>1,000,000 or more</b>									
New York (NY)	174,689	75,745	-56.6%	2,386	946	-60.4%	559	187	-66.5%
Los Angeles (CA)	83,809	50,241	-40.1	2,405	1,360	-43.5	1,010	538	-46.8
Chicago (IL)	81,208	48,089	-40.8	2,917	1,661	-43.1	686	357	-47.9
Houston (TX)	22,637	21,491	-5.1	1,388	1,100	-20.8	552	402	-27.1
Philadelphia (PA)	21,387	22,812	6.7	1,349	1,503	11.4	328	325	-0.9
Phoenix (AZ)	10,665	9,754	-8.5	1,084	738	-31.9	547	371	-32.1
San Diego (CA)	12,047	7,159	-40.6	1,085	585	-46.1	663	354	-46.6
Dallas (TX)	24,550	16,042	-34.7	2,438	1,350	-44.6	932	561	-39.8
San Antonio (TX)	5,730	7,905	38.0	612	691	12.8	364	420	15.6
Las Vegas (NV)	4,510	6,349	40.8	732	622	-15.0	388	293	-24.5
<b>500,000 to 999,999</b>									
Detroit (MI)	27,747	22,112	-20.3%	2,699	2,324	-13.9%	604	532	-11.8%
San Jose (CA)	4,698	4,928	4.9	601	551	-8.3	423	350	-17.3
Honolulu (HI)	2,412	2,302	-4.6	288	263	-8.9	135	128	-5.1
San Francisco (CA)	12,388	6,499	-47.5	1,711	837	-51.1	697	292	-58.1
Indianapolis (IN)	7,113	6,843	-3.3	1,007	891	-11.5	495	430	-13.2
Jacksonville (FL)	11,654	8,206	-29.6	1,835	1,116	-39.2	987	536	-45.6
Columbus (OH)	7,022	5,998	-14.6	1,109	843	-24.0	508	344	-32.4
Austin (TX)	3,326	3,069	-7.7	714	467	-34.7	418	268	-36.0
Baltimore (MD)	17,942	16,003	-10.8	2,438	2,458	0.8	627	527	-15.9
Memphis (TN)	9,082	9,610	5.8	1,488	1,478	-0.7	657	505	-23.2
Charlotte (NC)	9,531	7,515	-21.2	2,072	1,202	-42.0	1,025	521	-49.1
Milwaukee (WI)	6,282	5,711	-9.1	1,000	957	-4.3	337	286	-15.2
Boston (MA)	13,664	7,322	-46.4	2,379	1,243	-47.8	666	338	-49.2
Washington (DC)	14,919	8,625	-42.2	2,458	1,508	-38.7	331	239	-27.9
Nashville (TN)	6,886	8,901	29.3	1,378	1,562	13.3	675	713	5.6
El Paso (TX)	5,111	4,396	-14.0	992	780	-21.4	693	416	-39.9
Seattle (WA)	7,780	4,333	-44.3	1,507	769	-49.0	612	344	-43.9
Denver (CO)	4,205	2,885	-31.4	899	520	-42.2	319	194	-39.3
Fort Worth (TX)	7,826	3,815	-51.3	1,748	714	-59.2	824	319	-61.3
Portland (OR)	7,836	5,698	-27.3	1,792	1,077	-39.9	1,019	566	-44.5
Oklahoma City (OK)	4,813	3,951	-17.9	1,082	781	-27.9	558	391	-29.9
<b>350,000 to 499,999</b>									
Tucson (AZ)	3,680	4,542	23.4%	908	933	2.8%	494	489	-0.9%
New Orleans (LA)	11,227	5,330	-52.5	2,259	1,100	-51.3	804	320	-60.1
Cleveland (OH)	9,190	6,041	-34.3	1,818	1,263	-30.5	522	332	-36.5
Long Beach (CA)	8,403	3,216	-61.7	1,957	697	-64.4	1,307	365	-72.1
Albuquerque (NM)	5,121	5,136	0.3	1,331	1,145	-14.0	634	598	-5.7
Kansas City (MO)	11,087	7,179	-35.2	2,550	1,626	-36.3	966	573	-40.7
Fresno (CA)	4,399	3,843	-12.6	1,242	899	-27.6	1,025	563	-45.1
Virginia Beach (VA)	902	936	3.8	229	220	-4.1	151	130	-14.1
Atlanta (GA)	16,097	11,583	-28.0	4,085	2,781	-31.9	1,032	786	-23.8
Sacramento (CA)	3,978	3,117	-21.6	1,077	766	-28.9	664	480	-27.8
Oakland (CA)	5,845	5,038	-13.8	1,570	1,261	-19.7	949	710	-25.2
Mesa (AZ)	1,724	2,393	38.8	598	604	0.9	449	334	-25.7
Tulsa (OK)	4,898	4,411	-9.9	1,334	1,122	-15.8	698	539	-22.8
Omaha (NE)	3,139	3,164	0.8	935	811	-13.2	528	422	-20.2
Minneapolis (MN)	5,367	4,404	-17.9	1,457	1,151	-21.0	666	488	-26.7
Miami (FL)	15,607	7,877	-49.5	4,353	2,173	-50.1	1,406	710	-49.5
Colorado Springs (CO)	1,184	1,716	44.9	421	475	12.9	292	293	0.4
<b>250,000 to 349,999</b>									
St. Louis (MO)	13,682	7,936	-42.0%	3,449	2,279	-33.9%	886	533	-39.9%
Wichita (KS)	2,189	2,081	-4.9	720	604	-16.1	517	342	-34.0
Santa Ana (CA)	2,663	1,829	-31.3	907	541	-40.3	697	453	-35.1
Pittsburgh (PA)	4,893	3,267	-33.2	1,323	976	-26.2	424	315	-25.7
Arlington (TX)	1,876	2,157	15.0	717	648	-9.6	527	445	-15.6
Cincinnati (OH)	4,476	2,671	-40.3	1,230	806	-34.4	477	259	-45.7
Anaheim (CA)	1,802	1,413	-21.7	676	430	-36.3	524	356	-32.1
Toledo (OH)	3,541	2,380	-32.8	1,064	759	-28.6	518	345	-33.5
Tampa (FL)	8,608	6,381	-25.9	3,074	2,103	-31.6	1,045	680	-34.9
Buffalo (NY)	5,275	3,657	-30.7	1,608	1,250	-22.3	511	394	-22.9
St. Paul (MN)	2,763	2,393	-13.3	1,015	833	-17.9	519	416	-19.9
Corpus Christi (TX)	1,607	2,104	30.9	624	758	21.5	438	517	18.1
Newark (NJ)	10,684	4,092	-61.7	3,882	1,496	-61.7	1,055	279	-73.5
Louisville (KY)	2,281	2,036	-10.7	848	795	-6.3	362	296	-18.4

**Appendix table E. UCR property crime index offenses reported to police departments serving cities with a population of 250,000 or more, 1990 and 2000**

Population category and city	UCR property crime index offenses								
	Total number			Per 100,000 residents			Per 100 sworn employees		
	1990	2000	Percent change	1990	2000	Percent change	1990	2000	Percent change
<b>1,000,000 or more</b>									
New York (NY)	536,867	212,623	-60.4%	7,332	2,655	-63.8%	1,719	526	-69.4%
Los Angeles (CA)	237,727	130,297	-45.2	6,821	3,526	-48.3	2,866	1,395	-51.3
Chicago (IL)	228,829	169,699	-25.8	8,220	5,860	-28.7	1,933	1,260	-34.8
Houston (TX)	162,232	110,220	-32.1	9,950	5,642	-43.3	3,953	2,063	-47.8
Philadelphia (PA)	92,645	75,188	-18.8	5,843	4,955	-15.2	1,420	1,070	-24.6
Phoenix (AZ)	95,114	87,744	-7.7	9,672	6,642	-31.3	4,880	3,341	-31.5
San Diego (CA)	89,517	39,199	-56.2	8,061	3,204	-60.2	4,929	1,939	-60.7
Dallas (TX)	131,717	89,008	-32.4	13,082	7,489	-42.8	4,999	3,110	-37.8
San Antonio (TX)	111,044	78,424	-29.4	11,865	6,851	-42.3	7,046	4,167	-40.9
Las Vegas (NV)	39,434	41,059	4.1	6,399	4,025	-37.1	3,394	1,894	-44.2
<b>500,000 to 999,999</b>									
Detroit (MI)	97,578	73,649	-24.5%	9,492	7,742	-18.4%	2,124	1,773	-16.5%
San Jose (CA)	33,392	17,880	-46.5	4,269	1,998	-53.2	3,008	1,270	-57.8
Honolulu (HI)	48,616	44,357	-8.8	5,814	5,063	-12.9	2,730	2,475	-9.3
San Francisco (CA)	57,562	35,675	-38.0	7,951	4,593	-42.2	3,239	1,602	-50.5
Indianapolis (IN)	45,777	30,198	-33.3	6,484	3,977	-38.7	3,188	1,919	-39.8
Jacksonville (FL)	54,964	42,866	-22.0	8,653	5,827	-32.7	4,654	2,802	-39.8
Columbus (OH)	55,681	57,096	2.5	8,798	8,025	-8.8	4,032	3,274	-18.8
Austin (TX)	51,217	35,611	-30.5	11,000	5,428	-50.7	6,442	3,113	-51.7
Baltimore (MD)	60,047	49,883	-16.9	8,158	7,661	-6.1	2,099	1,644	-21.7
Memphis (TN)	51,173	49,904	-2.4	8,384	7,684	-8.4	3,703	2,621	-29.1
Charlotte (NC)	45,368	41,948	-7.5	9,865	6,708	-32.0	4,878	2,909	-40.4
Milwaukee (WI)	52,124	38,381	-26.4	8,299	6,429	-22.5	2,793	1,921	-31.2
Boston (MA)	54,393	28,548	-47.5	9,471	4,846	-48.8	2,649	1,319	-50.2
Washington (DC)	50,470	32,982	-34.7	8,316	5,765	-30.7	1,120	910	-18.7
Nashville (TN)	32,474	39,689	22.2	6,500	6,964	7.1	3,184	3,178	-0.2
El Paso (TX)	52,810	30,276	-42.7	10,248	5,371	-47.6	7,156	2,864	-60.0
Seattle (WA)	57,303	40,967	-28.5	11,100	7,272	-34.5	4,508	3,249	-27.9
Denver (CO)	32,064	23,417	-27.0	6,857	4,222	-38.4	2,433	1,573	-35.4
Fort Worth (TX)	59,214	34,327	-42.0	13,229	6,420	-51.5	6,233	2,870	-54.0
Portland (OR)	40,709	35,245	-13.4	9,309	6,661	-28.4	5,294	3,500	-33.9
Oklahoma City (OK)	42,377	43,894	3.6	9,529	8,672	-9.0	4,910	4,342	-11.6
<b>350,000 to 499,999</b>									
Tucson (AZ)	44,478	39,983	-10.1%	10,972	8,215	-25.1%	5,970	4,309	-27.8%
New Orleans (LA)	50,572	28,671	-43.3	10,177	5,916	-41.9	3,620	1,723	-52.4
Cleveland (OH)	36,895	26,543	-28.1	7,297	5,548	-24.0	2,095	1,457	-30.5
Long Beach (CA)	32,703	14,451	-55.8	7,615	3,131	-58.9	5,086	1,640	-67.7
Albuquerque (NM)	33,600	34,311	2.1	8,733	7,648	-12.4	4,158	3,994	-3.9
Kansas City (MO)	45,221	39,944	-11.7	10,403	9,046	-13.0	3,939	3,188	-19.1
Fresno (CA)	32,897	29,025	-11.8	9,288	6,787	-26.9	7,668	4,250	-44.6
Virginia Beach (VA)	21,814	16,746	-23.3	5,550	3,938	-29.0	3,654	2,320	-36.4
Atlanta (GA)	59,696	43,885	-26.5	15,151	10,537	-30.4	3,827	2,977	-22.2
Sacramento (CA)	29,732	24,221	-18.5	8,049	5,951	-26.1	4,964	3,726	-24.9
Oakland (CA)	34,750	20,022	-42.4	9,335	5,012	-46.3	5,641	2,820	-50.0
Mesa (AZ)	18,691	23,132	23.8	6,488	5,836	-10.0	4,867	3,226	-33.7
Tulsa (OK)	30,122	22,442	-25.5	8,201	5,710	-30.4	4,291	2,740	-36.1
Omaha (NE)	20,534	23,655	15.2	6,115	6,065	-0.8	3,457	3,154	-8.8
Minneapolis (MN)	36,778	23,085	-37.2	9,984	6,033	-39.6	4,563	2,559	-43.9
Miami (FL)	52,602	31,879	-39.4	14,671	8,795	-40.1	4,739	2,872	-39.4
Colorado Springs (CO)	19,833	16,968	-14.4	7,054	4,702	-35.9	4,885	2,796	-40.7
<b>250,000 to 349,999</b>									
St. Louis (MO)	44,517	42,717	-4.0%	11,222	12,268	9.3%	2,883	2,869	-0.5%
Wichita (KS)	24,952	19,588	-21.5	8,208	5,689	-30.7	5,899	3,216	-45.5
Santa Ana (CA)	19,628	8,623	-56.1	6,682	2,551	-61.8	5,138	2,134	-58.5
Pittsburgh (PA)	27,493	16,189	-41.1	7,433	4,839	-34.9	2,384	1,563	-34.5
Arlington (TX)	20,433	19,323	-5.4	7,807	5,803	-25.7	5,740	3,984	-30.6
Cincinnati (OH)	23,031	18,975	-17.6	6,327	5,728	-9.5	2,455	1,842	-25.0
Anaheim (CA)	17,294	8,496	-50.9	6,492	2,590	-60.1	5,027	2,140	-57.4
Toledo (OH)	28,453	21,643	-23.9	8,546	6,901	-19.2	4,166	3,137	-24.7
Tampa (FL)	36,052	27,285	-24.3	12,875	8,992	-30.2	4,375	2,906	-33.6
Buffalo (NY)	23,906	16,591	-30.6	7,286	5,669	-22.2	2,316	1,788	-22.8
St. Paul (MN)	19,381	16,326	-15.8	7,119	5,686	-20.1	3,643	2,834	-22.2
Corpus Christi (TX)	24,928	17,905	-28.2	9,683	6,453	-33.4	6,792	4,399	-35.2
Newark (NJ)	34,055	15,571	-54.3	12,374	5,692	-54.0	3,362	1,062	-68.4
Louisville (KY)	15,004	13,022	-13.2	5,576	5,082	-8.9	2,382	1,777	-25.4

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## Methodological notes

A large part of the data used in this report are from the Law Enforcement Management and Administrative Statistics (LEMAS) surveys conducted in 1990 and 2000. Population data are from the U.S. Census Bureau decennial census, and crime data are from the FBI's Uniform Crime Reports (UCR). Certain methodological issues arose during analysis and are discussed below.

### **Jurisdictional issues**

The 62 cities included in this report were chosen because they had a population of at least 250,000 in both the 1990 and 2000 decennial censuses. In most cases the data used represent a city and the local police department that serves it. For certain cities, special circumstances existed and are noted below.

#### *Anaheim (CA)*

The Anaheim (CA) Police did not respond to the 1990 LEMAS survey. Although personnel counts were obtained from other sources, other values for 1990 were based on the agency's responses to the 1987 and 1993 surveys. Where data values for categorical variables differed, the data for 1993 were used. Continuous variables such as number of personnel, operating budget, number of vehicles, and asset forfeiture receipts were averaged for the two years to arrive at an estimate for 1990.

#### *Charlotte (NC)*

The Charlotte Police and Mecklenberg County Police merged on October 1, 1993. To provide comparability with 2000 data for the Charlotte-Mecklenberg Police, the data reported by the two original agencies for 1990 were aggregated for continuous variables. For categorical variables in 1990, data from the Charlotte Police were used.

#### *Honolulu (HI)*

The jurisdiction of the Honolulu Police covers the City and County of Honolulu. Therefore, county population data were used for this report.

#### *Indianapolis (IN)*

The city of Indianapolis is served by both the Indianapolis Police and the Marion County Sheriff's Department. Therefore, data from these two agencies were combined for both 1990 and 2000. For categorical variables, data from the Indianapolis Police were used, and for continuous variables, the responses of the two agencies were aggregated.

#### *Las Vegas (NV)*

The city of Las Vegas is under the law enforcement jurisdiction of the Las Vegas Metropolitan Police Department (LVMPD). The jurisdiction of the LVMPD extends beyond the city of Las Vegas to include significant portions of suburban Clark County. General population counts were available for the actual LVMPD jurisdictional area, however; race and ethnicity were not. Therefore, the population race and ethnicity data used are for all of Clark County. This includes the city of Las Vegas, and county areas inside and outside of LVMPD law enforcement jurisdiction.

#### *New York (NY)*

The New York City transit and housing police agencies were merged into the New York City Police Department (NYPD) on April 30, 1995. To provide comparability with the 2000 data reported by NYPD, data reported by the transit and housing police for 1990 were combined with NYPD data. For categorical variables, the responses of the NYPD were used. For continuous variables, data for the three original agencies were aggregated.

### **Comparability issues**

All items that could be compared between the 1990 and 2000 surveys were included for analysis. Certain items asked in both surveys could not be included because of comparability issues. In some cases, items were included when the design of the questions had changed because it was determined to not affect comparability. These items included the following:

#### *Training requirements*

The 1990 LEMAS survey asked for the number of *classroom* and field training hours required while the 2000 survey asked for the number of *academy* and field hours.

#### *Operating costs*

The 1990 survey asked for the annual operating *expenditure* while the 2000 survey asked for the operating *budget*. All monetary data were converted to 2000 dollars by multiplying them by 1.3393. This factor was derived from annual Consumer Price Index averages published by the Bureau of Labor Statistics, Bureau of Economic Analysis.

#### *UCR Crime data*

Changes in reporting methods at the State or local levels may affect the comparability of crime data for 1990 and 2000. This has been documented for Tennessee and Memphis, which appear to have underreported certain crimes in 1990. Comparability issues may exist in other jurisdictions as well, documented or not.

Data on the number of forcible rapes in Chicago were not available for 1990 or 2000. Estimates based on the number of other violent crimes were calculated for this report.

When comparing crime rates between jurisdictions, the FBI suggests considering factors such as population density, degree of urbanization, demographic composition of the population, stability of the population, transportation modes and systems, economic conditions, cultural factors, family conditions, climate, effective strength of law enforcement agencies, administrative and investigative emphasis of law enforcement, criminal justice system policies, citizen attitudes, and citizen crime reporting practices. For more information on the Uniform Crime Reports see <<http://www.fbi.gov/ucr/ucr.htm>>.

#### *Special units*

The 1990 survey asked if the agency operated a special unit with personnel

assigned either full-time or part-time. The 2000 survey asked if the agency operated a unit with personnel assigned full-time or had specially designated personnel who dealt with the issue on a part-time basis.

#### *In-field computers*

The 1990 survey included the categories of laptop, car-mounted digital terminal, hand-held digital terminal and "other". The 2000 survey included the four specific categories of laptop, mobile digital/data computer, mobile digital/data terminal, and "other" within two general categories of vehicle-mounted and portable.

#### **Minority representation ratio**

The officer-to-resident ratios used to measure minority representation in figure 1 and appendix table B were calculated by dividing the percent of an agency's full-time sworn personnel who were members of a racial or ethnic group by the percentage in the population served who belonged to that group.

In some instances this resulted in a value greater than 1 (that is, a group was over represented).

Such values are included in table B; however, for the purposes of calculating the average ratios used in figure 1, these values were truncated to 1.00.

This was done so that average ratios would not be artificially inflated by overrepresentation in certain agencies. By definition the overrepresentation of one group is accompanied by the under representation of one or more other groups. Ideally, all groups would have an officer-to-resident ratio of 1.

This report in portable document format and in ASCII, its tables, and related statistical data are available at the BJS website <<http://www.ojp.usdoj.gov/bjs>>. If you wish to receive e-mails notifying you about BJS releases, please follow the instructions provided at <<http://www.ojp.usdoj.gov/bjs/juststats.htm>>.

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