

Appendix B

Technical Notes

1. Interpreting Information in National Tracing Center Records from Participating Jurisdictions

This note discusses limitations in using this information to compare one participating jurisdiction with another and to track the same jurisdiction from 1 year to the next.

The Youth Crime Gun Interdiction Initiative (YCGII) began in 1996. It is an emerging collaboration among Federal, State, and local law enforcement officials, ATF field offices, the ATF National Tracing Center, and ATF contractors from the academic community to improve enforcement of the Federal firearms laws, especially those relating to illegal firearms transfers to youth offenders, felons, juveniles, and other prohibited persons.

This is the fourth report published by ATF that uses information from trace requests submitted from YCGII jurisdictions to describe crime guns recovered by law enforcement agencies in those jurisdictions. This information improves the knowledge base for the enforcement of Federal and State firearm laws and regulations. It is, however, subject to several limitations. These arise out of three basic factors:

First, the program is undergoing constant change. Over the first 4 years of the YCGII program's operation, for United States cities with populations over 250,000 inhabitants, the percent of the population covered by participating YCGII jurisdictions increased from 28.5 percent to 80.4 percent (see Graph 1). Over this period, the number of cities in the over 250,000-population group also increased from 11 to 44 cities (or from 16.7 to 66.7 percent of this group). These improvements in program coverage are important because achieving comprehensive tracing in cities with populations of over 250,000 inhabitants has been a primary objective of the YCGII program. However, because of YCGII's rapid increases in program coverage, year-to-comparisons for aggregate population group of cities over 250,000 are inappropriate.

Second, the extent of program implementation varies from one jurisdiction to another based on each one's size, extent of agency computerization, information intake procedures, firearms-focused law enforcement

activity, and the nature of its crime gun problem. At this stage of development, it is not appropriate to attempt to impose a single standard on all participating jurisdictions.

Third, the program is still developing. ATF and local law enforcement agencies are still learning from each other how to best implement this program and to utilize the information obtained. This report and others to be produced by the Crime Gun Analysis Branch (CGAB) of the National Tracing Center are part of that developing process.

These factors result in data limitations, among them changing law enforcement procedures to obtain all crime guns from all agencies does not happen immediately or consistently throughout a particular agency. In such jurisdictions, the lag in reporting recovered firearms to ATF will generate data on fewer firearms than law enforcement agencies actually recovered.

The data reported here also reflects the behavior of law enforcement agencies whose policies and practices, including when and how firearms are recovered and how those recoveries are recorded, are changing in response to local attention to firearms crimes. These changes could increase or decrease the number of firearms trace requests made to the National Tracing Center.

Crime rates are changing. Changes in the number of trace requests could reflect changes in the number of crime guns that come to the attention of law enforcement agencies.

While the 50 participating jurisdictions represent a wide spectrum of American life, they do not represent a national sample of law enforcement agencies or crime guns recovered by law enforcement agencies. Participation in this program is voluntary, and jurisdictions included were not selected to be representative of the nation as a whole, rather they were included primarily because of a focus on youth gun crime. In 2000, however, 44 of the 50 jurisdictions had a population over 250,000. The population of these 44 jurisdictions represents more than four-fifths of the population of all U.S. cities combined with

populations of 250,000 or more. This made it appropriate to generate summary data for these large cities as a group.

For these and other reasons, the available data from the participating jurisdictions does not yet constitute a fully developed statistical series from which reliable comparisons can be made from one reporting period to the next or from one participating jurisdiction to another. The data is used in this report as descriptive of the trace requests of particular jurisdictions during the past year. The nature of these limitations is

similar to those initially encountered by the Federal Bureau of Investigation's Uniform Crime Reports program (UCR). Begun in the 1930's as a voluntary program by a few large jurisdictions, the UCR program has been developed over the past 70 years to include consistent definitions and standards, detailed reporting procedures, and nearly uniform participation by law enforcement agencies. The purpose of YCGII is to assist law enforcement by providing a detailed description of crime guns recovered in a given jurisdiction during the past year, and that is the most appropriate use of the data in this report.

Table B1: Percent of Cities and Percent of Population of Cities over 250,000 Inhabitants Participating in the YCGII Program by Year

	YCGII Program Year			
	1997	1998	1999	2000
Percent of Cities over 250,000 in YCGII Program	16.7	30.3	45.5	66.7
Percent of Population in Cities in YCGII Program	28.5	54.1	67.2	80.4

Figure B1: Percent of Population from Cities over 250,000 Inhabitants Participating in the YCGII Program by Year

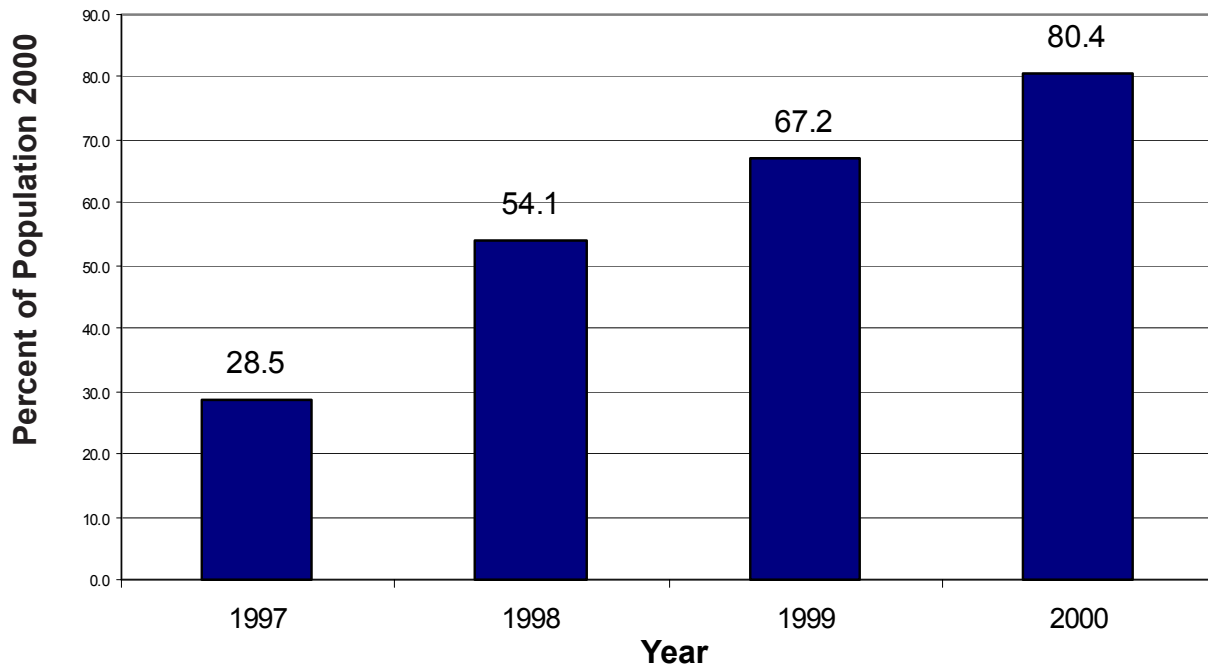
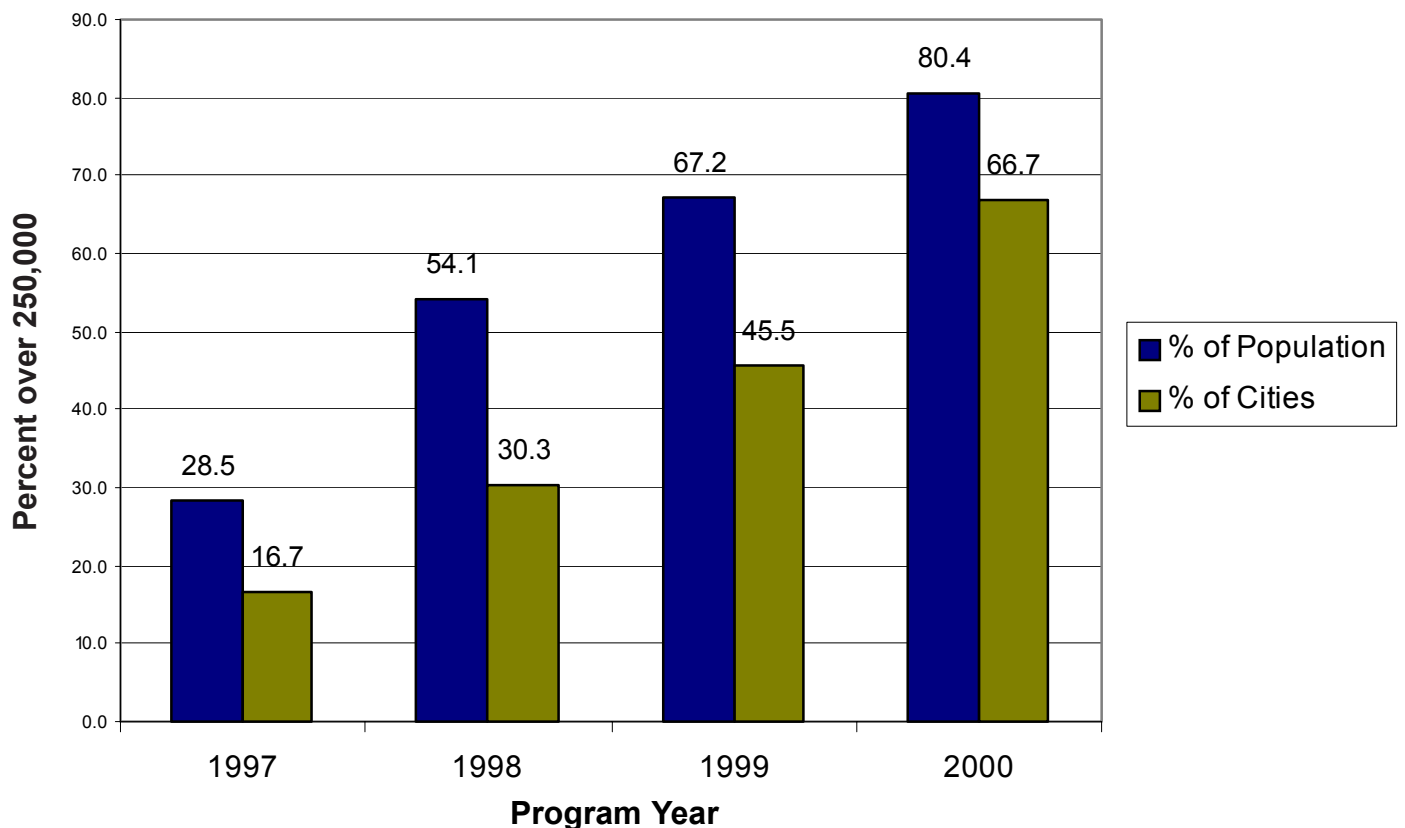


Figure B2: Percent of Cities and Percent of Population of Cities over 250,000 Inhabitants Participating in the YCGII Program by Year



2. National Analysis Based on 80.4 Percent of the Population of Cities with 250,000 or More Inhabitants

This percentage is sufficient for this report to constitute a national report on crime guns in cities of this size. ATF is providing the analysis on a population basis in order to permit use of crime gun trace information in conjunction with the FBI’s Uniform Crime Reports, which publish the crime statistics submitted by law enforcement agencies by size of the jurisdiction’s population.

3. Classification of Traces Based on Time and Geography

In order to include all crime guns traced from each city during the calendar year period of this report, the Crime Gun Analysis Branch employed the following criteria. If the recovery date on the trace fell within 2000, the trace was included. If no recovery date was given, but the trace was received by the National Tracing Center during 2000, the trace was also included. A careful analysis of recovery State, recovery city, tracing agency ORI Code, tracing agency name, local ATF office codes, and tracing agency city was conducted to determine which traces were from recoveries in each of the 50 cities. The ORI code is used to identify law enforcement agencies in the Firearms Tracing System database. If the recovery city and State fields included either a known city name or the name of a known sub-unit of a YCGII city (for example Bronx, NY), the trace was included in the analysis. If no recovery city was given, but the tracing agency was identified as the YCGII city’s main police department or an agency whose jurisdiction was only within the city, the trace was also included.

4. Calculation of Percentages

The tables and figures in this report were prepared using the Statistical Package for the Social Sciences (SPSS) or Microsoft Excel software. We have chosen to report all percentages as these programs calculated them. It is occasionally possible, using a calculator or different software, to produce percentages that differ by as much as 0.1 percent from the reported percentages.

5. Possessor’s Age

Table B2: Age of Possessor from Figure 1

Age	Frequency	Age	Frequency
10	13	46	464
11	35	47	604
12	54	48	431
13	141	49	600
14	331	50	203
15	569	51	263
16	1,147	52	277
17	1,706	53	272
18	2,569	54	200
19	2,744	55	211
20	2,751	56	182
21	2,930	57	123
22	2,553	58	137
23	2,420	59	137
24	2,118	60	120
25	1,942	61	107
26	1,768	62	105
27	1,651	63	111
28	1,620	64	54
29	1,339	65	77
30	1,321	66	77
31	1,174	67	65
32	1,041	68	73
33	1,019	69	50
34	1,067	70	73
35	976	71	42
36	932	72	48
37	1,044	73	54
38	1,040	74	38
39	831	75	43
40	1,017	76	464
41	878	77	604
42	845	78	431
43	746	79	600
44	699	80	203
45	699		

6. Distance to Recovery Location

Distance to crime gun recovery location is defined as distance in miles between the business location of the Federally licensed firearms dealer that sold a crime gun recovered by a law enforcement agency and the recovery location of the firearm. Distance-to-Recovery is calculated as the distance between the centroids of the zip code of the Federally licensed firearms dealer that sold the crime gun and the zip code of the location where the gun was recovered by a law enforcement agency. Distance-to-recovery is calculated for crime guns, 1) that were traced to a first time retail purchaser, 2) where a zip code is available for the business location of the FFL that sold the gun or where a zip code could be derived from the business address of the FFL, and 3) where there is a zip code for the location where the crime gun was recovered or where the a zip code could be derived from the street address of the recovery location.

7. Time-to-Crime Estimation

In previous reports to estimate the percentage of crime guns rapidly diverted from retail sale at Federally licensed firearms dealers, ATF produced high and low estimates of the proportion of guns rapidly diverted to crime gun status. These estimates were derived because resource limitations did not allow the National Tracing Center to trace many older crime guns. Since 1999, however, additional resources

have enabled the National Tracing Center to initiate traces on all recovered crime guns without respect to the age of the gun. The only exception to this standard is for crime guns that were manufactured prior to 1969 or crime guns that were sold by a manufacturer, wholesaler, or retail gun dealer more than 20 years prior to the gun's recovery by a law enforcement agency. (FFLs are not required to maintain firearm sale and purchase records beyond 20 years.) However, firearms in these latter two categories are still traced by ATF if records of their sale and purchase can be located in ATF's FFL out-of-business records files.

These changes in ATF's tracing procedures have greatly reduced or eliminated the utility of ATF's high and low estimates of time-to-crime, because the percentage of firearms traces not initiated due to the age of the firearm has dropped to approximately ten percent of all trace requests from approximately 30 percent of all trace requests in 1997 and 22 percent in 1998. In addition, there are other categories of crime guns trace requests for which traces are not initiated (e.g., crime guns with obliterated serial numbers) which if they could be traced would yield lower not higher estimates of time-to-crime.

