

B. Collection of Information Employing Statistical Methods

1. Sampling or Other Respondent Selection Methods

The potential respondent universe is as follows:

Agencies

CJIS Division Intelligence Group - 51 FBI Field Divisions and 131,200 Originating Agency Identifiers for Criminal Justice and Law Enforcement

Integrated Automated Fingerprint Identification System - 80,000 agencies that submitted fingerprints in a one month time period

Interstate Identification Index - Approximately 131,200 Originating Agency Identifiers for Criminal Justice and Law Enforcement Agencies

Law Enforcement Online - Approximately 92,000 members

National Crime Information Center - Approximately 131,200 Originating Agency Identifiers for Criminal Justice and Law Enforcement Agencies

National Instant Criminal Background Check System - Federal Firearm Licensees - Approximately 56,400 Federal Firearm Licensees

Point of Contact

National Instant Criminal Background Check System - Point of Contact and Partial Point of Contact States - 21 State Point of Contact and Partial

Uniform Crime Reporting - Approximately 17,000 Uniform Crime Reporting Contributors

The total universe equals 639,072.

2. Procedures for the Collection of Information

For this study the following simple random sample formula, developed by Dr. Klaus J. Miescke, will be used to determine the sample size for each of the programs' potential survey populations. Dr. Miescke is a professor of statistics at the University of Illinois at Chicago, Department of Mathematics, Statistics, and Computer Science. This particular formula has been used in over 800 court proceedings and is seen as a statistically valid, reliable, and accepted. (For further explanation, please refer to publication: Michael Klaus. "Statistical Sampling Methods for Auditing." *Bulletin of the International Statistical Institute*, Tome LVIII, Book 2, Proceedings of the 52nd Session of the International Statistical Institute, Helsinki, Finland, 1999; 301-302.)

The components of this formula are:

n = the sample size that is selected for study.

N = the total number of potential respondents in the program.

k = the desired number of units of standard deviation (set at 1.96 for a 95% level of confidence).

R = the amount of admissible error (The author recommends that this number is set at 0.1 which means the admissible error is 10% of the standard deviation.)

When N is very large and R is set at 0.1, then the formula is simplified to the following constant sample size occurs which will be used for programs with populations greater than 10,000.

When it comes to statistical estimation, it is best to err on the side of caution, therefore this number will be rounded to 400.

Once the sample size is determined individual units in the universe of potential respondents will be assigned a unique number. Then a sample will be chosen by entering all of these numbers into a database. SPSS software is used to randomly select the final sample.

After the survey is completed, the following formula is used to determine the range of error for each question in the survey (based on a 95% level of confidence).

Where,

X = the percentage of satisfied responses.

p = the proportion satisfied responses (number of satisfied responses divided by the number of responses)

$q = 1-p$

3. Methods to Maximize Response Rates

As the majority of these surveys will be completed on-line, based on survey methodology literature, a response rate of approximately 33% is expected. Due to this assumption, the sample size is multiplied by 3 to compensate for non-response (e.g., if a program requires a sample size of 1340, it is estimated that one-third, or 400 respondents, will participate). An introductory paragraph will also accompany the survey explaining its

importance, confirming confidentiality and anonymity by aggregating data so individual responses cannot be identified.

The results of this study will be used to determine the level of customer satisfaction with CJIS Division programs, determine areas of improvement, and are assumed to be representative of the greater universe of CJIS customers.

4. Tests of Procedures to be Undertaken

Each survey was distributed to three individuals who took the survey while being timed. These tests assured that respondents could easily understand questions and the average amount of time to complete the survey was recorded.

5. Name and Phone Number

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