

# TELEMASP BULLETIN

## TEXAS LAW ENFORCEMENT MANAGEMENT AND ADMINISTRATIVE STATISTICS PROGRAM

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### Surveys of Citizen Attitudes

In the past several decades there has been increasing effort to apply social science research to police policy issues. One representative effort is determination of citizen satisfaction with police service. Premised upon an ideology that policy recommendations and decisions should be informed by scientific data and theory (Skogan 1975), the citizen survey is utilized to measure both generic public attitude toward the police and to provide agencies with information upon which to formulate policy recommendations and decisions (White and Menke 1978).

Surveys always employ a sample and extrapolate the data collected to the study population. Sampling logic and methods are fundamental if the study findings are to be applied to the population. The elements of sampling procedure, sample size and data collection are reviewed in the first section of this bulletin. A review of Texas law enforcement agency use of citizen surveys will be presented in the second section.

#### The Elements of Survey Methodology

##### Sampling Techniques

The initial step in selecting a sample is a complete list of the members of the population. The list from which the sample is drawn is called the "sampling frame" (Hagan 1989). For example, if a police department is interested in identifying concerns among the senior citizens, a reasonably complete list of senior citizens living in the jurisdiction is required. Selecting a sample from the sampling frame is the second step. There are two types of sampling techniques from which to choose: probability and nonprobability sampling (Hagan 1989). Choosing between these two types of ap-

proaches is a matter of balancing the needs for validity and credibility against the practical need for timeliness and effort (Henry 1990). Probability sampling, carefully designed and carried out, has greater validity and credibility than nonprobability sampling. However, it often requires greater cost and time than nonprobability sampling (Henry 1990).

##### Probability Sampling

Probability sampling is a technique that allows estimation of the probability of selection of every member in the population being selected in the sample (Hagan 1989). Four types of probability sampling techniques are:

**Simple random sampling.** This method gives every member of the population an equal chance of being selected (Hagan 1989). The initial step of simple random sampling is to acquire a clear and complete list of all members of the population because all members must be independently and randomly chosen. After acquiring a list of the population, an identification number is assigned to each member. A random number table or a computer program can be used to generate the numbers of the citizens selected to be the recipients of the survey (Hagan 1989).

**Stratified sampling.** This is a random technique that is used to assure representativeness of subpopulations—such as age, race and sex—in the sample (Hagan 1989). Stratified sampling relies on knowledge of the distribution or proportion of population characteristics. The general procedure involves grouping the study population into strata and then selecting the random sample either proportionately or disproportionately, depending upon the size of the

subpopulations (Hagan 1989). For example, a police agency might over sample ethnic groups with typically small numbers in a jurisdiction, e.g., Asians or Native Americans.

**Cluster sampling.** This is the random selection of groupings, referred to as clusters, from which all members are chosen for the sample (Hagan 1989). For example, if an agency is interested in student attitudes toward drug use in a school, the classrooms could be clustered, and then all students in a selected classroom surveyed. Cluster samples are useful when a listing of clusters is available, but a list of the population is not available (Henry 1990). This method is also beneficial in reducing travel and training expenses when the data collection involves site visits or obtaining records from regional or local offices (Henry 1990).

**Multistage sampling.** This technique involves selection of clusters as a primary selection and then sampling members of the selected clusters to produce the final sample (Hagan 1989). For example, in a survey of neighborhood crime the jurisdiction might be clustered into 10 neighborhoods. Four neighborhoods (clusters) are then randomly selected. Within the selected clusters, blocks are randomly selected for door-to-door interviews (Hagan 1989).

### Nonprobability Sampling

Nonprobability sampling is a method employed to achieve particular objectives (Henry 1990). Procedures leave open the possibility of drawing a biased sample and the unknown difference of the estimates obtained from the sample statistics from the true population parameters (Bureau of Justice Assistance 1993). Five types of nonprobability sampling are:

**Convenience sampling.** The selection of respondents employing this method is based upon the availability of the sample for the study (Henry 1990). For example, an officer might interview everyone who attends a meeting which is held to discuss community problems. This allows the police agency to conveniently, quickly and inexpensively obtain residents' views of community problems (Bureau of Justice Assistance 1993). Obviously, however, the views of those attending a particular meeting may not reflect those of the community, or even neighborhood, as a whole.

**Accidental sampling.** Accidental sampling occurs when the researcher interviews everyone he or she meets on the street and makes little attempt to ensure representativeness of the sample (Hagan 1989). For example, police officers might interview every pedestrian they meet on the street during their shift to learn how neighborhood residents feel about drug problems (Bureau of Justice Assistance 1993).

**Purposive sampling.** This technique is used to select members of the sample to meet a specific objective (Bureau of Justice Assistance 1993). For example, a group of arrestees might be interviewed after an undercover reverse buy to learn about drug houses (Bureau of Justice Assistance 1993).

**Snowball sampling.** This is a strategy used in exploratory studies of hard-to-obtain subjects (Goodman 1969). This procedure relies on previously identified group members to identify other members of the population. As newly identified members name other members, the sample snowballs.

**Systematic sampling.** Systematic sampling involves selecting every *n*th item in a list that would be the population of the study (Hagan 1989). For example, an officer might talk to people in every fifth house on his/her beat to learn about fear of crime (Bureau of Justice Assistance 1993). Systematic sampling is usually representative even though it is technically not random. Occasionally, problems do arise.

### Sample Size

The size of the population has very little influence on the size of the sample needed unless the population is fewer than 100 (Bureau of Justice Assistance 1993). Instead, the sample size is contingent on a number of factors, and no predetermination exists for the appropriate sample size for all conditions (Hagan 1989). The sample size can depend on the degree of sampling error required, the availability of the funds, the anticipated frequency of the observed characteristic, and the expected subclassification of the variables (Hagan 1989). The underlying logic of sample size is that the larger the sample size, the greater the reliability of the sample.

### Data Collection

There are a number of alternative data collection strategies that can be used, depending on budget and quality concerns (Bureau of Justice Assistance 1993). Three types of data collection strategies are:

**Mail surveys.** This is the least expensive method. It can be used to obtain a sample in a large area and provides a more representative sample with reasonable cost, effort and time. Nevertheless, it is notorious for having a low response rate (Hagan 1989). The researcher cannot figure out the difference, if any, between nonrespondents and respondents (Hagan 1989). In addition, there is no opportunity to assist respondents who may have trouble interpreting the questions (Hagan 1989).

**Telephone surveys.** This method is more expensive than mail surveys, but response rate and the quality of the answers is usually higher (Hagan 1989). It allows interviewers to repeat calls until contact with the respondents is made and to clarify unclear questions (Hagan 1989). Compared to in-person interviews, telephone surveys are more effective in obtaining hard-to-locate respondents and simpler to monitor for interviewer bias (Hagan 1989). However, compared to in-person interviews, it is more difficult to acquire in-depth responses or evaluate answers over the telephone (Hagan 1989). This strategy is not appropriate if many of the sample respondents do not own telephones (Hagan 1989).

**In-person interviews.** This method brings the highest response rate and quality of answers. Because of the face-to-face relationship, this method allows personal interviewers to repeat, followup and clarify any misunderstood questions; to use their discretion as to the appropriate time at which to ask the more sensitive questions; and to act as an observer to record verbal responses, impressions and, sometimes, to collect information without asking a question, such as gender. An in-person interview strategy is more suitable than telephone surveys when most respondents do not have telephones. The disadvantages of in-person interviews are that it can be difficult to obtain information from hard-to-reach populations, it may be very time-consuming and it is costly. The quality of the responses depends mostly upon the quality, integrity and skill of the interviewers (Hagan 1989). In addition, consideration of the interviewer's position must also be taken (Bureau of Justice Assistance 1993). Respondents may not give candid answers to some questions if uniform officers conduct the survey, especially questions concerning their attitudes toward police performance. The use of uniform officers, however, can be used to enhance the attitude of citizens toward the police and to reduce fear of crime (Pate et al. 1986; Pate 1989). The interviewers' safety must also be taken into consideration when civilians are used to administer questionnaires in high-crime areas (Bureau of Justice Assistance 1993).

### Citizen Surveys in Texas

Thirty-seven Texas agencies responded to our query regarding use of citizen surveys. Of those responding, 15 agencies conducted generic citizen surveys, 15 reported never doing so, and seven agencies had used surveys only in specialized contexts. The results reported in this TELEMASP bulletin reflect the responses of the 15 agencies that conduct generic surveys.

**Table 1**

#### **Texas Agencies Employing General Sample Citizen Surveys**

Addison Police Department  
 Arlington Police Department  
 Austin Police Department  
 Beaumont Police Department  
 Carrollton Police Department  
 Dallas Police Department  
 Deer Park Police Department  
 Duncanville Police Department  
 Euless Police Department  
 Garland Police Department  
 Irving Police Department  
 Pasadena Police Department  
 Plano Police Department  
 Richardson Police Department  
 Wichita Falls Police Department

### Sampling Procedure

Most departments conducted surveys focusing on citizens in general, not on specific groups (see Table 1). The Wichita Falls Police Department randomly drew a 1,189 entity sample from the city's water customer list containing names and addresses of active households and businesses to determine citizen attitudes toward police performance and neighborhood priorities. The Irving Police Department conducted a survey for the same purpose but randomly selected a 1,000-person sample from a mailing list previously used by a private agency contracted to conduct the survey. The Deer Park Police Department drew a random sample of 3,194 from water bills. The Beaumont Police Department and the Pasadena Police Department also utilized surveys for the same purpose but Beaumont programmed the computer to generate a random list of 353 telephone numbers of citizens, whereas Pasadena used random digit dialing to generate the list of telephone numbers. The Carrollton Police Department measured citizen attitudes toward police performance and neighborhood priorities by surveying citizens who attended community meetings.

Three departments conducted surveys to obtain needed information from specific groups. For example, the Richardson Police Department randomly selected 390 complainants or victims in order to measure the citizen attitudes toward police performance in the areas of patrol, investigation and communications. The Duncanville Police Department utilized surveys to identify problem concerns among senior citizens. The department employed utility bill records.



The Addison Police Department measured attitudes toward police performance and prioritized concerns among business people who were sampled from the Business Certificate of Occupancy list maintained by the city (see Figure 1).

### Data Collection

Ten departments (66.7%) administer a questionnaire by independent mailing or by enclosing with utility bills or other mailings/newsletters. The frequency of administering questionnaires to collect the data about citizen attitudes

toward police performance and neighborhood priorities is varied. For example, the Plano Police Department administers a questionnaire to citizens three weeks after they have had a contact with the police department. The Carrollton Police Department administers a survey every two years. The Richardson Police Department conducts complainant surveys every month, whereas the Wichita Falls Police Department surveys annually (see Figure 2).

Several methods are used to increase the response rate by the departments. For example, the Wichita Falls Police Department makes the questionnaire format simple to complete and

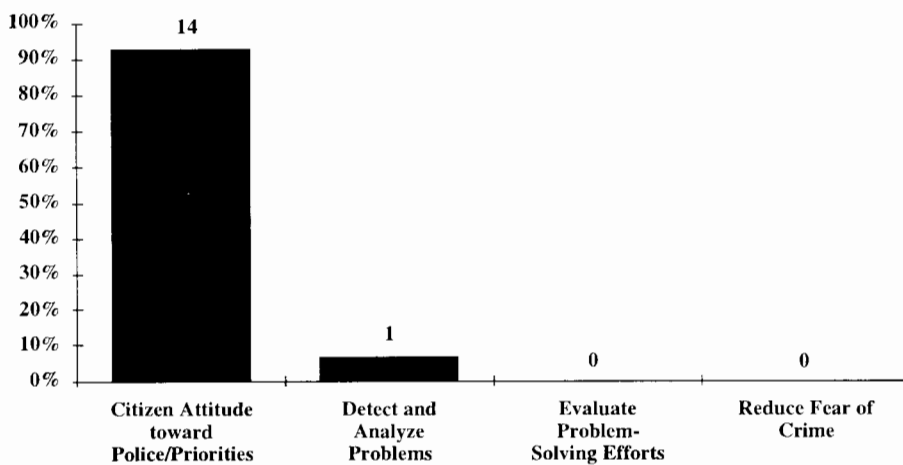


Figure 1. Purposes of Surveys Conducted in Past Year

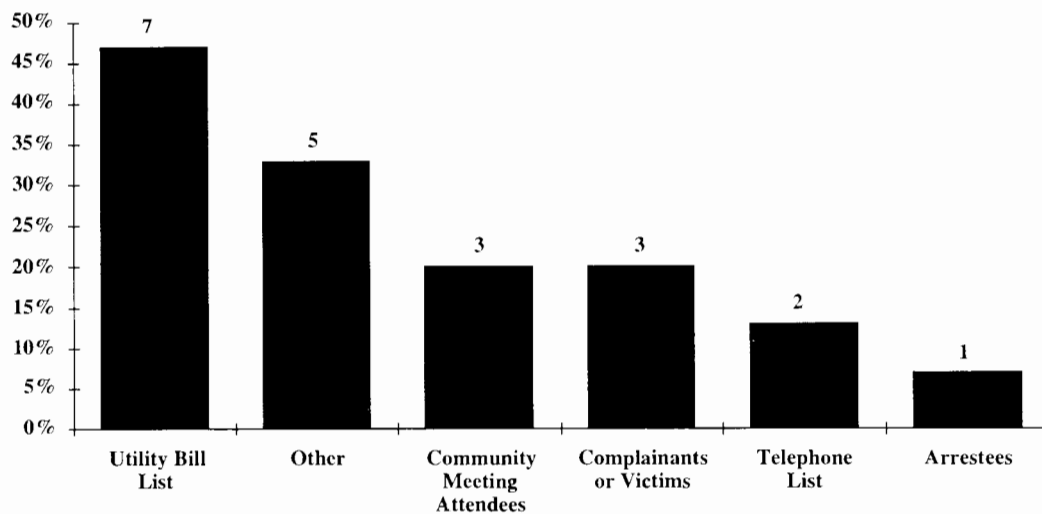


Figure 2. Sampling Technique

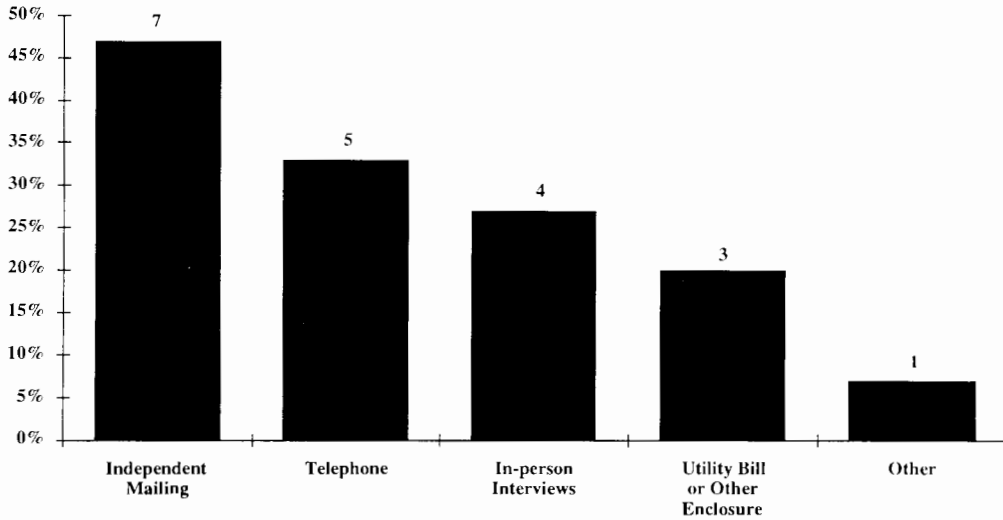
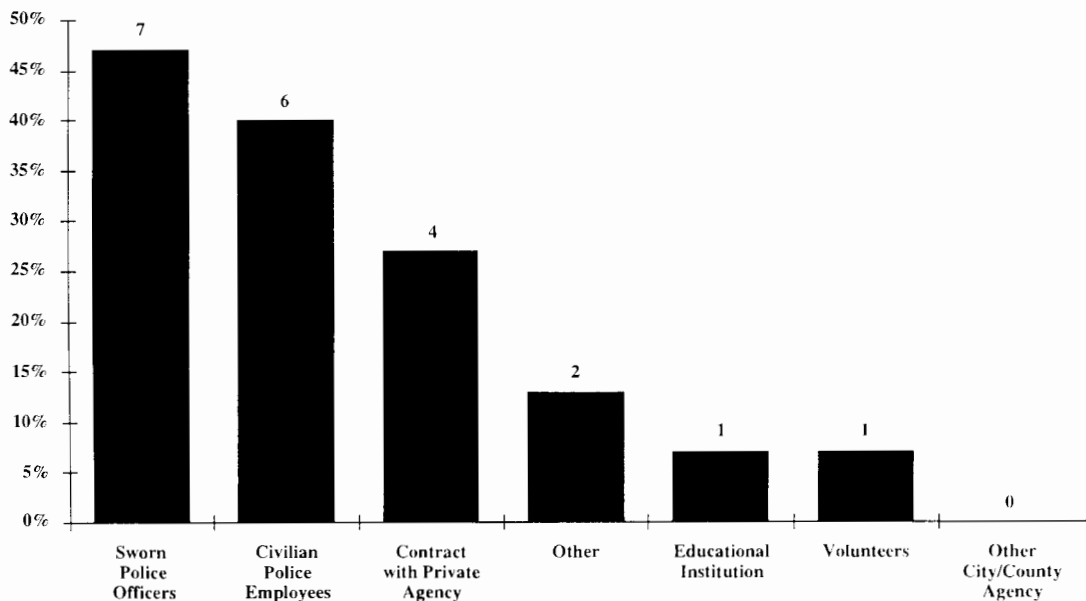


Figure 3. Survey Methods Employed

encloses a stamped return-addressed envelope. The Irving Police Department follows up with phone surveys. The Garland Police Department allows the respondents to return a questionnaire in several ways: enclose with utility payment, mail to the Planning Department, or drop off at several locations within the city. The Carrollton Police Department utilizes a blue survey card in order to increase response. This can be viewed as more convenient and reducing intimidation. In Arlington, school resource officers distribute surveys to students to take home to their parents. A postage paid envelope is included for returning the surveys. By having students take surveys home, it is hoped that better representation of minorities is obtained.

Five departments (33.3%) use telephones to conduct their survey. For example, in Beaumont, Lamar University criminal justice students performed telephone interviews on Monday and Thursday nights between 6:00 p.m. and 8:00 p.m. during October and November, 1994.

Four departments (26.7%) utilize the in-person interview method to survey the sample. For example, the Plano Police Department uses civilian employees and volunteers to interview citizens regarding attitudes toward police performance and neighborhood priorities. The Addison Police Department contracted with a private agency to conduct such a survey (see Figure 4).



Note: Seven agencies (47%) reported the use of more than one entity.

Figure 4. Persons/Organizations Administering the Survey

### Garland's Survey Return Options

We ask that you complete and return this questionnaire as quickly as possible. You may return this form with your utility bill or send it to the Planning Department, P. O. Box 469002, Garland, Texas 75046-9002. Or, you may drop it off at one of the following locations:

Lou Huff Recreation Center	525 E. Avenue B
Bradfield Recreation Center	1146 Castle
Granger Recreation Center	1310 W. Avenue F
Downtown Senior Center	901 W. State
Carver Senior Center	222 Carver
City Hall (information desk on the 1st floor)	200 N. Fifth
Utility Collections (drive-through window or 1st floor)	800 Main Street (Main Street Municipal Building)

Thank you for taking the time to fill out this questionnaire. We need to know what you think our priorities should be so that we can provide the best service to you that we possibly can. If you have any questions, please call Bob Barber at 205-2815.

### Carrollton Police Department Annual Citizen Survey 1994 Questionnaire

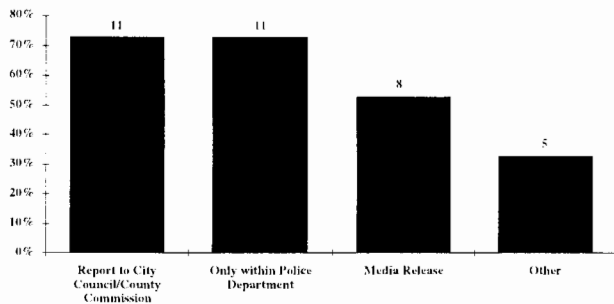
Each year, the Carrollton Police Department conducts a survey of citizen attitudes and opinions toward the Department. Please take a few minutes to complete the questions and indicate your concerns and recommendations. Submit the completed form with your utility bill. Thank you for your time and input.

1. How would you rate the Carrollton Police Department's overall performance?  
Excellent      Good      Fair      Poor
2. How would you rate the overall competence of the Carrollton Police Department employees?  
Excellent      Good      Fair      Poor
3. Are you concerned over safety and security within the City of Carrollton?  
Yes      No
4. What is your opinion of the Carrollton Police Department?  
Excellent      Good      Fair      Poor
5. Are you concerned over the safety and security within your own neighborhood?  
Yes      No
6. Do you have any recommendations and suggestions for improvement or concerns?

If you are interested in neighborhood crime watch or other crime awareness programs, please contact the Carrollton Crime Awareness Unit at 466-3330.

## Use of Survey Results

Five departments cited "other" as their response to the use of survey results. Among the "other" responses, the Deer Park Police Department uses the results for Total Quality Management training. In Wichita Falls, the results are utilized to provide the chief of police with added information to assist in the annual formulation of department goals and objectives. The Garland Police Department distributes the results to other city departments (see Figure 5).



Note: Twelve agencies (80%) reported results used for more than one purpose.

Figure 5. Use of Results

## Summary

A number of police departments surveyed in the state of Texas conduct citizen surveys. Almost all of the police departments engaged in surveys utilize them to measure citizen attitudes toward generic police performance and neighborhood priorities. Utility bill lists are the most popular technique employed for a sampling frame, and simple random sampling is most employed as a sampling technique. Mail surveys are most frequently used.

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- Addison Police Department
- Amarillo Police Department
- Arlington Police Department
- Austin Police Department
- Baumont Police Department
- Carrollton Police Department
- College Station Police Department
- Dallas County Sheriff's Department
- Dallas Police Department
- Deer Park Police Department
- Duncanville Police Department
- El Paso Police Department
- Eules Police Department
- Fort Bend County Sheriff's Department
- Fort Worth Police Department
- Garland Police Department
- Harris County Sheriff's Department
- Houston Police Department
- Irving Police Department
- La Marque Police Department
- Laredo Police Department
- Lubbock Police Department
- Mesquite Police Department
- Midland Texas Police Department
- North Richland Hills Police Department
- Odessa Police Department
- Pasadena Police Department
- Plano Police Department
- Richardson Police Department
- San Antonio Police Department
- Texarkana Police Department
- Texas Department of Public Safety
- University of Texas at El Paso Police Department
- Waco Police Department
- White Settlement Police Department
- Wichita Falls Police Department



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