

USING REPUTATIONAL SAMPLING TO IDENTIFY RESIDENTIAL CLUSTERS OF MINORITIES
DISPERSED IN A LARGE URBAN REGION: HISPANICS IN ATLANTA, GEORGIA*

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The problem of locating rare elements, or small groups, dispersed in a large population and the design of samples to gauge the characteristics of these dispersed elements has received periodic attention in the theoretical and applied research literature on sampling. The recurrence of discussions on this topic has been spurred by a continuing need among researchers to deal with the problem of generating cost-efficient and statistically sound data on elements of a population which are low-incidence, dispersed, and hence, relatively difficult to locate. This problem is often encountered in research or planning projects that desire to locate persons, households, or clusters of people in large urban areas that have special needs, such as groups of handicapped individuals (the blind, the deaf, or the physically limited, for example); groups with particular health problems (such as venereal disease or genetic disorders); and cultural or ethnic minorities who may require special aid (such as Cuban or Vietnamese refugees).

Those performing or assisting in applied research projects of this kind are motivated primarily by a desire to yield useful data and thus have been willing simply to tolerate problems of precision and measurement error which would disturb a theoretician. This paper will briefly examine theoretical and applied research issues that must be considered when reputational sampling techniques are used as a solution to this sampling problem and will then detail a real-life encounter with the issues in an example survey involving Hispanics in Atlanta, Georgia.

RESEARCH ISSUES IN THE USE OF REPUTATIONAL SAMPLING

The design of a sample may be determined by the degree of rarity of the elements in the population being studied. Kish (1965:404-437) offers an excellent review of the available strategies and confirms the idea that the choice among sampling technologies is linked to the degree of rarity of the sampling unit in the population. Some types of solutions involve the use of location strategies or filtering modes to locate possible clusters of the rare element. Use of multistage sampling techniques, screening interviews, and disproportionate stratified paradigms (or combinations of these) are some of the approaches which have been suggested and applied to this problem.

Basically, these techniques use empirically generated knowledge derived from the sampling process itself to increase efficiency in respondent selection. They are most efficient in the case where there is a clustering of the rare trait and a high degree of separation of the clusters from the general population. These probability-based techniques are desirable because of their reliability in yielding precise estimates of sampling variances.

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In addition to the strategies mentioned above, Kish (1965) and others have suggested the use of the nonprobability technique known as reputational sampling, for application under special conditions as a cost-effective means of obtaining information about rare elements. As a rule, the reputational sampling technique involves the use of an initial list of respondents who may be derived from screening a population using large clusters and probability methods, a specialized list of persons who manifest the criteria, or "key informants" identified in some other fashion by the researcher. The technique assumes that those persons or households manifesting the sampling criteria are aware of others with similar characteristics. Thus the initial respondents will, hopefully, generate leads for future contacts who may be screened for inclusion in the sample.

Once the initial list of respondents has been identified and interviewed, the researcher constructs a chain of probable future interviews in sociometric fashion from data supplied by cooperative respondents. For example, in the research described below on Hispanic migrants in Atlanta, it was assumed that formal and informal communication linkages between individuals and families with similar characteristics and cultural norms permitted efficient identification of appropriate respondents.¹ This "snowballing" assumption in reputational designs (in which current respondents know of and suggest additional respondents) is basic to the application of the reputational technique, yet it is also a problem when interpreting the results from such designs.

When using this technique, individuals with high visibility, or those acquainted with more people, have greater probability of being selected than the social isolate (Sudman, 1976: 211). If there are major differences between those persons more likely to be suggested in the snowballing process than those less likely to be suggested, then there is a form of bias inherent in the respondent selection process which may make any estimates from the reputational sample contain a systematic bias. The nature of this bias may be such that a researcher is unable to detail its direction and, hence, research involving reputational sampling typically proceeds on an untested assumption that those respondents identified are homogeneous,² with respect to those not interviewed or located.

The remainder of this paper describes a recent needs-assessment project in Atlanta, Georgia, that sought to locate clusters of Hispanics dispersed in the metropolitan region using a snowball sample. After a brief overview detailing the project's objectives, the procedures used to execute and analyze the data are presented. The example details organizational procedures which controlled and facilitated the sampling process and information about the efficiency of the technique when it was used in the field.

THE USE OF REPUTATIONAL SAMPLING IN A NEEDS-ASSESSMENT PROJECT

Objectives of the Project

By the mid-1970's it became apparent that the

Hispanic population of the Atlanta area had increased since the 1970 census. Service agencies in the area recognized the problems inherent in attempting to serve recently-arrived immigrants who had brought with them a linguistic and cultural heritage unlike that of the majority culture. While such problems were recognized, their nature and magnitude remained unknown. Though it would have been desirable to obtain precise estimates of the dimensions of the Hispanic community in the Atlanta area, such estimates would have necessitated the expenditure of hundreds of thousands of dollars that might otherwise have been used for improvements in existing service delivery systems.

This project sought to facilitate the provision of information that would expedite the delivery of needed services until more precise population estimates were available (after dissemination of the 1980 census). In order to do so, the project concentrated its resources on the following objectives:

- 1) locating and documenting geographic concentrations of the Hispanic population of the region that were potentially most in need of special or modified services (These were defined as those areas containing persons who had recently migrated to this country and/or to the Atlanta area and/or who were not fluent English-speakers.);

- 2) documenting both perceived needs and objective indicators of service needs among Hispanic segments of the population of the region.

Survey Methods

The assumption that non-English-speaking and/or recently-immigrated Hispanics are most likely to be in need of special services was based upon previous anthropological and sociological research. Such studies have demonstrated that persons with cultural or linguistic barriers to full participation in urban society will require more or different services than persons not facing such barriers. In particular, Hill's study of Hispanics in Atlanta (1975) demonstrated that long-term Hispanic residents with facility in English, or those who had developed a facility in English, tended to be integrated into the larger metropolitan community. These Hispanic persons may often require services, but they do have access to systems that serve members of the majority culture. Thus, recently-arrived immigrants and/or non-English-speaking Hispanics were assumed to be the subgroup of Hispanic persons most likely to be in need of special or modified services.

To identify these individuals, a list of contact points was developed. These contacts were Hispanic and non-Hispanic individuals and organizational representatives who were knowledgeable about or interested in the Hispanic community. The procedure for developing this list of contacts is discussed below. Once the initial contacts were found, they were then asked to identify others who were Hispanic, relatively new to this country or to the Atlanta region, and/or who had limited English-language facility. Because the sampling procedures used (described below) were based upon social networks, those Hispanics initially identified in turn identified many others who also exhibited these characteristics.

The initial contact list was developed through

interviews with members of the Hispanic community who had been aware of the project from its inception. These persons, in turn, suggested the names of other community workers, Hispanic professionals, grocers, restaurant owners, other business owners, and members of social clubs. In addition, it was known that there is a substantial number of Hispanic physicians in the metropolitan area. Their names were obtained both from the Yellow Pages of the telephone directory and from members of the community. Churches and religious leaders who serve the Hispanic community primarily, as well as others who might have Hispanics in their congregations, were added to the list. Other names were provided by members of a community advisory group after they reviewed a preliminary list. Once the initial contact points were identified, snowball sampling was begun. (The list of initial contact points is summarized in Table 1.)

Snowball sampling assumes that individuals are typically members of social networks. When asking a respondent to specify other individuals or families like themselves, the interviewer is using an informant's knowledge about his or her own social network and community to define that network. In this way, descriptive data about the structure of the community and about members of various networks can be developed. The quality of such information is directly related to the representativeness of the contact points and key informants used to begin the snowball procedure and the rigor with which the social networks within a community are explored.

In addition, the selection of key informants can be used to guide the selection of respondents in such a manner that the sample focuses on certain subgroups or segments of a target population. Hence, a snowball sample can follow the logic of stratification in probability sampling - that is, each social network discovered can be evaluated, and the selection of respondents can be guided to be representative of particular segments of a community.

The snowball procedure was most appropriate for this project, given that the size and geographic distribution of the Hispanic population in the seven-county metropolitan area was relatively unknown. The snowballing technique allowed resources to be concentrated on in-depth interviewing of respondents rather than on screening the entire population to find suitable respondents. Many respondents believed that a large net immigration of Hispanic persons had occurred in the Atlanta area since the 1970 census. However, since the proportion of Hispanics in the total Atlanta population is small, any efficient sampling design would have to locate concentrations of Hispanics prior to selecting respondents or be prohibitively expensive.

The location of these concentrations was accomplished by the selection of initial informants, as described earlier, from all geographic areas within the metropolitan area and from all walks of life. In addition, a special effort was made to include leaders of the Hispanic community as key informants and advisors. After this group of key informants was identified, these individuals were given a brief description of the project and its objectives. They were then asked to supply the names and addresses of persons or households within the Hispanic community which contained recently-arrived immigrants and/or persons with little or

no fluency in English. The persons recommended by the key informants, or the adult members of their households, were interviewed. Persons interviewed were then asked to supply the names and addresses of other Hispanic persons like themselves so that concentrations of persons who fit the criteria could be located. These referrals by respondents provided a chain by which social networks within the Hispanic community might be traced and residential patterns might be documented.

Given the importance of these chains and the need to control the snowball process, extensive documentation of these chains was maintained. When a respondent identified friends, neighbors, relatives, or acquaintances in an area other than his/her contiguous neighborhood, these referrals were checked for possible membership in other social networks already being explored. A confidential file on key informants, the initial interview contacts suggested by the key informants, and subsequent referrals to new address sites by respondents was maintained. All decisions for interviewing sites were made by those conducting the sampling, and interviewers were always given respondent names and addresses to insure that specific social networks were explored.

All key informant interviews were made by highly trained staff, and all interviews were conducted by Spanish-speaking interviewers who were carefully selected and trained. A draft survey instrument was developed using suggestions from some of the members of the community advisory group. The draft instrument was pretested by the interviewers and reviewed by the sponsors of the project. After review and pretesting, the instrument was finalized and used in over 500 interviews with Hispanic persons in the Atlanta area.

Results from the Use of the Sample Selection Criteria and the Snowball Sampling Technique

Further Definition of the Study Population

The definition of the study population should be clearly understood. In attempting to locate and identify Hispanic persons who were most likely to be in need of special or modified services, it was assumed that length-of-residence, English-language facility, and income were all positively associated with the ability to use services designed for members of the majority culture. That is, it was assumed that length-of-residence was related to acculturation and that the more acculturated, the greater the English-language facility, and the higher the income of Hispanic residents, the less likely it was that special or modified services would be required. Therefore, in establishing initial contact points, these general criteria were mentioned. Recent migration and language facility, however, were stressed, in order to avoid an emphasis on income, which could have caused some key informants to be hesitant to provide full information.

To have established concrete operational definitions of the criteria before the survey would not have been feasible. It would have been unlikely that many informants would have been able to provide precise information, so it was decided to guide the snowball sampling procedures using general references to the criteria. The social networks defined by this process were periodical-

ly cross-checked with existing information on Hispanic residents,³ and 518 respondents were identified and interviewed. The family income, length-of-residence, and English-language facility of each of these 518 cases were examined.

Only cases that met none of the three criteria were excluded from the analysis. It was assumed that, even if family income was high and length-of-residence long, lack of English-language facility could inhibit access to services such as emergency medical care. On the other hand, if the subject had some English-language facility, yet his/her family had arrived relatively recently and had a low income, access to services might be inhibited by lack of resources and familiarity with services. Thus, exclusion seemed justified only in cases where none of the criteria were met.

Using this rationale, a series of sorting procedures were employed. Those families which used English in the home were identified, and, from that group, those having family incomes above \$16,000 (for a family of four) and those having lived in Atlanta for over four years were excluded from the analysis.⁴ The 22 families excluded met none of the criteria and were not considered to be members of the study population. These sorting procedures, then, defined a sample of 496 cases, and these cases are described below.

Characteristics of the Sample

The cases included in the sample include short-term as well as long-term residents of the Atlanta area; length-of-residence in the Atlanta area ranged from less than a month to over twenty years. The majority (74%) of the households, however, had been in the Atlanta area for six years or less. (See Table 2.) The majority (58%) had moved to the Atlanta area from elsewhere in the United States, typically from Florida (principally from Miami), large urban centers in the northeastern United States (usually in New York and New Jersey), and from urban and rural settings in Texas and California. When asked why they had moved to the Atlanta area, respondents frequently mentioned as reasons better job opportunities (31%), having relatives in the area (41%), and having friends in the area (19%).

Thus, it appears that this sample of Hispanics in the Atlanta area is typified by secondary migration patterns that were encouraged by personal contacts and perceptions of economic opportunity. In addition, the migratory patterns reflected in the sample are consistent with previous anthropological research (Hill, 1975) which notes that initial residential choice within the region appears to be based upon personal contacts and cultural identification. Seventy percent of the households in the sample had moved at least once since arriving in the Atlanta area, and typically, the first place of residence was in northeast Atlanta, most often in the Broadview Plaza or Midtown areas of the city.

Even though the sampling procedures were not designed to identify a sample which reflects the full range of diversity within the Hispanic community in Atlanta, it does include a rather heterogeneous group. The dominant use of the Spanish language, however, is apparent. Eighty percent of the respondents indicated that Spanish was used in conversations among family members at home, and another 14% said that Spanish was used about half

the time at home. When asked what language was used when friends visited their homes, an even higher proportion indicated that Spanish was the dominant language used (84%). And when asked what language was used by family members when outside the home, 80% indicated that Spanish was used.

Beyond the dominant use of Spanish, however, the characteristics of the sample exhibit a great deal of diversity. While a majority were of Cuban origin (53%), significant numbers of persons of South American (17%), Mexican (11%), and Puerto Rican (9%) origin were heads of the households included in the sample. Smaller proportions of the heads-of-household number were Mexican-Americans (2%) and persons of Central American origin (3%).

Annual family incomes ranged from very low to relatively high, with the majority being below the mean family income for the area as a whole (64% below \$16,000); and 34% of the households in the sample had incomes of below \$10,000 a year. The number of persons per household (3.4 persons) was higher than is typical of the region, and in over half of the households (52%), more than one person was employed. Relatively low proportions of the households received income from social security, unemployment insurance, veterans' benefits, or other forms of social assistance and pensions.

The households in this sample, then, appear to have moderate incomes, typically have more than one person working, have a relatively high number of persons in the household, and use public sources of income support relatively infrequently. Yet unemployment among the sample households was relatively low (5%).

Other characteristics of the sample suggest that this group exhibits indications of a potential need for services. Sixty-eight percent of the employed heads-of-household were blue-collar workers, while approximately 46% of all those employed in the five-county region in 1970 were blue-collar workers (U.S. Bureau of the Census, 1972: 43). Forty-five percent of the heads-of-household in the sample had not completed high school, while only 11% were college graduates. Sixty percent of the households included at least one child (18 years of age or younger), and 20% included at least one elderly person (65 years of age or older). Additionally, only 22% of the dwellings in which the families lived were judged to be "sound."

Once again it is important to note that the sampling procedures used in this survey were not designed to permit description of the total population of Hispanics in the Atlanta area. The procedures employed were designed to describe and locate Hispanics in the region who were likely to be in need of special or modified services. As demonstrated in Table 2, the characteristics of the sample reflect this purpose. While the sample includes a diverse group of individuals and households, there are many indications of potential service needs.

Residential Location of the Sample

One of the objectives of this project was to identify geographic concentrations of Hispanics most likely to be in need of special or modified services. The residential distribution of the

Hispanic community was assessed in a number of ways. First, the referrals obtained through the snowballing procedure were geocoded. Second, each completed interview was also geocoded using county, municipality, census tract, and census block identifiers. Third, each respondent was asked to estimate the number of Hispanic families living within one-half mile of his/her residence. Thus, geographic clusters of Hispanic families' residences could be identified through analyses of referrals, location of interview sites, and the perceptions of the Hispanic residents themselves.

Referrals from respondents were assessed weekly in order to insure continuity in the tracing of social networks as well as to insure that new networks leading to additional geographic locations were discovered and explored. Early in the sampling process, it became apparent that the referrals were clustering in census tracts in northeast and southeast Atlanta and in northwest DeKalb County. This clustering continued to occur throughout the fieldwork stage of the project despite the care taken to pursue referrals in other areas of the region. Therefore, it appears that large portions of the Atlanta area's Hispanic residents meeting the study criteria reside in these areas.

In order to define residential clusters, contiguous census tracts with relatively high numbers of referrals and interviews were aggregated, and the resulting aggregations were cross-checked with respondents' perceptions of the numbers of Hispanic families living in close proximity. The seven residential clusters identified in Table 3 resulted from this analysis. In general, the clusters defined by numbers of interviews in each area are consistent with both the numbers of referrals obtained and, as is shown in Table 3, with the perceptions of respondents.

Two exceptions should be noted. The areas defined as having scattered interview sites were defined by deleting those cases included in the clusters and aggregating the remainder of the interviews according to politically defined jurisdictions. This method was employed as a means of organizing information given by residents of areas on the periphery of the clusters who would perceive high concentrations of neighboring Hispanics but could not be identified as living in one of the clusters. This appears to have been the case with respect to respondents living in scattered sites in the City of Atlanta (#8, Table 3).

The second area where the perceptions appeared inconsistent with other indicators of density is Gwinnett County (#14, Table 3). The mean estimated number of Hispanic families was quite high, yet there were relatively few referrals and interviews in Gwinnett County. This anomaly is explained, perhaps, by the fact that five of the seven interviews in Gwinnett County were in tract 504.00; and this, in turn, may indicate that there is a rather dense, yet proportionately small, cluster of Hispanic residents in tract 504.00. However, because of the few cases in this tract, defining this area as a residential cluster comparable to those areas defined as such in Table 3 seemed unjustified.

After developing the geographic definitions of the residential clusters, the characteristics of the Hispanic residents of each cluster were analyzed. These characteristics, along with an

analysis of available and accessible services, were then used to identify unmet service needs.⁵

DISCUSSION AND CONCLUSIONS

The needs-assessment example from Atlanta, Georgia, demonstrated how reputational sampling techniques can be applied to yield useful information about clusters of residents with special needs that are dispersed in a large metropolitan area. Key to the application of the technique is the care exercised in the selection of the initial contact persons, to insure that they are representative, and in monitoring the sociometric chains of respondents that result from the snowballing process. As the sampling progresses, periodic evaluation of how the snowball is developing (in terms of the geographic areas being covered) allows the researcher to make selections among the potential future respondents (suggested by the persons previously interviewed) in such a fashion as to maximize the geographic scope of the sample. This management of the reputational sampling design will prevent the potential problem of encountering circular chains of respondents, in which the names suggested by current respondents tend to refer to persons in sociometric chains already traced. Records that give the names of the initial respondents who began each chain of interviews and that detail the connections from one respondent to the next are a useful tool for the researcher in the management of the sampling process. Plotting each interview site and the chain of referral linkages on a map of the area studied is also helpful. Such a map can identify geographic areas in which interviews have and have not occurred, and this information can be used to evaluate the comprehensiveness of the sample.

If a group of key informants who were knowledgeable about the sample community was used to start the snowballing procedure, the resulting sample can be checked with their perceptions of the distribution of persons or households that fit the sampling criteria in the geographic area examined. This comparison may alert the researcher to areas not covered by the sample due to bias in the selection of initial respondents. If such bias is found during the snowballing process, then the researcher has the opportunity to guide the snowball into other geographic areas by carefully selecting the locations of the next round of interviews.

One special problem that existed in the Hispanic project concerned a possible bias in the sample which resulted from an unwillingness on the part of respondents to suggest illegal immigrants as future respondents. Interviewers reported that some respondents stated that they knew of persons who met the sample criteria but then refused to supply their names and addresses. After a few such responses were reported to the interview supervisor, one interviewer pressed a respondent for the reasons for his refusal and found that the respondent was afraid that illegals would be reported to the local immigration authorities through the survey project. Given this problem, a decision was made to train interviewers to cope with these fears by using several different strategies: the respondents were assured that the survey did not concern itself with questions of legal/illegal immigration status; the confidentiality of research files was stressed; and respondents were shown that notations concerning immigration status

were never made during the interview.

These strategies were reported by interviewers as not being particularly effective, so an attempt was made to use the information networks of the Hispanic communities in the study areas. Community leaders in these areas were requested to "put the word out" that the research project would help their communities and that the project interviewers were not immigration informants. The project results suggest that this strategy was at least marginally effective, since the rate of referrals to an area known to include a large concentration of illegals increased after its use. To support this strategy, the project also made an attempt to match the nationality of the Spanish-speaking interviewers to that of the neighborhood in which they were conducting interviews. This matching was done in response to suggestions from a local anthropologist who believed that Cuban-heritage interviewers would have particular problems gaining trust in Mexican-heritage communities. Matching was found to be particularly effective in neighborhoods with large concentrations of Mexican-heritage Hispanics.

To conclude, given the sampling problem of locating a population that has special needs and characteristics, that is relatively dispersed, and is a small proportion of the general population, the reputational sampling technique is one approach that can yield useful data. Given limited resources, this technique is most appropriate when the intent of the research is to discover concentrations of a characteristic, rather than to develop precise estimates of a criterion for the population. Obviously, a carefully designed random sampling technique that stratified on the basis of the criterion would be desirable over the reputational design described above. However, for planning purposes and exploratory analyses, the application of the lower-cost reputational technique may yield useful information to guide resource allocation. Data from a reputational sample may also serve as a precursor to a random sampling design by locating concentrations of people who meet the criteria, which can then serve as clusters to be analyzed in further detail.

FOOTNOTES

¹Classic examples of this technique in political science, sociology, and anthropology include the study of elites and patterns of community stratification and power. (See Hunter, 1953.)

²Sudman (1965) suggests totally enumerating the population of rare elements using a reputational approach when the incidence of the criterion is very low, as a means of eliminating the representativeness issue and the possibility that selection bias affects sampling variances. This response to the representativeness issue assumes a satisfactory enumeration (list) of the population or that an enumeration can be completed via exhaustive snowball sampling of the population. However pleasing this solution may be from a mathematic or theoretical standpoint, the practical problem of knowing when the snowballing procedure is complete still remains for the researcher. This problem, coupled with the impact of interview refusals, may make enumeration impractical in the field.

³General geographic areas containing recently-arrived, Spanish-speaking, and in some cases, low-

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income families were obtained from the client records of several public and private agencies. Anonymity and confidentiality were protected when the records were examined.

Upon analysis of the survey data, an item regarding the language used in the home appeared to be the most discriminating indicator of English-language facility. Four years was the mean length of residence for the entire sample, and \$16,000 is defined by the Census Bureau as the income level required by a family of four for an "austere" middle-class lifestyle.

A full description of the procedures used and the findings of this study may be found in The Assessment of Special Service Needs Among the Hispanic Population of the Atlanta Area (Center for Urban Research and Service, 1979).

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TABLE 1
DISTRIBUTION OF INITIAL CONTACT POINTS

I. BY CATEGORIES:		II. BY COUNTIES:	
Social/Human Service Agencies	13	Fulton	213
Education-Related Agencies/Persons	11	DeKalb	100
Hispanic Community Persons	139	Cobb	17
Hispanic Social Clubs	8	Clayton	31
Hispanic Physicians	99	Gwinnett	9
Other Hispanic Professionals	7	Douglas	3
Hispanic Restaurants/Grocers	24	Rockdale	2
Other Hispanic Businesses	21		
Churches and Religious Organizations	53		
			TOTAL 375
TOTAL	375		

TABLE 2

CHARACTERISTICS OF THE SAMPLE			
Length of Residence in Atlanta area:	Number of Persons in Household:	Head-of-Household Nationality:	
One year or less 13%	One 10%	Five 15%	Central American 3%
Over one year, but less 3 years 19%	Two 21%	Six 5%	Cuban 53%
Three to six years 42%	Three 18%	Seven or more 4%	Mexican 11%
Over six years 26%	Four 27%		Mexican American 2%
Language used by Family at Home:	Social Assistance Received:		Puerto Rican 9%
Spanish 80%	Social Security 20%		South American 17%
English 6%	Unemployment 1%		Other 5%
About 1/2 of each 14%	Veterans' Benefits 2%	Head-of-Household Formal Schooling:	
Family Income (Annual):	AFDC 4%	Did not complete high school 45%	
Below \$5,000 11%	Other Public Assistance 3%	High school graduate 24%	
\$5,000-\$9,999 23%	Other Pensions 6%	Some college 20%	
\$10,000-\$15,999 30%	Employed Persons in Household:	College graduate 7%	
\$16,000-\$24,999 29%	None 12%	Three 8%	Masters degree 2%
\$25,000 and over 7%	One 36%	Four or more 3%	Professional degree 2%
Number of Elderly (65 years or more):	Two 41%		Children in Household:
None 80%	Occupational Status of Head of Household:	None 40%	Two 24%
One 15%	White Collar 32%	One 21%	Three 11%
Two 4%	Blue Collar 68%	Four or more 4%	
Three or more 1%		Percentage of households with at least 1 unemployed person: 5%	
		Housing Conditions:	
		Sound 22%	Unsound 16%
		Unsound but repairable 61%	

TABLE 3

(This table shows the dispersion of interview sites by giving the location of the interview, then the number of completed interviews at the location, then the mean estimated number of Hispanic households within 1/4 mile of the interview site.)

Residential Clusters			Scattered Residences by Area (Excluding Clusters)		
Doraville	33	7.2	Scattered in the City of Atlanta	43	6.7
N.W. DeKalb	56	8.0	Scattered in North Fulton County	6	.7
West-Central DeKalb	41	4.6	Scattered in South Fulton County	20	
Broadview-Buckhead	70	17.7	Scattered in DeKalb County	87	1.4
Midtown-Ponce de Leon	29	4.6	Scattered in Cobb County	16	3.1
Cheshire Bridge, S. to Ponce de Leon	31	4.9	Scattered in Clayton County	23	1.0
Grant Park-S.E. Atlanta	30	7.9	Scattered in Gwinnett County	7	9.8
ALL CLUSTERED INTERVIEW SITES	290	9.1	Scattered in Douglas County	4	3.3
			ALL SCATTERED INTERVIEW SITES	206	3.4
			TOTALS FOR ATLANTA AREA	496	6.6