

**ETHNOGRAPHIC EVALUATION OF THE  
1990 DECENNIAL CENSUS**

**REPORT #4**

**RESIDENTIAL PATTERNS IN A RURAL BLACK COMMUNITY**

**Final Report for Joint Statistical Agreement 90-03**

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### Introduction and Statement of the Problem

The research site which provides the data and the information for this report is a predominantly Black rural town which operates within a complex mixture of formal and informal social arrangements. The significance of these arrangements for censusing emerges in a system of overlapping mailing, addressing and residential patterns which defy many of the assumptions of established research methodologies. This is evident in the residents' notions of 'living place' and 'staying place'; and in what will be referred to in this report as location patterns. These location patterns provide a classic example of informal adaptations to formal rules and procedures. An examination of ethnographic and census results indicates that some social arrangements in this community may have a significant effect upon census coverage overall, and upon the coverage of particular types of individuals. Coverage effects emerge in differences in census and ethnographic household coverage and in differences in census and ethnographic individual coverage.

This report describes ethnographically the behavioral characteristics of locating patterns and analyzes quantitatively the primary correlates to the same. The report begins with descriptions of the town and the research site. This description includes the primary and most important factors related to the analysis and conclusions of the study. The section on procedures is kept short as the report discusses sources and type of information as the subject arises.

### Characteristic of The Town

The town of Langston is located in Logan County in the State of Oklahoma. It is the home of Langston University. Logan County is in the central part of the State and Langston is approximately fifteen miles northeast of Guthrie, the old Territorial Capital and now county seat. Logan County is a predominantly

rural county with the largest town and county seat numbering 10,312 in the 1980 Census. The last census gives the total population of the county as 26,881. There are very few stores or services offered in Langston. Residents often travel 20 miles to Stillwater, or 15 Miles to Guthrie, or 40 miles to Oklahoma City to meet most of their consumer and personal service needs (e.g. medical service).

The only major river in the region, the Cimarron, bisects the territory between Stillwater and Guthrie, passing about a mile north of Langston. The eastern political boundary of Langston makes up part of the Indian Meridian, or the old boundary separating what was once Indian territory from Homestead lands. Langston is a historically black town. Like some other towns in Oklahoma, Langston grew out of the combined influences of the Homestead Act, the great land run, and pre- and post- Civil War events. Some of the descendants of the original founders still reside in the town, and own property there. The population includes in-migrants who are employed by the University, students attending the University, and permanent residents. For the most part, residents are tied to the community by tradition and/or history; or they are tied to the community by virtue of their relationship to Langston University. Census coverage varies for each of these groups.

The western and southern borders of the town are defined by the continuation of property owned by Langston University, which wraps around the southern and western sides of the town. The town proper and the University are separated by a State Highway. The highway itself is not part of the political boundary of Langston, but it is significant in that it distinguishes the town proper from the University. Langston University occupies the northwest corner

of the community. The state highway which separates the town from University also connects the three towns Guthrie, Langston, and Coyle. Since the 1980 Census, Langston annexed the land area that the University occupies.

Only one mile separates Coyle from Langston. Langston and Coyle are close enough to be considered binary or twin towns, so to speak. Each town has its own post office, police, and city administrations. Probably the most significant distinguishing characteristic for these two towns is the fact that Langston is predominantly black and Coyle is predominantly White.

#### Methodology and Procedures

Information for this study comes from four sources. Direct observation, interviews with residents, interviews and conversations with informants, and the results of a mock survey. The data and information gathering process involved four persons utilized at different points in time. The research proceeded in five phases each of which is described in this report. These are: (1) site identification and description; (2) dwelling, unit, and address identification; (3) resident and informant interviews; (4) a mock survey; and (5) unobtrusive observations of residents and neighborhoods. The detailed procedures for each phase are presented with the results.

The four field workers included one permanent and lifelong resident of Langston. This individual provided information that only such a person could provide. In most instances older residents would not give detailed information unless this person was present at the interview. In fact, having this insider made the interviews appear more a friendly visit than an interview. In these instances our presence did not interrupt any activity which was previously

taking place. e.g. cooking, watching television, etc. The resident fieldworker was also used to 'interpret' many of the unobtrusive observations. Association with this person lead to the acquisition of other informants. Many informants were persons known to this researcher previous to the study, but most of these are connected in some way to Langston University or to Oklahoma State University.

#### The Research Site

Information on the characteristics of the Site was collected by direct observation and from interviews with residents. Observations were made by driving around and walking around the town and the neighborhoods. Resident informants provided information on characteristics of neighborhoods and residences. This includes information on which units were rented and which were owned, as well as which units were occupied (temporarily or permanently) and which were vacant (temporarily or permanently).

The site was selected to include a combination of the different types of very small neighborhoods which adjoin each other. One of these neighborhoods is old and contains many converted units, irregular housing, trailers located behind single family units, and buildings not on a standard grid system. Most of the housing in this area would range in age from 70 to 10 years, with very few having been built within the last 25 years. The newest buildings in the older neighborhood tend to be recently built government subsidized single family and duplex units. Other newer dwellings are irregular housing or trailers. One neighborhood for which all dwellings are on the standard grid system is the newest residential addition to the town and was built with the

assistance of a government funded program. Other housing which is either subsidized by state or federal funds, is scattered throughout the town.

#### Block Group Analysis

The site for this study was selected to include both types of areas. The older neighborhood is located in a section of town referred to by students and migrants as "the village". The village is populated by older residents and by longtime residents. It contains much of the stable population. For purposes of analysis the village composed of all block numbers except block numbers 69,78, 82,83,84,85, and 86. Those blocks are assigned to the town. Some of these residents have built new houses in this area so that the area is peppered with some old and some new housing--mostly old. The converted units and trailers in this area are usually occupied by students who attend the University, and are often located on the property of a permanent resident. These types of units are known rental units whose occupants tend to be short-term occupants. Rental agreements are usually informal, and stable residents pay little or no attention to short-term residents. For example, a resident of Langston, who provided information for this research, knew which houses were rent houses. Concerning one of these rent houses, we approached the "known" owner for information on the last occupants who had recently vacated the property. We were told that they were students, but the owner stated that there was no formal lease or rental agreement with specific information. This is not an atypical situation. Longtime stable residents can identify other longtime stable residents. They have little information on others.

While older neighborhoods do not display any social class or income

variation in residential patterns, there is one middle-class residential area in the vicinity but it does not lie within the political boundaries of the town. The significance of this lies in the observation that some of these persons give a Langston address because they receive mail through the Langston Post Office. Most of this housing would have been built within the last twenty years. It is mostly populated by persons who are employed by the University.

Charts one and two show coverage characteristics for the village and the town, respectively. For each chart the groups were divided into those persons over age 23 (older), and those 23 or younger. This was an attempt to examine patterns for the more probable stable residents many of whom are not students. The distribution indicates that matching was more successful among the older group for both the village and the town. Reasons for this will become clearer when the college age group is examined separately. Ethnographic observations have revealed that the older population of Langston is the most stable. This population resides there most of the year and tends to have stable, though sometimes unconventional, mailing routes. This would help to explain why this group is better represented amongst matched cases.

#### Address and Residence: Patterns of Location

It is generally assumed, in society at large, that when a person has a residence and/or an address they can be located at one of the same either in person or through the mail system. Where address refers to "home address", it is generally expected that residence and address will refer to the same location. One's residence is typically assumed to be the place where one lives at least some of the time; one's address is assumed to be a place where one

receives mail. Additionally, addresses are formally regulated entities to the extent that individuals are not expected to assigned them at will to any particular dwelling. The extent to which the operating definitions and applications of the terminologies address, residence, and where one lives deviates from what is expected, the more problematic it becomes to locate persons.

For the community under study, the social significance and usage of the term address is most evident in the fact that many residents did not know the address of the dwelling in which they currently resided. Residents knew where they received mail, and they knew where their place of residence was located, but often they could not identify the address of that residence. In some instances residents could not even identify the name of the street on which they lived. Most of the information on mailing address was obtained from the respondents, as this was the only viable method for obtaining such information. In interviews with respondents, each person was asked to give their mailing address, or some address where they regularly received mail. Respondents were very reluctant to give out this type of information and were skeptical about how such information would be used. One observation is clear: responses to the questions: "What is this address?", and "What is your address?" bring different responses.

The nature and variety of responses indicate that important distinctions which must be made in the typical usage of the word "address". For many residents, address refers to the manner (not necessarily the place) in which one receives mail. This can be (1) a post office box located in the town in which the person resides; (2) a post office box located in a neighboring town:



(3) a mail box on a rural route which is located at the place where one lives; (4) a mail box on a rural route which is not located in the place where one lives and; (5) the place of work. For most persons at least two of the above can be identified. More typically, three of the above can be identified.

Similarly, residence has several meanings or usages depending upon the situation. For receiving mail from formal organizations (e.g. creditors) residence refers to the place where one receives mail. For informal situations (e.g. friends) which require locating the individual face-to-face, residence refers to the place where one lives most of the time. For long-term contact purposes, residence refers to a place which can best be characterized as "Somebody here knows where I can be found, and they won't be moving anytime soon."

Consider a situation where the following conditions exist: (1) residence does not necessarily indicate where one lives or receives mail; (2) where address does not necessarily indicate where one receives mail or where one lives; (3) where one lives may not have an address which coincides with where one receives mail; and (4) where some addresses may not be properly assigned. This describes some part of the situation in this research site. Circumstances are further complicated by the fact that this situation tends to vary by age of individual and by household composition. This is the complex of factors to which the remainder of the report is devoted. It is important to emphasize that this seemingly confusing situation poses no significant problems for residents; and interestingly enough, it does not appear to pose any problem to the mail carrier. An outsider attempting to locate individuals could easily

view this situation as an elaborate conspiracy. It is not. It is simply that the rules for assigning place are not necessarily the convention.

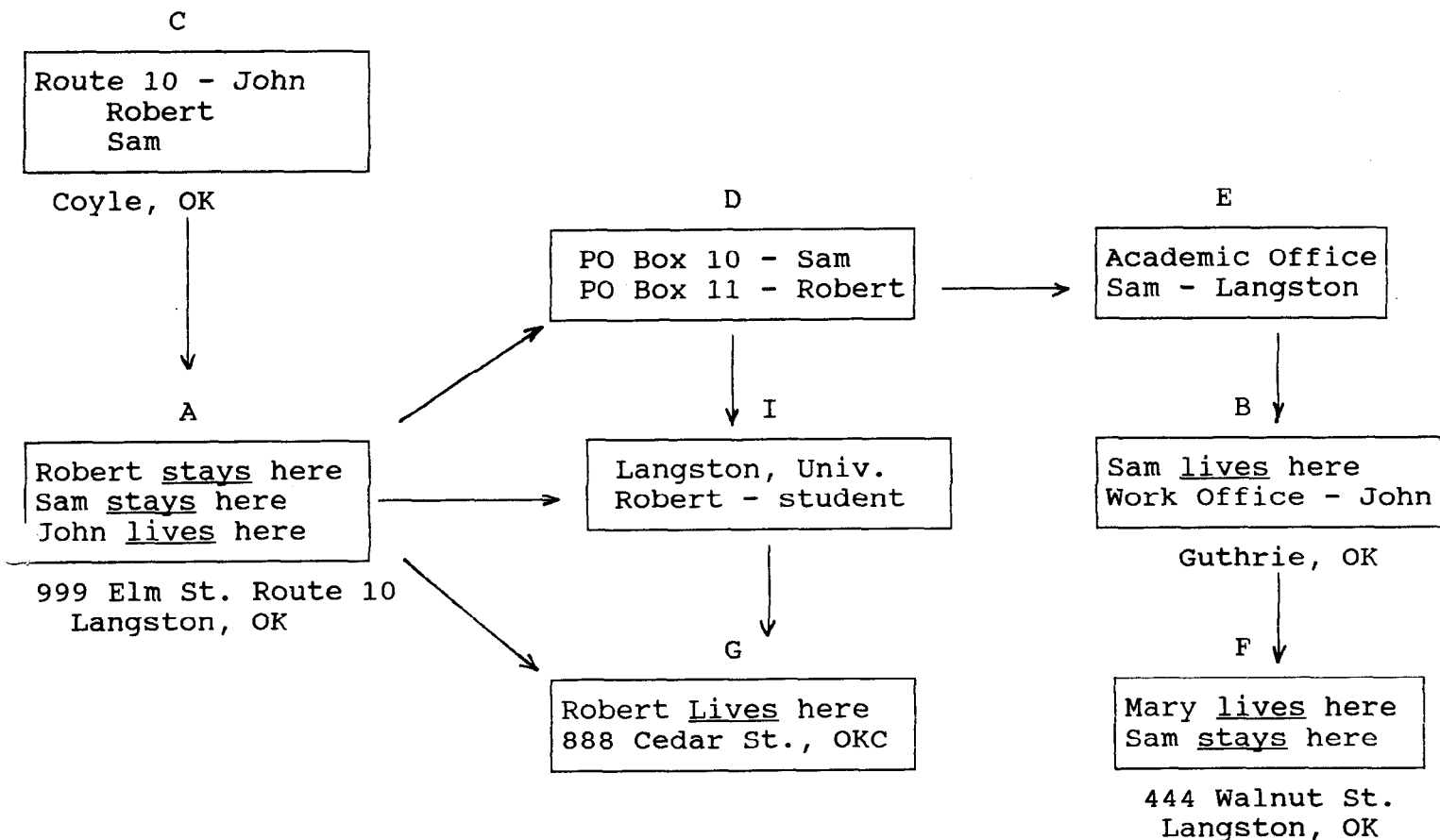
Consider the combination of addresses and places in Figure One which typifies many respondents in this study. This diagram represents information on the person referred to here as Robert (not the actual name).

Robert is a 21 year old student attending Langston University. He is related to John, who is a permanent resident of the town. Robert 'stays' with John while attending school. To stay refers to a place where one often sleeps and attends to personal needs (e.g. bathing). The stay can be short term, long-term, and it may be sporadic. Also one can stay at more than one place. The address of the single family dwelling where Robert stays has multiple entrances and is located at 999 Elm Street. John has an address for mail delivery from Coyle at Route 10, Langston Oklahoma. Robert has Post Office Box #11 at the local Langston Post Office. Robert's parents live at 888 Cedar St. in Oklahoma City. When asked by researchers, Robert lives at 888 Cedar St. Robert possibly receives mail at four places (possibly five, it could not be determined whether he also receives mail at Langston University). Robert stays at one place in Langston and lives in another in Oklahoma City. For Robert, the answer to the question: "What is your residence?" has multiple interpretations depending upon the motivation for and source of the question. With regards to 'place' Robert can be personally (face-to-face) located in places A, I, or G. He can be contacted through sources A, C, D, and G.

The pattern of residence and mail in Figure one represents the location pattern for Robert, John, and Sam. A location pattern is the set of mailing and residential factors which make it possible for one individual to locate another. This diagram indicates the complex of addresses and places that would characterize many of the residents of the village. The result for censusing in this somewhat altered case is as follows.

- (1) Census missed Robert. Researchers found Robert as someone who was "staying" with John at the time, and had attended Langston University during the Spring semester.
- (2) Researchers listed John as residing at 999 Elm st. and with mailing address at post office box. Census listed John with P.O. Box address.
- (3) Census missed Sam at Langston; but may have found him at Guthrie.

FIGURE ONE:  
TYPICAL LOCATION PATTERN



Robert 21 years old:

Stays at A  
Lives at G  
PO Box at D  
Attends at I  
Mail at A

John 45 years old:

Homeowner at A  
Works at B  
Receives mail at C

NOTE: Age characteristics are approximate.

Researchers listed Sam at 999 Elm st.

While Census, in general found more college age people than the researchers, they also probably missed more. Results of the study were tabulated to allow for comparison of characteristics between Census and Ethnographic findings and between matched and unmatched cases. Because Langston is a college town, differences in samples indicate that the time of year that the samples were taken is a significant factor. As chart three indicates Census found more college students due to the fact that the count was made before the regular semester ended. It is important to note that the largest percentage difference for samples is for the college age group. Considering that Census conducted its' study before the semester ended the total numbers for college age are probably quite low. The match differences related to age are shown again in Chart four. The older population is again, easiest to locate.

#### Types of Dwellings

Information on dwellings was obtained by direct observation and by interviews with residents and informants. Much of the information on dwelling was discovered later in the research process as many of the Census guidelines and suggestions were not applicable in this situation.

For purposes of the ethnographic description, dwellings are of four types. (1) Single family dwellings built on a standard grid system; (2) Duplexes or apartment buildings built on a standard grid system; (3) Irregular single family dwellings which are not on a standard grid system; (4) irregular

multiple family dwellings which are not on a standard grid system. In many instances dwellings are difficult to categorize and can only be described. Several houses were thought to be duplexes or converted multiple units but were actually single family units. These are instances in which all or part of the dwelling was built by the occupants themselves. Some of these dwellings contain multiple entrances, and were originally thought to be multiple units. In one such instance, the number of cars parked at the location was also misleading since the resident was an auto mechanic whose shop is also his residence.

In another instance an outside metal storage unit had been converted into a living unit. This could only be identified by the presence of a gas meter and an electrical hookup. In one such instance, the converter unit had a TV antenna. It was impossible to determine what, if any, address corresponds to these units. Older homes are often placed where they are difficult to recognize, see, or identify. Often there is no formal drive way, and there are visual obstructions.

#### Mail System

Most residents have post office boxes or they are on a rural route system. Some have both. For this reason, the place of residence is seldom associated with address used for mailing purposes. Mail boxes can be found in front of some residences for mail routed through the adjoining town of Coyle. Therefore, rural route addresses may appear to be Coyle addresses. There is, apparently, a sense of sharing and an agreed upon understanding of the use of the rural route. In some instances there was more than one mail box located at

a particular residence. These mail boxes sometimes have different names and numbers on them. In one instance the number on the box corresponded to the street number on the house, while the other two boxes did not correspond to any house number in the vicinity. Informants indicated that one individual was receiving mailing on the route number for other people. Other residents receive mail through general delivery and pick up their mail in Coyle or in Langston.

A noticeable problem in finding and locating persons stems from the degree of irregularity in the system of addresses. This irregularity stems from two sources. (1) Irregularity in housing location. There were a number of dwellings which could not be assigned a regular address, or which have not been assigned an address. For example, one apartment building (which has an address) has three trailers located behind it, which do not have an address, except that of the apartment building in front of it. Only by direct observation could one know about these situations. (2) Irregularity in the use of addresses. This is evident in the observation that Census found so few addresses. The results of the data indicate that this greatly complicates the matching process. Of those addresses census identified, they were primarily post office box numbers. These two factors of irregularity of address, and housing location interact with the characteristics of resident.

Chart five shows the distribution of unit types which appear as part of the address. Clearly post office boxes are typical for village as well as for the town in general. Since most of this information was missing for Census, an adequate comparison for matching is not possible.

### Summary and Conclusions

The most significant factors for Census Coverage in Langston are Age of respondent, permanent or nonpermanent residence in Langston, multiple addresses, and unconventional housing arrangements. College age persons who reside in Langston are mostly students. These students are more likely than permanent residents to live in converted housing with no discernible address. Students are more likely than permanent residents to list other places as their address while they are "staying" with someone else. These are characteristics of students who do not live on the Langston Campus in dormitory housing. Additionally, permanent residents tend to view students almost as visitors to the community, and are not likely to consider them as "living" there. The Chart six shows the distribution of unmatched individuals by age. The young group (which includes children in this instance) shows that there is greater consistency in Census and research findings for the oldest group. In addition Census missed more males than females. The implication of these findings is that Census count in Langston is probably least accurate for college age persons, particularly males. Several points regarding the observations and information provided by this data are important. These are as follows:

1. The research area was well covered by Census in the sense that many buildings and housing units in the area appear to have been found. The irregularity in housing probably accounts for Census failure to find all subfamily units within a building. This is particularly true where houses have been subdivided into apartments. The data indicates that where Census had complete addresses 84% of persons were matched. Where Census had incomplete addresses only 15.4% of persons were matched. The lack of addresses present on Census documents makes the full extent of accurate coverage difficult, if not impossible, to determine.
2. Where Census found both building and units, they tended to miss the more mobile persons, which are college students. The data indicates that the older age persons are more likely to be matched. This is in part due to the fact that this research was conducted during the summer,

when school was not in session. This is also due to the fact that these persons were probably present at the time of the Census, but were not named by any respondent as resident. It should be pointed out that a population pyramid constructed from either the Alternative Enumeration or the Census data would be contrary in structure to what would normally be observed for a college town age pyramid.

3. Some errors were generated from the mistake of assigning the same research code block number to more than one block. This problem arose because the research site was located in more than one ARA. This coding caused the number of housing units in these blocks to be misleading. Matching is still possible in these situations if the unit is not vacant and if the unit has an address. Where the block numbers for a housing unit were different on the census compared to the Alternative Enumeration, or where address was missing in the census data and the unit is vacant, adequate matching is very difficult. Confusions about the block assignment due to either the research block coding combinations or to incorrect location in the census data made it difficult to make a precise judgement on the location of buildings, even though we returned to the area several times after receiving the match report.

#### Recommendations

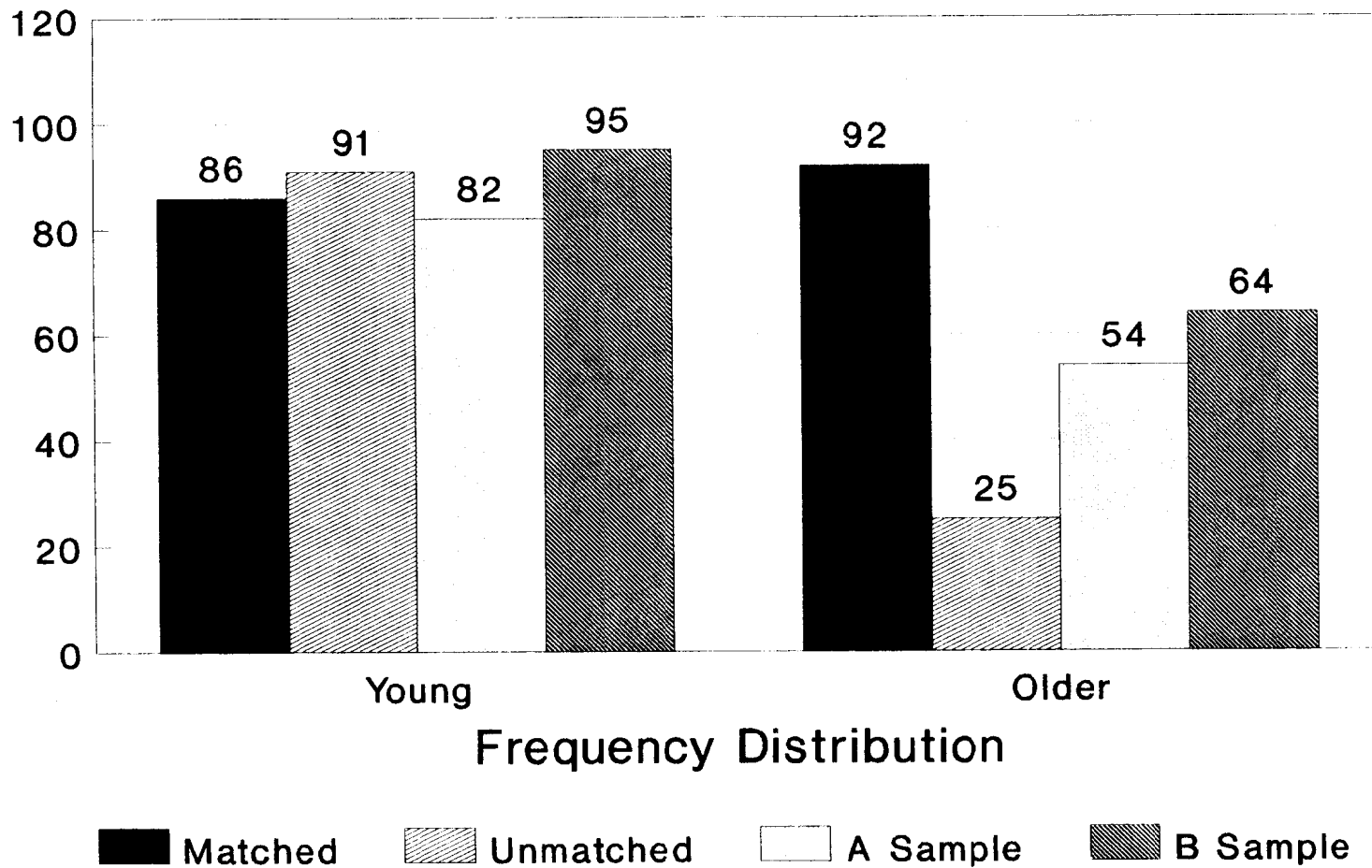
1. In circumstance of this nature, the address list might best be generated by locals. Alternatively, enumerators should be required to list the address of the place where persons are being enumerated.
2. This recommendation is in some ways conflicting with the first one. The results of a mock survey, using addresses for the research site, had a return rate of approximately 22 persons out of 190. It had a return to sender rate of 12 out of the same 190. This would tend suggest that addresses are of little use in this situation. Field enumeration is strongly suggested.
3. Vacancies without addresses should be carefully scrutinized. This could contribute to incorrect assessment of household coverage. This has been the case in this research.
4. Enumerator instructions should include more probing questions regarding "residence", and might consider more flexibility in the definition in certain places or under certain circumstances.



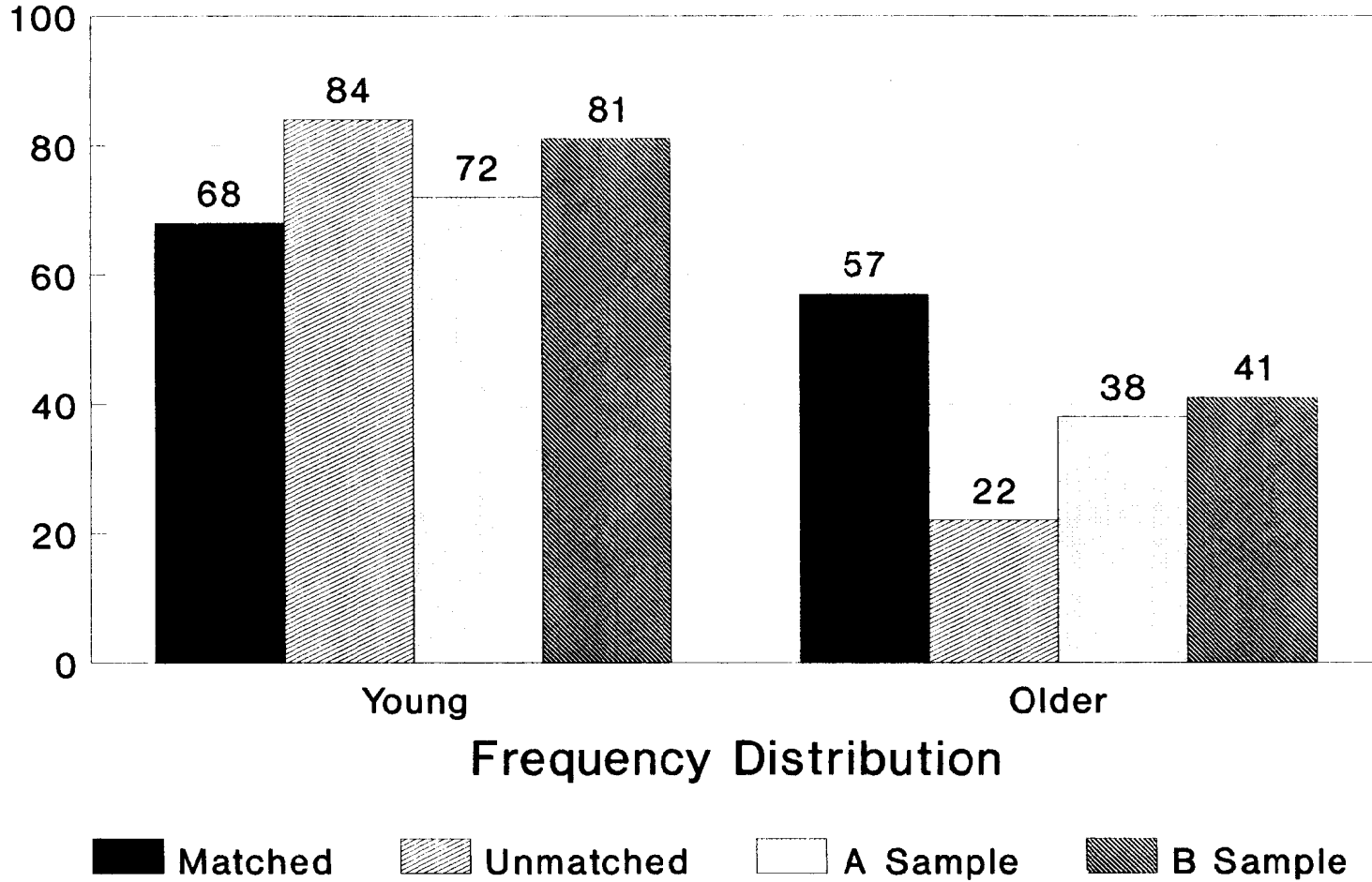
Charts Appended:

- One: Coverage Characteristics for  
Village: Younger and Older Age Groups
- Two: Coverage Characteristics of Town:  
Younger and Older Groups
- Three: Age Group Distribution: Both Samples
- Four: Matched and Unmatched Cases:  
Distribution by Age Groups
- Five: Unit Types for Neighborhoods: Both  
Samples Combined
- Six: Unmatched Cases: Distribution by Age Group
- Seven: Age Group and Neighborhood: Percent  
Distribution
- Eight: Age Group: Distribution for Unmatched Cases
- Nine: Unit Type: Distribution for Unmatched Cases
- Ten: Completeness of Address for Residence

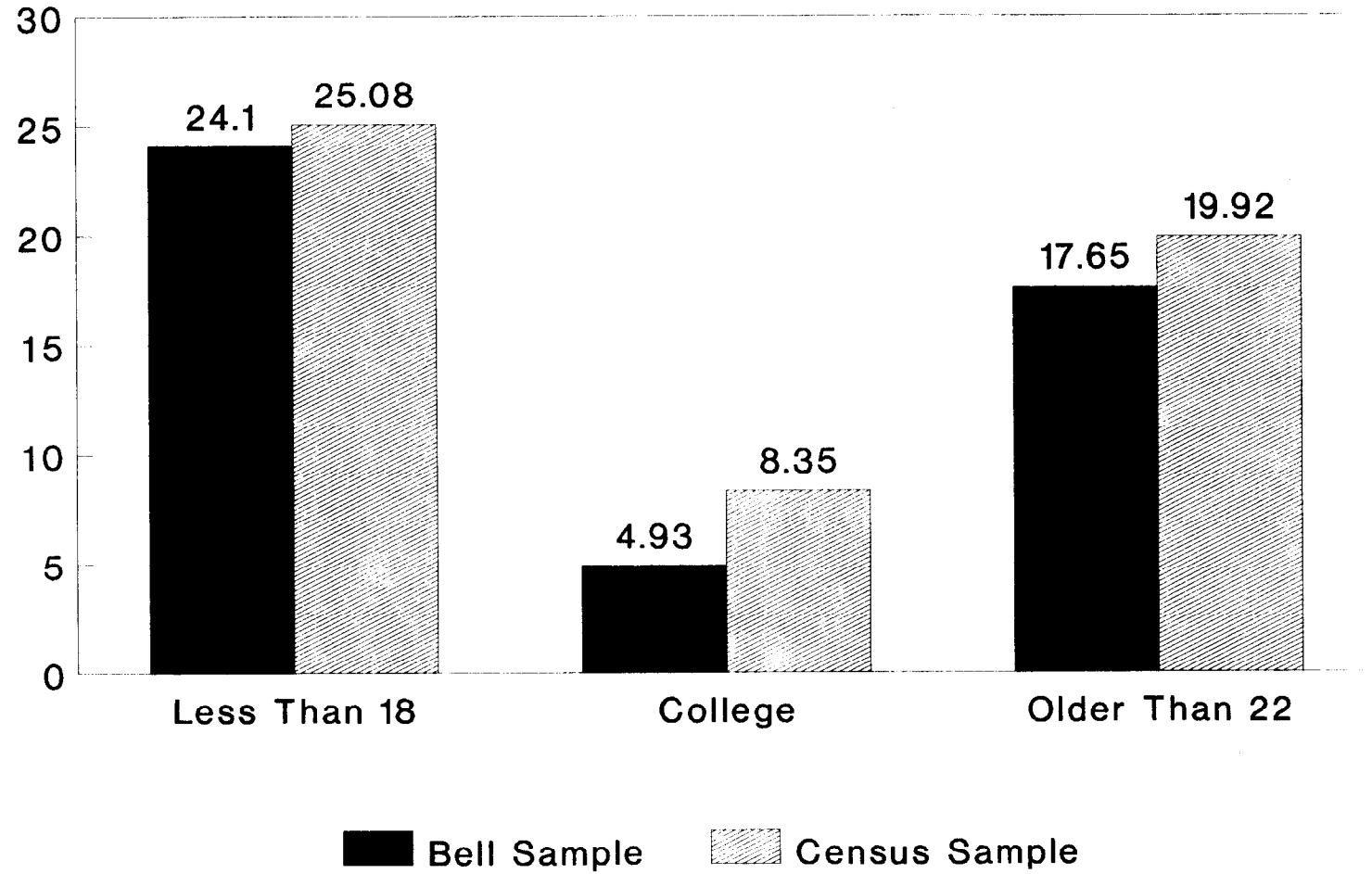
# Coverage Characteristics for Village Younger and Older Age Groups



# Coverage Characteristics of Town Younger and Older Groups



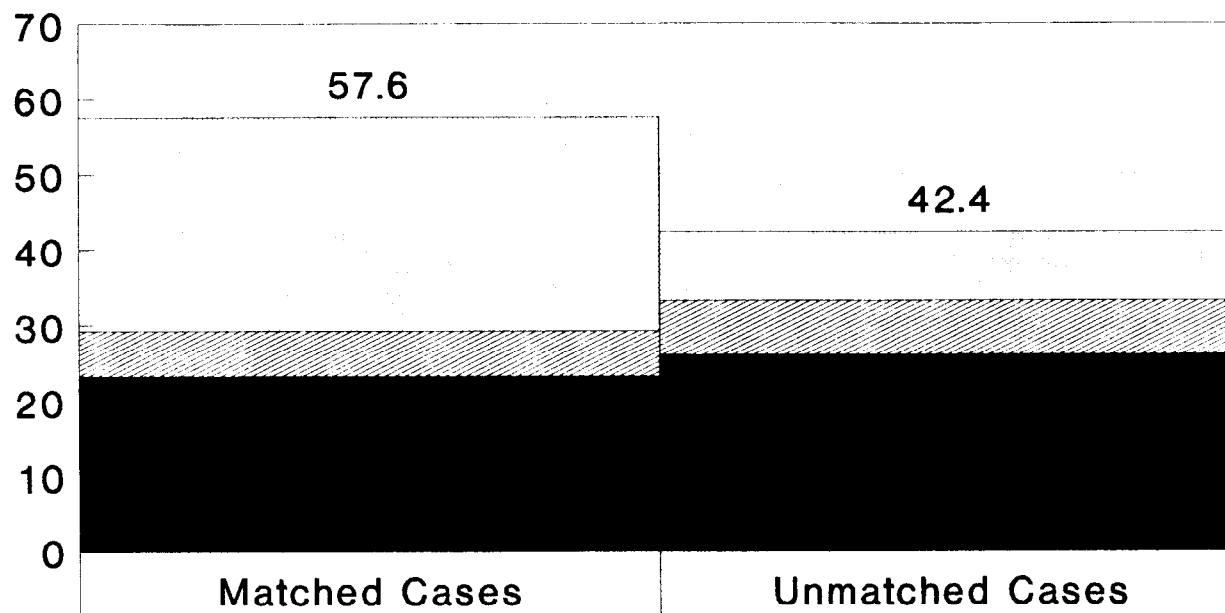
# Age Group Distribution Both Samples



Percent excludes those for age missing.

# Matched and Unmatched Cases

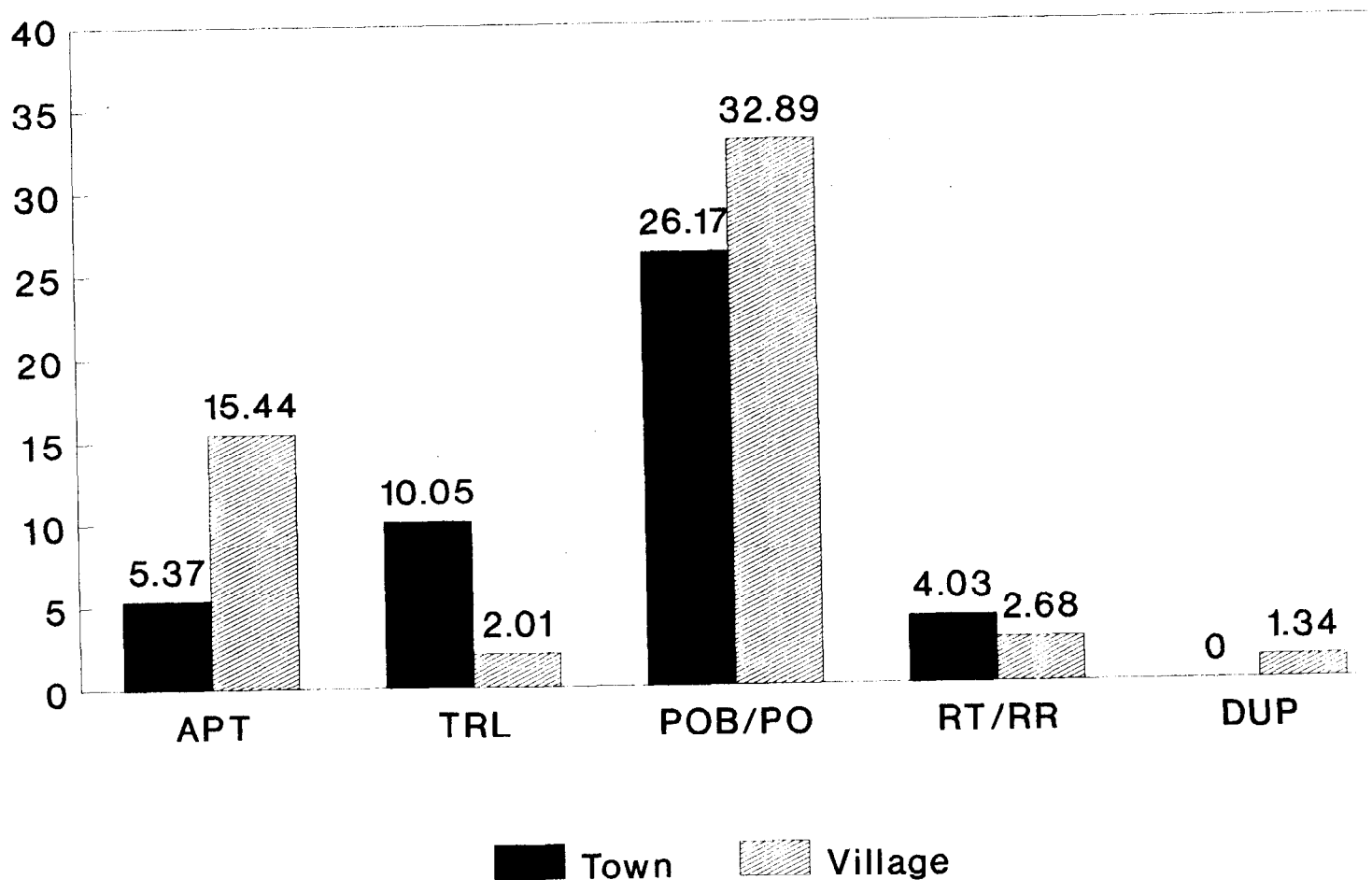
## Distribution by Age groups



	Matched Cases	Unmatched Cases
Less than 18	23.19	26.05
College Age	6.08	7.22
Older than 22	28.33	9.13

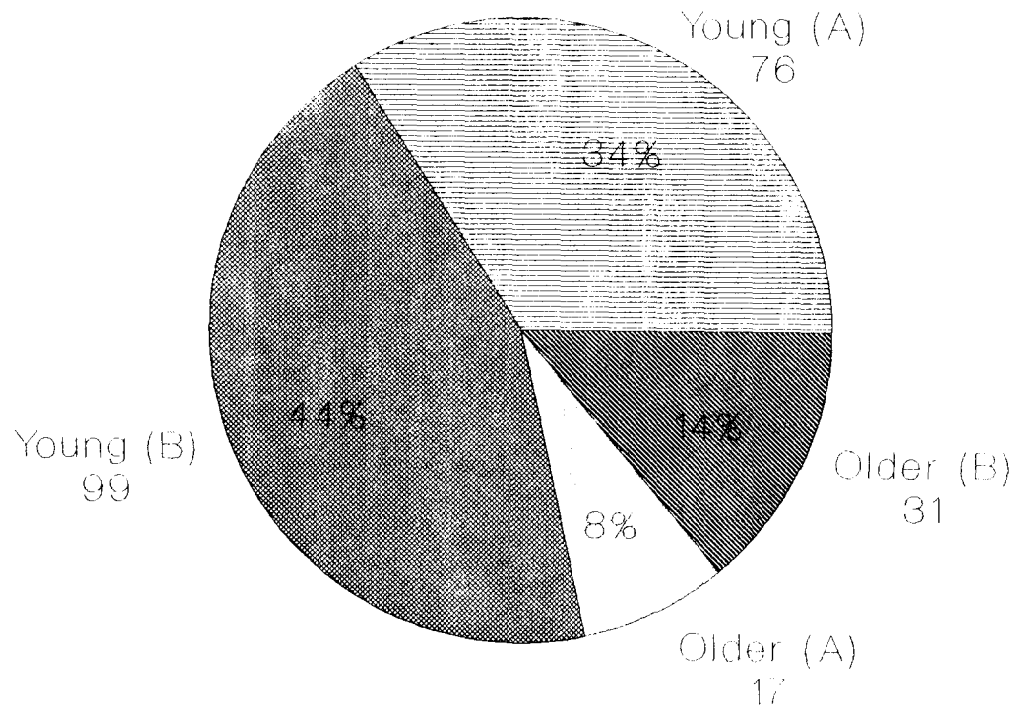
Less than 18
  College Age
  Older than 22

# Unit Types For Neighborhoods Both Samples Combined



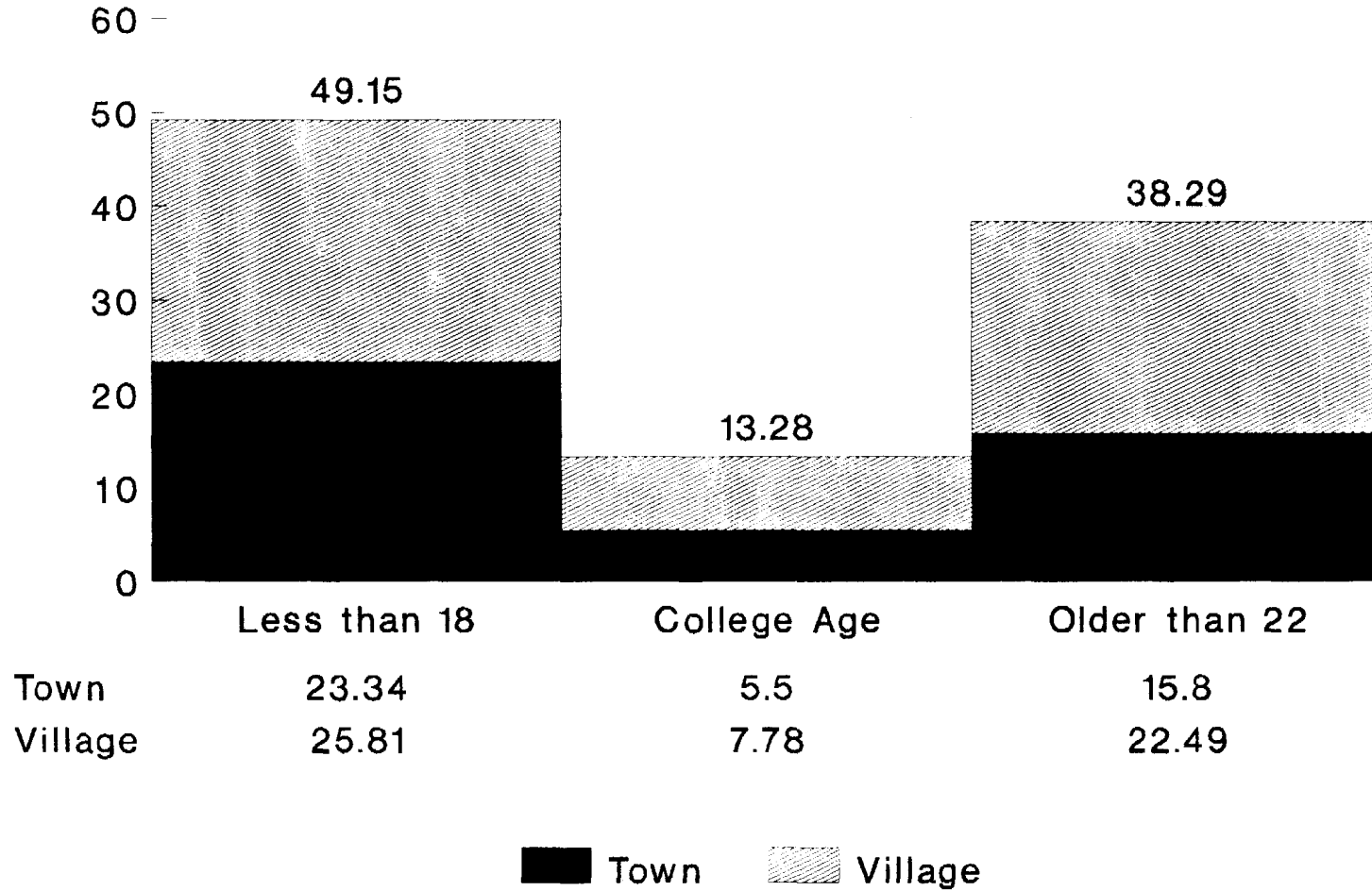
Numbers are Percentages

# Unmatched Cases Distribution by Age Group



For A and B Samples

# Age Group and Neighborhood Percent Distribution

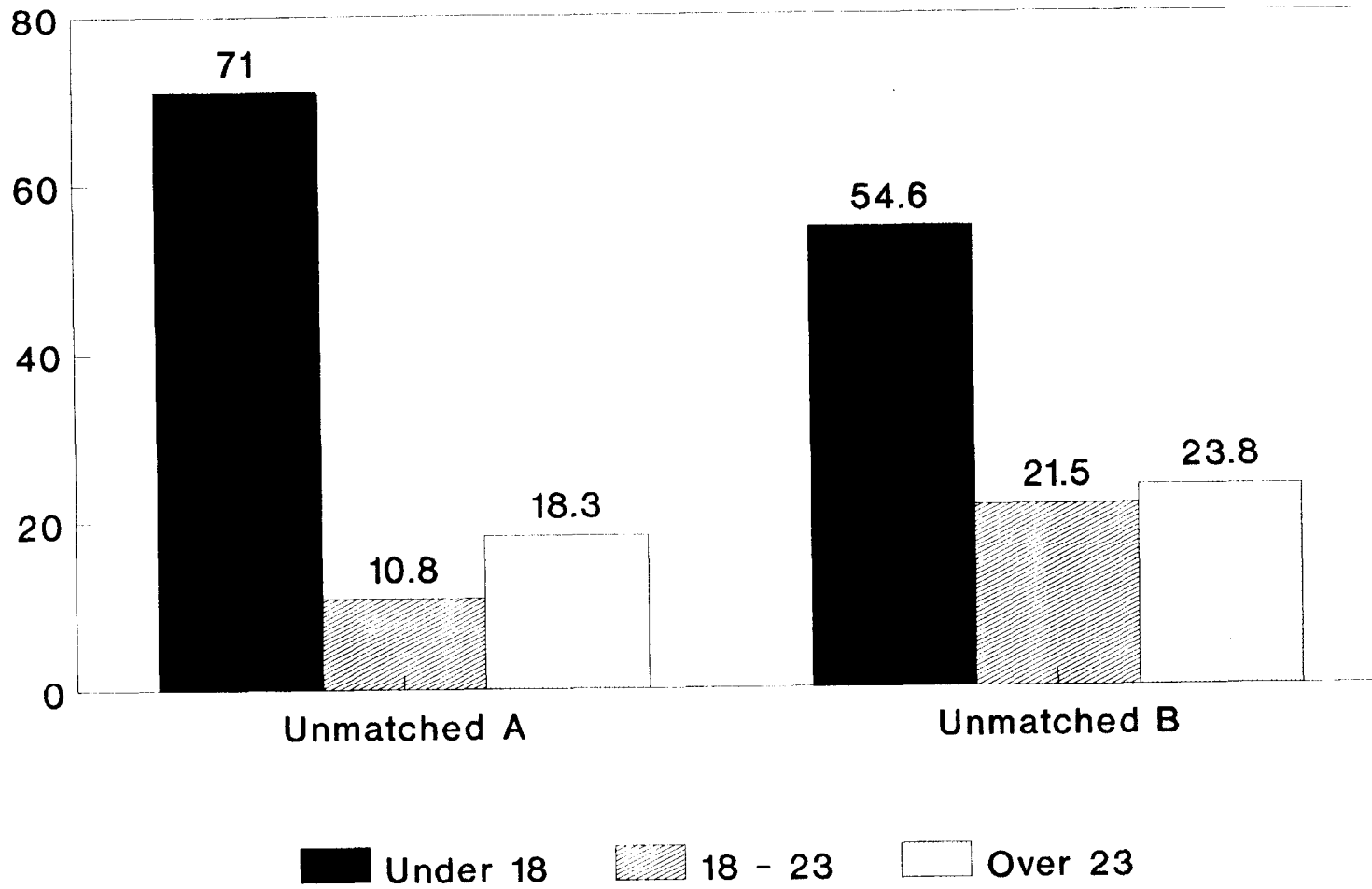


Percent is for total sample

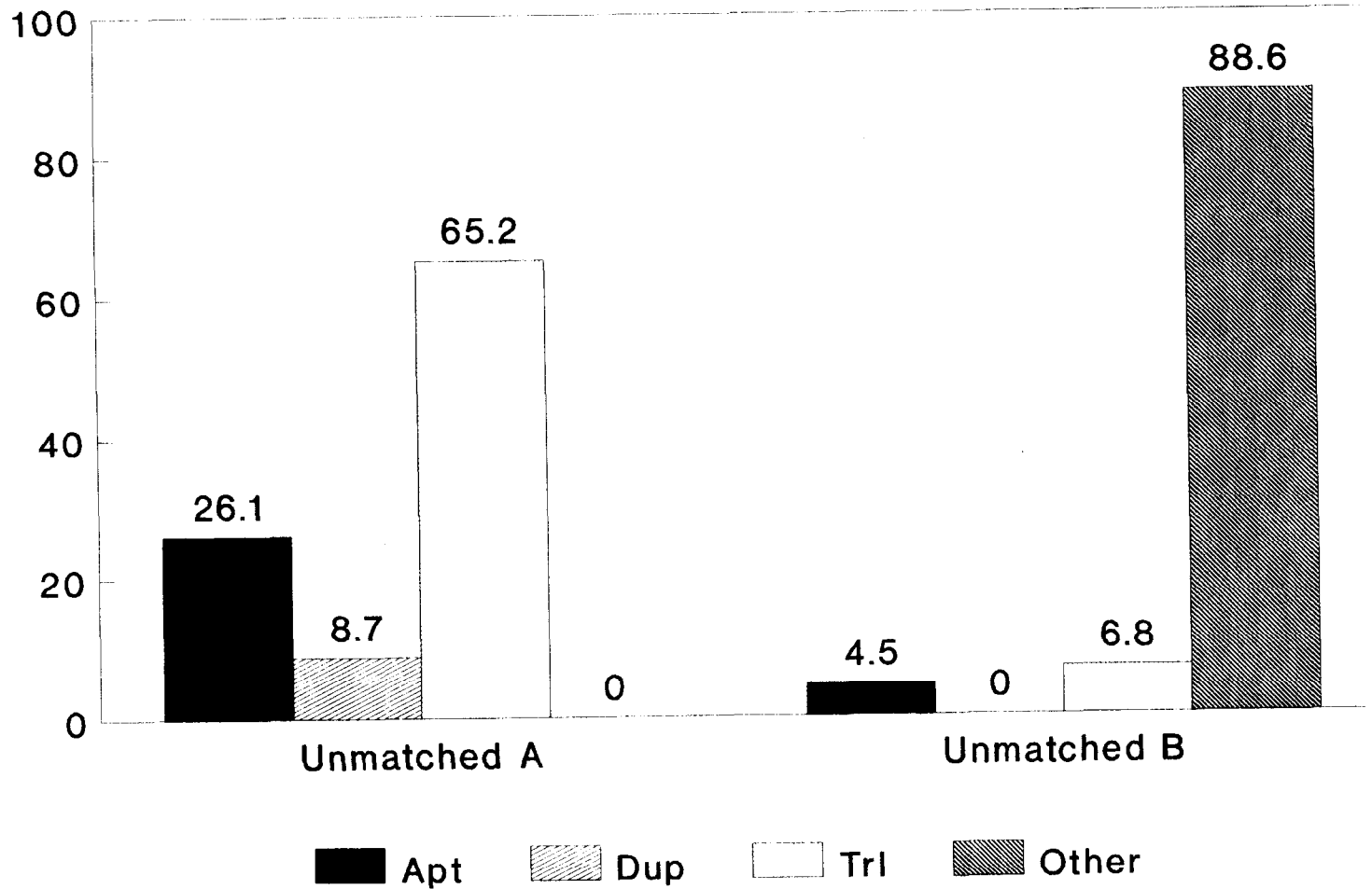


# Age Group Distribution For Unmatched Cases

Bell  
25  
Chart Eight



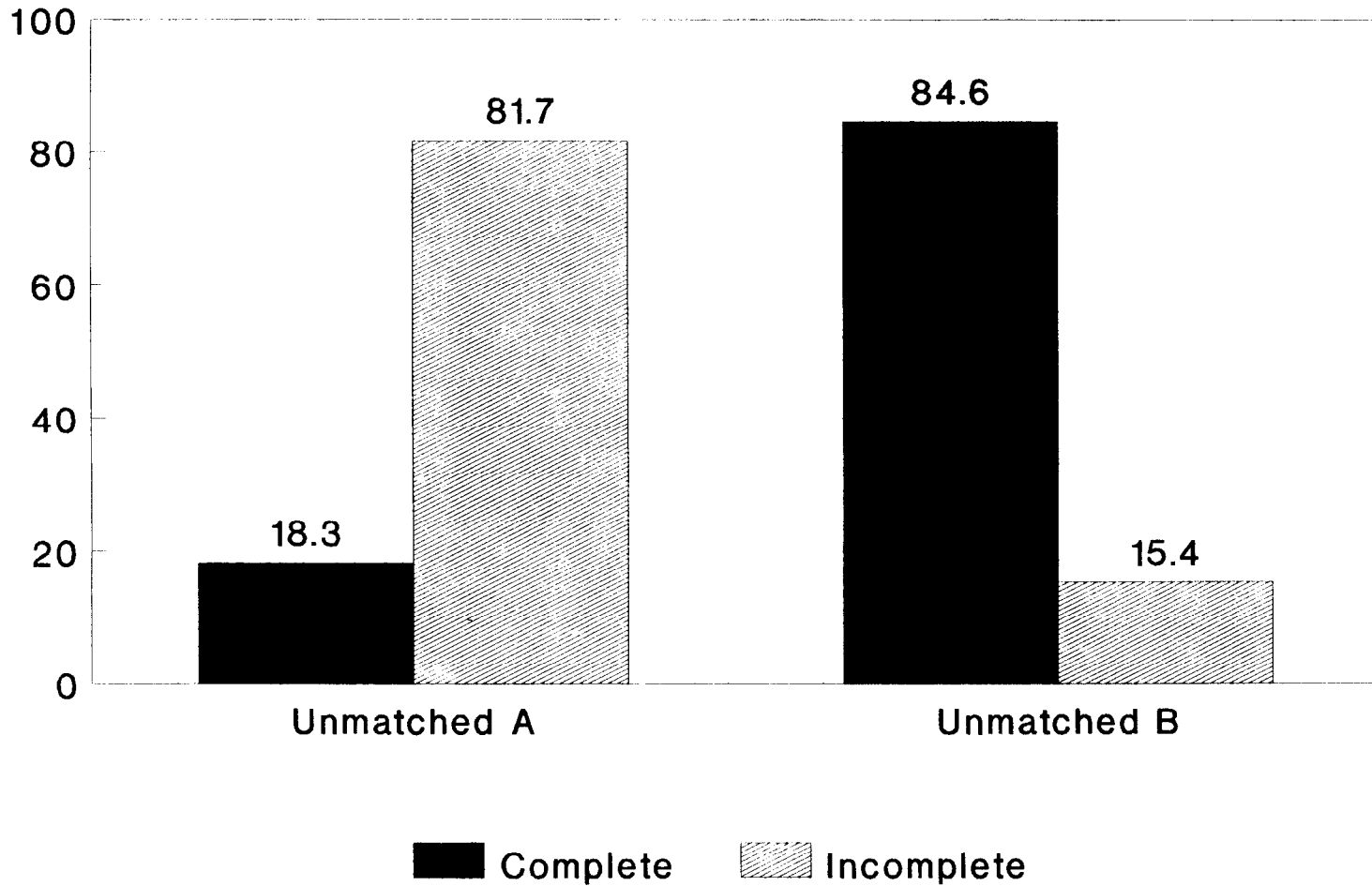
### Unit Type Distribution For Unmatched Cases



Other includes PO POB RT

# Completedness of Address For Residence

Bell  
27  
Chart Ten



DISCLAIMER FOR ETHNOGRAPHIC EVALUATION OF THE 1990 DECENNIAL CENSUS REPORT SERIES, REPORTS # 1- 24 (EV -01 THROUGH EV -29)

Disclaimer: This is the final report for one of the 29 independent Joint Statistical Agreement projects which conducted an ethnographic evaluation of the behavioral causes of undercount. All 29 studies followed common methodological guidelines. This report is based on an analysis of the results of a match between the author(s)' Alternative Enumeration to data from the 1990 Decennial Census forms for the same site. Each ethnographic site contained about 100 housing units. Information was compiled from census forms that were recovered through October 10, 1990. The data on which this report is based should be considered preliminary for several reasons: Between October 10, 1990 and December 31, 1990, additional census forms MAY have been added to or deleted from the official enumeration of the site as a result of coverage improvement operations, local review, or other late census operations. Differences between October 10, 1990 and final census results as reported on the Unedited Detail File were incorporated in later analyses of data from this site. The consistency of the authors' coding of data has not been fully verified. Hypothesis tests and other analyses are original to the author. Therefore, the quantitative results contained in this final JSA report may differ from later reports issued by Census Bureau Staff referring to the same site.

The exact location of the study area and the names of persons and addresses enumerated by the independent researchers and in the 1990 Decennial Census are Census confidential and cannot be revealed until the year 2062. The researchers who participated in this study were Special Sworn Employees (SSE) or staff of the Census Bureau.

To request copies of this report, contact Statistical Research Division, Room 3133-4, Bureau of the Census, Washington, D.C. 20033.