# A COMPARATIVE STUDY OF THE PERCEIVED HOUSING NEEDS OF LOW-INCOME AND UPPER-MIDDLE-INCOME RESIDENTS OF SAN JOSE

by

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#### I. Introduction to the Problem.

The United States is experiencing its worst housing shortage since World War II. The Department of Housing and Urban Development estimates the present shortage at 2.6 million housing units, with things getting worse.

There are at least three obvious causes for this shortage: (1) Growing population combined with deterioration of the present housing stock, has pushed up the need for new housing units. (2) Inflationary rises in building costs, labor costs, land, rent, etc., have driven the price of housing so high that many cannot afford to build new homes, or to buy or rent what is already available. (3) Federal "tight money" policy, primarily aimed at halting inflation, has drastically reduced the amount of money available for new home and apartment financing. Therefore, at a time when new housing is so badly needed, the number of new housing starts is declining:

There are similarities between the local and national housing situations, but there are also important factors specific to this area. For example, San Jose has not shown the decline in new housing starts which is characteristic of the nation as a whole, but the population growth rate is greater here than in most of the rest of the country. In Santa Clara County, as in most places, housing for the poor and the minorities is limited in quantity and low in quality. While only 5% of the housing units occupied by non-Mexican-American whites were unsound in 1960, 23% of the units occupied by Mexican-Americans were unsound. Overcrowding was found in 30° of Mexican-American households in 1960, compared to only 6% of non-Mexican-American white households.

San Jose Mercury; March 15, 1970: p. 1H.

San Jose Mercury; September 13, 1970: p. 1H.

Housing problems are not limited to the poor and the minorities.

Currently a family must earn approximately \$12,000 per year if it is to have a reasonable expectation for home ownership at prices within the noraml budget limitation of a house valued twice the family's annual income. The required a \$2,000 an 8-year old San Jose house purchased in January, 1970 for \$25,000 down payment for a 30-year FHA mortgage (at 8 1/2 interest), plus about \$800 in various closing costs (loan fees, taxes, insurance, etc.) and monthly payments (for mortgage, insurance, and taxes) of \$231. The average rise in home value in the County since 1960 has been 28 with some areas as high as 50%.

Rental housing is also increasingly more costly. The price index for rent in the County has risen approximately 50° since 1960. Vacancy rates have fallen from 15° in 1960 to less than 3° in 1969. Households earning less than \$4,000 per year have been most adversely affected by the short supply of rental units. It is estimated that ability to pay \$120 per month in rent is necessary before the local rental market can supply an adequate number of units to balance supply and demand. Assuming a normal budget of 25% of monthly income for rent, it appears that a household must earn \$5,700 per year before the market can supply an adequate opportunity to rent. For the County's nearly 34,000 renter households with income below \$5,700, there were only 14,400 units available in 1969 at prices they could reasonably afford. In addition, it is assumed that the majority of unsound rental units in Santa Clara County are in the rental range below \$120.

The housing problem in the County, as in the nation, is acute.

The Housing Situation: 1969: Santa Clara County. Prepared by the County of Santa Clara Planning Department.

<sup>4</sup> Ibid.

It appears that the solution will require large-scale planning of new housing facilities — at least for lower-income groups. This requirement presents middle-class planners and architects with a two-fold predicament. First, how to plan for the lower-income resident. Are his perceived needs the same as those of a middle-income resident, or are they somewhat more modest? We don't know. Second, given the reluctance of the federal government to grant large sums of money for housing, how can "decent" large-scale developments be designed for minimum construction costs. Do lower-income people feel that they should have spacious "middle-class homes", or will something smaller (and therefore less expensive) be acceptable? Again, we don't know. This study will begin to answer these questions.

We present here the results of a survey of lower-income and upper-middle-income residents of San Jose. Most of the interviews were conducted by students in a sociology course at Stanford University during the spring of 1970. These data allow us to compare the perceived housing needs of respondents in the two income brackets. We will also be able to compare the perceived needs of Mexican-Americans, non-Mexican-American whites, and the elderly.

It is important to understand the limitations of this type of study at the outset. We have asked respondents to report their attitudes and opinions about housing needs. There is always some question as to whether attitudinal research taps the "real" attitudes of the respondents. In fact, there is some question as to whether the respondents actually have "real" attitudes before they are interviewed. In many cases they have probably never thought about a particular question until it was posed to them by our interviewer. The problems of opinion research are particularly acute in the present sort of study where there are often large discrepancies between the social status of the interviewer and the interviewee. The

biasing effects of these discrepancies are well known. Therefore it is imperative to recognize that our results are only an approximation of the "real" attitudes of the respondents.

The conclusions we make here should not be generalized without extreme caution. San Jose is not a typical city. It has recently been called "perhaps the country's fastest growing boom town." Our results may not be representative of other urban areas. There are also severe limitations in our selection of low-income subjects. We have only reached residents of regular houses and apartments. There are reportedly substantial numbers of the very lowest income group — the destitute — who live in shacks, cars, and greenhouses. These people are not included in our operational definition of the low-income group.

<sup>&</sup>lt;sup>5</sup> Newsweek; September 14, 1970: p. 68.

II. A Description of Santa Clara County, San Jose, and the Study Areas.

Santa Clara County is one of the fastest growing metropolitan areas of the nation. Its 1966 population of 919,657 is increasing by about 45,000 people every year. The growing population has generated an average construction of 15,000 dwelling units each year, as expanding job opportunities have attracted skilled workers to the area. Despite present recessional tendencies in the national and local economy, the long run trend in the County is almost certainly continued rapid growth.

Severe shortages of housing exist for low and moderate income house-holds. There has been an increasing inability of the housing market to respond to the needs of low income families. There are growing contrasts between affluence and poverty, and between the predominant white non-Mexican-American population and the minority groups.

About one-seventh of the County is urban area, lying mainly in the valley between the Santa Cruz Mountains on the west and the Diablo Range on the east. This urban spread runs roughly parallel to the Bayshore Freeway from Palo Alto down to San Jose.

Fifteen percent of all County households in 1966 had incomes below the poverty level of \$4,000. In all, 40,000 households were living under conditions of poverty, and a sizeable proportion of these households were headed by persons over 65 years old. There is a marked spatial segregation of income groups in the County. The poor are found generally in the older areas on the valley floor, while the high income groups, those earning more than \$15,000 per year, tend to live in the newer areas in the foothills of the valley.

This section is largely extracted from the recent report, The Housing Situation: 1969: Santa Clara County, prepared by the County of Santa Clara Planning Department.

The minority groups of the County are concentrated principally in the areas of low income, and are relatively scarce in the high income districts. The largest minority group in Santa Clara County is the Mexican-American, which accounted for 9.5% of the population in 1966. Black, Oriental, and other non-white populations comprised 4.2% of the County population in 1966, for a total minority population of about 14% of the County.

Most of the County's low-income residents live in its major city:

San Jose. With a 1970 population of 436,000 San Jose is now the second largest city in the Bay area, after San Francisco. A recent study by Kaiser Engineers of Oakland indicated that the city needs more than 11,000 units of low-income public housing.

Two areas of the city were selected as study sites. They will be designated "Downtown" (a low-income section south of the crossing of highways 101 and 17), and "Cambrian Park" (an upper-middle-income area in southern San Jose).

Appendix A contains a description of the boundaries of these areas, and their statistical description according to the 1966 special census of Santa Clara County. A summary of these statistics is presented in Figure 1 along with comparable data obtained from our survey.

Our intent was to obtain representative samples of the two study areas. (We did not attempt to obtain a representative sample of the population of San Jose.) The sampling procedures are specified in Appendix B. A comparison of our survey data with the 1966 census data (Figure 1) gives some measure of the representativeness of our sample. For the Downtown area, the percentages of minority populations show good agreement;

San Jose Mercury; March 15, 1970: p. 35.

The Downtown area was originally treated as two separate study sites, however these subareas were sufficiently similar that they have been combined in the analysis.

Figure 1. A comparison of Data From the 1966 Census and Our 1970 Housing Survey.

	Downtown		Cambri	an Park
	1966	1970	1966	1970
	census	survey	census	survey
1966 population:	21,274		15,005	Go 64
Number of interviews:		184	per est	102
Mexican-American:	30%	36¢	8% (?)	10'
other minorities:	13%	9%	200	20
<pre>households with incomes below \$4,000:</pre>	1,1,0,	35°	3%	5%
Median household income:	\$4,500	<b>45,000</b>	\$10,700	\$14,000
single family dwelling units:	469	66%	97%	100%
% owner occupied:	349	42%	90%	96%

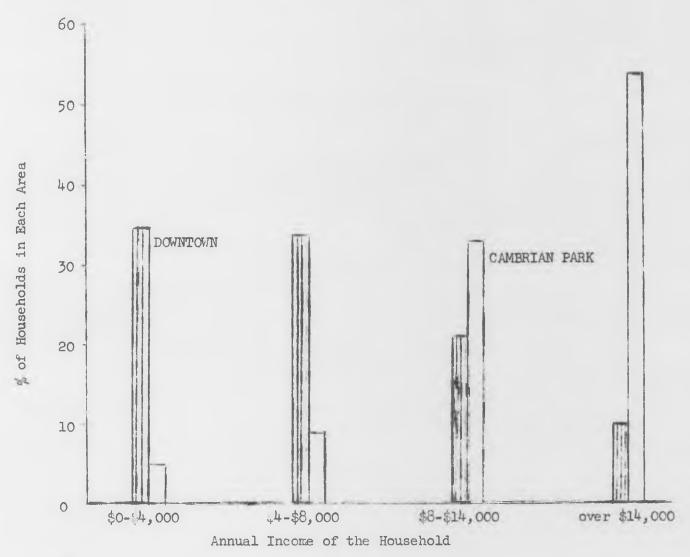
the small differences in sincome statistics could be easily accounted for by inflationary rises over the last four years. The data on single family dwelling units, and owner occupation, suggest that we may have oversampled single dwellings.

The high 1970 median income in Cambrian Park could be due to inflation. plus an apparent recent influx of higher income residents. We do not consider that figure unreasonable. All the other statistics are in good agreement except for the percentage of Mexican-Americans. The survey could have missed them in the sampling process or mistakenly identified Mexican-American respondents as non-Mexican-Americans. There is reason to believe that this error is not as large as it appears in Figure 1. We have some indication that the 1966 census overstates the present proportion of Mexican-Americans in the Cambrian Park area, and that a more appropriate number would be 4 or 5 percent. (See Appendix A.)

In summary, it appears that we have under-represented Mexican-Americans in Cambrian Park, and have over-sampled single dwellings in the Downtown area. Still, the sample is adequate for our purposes here.

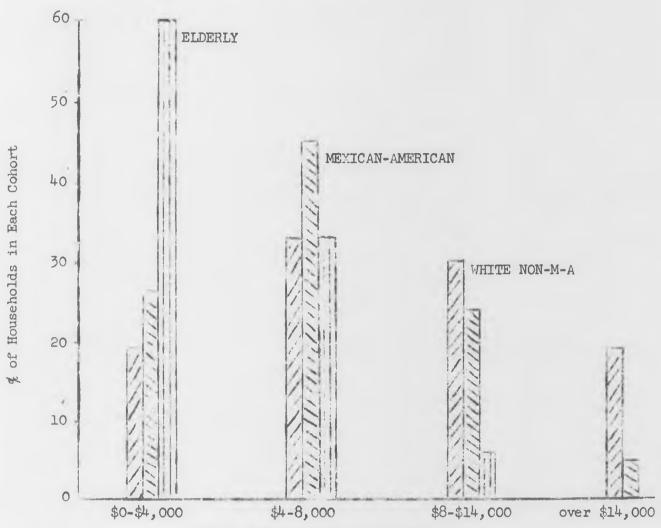
The distributions of gross annual household income in each study area are displayed in Figure 2. Figure 3 shows a further breakdown of the Downtown area into three major cohorts: the elderly (head of household is age 65 or older), Mexican-Americans (head of household less than 65), and white non-Mexican-Americans (head of household less than 65). Cambrian Park has relatively few aged or Mexican-American families. The Downtown families with heads under age 65 generally have low incomes, but they are not destitute. Note that about 30% have gross annual incomes of \$8,000 or more. Thus, although Downtown contains some of the poorest urban areas in Santa Clara County, it is not necessarily indicative of worse urban areas in other parts of the country.

Figure 2. Distribution of income, by area.



n's
Downtown: 162
Cambrian Park: 80

Figure 3. Downtown. Distribution of Income, by Cohort.



Annual Income of the Household

n's	
White Non-Mex-Amer.:	43
Mexican-American:	42
Elderly:	48

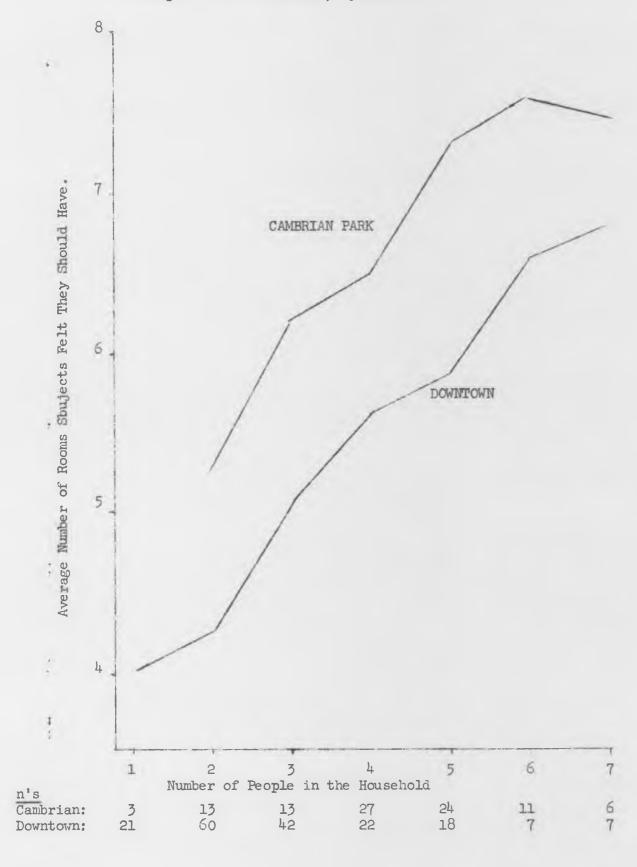
- III. Differences in Perceived Housing Needs Between An Upper-middle-income Area and a Low-income Area.
  - A. Physical Structures.

We will begin our data analysis with a simple comparison of the perceived housing needs of respondents in the Downtown area (median income is \$5,000) and the Cambrian Park area (median income is \$14,000). There are, of course, many different aspects of housing needs we could have compared, from size of house, to number of bathrooms, to height of ceiling. But since an interview must be fairly short in order to hold the interest of the interviewee, and since we had quite a bit of additional information to collect, it was necessary to limit our inquiry. We chose to ask respondents: "How many total rooms do you feed you should have to properly take care of your family, not counting bathrooms and halls?" We also asked the number of bedrooms they felt they should have. These items have the advantages of being rather basic, unambiguous, and quantifiable. We recognize that they give a very limited picture of housing needs.

Larger families generally require more rooms, so the average number of rooms subjects felt they should have is plotted as a function of the number of people in the subjects' household. (Figure 4.) Each area is plotted separately. Thus, for Cambrian Park respondents with three people in their household, the average number of rooms they felt they should have was 6.16; whereas Downtown respondents with three people in their household gave an average of 5.06 as the number of rooms they felt they should have.

Note that for each area, the number of subjects (n) with a given number of people in their households is given at the bottom of the figure. As a general rule throughout this paper, if n is less than four we will assume there is insufficient data for calculating an average value. The n's in any figure are based on the number of subjects for whom we have all the data required in that figure. Since a few questions were inadvertantly skipped for some subjects, there will be occasional inconsistencies in the n's from one figure to another.

Figure 4. Number of Rooms Subjects Felt They Should Have vs. Number of People in the Household, By Area.



For any given household size, people in Cambrian felt they should have more rooms than people in Downtown felt they should have. There is approximately a one-room differential independent of the number of people in the household.

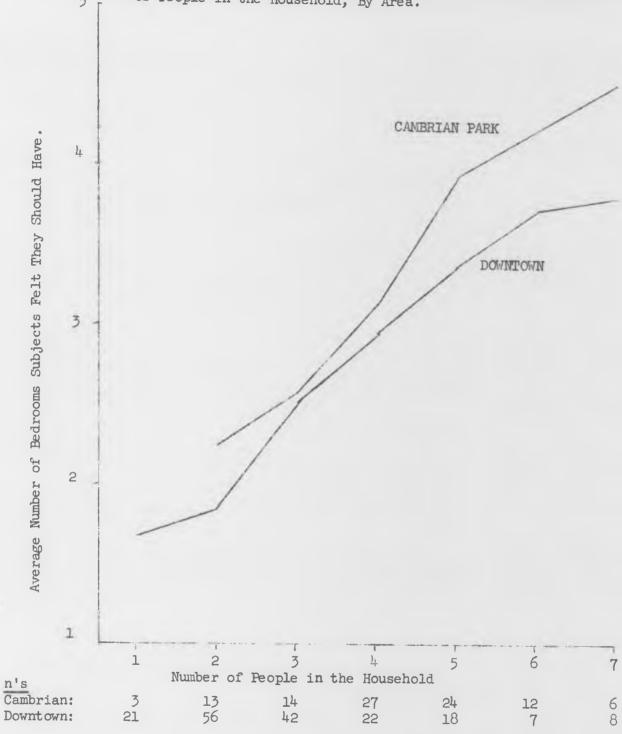
The average number of bedrooms which subjects felt they should have is also plotted as a function of number of people in the household.

(Figure 5.) Again, the two areas are plotted separately. As before, for a given household size, Cambrian people felt they should have more than Downtown people felt they should have. The differential is much smaller here, particularly in 2, 3, and 4-person households which contain the bulk of the respondents. The Cambrian and Downtown images of an appropriate home seem to differ less in bedrooms than in the other rooms of the house. Perhaps Cambrian people are more likely to include a family room or a study in their notions of what they should have.

The number of rooms, and bedrooms, which subjects in each area <u>actually</u> have are shown in Figure 6. Not surprisingly, the Cambrian people have more of both. Almost three-quarters of the Cambrian Park dwellings are 6 or 7 room houses with 3 or 4 bedrooms, and most of the rest are larger. Downtown homes, both houses and apartments, are substantially smaller. This picture is somewhat deceptive however, since the average number of people per household is smaller Downtown than in Cambrian. We have calculated a measure of "crowding" by simply dividing the number of people in the household by the total number of rooms in the home. The distribution of people-per-room for each area is shown in Figure 7. There is little difference between the two areas in degree of crowding.

Downtown people have smaller homes, but they also feel thay they should have smaller homes, so we may ask at this point which group is most deprived relative to what they feel they should have? For each subject,

Figure 5. Number of Bedrooms Subjects Felt They Should Have vs. Number of People in the Household, By Area.



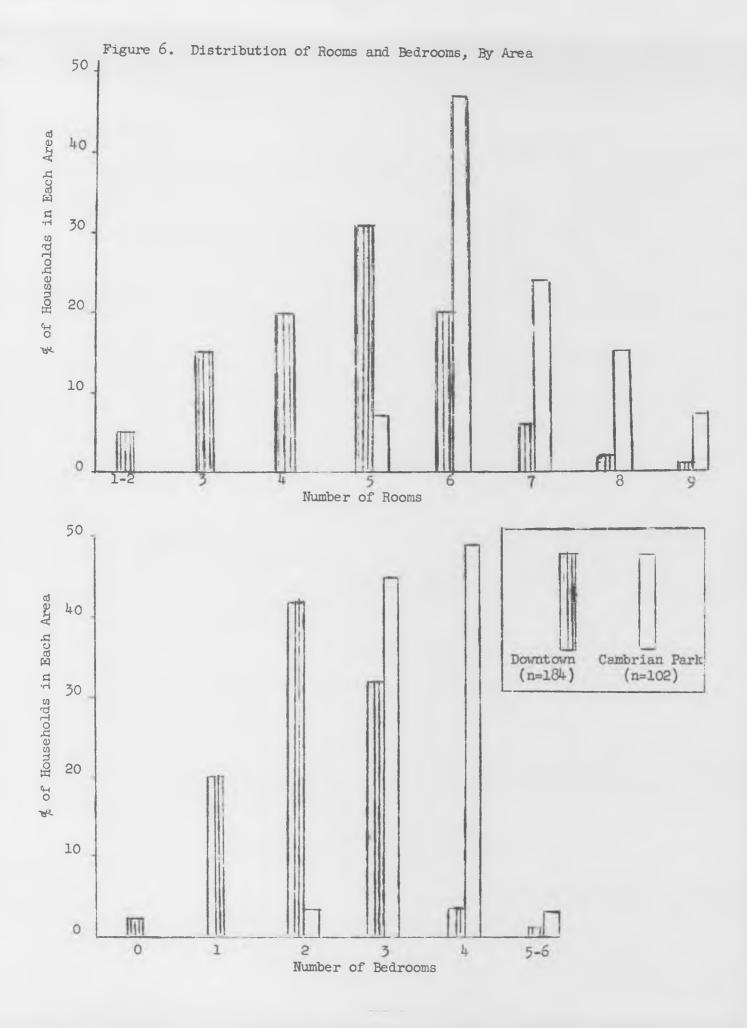
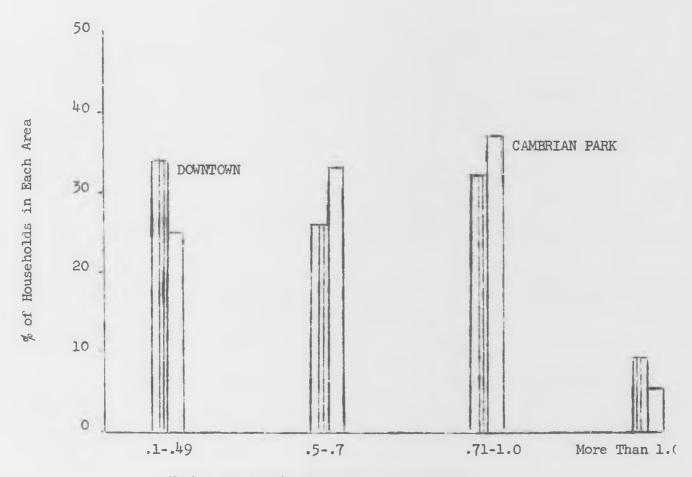


Figure 7. Crowding (People per Room)

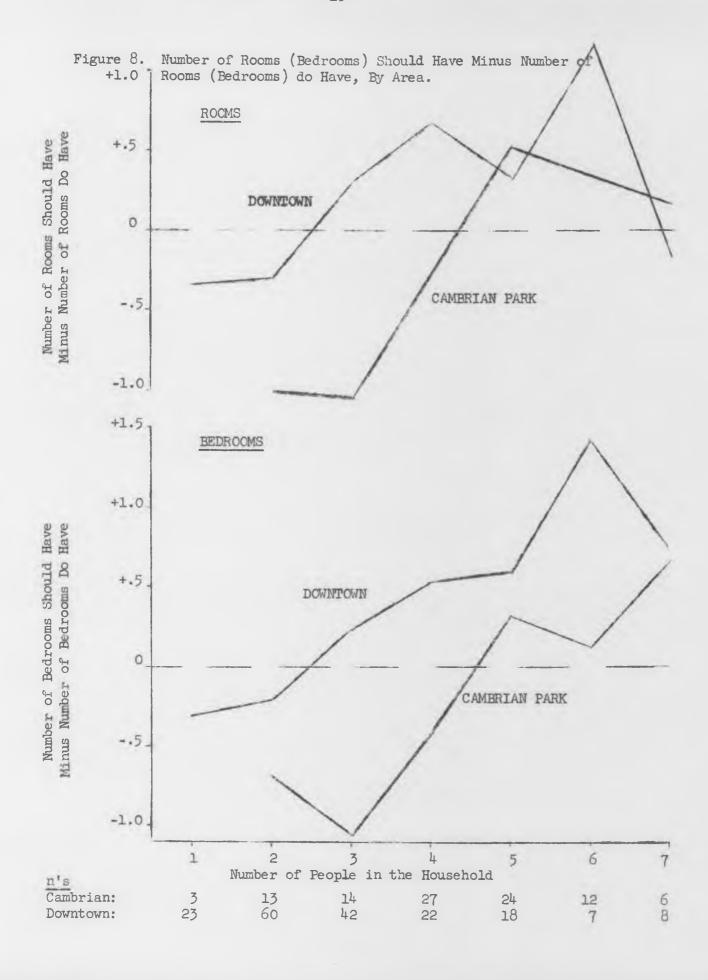


Number of People Per Room in the Home.

ns Downtown: 184 Cambrian: 102 we obtained a measure of "deprivation" by subtracting the number of rooms he actually had from the number of rooms he felt he should have. If this difference was a positive number than the subject was "deprived," whereas if it were a negative number then he had more rooms than he felt he really should have to properly take care of his family. These results are plotted in Figure 8 as a function of the number of people in the household, with both areas plotted separately as usual. Figure 8 also contains similar plots for bedrooms.

The results indicate that for a given number of people in the house-hold, Downtown respondents have the greatest discrepancies between what they have and what they feel they should have. Note that in both areas the people with the largest families tend to be "deprived." It is rather interesting that the proportion of "deprived" in Downtown (32% using total rooms as a measure, 34% using bedrooms) is not much larger than the proportion of "deprived" in Cambrian Park (24% using total rooms, 20% using bedrooms).

In summary, for a given number of people in the household, Cambrian residents felt they should have more rooms and bedrooms than Downtown residents felt they should have. Homes in Cambrian Park were generally much larger than those Downtown, but the degree of crowding is about equal. We asked which area was more "deprived" relative to what they felt they should have. Downtown people showed the greatest relative deprivation, but the difference between the areas was not great.



#### B. Neighborhoods.

Proper housing involves more than a physical structure. We must also consider the resident's neighborhood — his perception of the area around his home.

Respondents were asked whether there was anything they particularly <a href="liked">liked</a> about their neighborhood (68% Downtown, and 88% in Cambrian said "yes"); and whether there was anything they particularly <a href="disliked">disliked</a> (43% Downtown, and 38% in Cambrian, said "yes"). Not surprisingly, Cambrian residents had more to like and less to dislike. Still, a large majority of the Downtown residents liked something about their neighborhood, and the percentage who disliked Downtown was only 5% higher than the percentage who disliked Cambrian Park.

Those respondents who said they had a particular like or dislike were then asked what it was. These open-ended responses were categorized and are listed in Figure 9. A few diminsions stand out as particularly important in both neighborhoods. Social relations with the neighbors, and quiet and privacy, appear to be major factors in liking or disliking the neighborhood. This holds true in both areas, although in Downtown many of the noise complaints were specifically linked to the nearness of the airport. Convenience of the location is a major factor in liking, and busy traffic is a major factor in disliking for both areas. To our surprise, neither the quality of public services, nor the quality of housing structures, came out as a major factor in either area.

A notorious difficulty with this sort of survey is that people's reported attitudes do not always correspond to their behaviors. Just because respondents say that quiet, privacy, and good social relations with the neighbors, are important determinants of their liking a neighborhood does

Figure 9. Percentage of Respondents Who Like, Or Dislike, Various Aspects of Their Neighborhood, By Area.\*

## DOWNTOWN

Aspects of the neighborhich are liked. (n=		Aspects of the neighbork which are disliked. (n=	
Quiet and/or privacy:	40%	Bad social relations with neighbors:	275
Convenient location:	24%	Busy street traffic:	25%
Good social relations with neighbors:	20%	Lack of quiet and/or privacy:	23%
Good public services:	40	Not well lit at night:	5%
Miscellaneous:	12%	Miscellaneous:	20%
	·		100%

## CAMBRIAN PARK

Aspects of the neighbor which are liked. (n=0		Aspects of the neighbound which are disliked. (n	
Good social relations with neighbors:	34%	Busy street traffic:	21%
Quiet and/or privacy:	24%	Bad social relations with neighbors:	16%
Convenient location:	19%	Lack of quiet and/or	89
Good public services:	6%	privacy:	,
Miscellaneous:	17%	Miscellaneous:	55% 100%
	100%		1007

<sup>\*</sup> Respondents who indicated no particular likes, or dislikes, about their neighborhoods are not included in the percentages.

not make it true. That is not to infer that respondents are lying, but they may be rationalizing their likes and dislikes, or they may simply never have thought about the question before being confronted with it in our interview. Therefore it is important to have independent checks on these results in order to increase our confidence in them. Fortunately we anticipated that social relations would be an important factor, so we took independent measures of subjects' social relationship to their neighborhood, and these enable us to check the findings further.

Respondents were asked how many of the neighboring families they were friendly with, and whether or not they attended any sort of community social organization or a local church. Presumably people with good neighborhood relations have more friends, and are more likely to attend a community social organization, than people with poor social relations. If good social relations are indeed determinants of liking the neighborhood, then those people with the most friends, and who attend local community organizations, should be most likely to like the neighborhood. We would also expect that, of those people who like the neighborhood, those with the most friends, and who attend local organizations, should be most likely to consider good social relations their reason for liking the neighborhood. Figure 10a shows all of these hypotheses to be true.

If bad social relationships are indeed determinants of <u>disliking</u> the neighborhood, then those people with the least friends, and those who do not attend local organizations, should be most likely to <u>dislike</u> the neighborhood. Also, of those people who dislike the neighborhood, those with the least friends, and those who do not attend local organizations, should be most likely to consider bad social relations their reason for disliking the neighborhood. Figure 10b shows that 3 out of these 4 hypotheses are not true.

Figure 10a. Social Relations and Liking the Neighborhood.

## NUMBER OF NEIGHBORING FAMILIES THE SUBJECT IS FRIENDLY WITH:

	0-2	3-5	6-9
Percent who like neighborhood:	66%	72°,	88%
	(n=106)	( <b>92)</b> ,	(86)
Percent liking neighborhood because of good social relations (of those who like the neighborhood):	12%	23%	41¢
	(69)	(64)	(75)

## DO YOU ATTEND A COMMUNITY SCCIAL ORGANIZATION OR CHURCH?

	No	Yes
Percent who like neighborhood:	69% (n=130)	809 (152)
Percent liking neighborhood because of good social relations (of those who like the neighborhood):	20% (86)	29% (120)

## Figure 10b. Social Relations and Disliking the Neighborhood.

## NUMBER OF NEIGHBORING FAMILIES THE SUBJECT IS FRIENDLY WITH:

	0-2	3-5	6-9
Percent who dislike neighborhood:	41% (n=107)	40%	44 <i>9</i> (86)
Percent disliking neighborhood because of bad social relations (of those who dislike the neighborhood):	31 <i>9</i> (45)	14%	22 <u>%</u> (37)

## DO YOU ATTEND A COMMUNITY SOCIAL ORGANIZATION OR CHURCH?

	No	Yes
Percent who dislike neighborhood:	45% (n=131)	38¢ (151)
Percent disliking neighborhood because of bad social relations (of those who dislike the neighborhood):	22% (59)	23% (5 <b>7</b> )

Our checks show one consistent result and one inconsistent result.

We have a very strong case for they hypothesis that good social relations are an important determinant in <a href="Liking">Liking</a> a neighborhood. It is less clear that the converse is true — i.e. that bad social relations cause one to <a href="dislike">dislike</a> the neighborhood, although it certainy seems reasonable to expect that to occur in cases of extermely poor social relations. We may be erring in considering a lack of friends as an indicator of "bad" social relations. It may be more accurate to characterize that as a state of "neutral" social relations. "Bad" social relations may require some actual enemies. With this latter interpretation we might hypothesize that good social relations lead one to like the neighborhood, neutral social relations lead one to be indifferent to the neighborhood, and bad social relations lead one to dislike the neighborhood. This hypothesis is consistent with the data we have presented so far, but since we have no data on the subjects' enemies, we are not in a position to test it further.

Our questionnaire specifically inquired about the adequacy of several public services in the neighborhood. The percentages of respondents who found these inadequate are listed in Figure 11. A relatively large proportion of respondents in both areas considered local public transportation to be inadequate, and one-quarter of the Cambrian Park respondents found the garbage collection unsatisfactory (mainly because of policies of the garbage collection company). As we have seen, these do not appear to be significant factors in determining whether or not one likes or dislikes the neighborhood. It is interesting to note that most of the Cambrian Park respondents (82%) never use public transportation anyway. Whether or not they would use a better public transportation system is an open question. Rather surprisingly, Cambrian residents were more dissatisfied

Figure 11. Percentage of Respondents Who Find Various Local Public Services Inadequate, By Area.

	Downtown (n=184)	Cambrian Park (n=102)
Public transportation:	31%	47%
Garbage Collection:	12%	25%
Schools:	13%	15%
Law enforcement:	19%	11%

than Downtown residents on three of the four public services considered.

In conclusion, the major factors which the subjects themselves consider to be involved in <u>liking</u> neighborhoods — in both the low- and upper-middle-income areas — are quiet and privacy, good social relations with neighbors, and convenience of location. The major factors they felt were involved in <u>disliking</u> neighborhoods — again both in low- and upper-middle-income areas — are busy traffic, bad social relations with neighbors, and lack of quiet and privacy. They do not consider public services (which are perceived as worse in the upper-middle-income area than the low-income area) to be a major factor in liking of disliking the neighborhood.

As a check on a portion of these findings, we compared subjects with few and many friends in the neighborhood, and subjects who did or did not attend local organizations, to see if they differed in their degree of liking and disliking their neighborhoods. Subjects with good social relations did indeed tend to like their neighborhoods better than subjects with fewer friends, or than those who did not attend local organizations. There were no consistent differences, however, on disliking of the neighborhood. Thus, we have a very consistent finding that good social relations leads to liking of the neighborhood, but the determinants of disliking are less clear.

#### IV. Mexican-Americans and the Elderly.

Cambrian Park is a homogeneous neighborhood. Respondents almost always came from white non-Mexican-American families living in their own three or four-bedroom houses; the head of the house was usually a middle-aged man making a good income. Downtown is much more mixed. Forty-four percent of these respondents belonged to minority groups — mainly Mexican-American (36%); almost one-third of the Downtown housing units in our sample were apartments or duplexes; age of the head of the house ranged from 18 to 87; although most of the residents had low incomes, 10% reported total household incomes in excess of \$14,000 per year. In this section of the paper we will look more closely at the Downtown area to see how low-income whites, Mexican-Americans, and the elderly, differ from our overall characterization of the area.

Our approach to this analysis was to divide the Downtown subjects into three cohorts; white non-Mexican-Americans, Mexican-Americans, and the elderly (i.e. head of household was age 65 or older). We additionally removed from the first two cohorts the small number of households in which members were not all related. (These were mainly San Jose College students.) Figure 12 shows a breakdown of these three cohorts as well as a residue category of Downtown subjects who did not fit into any of the cohorts. The analysis will be done in terms of these three cohorts. For comparison purposes, the Cambrian results in the preceeding section may be thought of as representing white non-Mexican-American families with heads below the age of 65. (We have rerun the Cambrian data after removing the few minority and elderly households in that area, and the results are almost identical to those for the full Cambrian sample.) As in the last section, we will first consider physical structures and then the neighborhood.

Figure 12. Downtown Cohorts.

	Cohort #1 White non-M-A with head of household below age 65.	Cohort #2  Mexican-Americans with head of household below age 65.	Cohort #3 Head of household age 65 or older.	Residue
<u>n:</u>	48	47	59	32
Ethnicity White non-M-A: Mexican-Amer.: Other minorities:	100%	0% 100% 0%	70% 26% 4%	50%* 6%* 44%*
Age of head of household Below 65: 65 or older:	1004 Od.	100% 0%	0% 100%	869;* 149;*
Percent of households in which all members are related:	100%	100%	98%	64%*
Percent who already own their own home:	27%	7%	53%	21%*

<sup>\*</sup> These percentages are approximations since some respondents were placed in the "residue" category because incomplete data prohibited their placement in one of the other three cohorts.

## A. Physical Structures.

In comparing the three Downtown cohorts, we will follow the same line of analysis already used to compare Downtown with Cambrian Park. Thus, we begin with Figure 13, which shows the average number of rooms subjects felt they should have, plotted as a function of the number of people in the subjects' household. Each cohort is plotted separately. (Note that the vertical axis of the graph has been scaled differently than in the comparable graph of Figure 4 in order to magnify any differences between the Downtown cohorts.) Figure 13 also contains a portion of the Cambrian Park graph as a basis for comparison.

We can see that there are some differences between the Downtown cohorts, with the Mexican-Americans below age 65 generally feeling they should have relatively less rooms for a given number of people in the household. The graphs of the other two cohorts appear to be quite close. All the Downtown graphs lie below the Cambrian Park graph.

Figure 14 shows the average number of bedrooms which subjects felt they should have, also plotted as a function of the number of people in the household. The three Downtown cohorts and Cambrian Park are plotted separately. Again, the perceived needs of the Mexican-Americans below age 65 are relatively less than the perceived needs of the other cohorts. There are no clear differences between the Cambrian Park graph and the graphs of the elderly and the white non-Mexican-Americans. Thus it would appear that the small differences between Cambrian and Downtown back in Figure 5 are mainly due to the Mexican-Americans in the Downtown area.

The number of rooms, and bedrooms, which subjects in each cohort

actually have are shown in Figure 15. (A comparable distribution for

Cambrian park is shown back in Figure 6.) These distributions are roughly

this result since the Mexican-Americans generally have more people per household than the other two cohorts, while the elderly have less. (Seventy percent of the elderly have only one or two people in the home; 53% of the Mexican-Americans have at least four people in the home.) In order to illustrate this situation more clearly, the crowding distribution (people per room) for each cohort is illustrated in Figure 16. Clearly, the Mexican-Americans are living in the most crowded condition, and the elderly are the least crowded.

Mexican-Americans are more corwded than any other cohort, but we have also seen that their perceived housing needs are lower than any other cohort's perceived needs (Figures 15 and 14), We may then ask which cohort is most deprived relative to what they feel they should have? We have not included graphs of the magnitude of "deprivation" (number of rooms should have winus number of rooms do have) as a function of number of people in the household — analogous to the graphs in Figure 8 — because they are not clearcut and are difficult to interpret. We get a clearer picture by examining the percentage of people in each cohort who have less total rooms, and less bedrooms, than they feel they should have. These percentages are displayed in Figure 17, and the Cambrian percentages are included for comparison purposes. Using either total rooms or bedrooms, the Downtown Mexican-Americans are by far the most likely to consider themselves "deprived" even allowing for the fact that their perceptions of what they should have are the lowest of all the groups.

In summary, for a given number of people in the household, the Mexican-Americans felt they should have less total rooms, and less bedrooms, than either of the other Downtown cohorts felt they should have. All three

Elderly:

Figure 13. Downtown. Numbers of Rooms Subjects Felt They Should Have vs. Number of People in the Household, By Cohort. ELDERLY 6.5-Average Number of Rooms Subjects Felt They Should Have CAMBRIAN PARK 6.0-5.5-WHITE NON-M-A 5.0-MEXICAN-AMERICAN 4.5-Number of People in the Household White Non-M-A: 2 27 5 24 274 4 11 5 5 5 070 7 5 17 Mex-American: 0 16

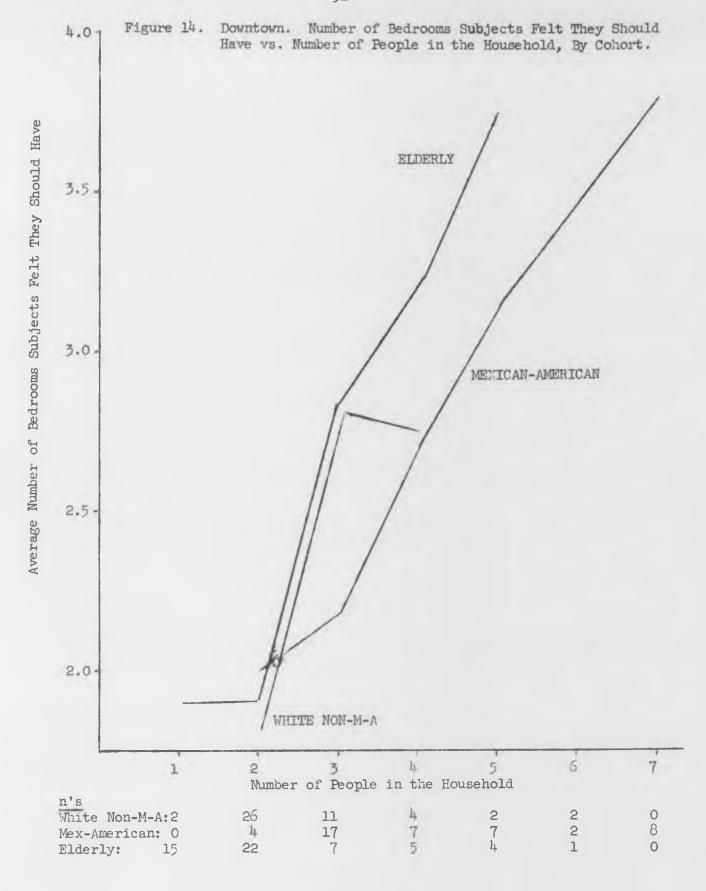
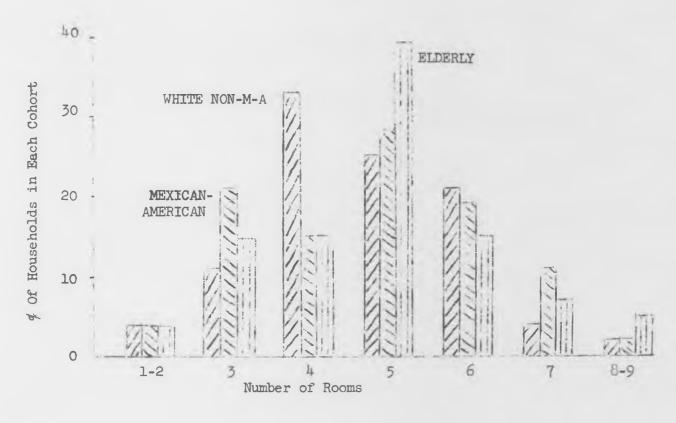


Figure 15. Distribution of Rooms and Bedrooms, By Downtown Cohort.



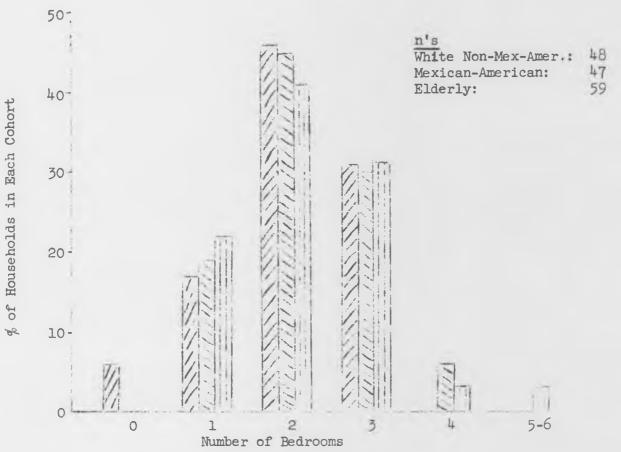
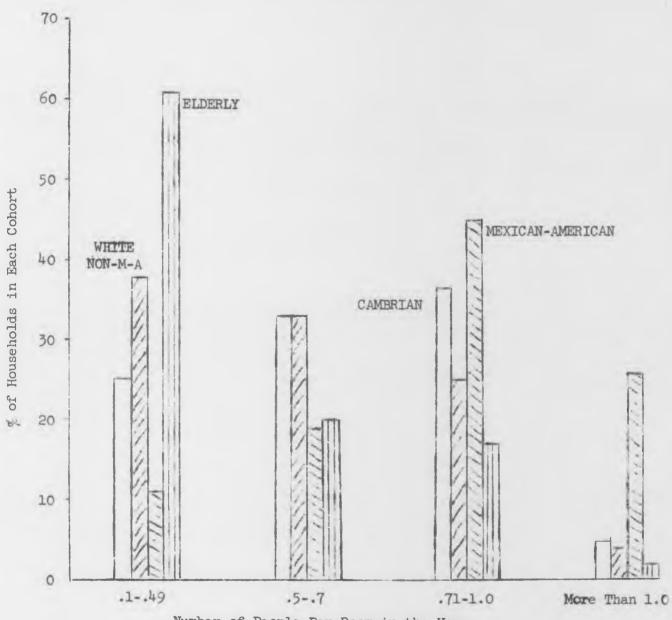


Figure 16. Downtown Crowding (People per Room).



Number of People Per Room in the Home

	n's	
	Cambrian Park:	102
	White Non-M-A:	48
Downtown (	Mex-Amer.:	47
	Elderly:	59

Downtown cohorts felt they should have less total rooms than Cambrian Park residents felt they should have, however except for the Mexican-Americans, there were no clearcutdifferences on bedrooms. The distribution of various size homes is roughly the same for each of the Downtown cohorts, but Mexican-Americans generally have more people per household than the other groups, while the elderly have the least number of people per household. Therefore, the degree of crowding (people per room) is highest for Mexican-Americans, and lowest for the elderly. In fact, the Downtown elderly are less crowded than the residents of Cambrian Park. Looking at perceptions of relative "deprivation," the Mexican-Americans are most "deprived," even when allowing for their very low perceptions of what they feel they should have.

Figure 17. A Comparison of "Deprivation."

Area:		Cambrian		
Cohort:	White non-M-A with head of household below age 65.	Mex-Americans with head of household below age 65.	Head of household age 65 or older.	All.
n:	(48)	(47)	(59)	(102)
% having less total rooms than they feel they should have:	25¢.	47%	17%	24%
% having less bedrooms than they feel they should have:	314	53%	17%	20g

# B. Neighborhoods

Subjects were asked if there was anthing they particularly liked or disliked about their neighborhood. Of the three Downtown cohorts, Mexican-Americans were most likely to both like and dislike something. Seventy-two percent liked some aspect of their neighborhood compared to 65% of the white non-M-A cohort, and 63% of the elderly cohort. Forty-nine percent of the Mexican-Americans disliked something, compared to 40% of the white non-M-A and 41% of the elderly.

Cohorts were roughly similar in those aspects of the neighborhood which they particularly liked. Quiet and/or privacy was most often mentioned, and then convenience of location, and good social relations with the neighbors. The white non-M-As and the elderly agreed on neighborhood dislikes: first, bad social relations with neighbors; second, lack of quiet and/or privacy; third, busy street traffic. The Mexican-Americans usually mentioned the same things but inverted the order. The data in Figure 8 of the previous section gives a fairly general picture of major aspects of neighborhoods that subjects report they either liked or disliked, independent of the area or cohort.

## V. What Accounts for the Differences?

We have seen that, for a given size household, upper-middle-income residents of Cambrian Park generally perceive that they should have more rooms, and more bedrooms, than low-income residents of Downtown perceive they should have. What accounts for these differences? Several explanations seem reasonable:

- 1. High status people may feel that they are entitled to more than low status people, and conversely, low status people may feel entitled to less than high status people. Since income level is one of the major signs of social status in the United States (along with educational level and occupation), the upper-middle-income people may perceive that they should have large homes because of their higher status in the society.
- 2. A person's perception of what he should have may be determined by what he feels he can afford. A higher income person, who can afford a larger home, would feel that he should have a larger home.
- 3. It is well known that different sections of a city may have very different subcultures. That is, the residents of two areas may differ in their life styles, their values, and their goals in life. These differences are often rooted in the differing historical and ethnic backrounds of the residents and may be quite independent of income level or social status. Hence, <u>cultural</u> differences between the areas could account for differences in perceived housing needs.
- 4. Peoples' perceptions of what they should have may be based on what they do have. A person who has a large home, and who has always had a large home, may come to feel that he should have a large home; whereas a person used to a small home would come to think that is what he

should have. The Cambrian Park residents who live in larger homes (Figure 6), must be used to larger homes. This, then, would lead them to feel that they should have larger homes.

These are not mutually exclusive explanations. Perhaps they are all correct to some degree. On the other hand, perhaps none are true. Cur intent in this section is to see which appear to be more or less important in explaining the findings. The statistical method which we will use here (regression analysis) is not capable of proving that a particular causal explanation is indeed true. We must emphasize that this analysis will only serve to show which explanations appear more or less important.

Regression analysis is an extremely convenient statistical technique for the problem we are examining here. We will present a very brief and rough explanation of it here. The reader may find a more complete explanation in most good statistics and methodology texts.

We are interested in explaining why there are differences in the number of rooms people feel they should have, so our "dependent variable" is <u>number of rooms should have</u>. We assume that it is meaningful to write the following equation:

number of rooms should have = aX + bY + c,

where a, b, and c are constants; and X and Y are "explanatory variables" — that is, we expect X and Y to be related to the number of rooms a person feels he should have. For example, X might be "annual income" and Y might be "number of people in the household." Then for any subject, we could plug into the equation his annual income (X) and the number of people in his household (Y) and calculate number of rooms should have for that subject. (This assumes, of course, that we have values for the constants a,

b, and c.) Now if the equation, and our constants, were very accurate, then the number we would calculate for <u>number of rooms should have</u> would be very close to the number of rooms that the subject told the interviewer he should have. We are never terribly accurate, but we usually find that some explanatory variables are more accurate than others. Now if we have several possible variables which we think may be the true explanatory variables, we simply try them out in the equation to see which are the most accurate. We then assume that the most accurate explanatory variables are the ones that are most important in explaining differences in the number of rooms people feel they should have. That is the basic idea behind regression analysis.

New constants are derived for each set of explanatory variables that are used in the equation. Constants are derived so as to minimize the discrepancy between <u>number of rooms should have</u>, as calculated from the equation, and the actual number of rooms which the subject told the interviewer he should have. Actually, we minimize the "average" discrepancy over the whole population of subjects.

The method commonly used is to calculate the "variance" of the discrepancy.

The method commonly used is to calculate the "variance" of the discrepancy of each subject. This is called the "unexplained" variance because it represents the degree of inadequacy of the assumed set of explanatory variables. A very small unexplained variance indicates that the assumed set of explanatory variables is either the true set, or else is highly correlated to the true set. A large unexplained variance indicates that some of the true explanatory variables have been excluded from the equation.

<sup>10&</sup>quot;Variance" is a common statistical measure of the amount of variability in a set of numbers.

There is an upper limit to the unexplained variance, and it is equal to the total variance of the dependent variable. The difference between this total variance and the unexplained variance associated with a particular set of explanatory variables is called the "explained" variance of that set of explanatory variables. We usually speak of the "percent of explained variance" which is simply:

# explained variance = total variance - unexplained variances.

The higher the preparation explained variance, the more likely that our assumed set of explanatory variables is the true set, or at least highly correlated with the true set.

If we are using a set of two explanatory variables, we may wish to explain as much variance as possible with only one of them in the equation, and then, as a second "step," see how much additional variance can be explained by using both in the equation together. This procedure is called "stepwise" regression.

Now that the basic ideas behind regression analysis have been explained, we may proceed to the actual analysis. The dependent variable we are trying to explain is the size of the home subjects feel they should have.

Actually we will be using two slightly different dependent variables:

(1) the number of total rooms the subject feels he should have to properly take care of his family (not counting bathrooms and halls) — this will be denoted total rooms should have, and (2) the number of bedrooms he feels he should have to properly take care of his family — denoted number of bedrooms should have. Both are measures of the size of the home he feels he should have, and they are highly correlated.

We will use five explanatory variables: (1) annual income of the household, (2) the area of residence of the subject, (3) the number of total rooms (not counting bathrooms and halls) that the subject has at the present time — denoted total rooms at present, (4) the number of bedrooms the subject has at the present time — denoted number of bedrooms at present, and (5) the total number of people in the household. These explanatory variables are not independent; they are all positively intercorrelated. Therefore caution must be used in drawing inferences from the regression results.

The situation of an elderly family with a low retirement income is very different from the situation of a younger family with the same income. Therefore households in which the head is age 65 or older have been excluded from the analysis. Other families were excluded because some portion of the data needed for the regression was missing — usually income. Therefore, the regression is based on 183 households, all with the head below age 65, with about 40% living in Cambrian Park and the rest in Downtown.

The first step in the analysis is to run each of the explanatory variables, one at a time, against both of the dependent variables. The results are displayed in Figure 18. Note that total rooms at present is more effective than number of bedrooms at present in explaining variance when the dependent variable is total rooms should have. If we use both total rooms at present and number of bedrooms at present together in the regression (with total rooms should have as the dependent variable) then we only explain 1% more variance than the 44% explained by total rooms at present alone. Similarly, if we use both of those explanatory variables together in the regression with number of bedrooms should have as the

Figure 18. Explanatory Variables Regressed One at a Time.

# Dependent variables:

TOTAL ROOMS SHOU	LD HAVE	NUMBER OF BEDROOMS SHOULD HAVE			
Explanatory variable:	Percent explained variance:	Explanatory variable:	Percent explained variance:		
total rooms at present	449	number of people in	58%		
number of bedrooms at present	36% number of bedrooms		32%		
number of people in household	34%	at present total rooms at present	22%		
area	26%	area	19%		
income	21%	income	12%		

dependent variable, we explain less than 1% more variance than the 32% explained by using number of bedrooms at present alone. We will therefore assume that these two explanatory variables have negligible independent effects. They will be interpreted as two slightly different indicators of the same thing: size of home at present. Therefore in the remainder of the analysis number of bedrooms at present will not be used when total rooms should have is the dependent variable, and total rooms at present will not be used when number of bedrooms should have is the dependent variable.

The results we obtained in previous sections of this paper used number of people in the household as a control variable. Following that procedure, the remainder of this analysis will be based on stepwise regression in which the first step explains variance associated with number of people in the household. We will then analyze the remaining variance using the other explanatory variables.

Figure 19 shows the additional percentage of variance explained by each

Figure 19. Two-step Regression With the First Step Controlling For Variance Due to Number of People in Household. The Additional Variance Explained By Each of the Other Explanatory Variables, Regressed in the Second Step, Is Given Below.

## Dependent Variables:

TOTAL ROOMS SHOU	LD HAVE	NUMBER OF BEDROOMS SHOULD HAVE				
Explanatory variable:	Percent additional explained variance:	Explanatory variable:	Percent additional explained variance:			
total rooms at present area:	26¢ 13¢ 12¢	number of bedrooms at present:	7%			
ncome:		area: income:	5¢.			

explanatory variable after controlling for number of people in the house-hold. The table shows the results of six regressions — three for each of the dependent variables. Each regression was done in two steps with number of people in the household entered first, and then size of home, or area, or income entered second. We see, for example, that total rooms at present accounts for an additional 26% of the variance independently of number of people in the household. The results in Figure 19 show that, controlling for number of people in the household, the size of the home (as measured by total rooms at present and number of bedrooms at present) explains more variance than either area or income.

This analysis is complicated by the fact that the explanatory variables are all positively intercorrelated. People in Cambrian Park have higher incomes and larger homes than people Downtown. This raises the possibility that the variance explained by area and income may be spurious. That is, it may simply be due to the fact that area and income are correlated to

the size of the home, which is the major source of variance. We may check this possibility using a three step regression where the first step removes variance due to number of people in the household, the second step removes additional variance due to the size of the home, and the third step attempts to remove any additional variance which is associated with income or area. (They are entered together in the third step.) For either dependent variable, only about 1% of the variance is solely related to income and area. That is, if we first take into account the effects associated with number of people in the household and size of the home, then income and area have negligible effects.

This analysis puts us in a good position to evaluate the relative merits of the four explanations which were suggested at the beginning of this section. If the first and/or second ones were particularly important then we would expect that, for a given size family, most of the variance in the dependent variables would be explained by income differences between subjects. The third explanation requires that a major proportion of the variance be explained by area differences. We have just seen that income and area are the least effective variables for explaining variance.

The fourth explanation — that people used to living in large homes come to feel that they should have larger homes — requires that, for a given size family, most of the variance in the dependent variables be explained by the size of the present home. Measures of the size of the present home were indeed the most effective explanatory variables (controlling on size of the household), so the fourth explanation appears to be more important than the other three. In fact, the three-step regressions suggest that the other explanations are irrelevant, although this result could be an artifact due to the correlation between the explanatory variables.

We must emphasize again that this sort of analysis does not prove that any particular explanation is true. It simply makes some appear more likely than others. It is always possible that the "real" explanation has totally escaped our attention, and that those hypothetical explanations which we choose to investigate are only secondary causes or spurious effects. We can, however, say with some assurance that whatever the "real" explanation is, it must be closely tied to the explanatory variables we have already investigated because they do explain a very large portion of the total variance of the dependent variables. We have "explained" 62% of the variance of mumber of total number of rooms should have, and 66% of the variance of mumber of bedrooms should have. A large portion of what remains unexplained is error variance due to intrinsic inaccuracies of the measurement situation.

#### VI. Dissatisfaction.

Which people are most dissatisfied with their housing? Is it the overcrowded, the aged, or those with no friends in the neighborhood?

We asked respondents ten separate questions about possible dissatisfaction with their homes and neighborhoods. These are listed in Figure
20 along with a matrix which indicates the correlations between these measures, taken two at a time. The measures are all intercorrelated — particularly eight of the ten (excluding fairness of monthly payments, and
adequacy of schools.) That is, subjects who gave a dissatisfied response
to one of these eight questions were likely to have also given dissatisfied responses to one or more of the other seven. Thus of the 225
subjects who gave at least one dissatisfied response, 68% gave at least
one more, 41% gave at least two more, and 4% gave at least five more
dissatisfied responses to the eight questions.

The percentages of subjects giving multiple dissatisfaction responses is greater than would be expected by chance (using a binomal distribution). We tentatively conclude, then, that some people are generally dissatisfied, and their dissatisfaction is manifested on a wide variety of questions about their homes and neighborhoods. Certainly there are also specific reasons why one individual may be most dissatisfied with the garbage collection while another person is most dissatisfied with the fairness of his monthly home payments. (For example, people with high monthly payments are more likely to find them unfair than people with low monthly payments.) But over and above these specific complaints, many of the respondents appear to have a generalized orientation of dissatisfaction. In the remainder of this analysis, we will not be concerned with the causes of any one

Figure 20. Correlation Matrix of Ten Measures of Dissatisfaction.

# Ten Measures of Dissatisfaction:

- 1. Is there anything else (other than more rooms) you feel you should have to properly take care of your family?
- 2. Is there anything you particularly dislike about this neighborhood?
- 3. Do you feel that you and your hisband (wife) have enough privacy from the rest of the family?
- 4. Do you find this home generally satisfactory to properly take care of your family?
- 5. Is the garbage collection satisfactory?
- 6. Do you feel that the city government is doing enough to provide decent living conditions for the people of San Jose?
- 7. Do you feel that law enforcement in this neighborhood is effective?
- 8. Do you find the public transportation adequate here?
- 9. Do you consider (your monthly home payments) a fair amount?
- 10. Do you think the local schools are adequate?

## Correlation Matrix:

"x" designates that the two measures are correlated at the .001 level of statistical significance.

#### Measure number:

		2.	3.	4.	5.	6.	7.	8.	9.	10
Measure number:	1.	1.	x	х	х	x		3		•
	2.	1	x		x	x	x			٠
	3.		1	X	x		х	х	*	
	4.			1	×	x			x	•
	5.				1	x	x	x		
	6.					1	x	x		х
	7.						1	x		
	8.							1		x
	9.									

particular measure of dissatisfaction, but instead we will look for causes of the general orientation of dissatisfaction. Toward that end, we will combine the eight measures of satisfaction that are most closely intercorrelated (numbers 1 through 8 in Figure 20) into a scale of general dissatisfaction. An individual's score on this dissatisfaction scale will be the number of dissatisfied responses he gave to these eight questions. Thus a low score indicates little generalized dissatisfaction while a high score indicates substantial generalized dissatisfaction.

Not surprisingly, the dissatisfaction scale correlates with other indicators of a pessimistic outlook. Thus, people who score high on that scale are most likely tothink that if they decided to move now, they would have trouble finding a place they could afford; and they do not expect to stay at their present residence too long.

We have attempted to correlate a large number of variables with the dissatisfaction scale. The results are summarized in Figure 21 where variables are listed in three groups: (1) those which correlate with dissatisfaction at the .001 level of significance or higher — these are very reliable correlations; (2) those which correlate with dissatisfaction at least at the .05 level of significance, but not at the .001 level — these are moderately reliable correlations; and (3) those which are uncorrelated with dissatisfaction.

If we look at the last group first, we find that measures of material well being (number of rooms in the home, income) are uncorrelated. Membership in a minority group and residence in the Downtown area are both unrelated to dissatisfaction. Number of friends in the neighborhood — a measure of social integration — is also unrelated.

Three types of variables showed highly significant (.001) correlations

Figure 21. Variables Correlated With the Dissatisfaction Scale.

# Variables correlated at the .001 level of significance:

Age of head of household.

Age of respondent.

Members of household are unrelated (mainly college students).

Number of people in the home age 65 or older.

Number of rooms should have minus number of rooms do have.

Number of bedrooms should have minus number of bedrooms do have.

Number of people in the home.

Number age 18 or younger.

Number of school children.

Number of people divided by number of rooms.

Number of people divided by number of bedrooms.

# General trends:

There is more dissatisfaction among the young.

Those who are dissatisfied do not have as much as they feel they should have.

There is more dissatisfaction in homes with larger numbers of people and more crowding.

# Variables correlated at the .05 level of significance:

Is there anything you like about the neighborhood?

How long has your family lived here (in the same home)?

Are you buying or renting the home?

Do you attend a community social organization or a local church?

People who like the neighbor-hood are more satisfied.

People who have lived in the home longer tend to be more satisfied.

People who already own their own home are most satisfied than people who are currently buying or renting.

People involved in social organizations or churches are more satisfied.

## Uncorrelated variables:

Number of rooms in the home.

Number of bedrooms in the home.

Income.

Ethnicity (M-A or white non-M-A)

Number of neighboring families who are friends.

Area.

Size of home and income make no difference.

No relation.

No relation.

No relation.

with dissatisfaction. The first type were age-related variables; younger people tended to be more dissatisfied. The second type had to do with number of people in the home and degree of crowding; dissatisfaction increases with crowding. The third type of variable was the discrepancy between the number of rooms (bedrooms) which subjects thought they should have and the number they did have. These two discrepancy variables showed higher correlations with dissatisfaction than any other variables in Figure 21.

Although several of the correlations of Figure 21 were extremely significant statistically, none of them were very high. In order to find out just how much of the variation in dissatisfaction we could explain, we used the variables in Figure 21 as explanatory variables in a regression analysis with <u>dissatisfaction</u> as the dependent variable. The discrepancy in rooms (should have minus did have) explained 14% of the variance by itself. Discrepancy in rooms, plus age of the head of the household (the older the head the less dissatisfaction), explained 18% together. If we then add the crowding variables, we get very little additional explained variance. Using all of the variables in Figure 21, we were only able to explain 25% of the variance in the scale of dissatisfaction. We are clearly missing some crucial explanatory variables.

The discrepancy variables were defined so that they took a value of zero whenever number of rooms (bedrooms) should have minus number of rooms (bedrooms) did have, would have been a negative number. Using Kendall's Tau as a measure of association, the correlations between dissatisfaction and either of the discrepancy variables was about .26. The correlations between dissatisfaction and number of rooms (or bedrooms) did have were both insignificant. There was a .09 correlation between dissatisfaction and number of rooms should have (significant at the .01 level), and a .14 correlation between dissatisfaction and number of bedrooms should have (significant at the .001 level).

# VII. Summary of Major Findings

## 1. Physical Structures.

For a given number of people in the household, the upper-middle-income residents of Cambrian Park felt they should have more roums and bedrooms than the low-income residents of Downtown felt they should have. Among the Downtown residents, Mexican-Americans had the lowest perceptions of the number of rooms and bedrooms they should have.

Homes in Cambrian are generally much larger than those Downtown, however, if we take into account the number of people living in the homes and speak in terms of "crowding" (number of people per room), then the elderly residents of Downtown turn out to be the least crowded, followed by the Downtown white non-Mexican-American, the Cambrian Park residents, and then the Downtown Mexican-Americans who are the most crowded.

We inquired which area or cohort was most deprived relative to what they felt they should have? Our measure of "deprivation" was the number of rooms a subject felt he should have minus the number of rooms he did have. Downtown Mexican-Americans were the most "deprived," followed by Downtown white non-Mexican-Americans, then Cambrian Park residents, and then the Downtown elderly.

## 2. Neighborhoods.

We examined subjects' perceptions of the neighborhoods around their homes. The major factors which subjects themselves consider to be involved in <u>liking</u> neighborhoods are quiet and privacy, good social relations with the neighbors, and convenience of location. The major factors they felt were involved in <u>disliking</u> neighborhoods are busy traffic, bad social relations with neighbors, and lack of quiet and privacy. They do not consider

public services to be a major factor in liking of disliking the neighborhood.

These results are fairly consistent between Cambrian Park and the three

Downtown cohorts.

As a check on a portion of these findings, we compared subjects with few and many friends in the neighborhood, and subjects who did or did not attend local community organizations, to see if they differed in their degree of liking and disliking their neighborhoods. Subjects with good social relations did indeed tend to like their neighborhoods better than subjects with fewer friends, or than those who did not attend local organizations. There were no consistent differences, however, on disliking of the neighborhood. Thus, we have a very consistent finding that good social relations leads to liking of the neighborhood, but the determinants of disliking are less clear.

## 3. What accounts for the Differences?

It is obvices that a larger family needs a larger home. We were concerned here with additional factors beyond family size which explain differences in the number of rooms and bedrooms which subjects perceive they should have to properly take care of their family. Explanations based directly on income or area differences were decisively eliminated. The most likely explanation, according to this analysis, is that people used to living in large homes come to feel that they should have relatively large homes, while people used to living in smaller homes come to feel that they should have relatively small homes. Two variables — size of the present home, and number of people in the household, explained about 65% of the variance in the size home subjects felt they should have. Given the large unexplained variance to be expected from intrinsic uncertainties

of our measurements, it appears that these two variables are the major, if not the only, factors determining the size home subjects feel they should have.

### 4. Dissatisfaction.

Many respondents appear to have a general orientation of dissatisfaction which manifested itself on several questions about their homes and neighborhoods. Several variables which one might initally think would be associated with dissatisfaction were not associated with it. Measures of material well being (size of home, income), number of neighboring families who are friends, minority group membership, and residence in a low-income area were all unrelated to our scale of dissatisfaction. The three types of variables showing the most statistically significant correlations were those associated with age (there is more dissatisfaction among the young); those associated with number of people in the home, and overcrowding (there is more dissatisfaction in overcrowded conditions); and most important, those showing a discrepancy between the size home a subject feels he should have and the size home he actually has (the less he has, relative to what he thinks he should have, the more dissatisfaction). All together these variables explained only 23d of the variance in the dissatisfaction scale, so we are missing some important explanatory variables.

VIII. Discussion.

Applied social research suffers from all the problems of "pure" research plus one more: Readers of the final report generally have preconceived views of what constitutes good and bad social policy, and they tend to accentuate research findings which support their views, ignore those which refute them, and selectively interpret those which could go either way. In the present case, we have the finding that low-income Mexican-Americans feel they should have smaller homes than middle-income people would have for thenselves. We visualize one group of critics taking this as support for a do-nothing housing policy: "They don't feel they need much, so we don't have to give them much."

Our own biases lead to different implications. The Mexican-Americans were the most over-crowded group studied here. Data reviewed at the beginning of this paper indicated that they are most likely to have unsound housing units. The fact that they have modest perceptions of their own housing needs means, to us, that they can realistically be supplied with "a decent home" at a substantially lower cost than would be the case if they had middle-income expectations. The finding is, to us, a go-ahead rather than an impediment to subsidized low-income housing. Additionally, when we controlled for the fact that their own perceived needs were low, we found that relative "deprivation" — what you feel you should have minus what you do have — was greater for the Mexican-Americans than for any other group in the study. If aid is to be allocated on the basis of who feels they need it, then low-income Mexican-Americans should receive priority for housing assistance.

Our neighborhood findings support the well accepted notion that good

Critics of high-rise public housing have pointed out that old socia! ties are broken when families are moved from the slum into new mass housing. There is little opportunity to establish new social links in the new environment. Thus, while physical surrounding improve, social relations deteriorate. Out data suggest, however, that some critics go too far when they blame this social isolation for the general dissatisfaction and alienation found in public housing. Our scale of generalized dissatisfaction was only minimally related to measures of neighborhood social relations. We shall return to this point, but first it is worth specifying some of the implications of our neighborhood findings for San Jose's proposed plan to scatter low-income housing throughout middle-income areas of the city.

There are clear advantages to scattered housing. For one, schools can be integrated without the need for extensive busing. But we know that people tend to become friendly with other people similar to themselves. One or two low-income Mexican-American families would probably be hard pressed to find many friends among non-Mexican-American middle-income neighbors. Therefore it would seem wise to insure that there are at least enough low-income families contiguous to each other so that social cliques can form. If possible, families who were already friendly could be moved into adjoining homes. If this is not practical, then the low-income families should be "sorted" so that those who are to be neighbors will be similar. For example, a young family with small children would be much more likely to become friendly with a similar young family than with an elderly couple. Therefore it would be better to make neighbors of two young families rather than a young one and an elderly one.

Our findings emphasize the importance of quiet and privacy. While the residents of public housing must have opportunities for making and maintaining friendly contacts with their neighbors, they must also have the option of withdrawing from the neighbors into the seclusion of their own home. Present home designs are evidently not sufficient in providing quiet and privacy since their lack was a major complaint in the survey.

Perhaps our most interesting set of findings are those concerning dissatisfaction. First we found that many people tend to have a generally dissatisfied orientation which manifests itself on a wide variety of questions about their housing conditions. Several factors frequently associated with dissatisfaction and alienation were not related in the present study. Income and size of home, minority group membership, number of friendly families in the neighborhood, and residence in a low-income area — all these showed no significant effect. The three factors which were most significantly related to dissatisfaction were age (the younger are more dissatisfied), overcrowding, and the discrepancy between the size home a subject had and the size home he felt he should have.

The discrepancy variables were most improtant. Sociologists have often theorized that this sort of relative deprivation is a cause of dissatisfaction, alienation, and even rebellion; but good empirical support for the hypothesis is unusual. We have gotton a substantial empirical grip on the problem here, however, and this appears to be the most promising direction for future research. Only a little over 20% of the variance in dissatisfaction has been explained. Some important explanatory variables are clearly missing from our analysis. We hypothesize that the missing variables are very similar to the discrepancy variables we have already used. There are many aspects of life where a person may obtain substantially

less than he thinks he should obtain. His job may not pay as much as he feels he is worth; his wife may not treat him as well as he feels he should be treated. Presumably these discrepancies would help explain generalized dissatisfaction.

If the level of dissatisfaction found in a population is indeed a function of these several discrepancies, then it is interesting to speculate on the possibilities for altering that level of dissatisfaction.

Various public policies might have the effect of generally increasing, or decreasing, certain discrepancies. For example, some critics maintain that the national "War on Poverty" did substantial harm by raising expectations of the poor without fully delivering the goods. Presumably the increased discrepancy between what was expected and what was received increased the level of dissatisfaction among the poor. A better understanding of these mechanisms might allow social planners to eliminate societal dissatisfaction in the same way that economic planners control inflation through manipulation of the money flow. Of course, our present national economic policies emphasize the severe dangers to this course.

## APPENDICES

Appendix A. Description of the Study Areas.

The boundaries of the Downtown area are: Highway 17, to Highway 101, to Taylor St., to 4th St., to Empire St., to 1st St., to Washington St., to Coyote Creek, to Santa Clara St., back to 1st St., to Market St., to Auzerais Ave., to Los Gatos Creek, to The Alameda, to Stockton Ave., back to Highway 17.

The boundaries of the Cambrian Park area are: Leigh Ave., to Dry Creek Rd., to Booksin Ave., to Hillsdale Ave., to Leigh Ave.

Both areas were selected to coincide with regular census tracts. Figure A-1 presents data for these tracts (six tracts in Downtown, two in Cambrian Park) from the 1966 special census of Santa Clara County. This data was aggregated to produce Figure 3.

Figure A-1. Statistical data on the San Jose study areas, as of 1966.

Census tract No.	1966 porula- tion	% Mexican- American	% Negro	% other Non-white	% Households with incomes below \$4,000	Nedian household income (\$)	% Unem- ployed	% Single family dwelling units	% Owner occupied
Downtown	area:								
A 001	4,194	26.6	3.1	24.7	29.2	5,800	12.1	60.2	47.4
A <b>0</b> 02	3,750	19.1	3.0	12.8	34.6	5,600	9.0	43.4	36.2
A 003	3,243	34.3	2.0	3.9	27.7	5,800	9.5	53.4	38.1
A 008	3,358	37.6	1.7	1.7	65.1	2,350	16.0	27.1	17.6
A 010	3,276	27.2	4.8	8.9	53.9	3,600	11.8	28.9	23.8
A 012	3,453	34.2	5.1	8.3	52.1	3,800	10.0	61.5	43.1
Cambrian	Park Area:								
A 029B	7,€48	3.9	.6	1.7	4.0	10,200	2.6	96.6	86.9
A 029C	7,357	12% (?)*	.3	1.9	2.4	11,200	1.7	97.8	93.7

Source: "Memorandum to Data Users"; Info No. 326; County

of Santa Clara Planning Department; June, 1969.

There is reason to believe that this overstates the percentage of Mexican-Americans in this tract. The survey failed to identify very many Mexican-Americans in either tracts A 029B or A 029C, and there was no prima facie evidence that tract A 029C contained any more Mexican-Americans than the surrounding tracts (which the census reported as four or five percent on the average.) The original source memorandum contained a figure of 22% Mexican-Americans in tract A 029C, but on checking the original census print-outs this proved to be an error and was corrected to the present 12%. But our recent experience in the tract suggested that this was still too high, so we contacted local Catholic churches to obtain information on Mexican-American residential patterns in Cambrian Park. This investigation supported our impression that tract A 029C had no higher concentration of Mexican-Americans (and probably a lower one) than the surrounding tracts. Our own estimate of the true proportion of Mexican-Americans in the Cambrian Park study area is four to five percent. We thank Father Essig of St. Francis Cabrini Church for his assistance in this matter.

Appendix B. Sampling and Interviewer Procedures.

The sample of subjects was selected to be fairly representative of the two study areas. We did not use a strictly random procedure because of limitations on time and manpower. Instead we selected 18 to 36 street intersections scattered throughout each area. Then teams of three or four student-interviewers visited these intersections in random order until our complement of interviews was obtained. Single interviewers approached homes on blocks which ended at the selected intersection. If an interviewer made contact with someone in a home, he skipped the next two homes before approaching another one. If no contact was made, the interviewer approached the next home. There were no callbacks. This method appears to have been moderately successful in obtaining a representative sample. (Figure 1) Interviewers kept a record of their approaches, contacts, successful interviews, reasons for refusals, and hostile interactions.

Interviews took about 10 minutes. Interviewers made contact with adults in about 60% of the homes that were approached. Of those contacted, about 70% consented to the interview. Residents were generally quite cooperative; less than 10% of the adults contacted showed any sort of unpleasantness toward the interviewer. These percentages were roughly the same in both areas. We believe that cooperation would have been evenbetter if the interviews had not taken place right after the campus strikes over the Cambodian invasion.

There was some inital concern that a few of the student-interviewers who had beards or were minority group members might be treated differently than the "straight" interviewers. We have no evidence of significant differential treatment. That was not a problem.

A few interviewers were able to question subjects in Spanish. Most were not, however, and we lost about 12 potential subjects because of language difficulties.

Most interviews took place on weekday afternoons with the effect that most of the respondents were women — particularly in Cambrian Park. Only among the Downtown elderly were men and women about equally represented among the respondents. We have checked this bias and find that it does not significantly alter the analysis.

Appendix C. Items on the Final Interview.

Type of housing unit. (house, duplex, apartment, other)

Sex of respondent.

How many people live in this household?

(If not obvious:) Are they all related?

How many people here are age 18 or younger?

How many here are age 65 or older?

About how old is the head of the household?

Are there any grammar of high school children here? (If yes:) How many are there?

How long has your family (household) been living here? (If one year or less:) When you moved, did you have any trouble finding a place to live? (If yes:) What kind of trouble?

Why did you decide to move here?

How long does your family (household) expect to stay here?

If you decided to move now, do you think you'd have trouble finding a place you could afford?

In the last place your family lived, how many rooms did you have, not counting bathrooms or halls?

How many rooms do you have here, not counting bathrooms and halls?

How many total rooms do you feel you should have to properly take care of your family (household), not counting bathrooms and halls?

How many actual bedrooms are there?

(If there are more than two people:) How many rooms do people regularly sleep in?

How many actual bedrooms do you feel you should have to properly take care of your family (household)?

Is there anything else you feel you should have to properly take care of your family (household)? (If yes:) What?

Do you feel that you and your husband (wife) have enough privacy from the rest of the family?

If you had your choice, would you want your family to live in a house, duplex, or an apartment?

If you could do either, would you rather buy or rent your home?

I'd like to ask you some things about the neighborhood now. First, is there anything you particularly like about this neighborhood? (If yes:) What are the main things you like?

Is there anything you particularly dislike about this neighborhood? (If yes:) What are the main things you dislike?

About how many of the neighboring families are you friendly with?

Do you attend any sort of community social organization or a local church?

Do you find the public transportation adequate here?

Do you ever use public transportation?

Is the garbage collection satisfactory? (If no:) Why not?

Do you think the local schools are adequate? (If no:) Why not?

Do you feel that law enforcement in this neighborhood is effective? (If no:) Why not?

Are you buying or renting here?

Would you mind telling me about how much your monthly (rent) payments are here? (If making payments:) Do you consider that a fair amount?

Do you find this home generally satisfactory to properly take care of your family (household)?

Do you feel that the city government is doing enough to provide decent living conditions for the people of San Jose? (If no:) Why not?

(Show chart of annual incomes.) Please tell me the letter that corresponds most closely to the total income, before taxes, of your family (household) during 1969. This would include salaries, pensions and any other income received by anyone in the family (household).

(If the respondent is not the head of the household:) Could you tell me your approximate age?

(If not obvious:) Could you tell me your ethnicity (race)?