

Chapter 3

POPULATION

José Hernandez, Lilia Hernandez, Theodore E. Downing

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Jose Hernandez, Lilia Hernandez and Theodore E. Downing

Since basic forms of social change involve the birth and death of people and other major life events, an overview of the Douglas society should begin with a description of its population size and composition, including the city's ethnic, age, and occupational groups. An overview continues which reveals that the past, present and future in Douglas partially depend on its unusual population pattern, largely attributable to its characteristics of a multi-ethnic, one-company, small town situated on the United States - Mexico border.

#### Population Growth

The United States' government enumerates the nation's population once every ten years. Examining several censuses shows that Douglas has a history of irregular population change. Dating from the city's founding, a large population increase came in the 1920's, when the number of residents grew from sixty-five hundred to almost ten thousand. After moderate population declines during the 1930's and 1940's, the downward trend was reversed in the 1950's, with the population expanding to its current level of slightly more than twelve thousand. Since 1960, no significant change has occurred, with the present population remaining about double the total in 1910. In other words, since 1960, the population appears to have stabilized, showing little sign of change.

IN Thomas Weaver and Theodore E. Downing, The Douglas Report, 1975. Tucson: Bureau of Ethnic Research, University of Arizona.

The slow growth pattern in Douglas may be compared with different conditions in seven other Arizona cities, all within a 50 percent range of its population (Table 1). Since 1960, Kingman and Sierra Vista have grown more rapidly than is usual for Arizona as a whole. Nogales, the only other border town on this list, and Chandler have grown at rates near the state average. Like Chandler, the population of Casa Grande has increased slightly, but a good deal of its growth can be attributed to recent annexations. Thus, the continued stability of the Douglas population did not keep pace with the prevalent trend of expansion occurring in other communities of its size and the state itself. But on the other hand, the population did not decline, as it did in Bisbee, Prescott, and Winslow.

More than a decade of stability might give the mistaken impression that in recent years Douglas has had a "stationary" population, that is, one in which the number of deaths equals the number of births. Certainly, this would be the most readily understandable explanation for a period of almost no change in population. Further investigations, however, reveal that the births have outnumbered deaths by a considerable margin for several decades. The positive balance between birth and death rates should have caused considerable growth in the population. Considering also the indications of a steady stream of in-migration, this natural increase should have enlarged the population by an annual rate of three percent during the last quarter century. Since 1950, the population should have doubled in size. Obviously this has not happened.

Table 1

Population Growth and Stability for Selected Small Cities in Arizona, 1970\*

<u>Cities</u>	<u>Percent Change, 1960-1970</u>
Arizona	+36.0
Douglas	+ 3.7
Bisbee	-16.0
Casa Grande	+ 2.6
Chandler	+38.6
Kingman	+61.6
Nogales	+18.8
Prescott	- 5.2
Sierra Vista	+87.9
Winslow	- 9.0

\*Non-metropolitan urban places with total populations within a range of + 50 percent of the Douglas total. Source: U.S. Bureau of the Census. Census of Population: 1970. General Social and Economic Characteristics. Final Report PC (1)-C4, Arizona

The Douglas population presents a pattern heavily influenced by out-migration which has contributed to stabilization at a particular level, despite considerable internal changes. The situation might be considered to resemble a tank of water being simultaneously filled and drained, but never changing level. The constant replacement and steady state may be better understood by looking at the internal composition of the Douglas population and the forces causing changes in this composition.

#### Population Composition

Let us first look at the division into ethnic groups, a primary element of the Douglas population. Among Douglasites enumerated in the United States census in 1970, about seventy percent were classified as either of Spanish language or Spanish surname, the broadest designations used by the census to identify a person as Mexican American. Spanish language refers to all residents of households where the head or spouse was exposed to the use of the Spanish language during early childhood, regardless of current use or language ability. Persons having a surname that was identifiable as Spanish, but not living in a household identified as of Spanish language, were added to the Mexican American count. Mexican American identity was also measured by answers to a question which asked how respondents identify themselves<sup>1</sup>. In Douglas, these answers gave virtually the same result as the classification by language or surname. Only seven persons out of more than eighty five hundred in this classification reported a nationality or Spanish group other than Mexican.

Information collected on the random sample of the Bureau's project reinforced these findings from the United States census data. Each person was asked "How does X prefer to be identified?" They were shown a list and asked to pick the most appropriate terms for each member of their household, including themselves. "Mexican" and "Mexican American" proved the most commonly used ethnic designations, accounting for two-thirds of the population (Table 2). "Chicano" was less frequently used, apparently because of the political activist connotation which most of the Mexican heritage community preferred to avoid. "Anglo American," "American," and "White" seem to encompass most of the non-Mexican heritage community, but also including some individuals who had other characteristics which might cause them to be classified as Mexican heritage by a disinterested third party, that is, they were either born in Mexico, spoke Spanish better than English, or both. The black population formed a small minority in Douglas, representing less than one percent of its total population.

Most Mexican Americans in Douglas were United States citizens and slightly more than one-half were second generation Mexican Americans, meaning that they were born in the United States, but one or both of their parents were born in Mexico (Table 3). Another one quarter were descendants of United States born parents, two or more generations removed from alien status and 23 percent were born in Mexico.

Since at least three percent of the entire United States population was undercounted by the 1970 census and the omission factor is much

Table 2

## Self-Identity of People in Douglas

<u>Self-Identity</u>	<u>Number</u>	<u>Percent</u>
All Respondents	703	100.0
Mexican American	281	40.0
Mexican	169	24.0
Chicano	17	2.4
Subtotal	<u>(467)</u>	<u>(66.4)</u>
American	130	18.5
Anglo American	57	8.1
White	9	1.3
Subtotal	<u>(196)</u>	<u>(27.9)</u>
Black or Negro	2	0.3
Other	13	1.8
Don't Know	25	3.6

Source: Unless otherwise specified, all tables and figures are derived from the information gleaned from the Douglas Project Questionnaire.

Table 3

## Citizenship Claimed by Respondents For Themselves and Household Members

<u>Citizenship</u>	<u>Number</u>	<u>Percent</u>
United States	539	75.1
Mexico	138	19.2
Both Mexico and U.S.	4	0.6
Burma	5	0.7
No Response	32	4.5
Total	<u>718</u>	<u>100.0</u>



higher in the case of minorities, these percentages probably have some degree of error. If adjustment were possible, the foreign-born group would likely increase in proportion and the entire Mexican heritage ethnic group would increase to at least 75 percent of the Douglas population.

According to the 1970 census, the remaining 25 to 30 percent of the Douglas population was largely of European origin. The combined total of Black, Native and Asian American residents was two hundred seventy-nine, slightly more than two percent of all inhabitants. Adding a small additional margin to compensate for the undercount (also affecting these groups) and for a few individuals classified as "White," but not of European nationality, would raise the non-Mexican minority element to three percent. This left about one quarter as genuinely representative of the Anglo American ethnic group. Among Anglos, eighty-eight percent were native born of native born parents, suggesting United States ancestry from before this century.

The most notable change within the Douglas population during the past few decades has been the gradual increase in the number of Mexican Americans and a corresponding decline of Anglo Americans (Table 4). A brief overview can be gathered from Table 2. The proportion of Anglos in Douglas declined from almost forty-six percent in 1960 to less than thirty percent in the 1970 census. This indicates that Mexican Americans are currently replacing the Anglo population at a rate of about three percent each year.

Table 4

Changes in the Proportions of Mexican Americans and Anglos, 1960-1970 in Douglas

<u>Douglas</u>	<u>1960</u>		<u>1970</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Total Population	11,925	100.0	12,462	100.0
Spanish Surname Population	6,252	52.4	N.A.	0
Spanish Language or Surname Population	N.A.	0	8,702	69.9
"Nonwhites"	203	1.7	279	2.2
Anglo Population	5,470	45.9	3,481	27.9

\*Unadjusted for undercount. Source: U.S. Bureau of the Census. Census of Population: 1970. General Social and Economic Characteristics. Final Report PC (1)-C4, Arizona.

### Affluence and Poverty

Comparing Douglas with the seven Arizona cities previously mentioned, offers an idea of the relation of economics to population. Cities undergoing high population growth showed several signs of affluence, while three, which were stable or declining, including Douglas, showed symptoms of poverty (Table 5 and 5). Specifically, growing towns tended to have more families in the \$10,000 to \$25,000 income range than stable or declining towns. They also had a high percentage of their male labor force in professional or managerial occupations and a higher percentage of persons over twenty-five who had some college experience. In contrast, indications of poverty proved more common to cities undergoing a decline in stability or population. Such towns had more families below the poverty level, more people in semi- or non-skilled jobs and a higher proportion of the male labor force unemployed than towns undergoing population growth.

These indicators of affluence and poverty were also related to the residential stability of the eight towns, as measured by the percentage of people living in the same house in 1970 as they occupied in 1965 (Table 7). This comparison revealed that residential stability was consistently linked with poverty, that is, the poorer the town, the more stable the residency. The percentage of foreign born in a city was also linked with its poverty (Table 5 and 6). Douglas stood second only to Nogales in the percentage of foreign born in their populations. Both towns rated low on measures of affluence and high on measures of poverty when compared to the other six cities.

The combination of poverty and a numerous foreign-born population in a town with limited economic opportunity contributes to a situation favoring out-migration of people in quest of a more promising environment. Thus,

Table 5

## Economic Indicators for Selected Small Cities in Arizona, 1970\*

Locality	Indicators of Affluence			Indicators of Poverty		
	Families Percent With Income \$10,000 -25,000	Male Labor Force Percent In Professional & Managerial Occupations	Persons Age 25+ Percent With Some College Education	Families Percent Below Poverty Income Level	Employed Persons Percent In Semi- & Non- Skilled Jobs	Male Labor Force Percent Unemployed
Arizona	40.4	28.7	26.4	11.5	34.8	3.8
Douglas	34.9	22.7	18.2	18.9	41.3	3.3
Bisbee	57.7	11.9	16.8	8.1	47.6	3.0
Casa Grande	39.5	22.2	21.7	16.5	43.8	4.8
Chandler	42.7	23.2	24.2	12.3	45.3	4.2
Kingman	54.8	29.0	10.0	7.5	39.0	3.7
Nogales	30.0	28.1	13.9	26.5	38.2	5.5
Prescott	32.8	29.5	25.6	14.1	38.3	4.9
Sierra Vista	60.8	56.9	34.4	7.6	18.1	2.9
Winslow	46.9	32.3	18.1	12.6	35.7	3.2

\*Based on 1960-1970 totals, not including areas annexed during the decade.

Source: U.S. Bureau of the Census. Census of Population: 1970. General Social and Economic Characteristics. Final Report PC(1)-C4, Arizona.

Table 6

Correlations of Population Growth, Residential and Foreign Birth  
as Indicators of Affluence and Poverty in Eight Arizona Cities

	Indicators of Affluence			Indicators of Poverty		
	Families With Income \$10,000 -25,000	Male Labor Force Percent In Professional & Managerial Occupations	Persons Age 25+ Percent With Some College Education	Families Percent Below Poverty Income Level	Employed Persons Percent In Skilled & Non- Skilled Jobs	Male Labor Force Percent Unemployed
Population Growth	+4.474	+0.719	+0.321	-0.354	-0.665	-0.191
Residential Stability	-0.474	-0.670	-0.575	+0.565	+0.569	+0.197
Foreign Birth	-0.512	-0.071	-0.308	+0.806	+0.004	+0.376

Source: U.S. Bureau of the Census. Census of Population: 1970. General Social and Economic Characteristics.  
Final Report PC(1)-C4, Arizona.

Table 7

Indicators of Stability for Selected Small Cities in Arizona, 1970\*

<u>Locality</u>	<u>Percent Living in Same House as in 1965</u>	<u>Percent Foreign Born</u>
Arizona	41.3	4.3
Douglas	59.9	17.8
Bisbee	65.9	7.3
Casa Grande	44.6	2.2
Chandler	40.1	2.6
Kingman	37.4	2.2
Nogales	66.7	32.1
Prescott	50.4	3.8
Sierra Vista	25.0	6.1
Winslow	57.9	2.7

\*Non-metropolitan urban places with total populations within a range of  $\pm 50$  percent of the Douglas total. Source: U.S. Bureau of the Census. Census of Population: 1970. General Social and Economic Characteristics. Final Report PC(1)-C4, Arizona.

at any given moment (say, the census enumeration) the percent actually without work may be low, as evident among the figures in Table 5.5. In poverty conditions, the loss of a job or inability to find employment provides strong motives for moving on. Perhaps because of this tendency for the unemployed to leave, we did not find as close a relationship between high unemployment rates and population stability or decline as might be expected.

#### Labor Force

According to the 1970 census, Mexican Americans and Anglos were participating in the labor force to about the same extent, although distinguishing men and women among those employed reveals significant differences. Anglo males had a slightly lower participation in the labor force (60.0 percent of those over fourteen years of age) than Mexican American males (63.7 percent). Anglo males, however, had a larger proportion of old and retired persons and a smaller proportion of teenage workers than Mexican Americans, which helps explain this unusual instance of lower participation for Anglo males. Due to chronic unemployment and occupation displacement, it is common among adult males in United States minority groups to have proportionately lower labor force participation than the total population.

In contrast, fewer Mexican American women were participating in the labor force (25.8 percent) than Anglo women (34.1 percent). The almost ten percent difference may be partially explained by greater domestic and family responsibilities among Mexican American women, although in a

job-scarce economy many women stay home who would seek work if they perceived opportunities.

All four groups, Mexican American men and women and Anglo men and women, participated in the labor force below the respective national employment levels in 1970 (73 percent for males and 40 percent for females). This fact again reflects the depressed labor market in Douglas, where work opportunity limitations are all the more accentuated among teenagers, young adults, women, and people of Mexican American background. It should also be emphasized that these figures were collected before the economic difficulties of the mid 1970's began to appear. It seems safe to assume that conditions have grown worse since the 1970 census.

Economic differences became even more apparent when comparing the occupational structure of the two ethnic groups (Table 8). Anglo professionals and managers outnumbered Mexican Americans in almost inverse proportion to their presence in the population. Compared with the national level for all males (twenty-four percent) Anglo participation in Douglas in these high status occupations was nearly twice while the Mexican American rate stood at about half the national average. In fact, on a proportional basis almost three times as many Anglo women held these prestigious jobs as Mexican American men. Since Anglo men were employed to a greater extent than Anglo women, these figures demonstrate not only the dominance of Anglos in the economic structure of the community, but also the inferior situation of females.

The distribution of workers in middle levels of employment was more influenced by the workers' gender than by ethnicity. Women from both



Table 8

Occupation Distribution by Ethnicity and Sex: Douglas, Arizona 1970

	Percentage Distribution			
	<u>Mexican American</u>		<u>Anglo</u>	
	<u>Males</u>	<u>Females</u>	<u>Males</u>	<u>Females</u>
<u>Persons Employed, Percent By Occupational Level</u>	100.0	100.0	100.0	100.0
Professionals & Managers	12.5	17.3	41.5	32.1
Sales & Clerical Workers	11.8	37.9	13.5	46.8
Skilled Manual & Foreman	20.4	0.0	17.7	2.0
Semi- & Non-skilled Manual	55.3	44.8	27.2	19.1

ethnic groups held more sales and clerical positions than males, while craftsmen and foremen were mostly male. Nearly half of the sales and clerical positions were occupied by Anglo women, representing almost half of the Anglo female labor force. Only among skilled manual workers and supervisors did Mexican Americans begin to outnumber Anglos. Although this category includes mechanics and repairmen, carpenters, electricians, masons, painters and plumbers, almost half were engaged in other jobs, probably as machinists and metal workers in the smelter operations.

The copper industry enters predominantly into the picture when comparing the proportion of both ethnic groups in manual employment. Over half the Mexican American males worked as semi-skilled and non-skilled workers. Combining this segment with those employed in skilled manual or foreman occupations, fully three-fourths of the Mexican American men were working in manual occupations, much higher than the proportion of Anglo males at the same job levels. Moreover, two-thirds of the Mexican American male operatives were employed in manufacturing of durable goods, which in Douglas means the copper industry. Out of the 402 Mexican Americans listed by the 1970 census as working in the metal industry, about half were non-skilled laborers. So dominant was the copper industry as an employer of Mexican Americans that (placing agriculture and services aside) it represented about forty-five percent of the jobs held by both sexes of this group and an even greater percentage of those jobs held by males.

Mexican American women were predominately employed in semi- or non-skilled manual labor, having slightly less than half their number employed

in such low status positions. Of this group, almost half were employed in private households or as cleaning and food service workers. Traditionally, such jobs have low pay, but locally depressed conditions meant they received an even lower salary than would be the case in more prosperous towns.

#### Income Distribution

Thus far, we have painted a picture of a society divided into different social and economic levels with the Mexican Americans forming the less advantaged classes. This idea can be verified by comparing the distribution in annual income of Anglos and Mexican Americans (Table 9). Eight out of every ten Mexican American households had less than \$10,000 income in 1969. By contrast, half of all households in the United States received more than \$9,590 during this same period. The depressed economic condition of Mexican American families also appears in their percentage below the poverty line, twenty-three percent, in contrast to 10.7 percent for the nation's total population and 10.3 percent for Anglos in Douglas.

Family income among Anglo Americans followed the national pattern, closely resembling the income distribution among "white" families. Compared with Mexican Americans, Anglos were consistently more numerous in the higher income levels -- especially in the crucial fifteen to twenty five thousand dollar range, which included most of the higher-paying salaried jobs. Nevertheless, there were some relatively affluent Mexican American families as well as a few Anglos submerged in poverty, not typical of the remainder of the population, and comprising about ten to fifteen percent of each ethnic group. In terms of estimated population totals for Douglas

Table 9

## Distribution of Annual Income for Anglos and Mexican American Households

<u>Annual Income (1969)</u>	<u>Percentage of Households</u>	
	<u>Mexican Americans</u>	<u>Anglos</u>
Less than \$2,000	10.6	5.5
\$2,000 - \$5,000	26.4	16.2
\$5,000 - \$10,000	40.3	33.1
\$10,000 - \$15,000	16.4	24.9
\$15,000 - \$25,000	4.3	15.5
\$25,000 or more	2.0	4.8
Total	100.0	100.0

in 1970, this system of economic stratification could be depicted as follows (Figure 1).

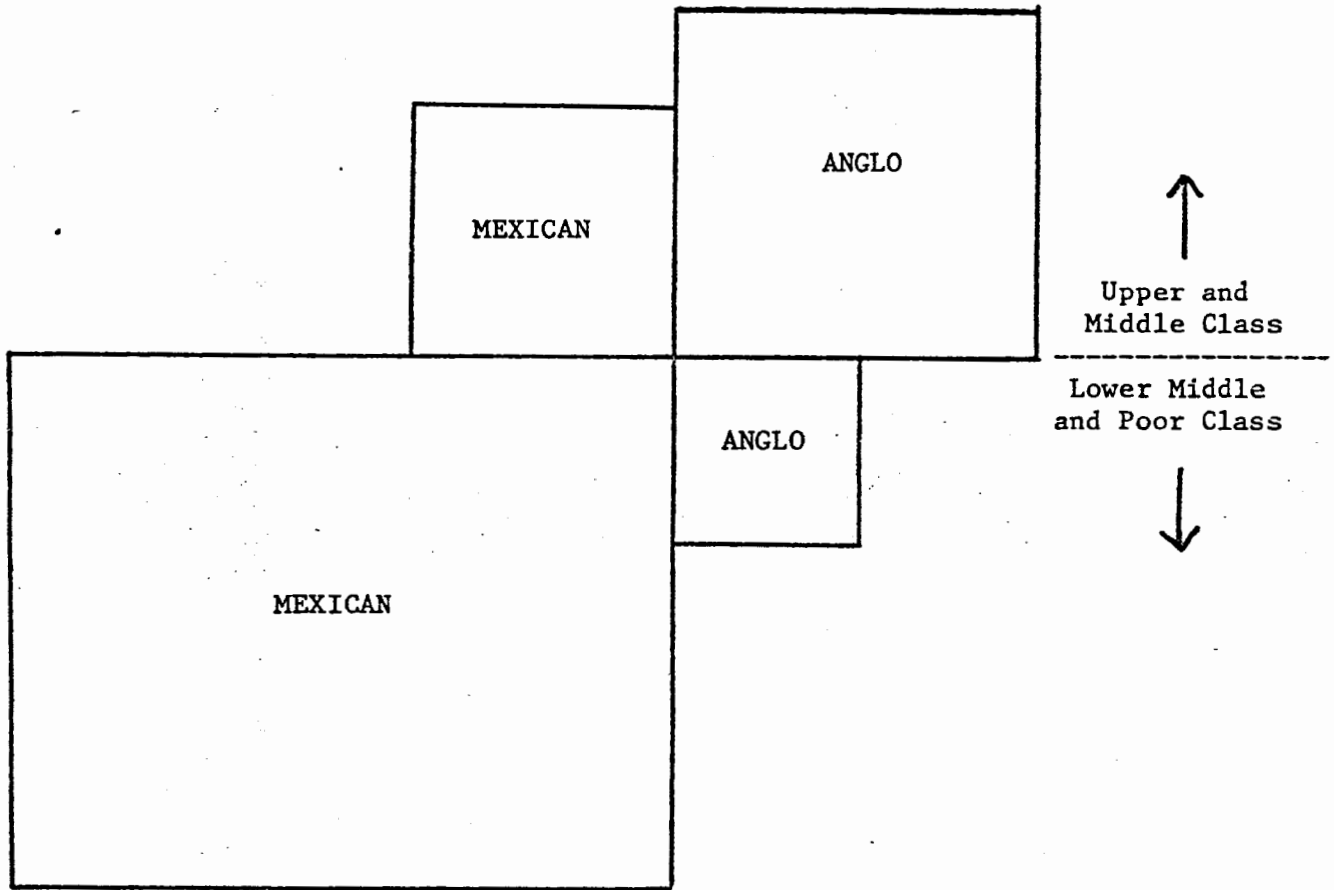
This diagram and the statistical information mentioned, illustrate the restrictive conditions created by the reality of being a "small, border and multi-ethnic, one-company, Anglo dominated town." The Mexican American middle and upper classes were a local, mainly native-born elite with educational and personal backgrounds similar to the corresponding Anglo classes. They were nonetheless limited in social mobility, access to jobs, income and influence that might equalize their situation with the Anglo dominate group, remaining a minority at the crucial level of power and policy implementation in Douglas.

The largest subgroup, made up of lower class Mexican Americans and resident Mexican aliens, resembled a proletariat of manual workers and their families, continually affected by low wage levels, job uncertainties, and a general lack of promising options for remaining in Douglas. The small Anglo lower middle class and poor people shared this condition and probably have resorted more frequently to out-migration as a solution, a choice not always easy for persons from a minority group, who often face the need of adapting to the majority way of life, in addition to the usual constraints of a limited educational attainment and lack of experience.

Later in the report, we shall look at some of the social and political effects of these economic and ethnic rifts in Douglas society, but for the moment, let us raise some rather blunt questions. Why do Mexican Americans fill so few high status occupations in the community,

Figure 1

Proportion of Ethnic Groups in Economic Classes



Squares are proportioned to the size of the group in the population.

especially given their numerical dominance in the population? How does the economically powerful Anglo minority retain its dominance over the impoverished Mexican American majority? How do the small numbers of wealthy Mexican Americans and poor Anglos cope with their unusual economic positions which contrast with the majority of their own ethnic group? What is the future of such an ethnic stratification system? Throughout the report, these questions shall be approached from several perspectives. For the present, we will turn to the dynamic elements underlying population change, the basic ways in which this social system replenishes its numbers through human reproduction, or alters in composition as people grow old and die or move in or out of the population.

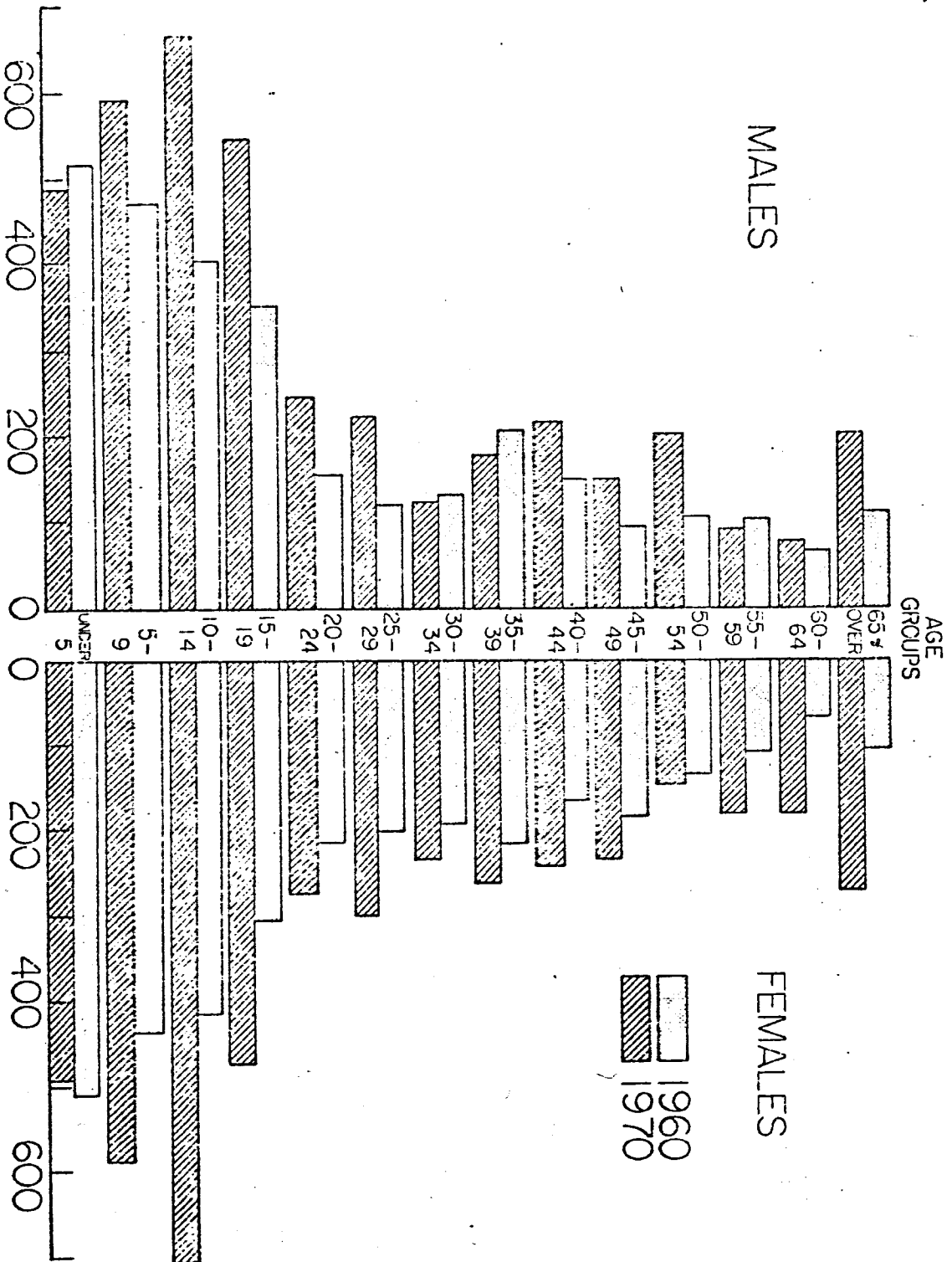
#### Age - Sex Composition and Migration

A population's composition and size changes by three things: births, deaths, and migration. If no migration took place into or out of Douglas, then the stability of its population could be attributed only to an even balance in which the number of births equalled the number of deaths throughout a considerable period of time. However, even a casual look at the city's vital statistics reveals that births have far exceeded deaths for several decades. This finding provides the first of many indications that migration plays a major role in the population dynamics of Douglas.

The migration factor can be further specified by observing changes in age and sex composition of the population between 1960 and 1970, which Figures 2 and 3 summarize for the two major ethnic groups. In general, these graphs show the Mexican American population grew in almost every age

Mexican American Age-Sex Composition, 1960 and 1970

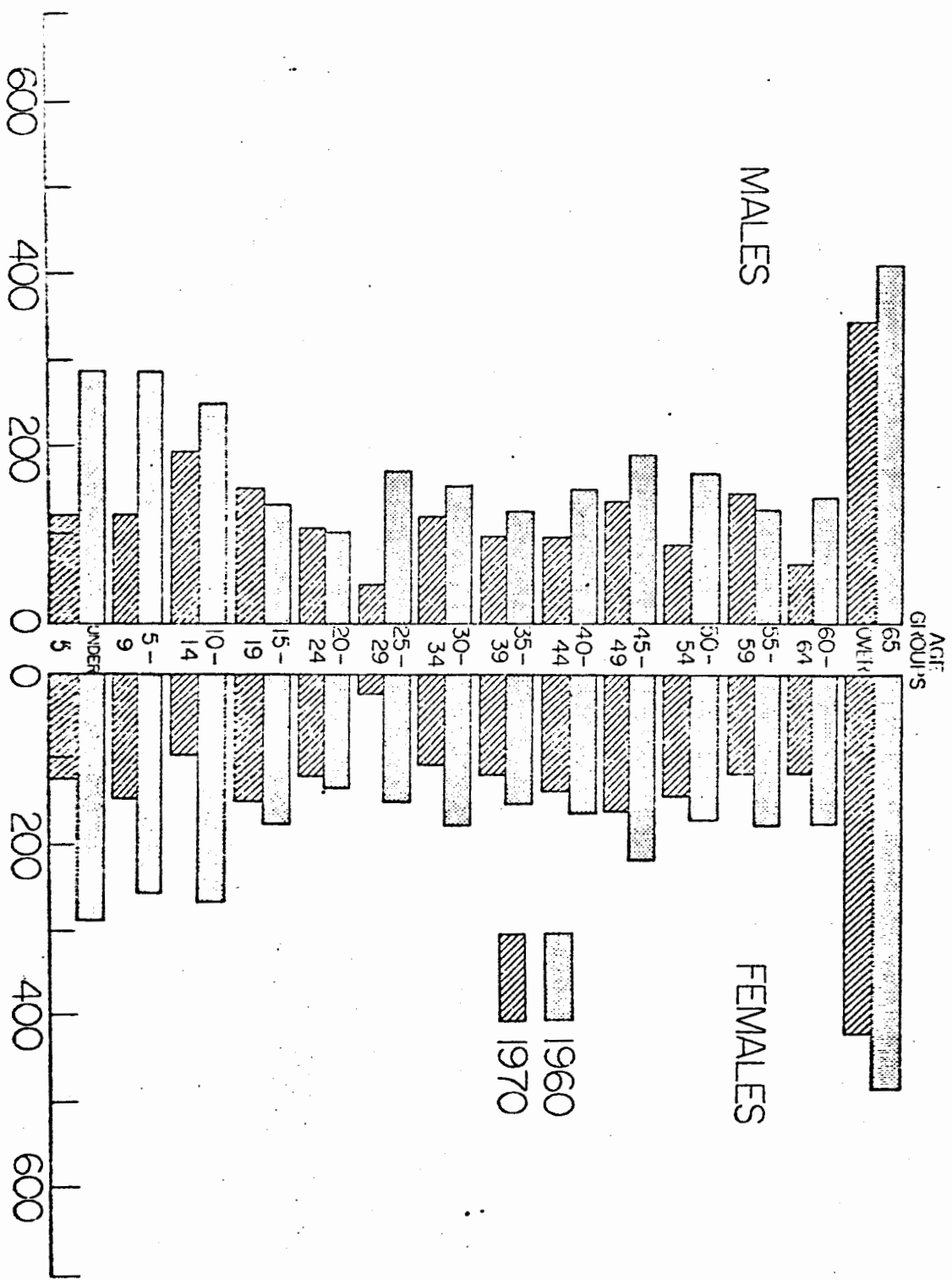
Figure 2





Anglo Age-Sex Composition, 1960 and 1970

Figure 3



category while the Anglo population decreased during the decade. Closer examination, however, reveals more subtle changes taking place in Douglas. Both Anglos and Mexican Americans experienced a decline in children under five years of age. This decline reflected a pattern of declining fertility occurring throughout the United States dating from the early 1960's. It was particularly accentuated by the decrease of Anglo women at all ages (especially in the childbearing years) and occurred despite an increase in Mexican American women in the corresponding age groups.

For example, sharp decline is noted in the number of female Anglos in the twenty-five to twenty-nine year old age group. There were about a hundred and fifty women between ages fifteen and nineteen in 1960; ten years later, we would expect this same number less those that died. But, we found only twenty still in Douglas by 1970. The logical explanation is that over one hundred have left town during the intervening ten year period. Linked with general impressions from our study of the Douglas educational system this evidence indicates a strong outward migration following high school graduation.

Mexican American women of the same age group did not show such an enormous exodus from the community. This contrast is especially significant for its effect on reproduction rates for each group. The decline in Anglo women of childbearing age (twenty-five to thirty-nine) partly accounts for a drop in the number of Anglo children (age five to fourteen). Meanwhile, Mexican American women of childbearing age were more numerous and their numbers were increasing. The result is a much larger group of school-age Mexican American children and adolescents for today and for the future.

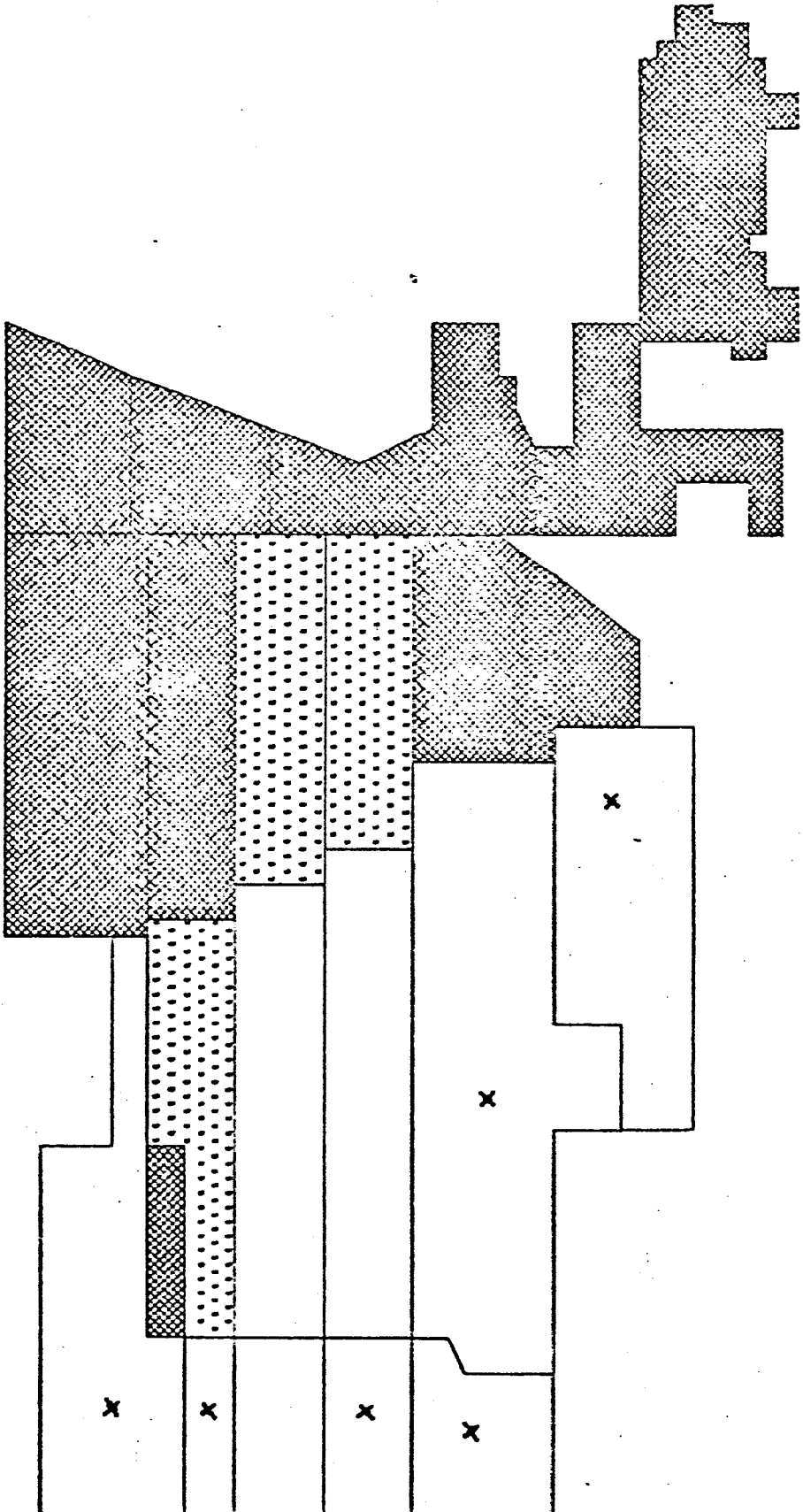
Generally, there was a decrease in Anglo males and a corresponding increase in Mexican American males; but again, an examination of change by age group indicates certain special aspects of the population dynamics of Douglas. Early middle-age males (thirty to thirty-nine) declined among Mexican Americans and Anglos. This decline appears accentuated among Mexican Americans, since it contrasts with the overall expansion of teenagers and young adults. Once again, the best explanation for this decline is out-migration; something motivates men to leave town about the age of twenty. A second exodus takes place from their late twenties until their late thirties, leaving a higher proportion of elderly men in the community.

These out-migrations are much less marked among females, with the result that beginning at age twenty, women generally outnumber men in both ethnic groups, especially among Mexican Americans at young adult and middle-age levels. For women above age fifteen, the census reported only slightly more than half as "married with husband present." This is considerably lower than the average of sixty percent for other Arizona cities and the United States in general. In fact, in Douglas the number of women married, but currently separated from their husbands, surpasses those with husbands present by a total of 350 persons. This strongly suggests that certain couples have resorted to an arrangement where the husband works elsewhere and the wife remains in Douglas. Another important finding is the rather high percentage of widows. This accords with the large proportion of Anglo women beyond retirement age and the recent increase in the number of Mexican American women age fifty-five and older.

Adolescents and young adults generally make up the most mobile age groups, the world over. Faced with major decisions regarding continued schooling, careers, marriage, and settlement into adult life, they often incline toward trying new environments. Unencumbered by family responsibilities, change-oriented and energetic, they make the most likely candidates to leave in the face of restrictive conditions such as those found in Douglas. Here the tendency to leave plainly involves women and men of both ethnic groups. By 1970, less than half those who were teenagers in 1960 were still living in Douglas.

Since this trend appeared so important to an understanding of the Douglas population, it was decided to explore the topic in more detail. Among other steps, we reanalyzed the data in hopes of determining whether out-migration varied for different classes of teenagers. Using the United States census and aerial divisions of Douglas census enumeration districts in Douglas, we reclassified by the predominance of particular social levels. These classes were defined using three criteria: the property value of housing, the proportion of renter vs. owner occupied dwellings and the monthly rent of households (Figure 4). Because some districts had very few teenagers, we combined all upper class districts, all middle class districts, and all lower class districts to form three groups.<sup>2</sup> Next a base line was established for comparing out-migration measures; this consisted of the population between ten and thirteen years of age, who were likely to be the least affected by out-migration and close to the established departure age for the young migrants. The base line population was used as a guide for determining the population loss at older ages, by comparing




# DOUGLAS URBAN AREA BY CENSUS ENUMERATION DISTRICTS



ENUMERATION DISTRICTS BY ECONOMIC STATUS (X = NO DATA)

Figure 4 (Continued)

Criteria for Classifying Enumeration Districts by Economic Status

Criteria	Status			Remarks	Areas *
	Upper 	Middle 	Lower 		
1. Property Value, Percent Households: Below \$10,000	Less Than 10	20-30	80 or more*	*ED 43 had 69 percent	Excluded Due to Data Sup- pression or Unavailability in Census Tapes or for Technical Reasons
Below \$15,000	Less Than 30	60-70*	Near 100	*ED 37 had 88 percent	
2. Ratio, Rented Households Per 100 Owner Occupied	Near Zero	20-60	65 or more*	*EDs 43, 45 & 49 were in the 20-60 percent range	
3. Rented Households, Percent Paying Monthly Rent: Below \$40.00	Near Zero	Less Than 15	40 or more	Almost all rented households in lower status EDs paid less than \$80.00 rent	
Below \$60.00	Less Than 15	Less Than 50	75 or more	Less than 0.5 percent of all upper status households were in this category	
Enumeration Districts as Classified	36,38, 39	37,40, 42	34,43, 45,46, 47,48, 49	No genuine borderline case seemed present	

Source: U.S. Bureau of the Census. 1970 Census of Population and Housing,  
First Count Summary Tape for Arizona.

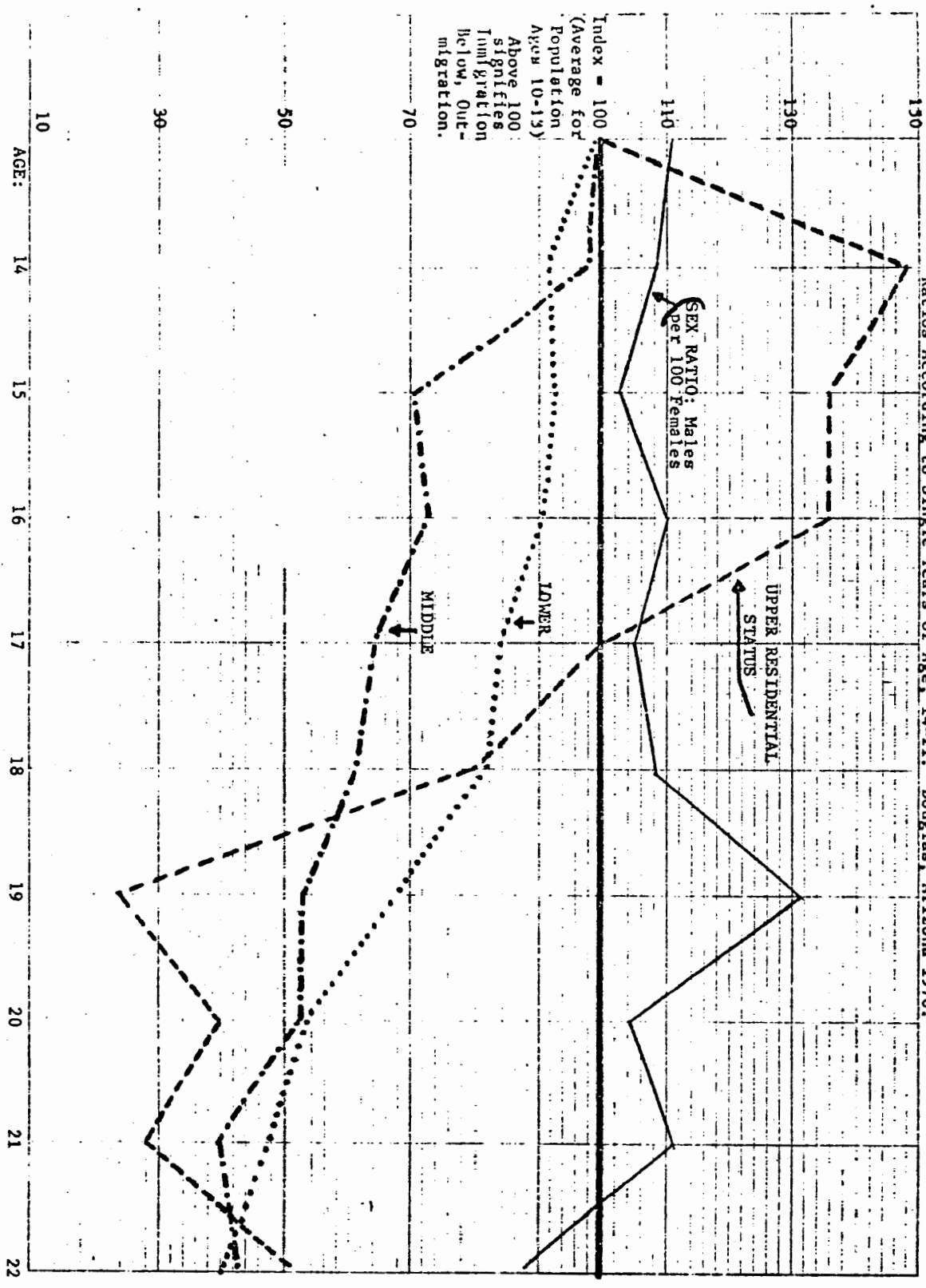
it with older teenagers and young adults. Adjusting for the chance of death up to age twenty-two and fertility rates from 1948 to 1959, any difference between the older groups and the base line of ten to thirteen year olds would be attributable to migration.

This rather complicated procedure proved worthwhile, for it revealed that out-migration was a general tendency among young people in all economic status groups (Figure 5). First, among upper class teenagers fourteen and sixteen years old, a temporary increase had taken place, probably due to the arrival of middle-aged, high level professionals and administrators. But at high school graduation, ages seventeen to nineteen, there came a sharp drop. While the losses continued through the college years, at age twenty-two and older, only the upper class showed an increase in young men, perhaps college graduates employed at the junior executive level.

In contrast, the departure of middle and lower class teenagers followed a steady outward flow, beginning at age fourteen and reaching its greatest intensity in the late teens and early twenties. Although the population loss was greater in middle status districts, teenage out-migration in the lower status neighborhoods was more likely counterbalanced by immigration from Mexico. Thus, had it been possible to separate the immigrants from this group, their population loss might have been as great as in the middle sector or even more accentuated.

Also contrary to the trend in upper status districts, some teenagers in the middle and lower class apparently did not await high school graduation, to leave Douglas. This suggests that drop-outs may be as related to out-migration as transfers to schools in other cities. Nevertheless, age

Figure 5  
 Migration Trends by Economic Status of Residence (for Males and Females Combined) and Sex  
 Ratios According to Single Years of Age, 14-21. Douglas, Arizona 1970.





eighteen and graduation seemed to be the crucial moment, since the greatest numerical losses were registered between then and the mid-twenties, regardless of social class.

From a migration viewpoint, there is more to Douglas than a town with a stable ethnically stratified population experiencing the heavy loss of people. Douglas also has been receiving numerous in-migrants from other areas, as evidenced by data on the birthplace of current residents (Figure 6). Only one out of every five residents of Douglas were born there. For every Douglas born resident, there were two born somewhere else in the United States. The remaining two-fifths of the population were born in Mexico. Mexican immigration was not primarily from nearby areas, contrary to the image that depicts people born in Agua Prieta as stepping across the street into the United States. Instead, eight out of every ten Mexican-born residents of Douglas came from someplace other than Agua Prieta, many from villages and towns deep in the interior of Mexico.

By relating birthplace to ethnicity several additional insights were gained (Table 10). Among those migrants into Douglas who originated in the United States, almost three out of ten were Mexican Americans joined with the numerous immigrants from Mexico, this stateside movement meant that only a quarter of the town's large Mexican American population was born in Douglas. Anglos native to Douglas formed a minority as well, comprising only sixteen percent of the total Anglo population.

While Douglas combines high in-migration and high out-migration there remains a "core population" standing firmly in the tide of others moving in and then out. Again, limited economic opportunities explain the tendency

Figure 6

Place of Birth of Current Douglas Residents

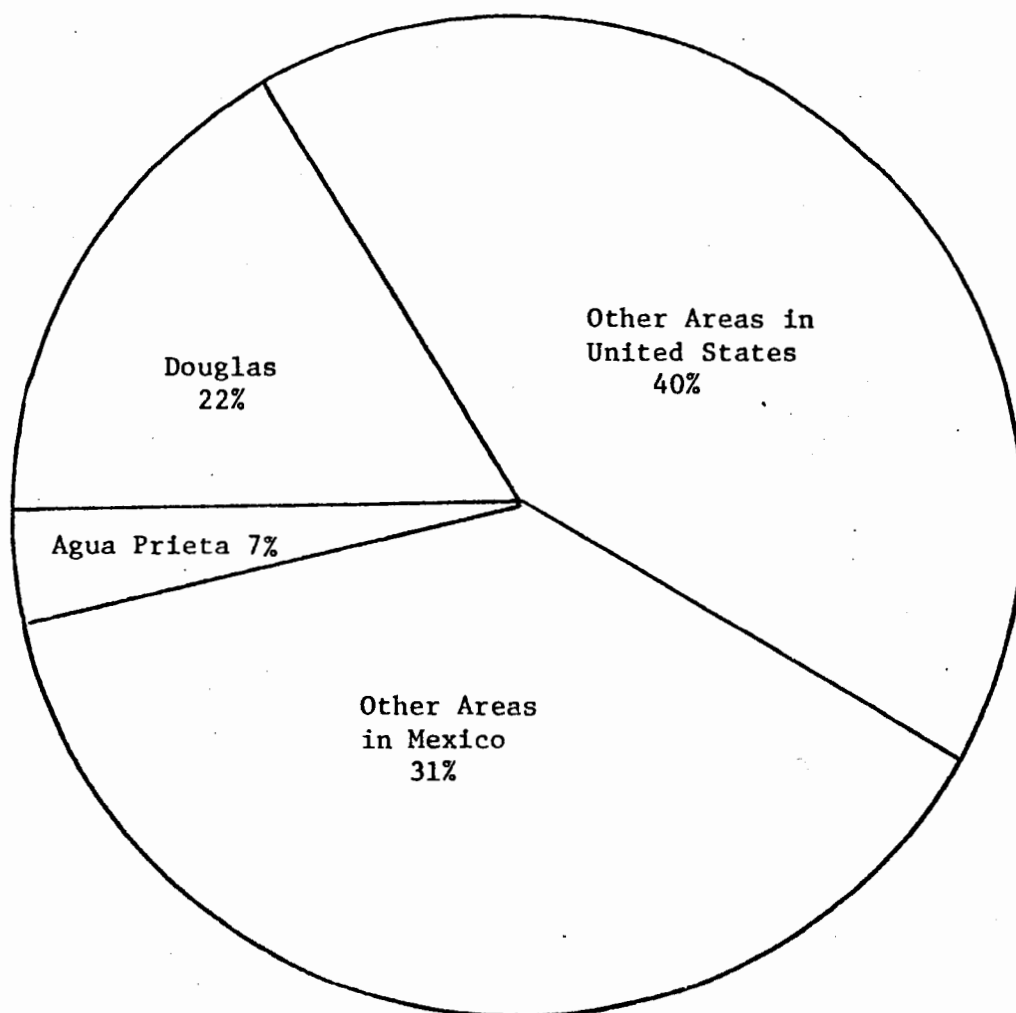


Table 10

## Place of Birth and Ethnicity

<u>Place of Birth</u>	<u>Ethnicity</u>	
	<u>Anglo</u>	<u>Mexican American</u>
Douglas	9	26
Agua Prieta	-	11
Other United States	46	19
Other Mexico	2	49

$\chi^2 = 65.29$      $\text{Sig.} \leq .001$      $N = 162$

for people to leave, particularly young men and women seeking a livelihood, after graduation from high school. For those who do find work, a lack of genuine opportunity for advancement and increasing financial responsibilities join to urge out-migration after a few years on the job. At each step, the generally low salary scales provide little hope for significant improvements in the standard of living. A few facts on unemployment summarize the story. Among males aged sixteen to twenty-one in 1970, over one third were neither enrolled in school nor working. Only between ages twenty-five and thirty-four do those remaining begin to find full employment. Meanwhile, the large number of women working (particularly at ages when marriage and childbearing usually take place) suggests a strong need for substitute or supplementary income among young couples living in Douglas.

The job scarcity is exacerbated by the influx of Mexican immigrants who compete for employment with the Douglas lower and middle-class young. More detailed analysis might contribute further refinements, but the attraction of being a border community is obvious from the high rates of immigration from the interior of Mexico. The immigrants willingness to work for depressed wages forces the sons and daughters of the core population, themselves often second generation Mexican Americans, to seek employment elsewhere. But, as in many other locations in the American southwest, little change seems likely in economic institutions encouraging the immigration by their continued exploitation of cheap labor. As long as hiring orientations continue favoring alien workers, the cycle of displacement of American citizens will persist.

### Fertility and Marriage

Migration in Douglas has modified the composition of the female population and this in turn has affected the number of children in the community. We have already seen how the declining number of Anglo women at child-bearing ages contributed to a subsequent reduction in the Anglo child population. The numerical reductions, however, do not necessarily imply a lower fertility rate among women remaining in Douglas, since this depends on the average number of live births per female, a measure based on individual levels of reproduction.

We have several indications that Douglas has higher fertility rates than the United States average. First, the 1966-68 reports of Arizona vital statistics showed Douglas as having from twenty-three to twenty-five births per thousand inhabitants, a high rate when compared to national figures, although about average for small Arizona cities (Table 11). Second, the 1970 census reported a ratio of four children per woman for Douglas, well above the national average of 2.7, but below the high ratio of 5.5 to 6.0 children per woman reported for Mexico. Vital statistics for 1968 and 1969 for Douglas formed the basis for calculating the annual birth rate for women between ages fifteen and forty-four as 126.4 births per one thousand women.<sup>3</sup> Again, this figure falls between a rate of 75 in the United States and the rate for Mexico of 184 births per one thousand women (Table 12).

The age-specific birth rates in Table 12 also suggest an early childbirth syndrome, that is, childbirths higher than the national average, but presumably typical for small cities in the United States. Among women in their twenties, one out of every four women gave birth in a given year, as

Table 11

Gross Reproduction Rates: Douglas 1968-69\*

<u>Population</u>	<u>Female Births per Women</u>	<u>Birth Rate per Woman</u>
<u>Douglas</u>	2.0	4.0
Spanish-surname	2.1	4.3
Non-spanish surname	1.8	3.5
<u>Mexico</u>	2.7-3.1	5.5-6.0
<u>United States</u>	1.4	2.7

\*Source: computer tapes provided by the Division of Health Records and Statistics, Arizona State Department of Health, through the Arizona Regional Medical Program, and U.S. Bureau of the Census. Census of Population: 1970. General Social and Economic Characteristics. Final Report PC(1)-C4, Arizona.

Table 12

## Birth Rates for Different Ages: Douglas, Arizona, 1968-69\*

<u>Specific Annual Birth Rates per 1,000 Women</u>	<u>Douglas Total</u>	<u>Rates Typical of Current Fertility Level in:</u>	
		<u>Mexico</u>	<u>United States</u>
Ages: 15-19	63.2	50-100	20-30
20-24	273.9	249	158
25-29	239.4	327	163
30-34	128.6	275	88
35-39	63.7	207	40
40-44	30.9	98	11
General Annual Birth Rate per 1,000 Women Age 15-44	126.6	184	75

\*Source: computer tapes provided by the Division of Health Records and Statistics, Arizona State Department of Health, through the Arizona Regional Medical Program, and U.S. Bureau of the Census. Census of Population: 1970. General Social and Economic Characteristics. Final Report PC(1)-C4, Arizona.

compared with a national ratio of one in every sixth or seventh women. Birth rates below and above age twenty were unusually high. Women age fifteen to nineteen were bearing as many children as those thirty-five to thirty-nine years old, and those twenty to twenty-four had the highest fertility rate of all age groups, a condition most often occurring among women age twenty-five to twenty-nine.

High birth rates among the young reflect a relatively young median age at first marriage: twenty-one for males and twenty for females. Many marriages below the median are related to graduation from high school; as a young man assumes job responsibilities he often views himself as economically capable of supporting a wife and family. Young women raised in a small town, family-oriented environment frequently view marriage soon after high school graduation as a natural sequence of events. And in both cases, the freedom from parental constraints and for self-fulfillment believed to ensue from marriage proves a powerful reason for leaving the single state.

Mexican Americans seemed especially inclined to marry young and have children in early adulthood, something of a difference from the pattern of postponement until the late twenties that characterizes people moving up from poverty in high fertility nations such as Mexico. But, the accumulated number of children born by women up to age thirty was quite similar to rates for Mexico, suggesting that early marriage did not necessarily mean the very large families customary in Mexico. In fact, beyond age thirty, the Mexican American rate of child production dropped from the annual fertility rates of two hundred or more per one thousand women



(a distinguishing feature of high fertility nations) to half way between this level and the much lower levels common to affluent, industrial societies. This suggests a bi-cultural pattern where Mexican American fertility not only falls midway between Mexico and the United States, but also shows the influence of factors deriving from both nations. It remains possible, however, that what appears as a bi-cultural pattern is actually a statistical balance between one segment adhering fairly closely to the Mexican pattern and another segment exhibiting the American small family pattern. Some adolescents marrying early may be influenced by lower class Mexican traditions, while others might be primarily oriented to the high school graduation pattern typical of small towns in the United States. Based on the data analyzed, it is not possible to say which is the case.<sup>4</sup>

Anglo Americans resembled Mexican Americans in also having high fertility (Table 13). In fact, Anglos were more inclined to show early childbirth. The median age of Anglo mothers delivering babies in 1968-69 was just above nineteen years, meaning that somewhat more than half conceived while still teenagers. Although this might appear out of line with the relatively low fertility rate for Anglo women age fifteen to nineteen, the sharp decline in Anglo females above this age means that most who gave birth were relatively young. The number of Anglo women between ages twenty and twenty-nine was so small, that a single ten year category had to be used to calculate a rate consistent with the general pattern. But, the result is still much higher than average for low fertility nations such as the United States. Why Anglos had children early and often may relate to the possibility of "selection;" that is, women postponing marriage and

Table 13

Birth Rates of the Douglas  
Spanish Surname and Non Spanish Surname Women, 1968-69\*

<u>Annual Birth Rates per 1,000 Women</u>	<u>Douglas</u> <u>Spanish</u> <u>Surname</u>	<u>Douglas</u> <u>Non Spanish</u> <u>Surname</u>	<u>Mexico</u>	<u>United States</u>
Ages: 15-19	64.7	58.4	50-100	20-30
20-24	324.5	262.2	249	158
25-29	202.1		327	163
30-34	165.9	57.9	275	88
35-39	74.5	37.4	207	40
40-44	34.5	24.2	98	11
General Annual Birth Rate per 1,000 Women Age 15-44	138.7	98.5	184	75

\*Source: computer tapes provided by the Division of Health Records and Statistics, Arizona State Department of Health, through the Arizona Regional Medical Program, and U.S. Bureau of the Census. Census of Population: 1970. General Social and Economic Characteristics. Final Report PC(1)-C4, Arizona.

oriented to small families may have left Douglas to pursue an education or career, while those remaining would be more inclined to high fertility. Such high fertility might also accompany low income and economic problems and reflect traditional patterns of reproduction in small towns in the United States.

The high fertility of Douglas women has important consequences for the entire community's social structure. When a population has high fertility without out-migration, the average age of the population tends to decline or "youthens." This means that the proportion of children and adolescents in the population increases relative to older age groups. In Douglas, we find the rather unusual situation of "youthening" while high out-migration of teenagers takes place. The percentage of young people between ages five and nineteen has steadily increased from about one fourth the population in 1950 to nearly one third in 1970. Since out-migration is more pronounced among teenage girls, the teenage male population has proportionately out-numbered the females.

"Youthening" helps explain the steadily increasing proportion of single persons among adults at least fourteen years old, up from about twenty-three percent in 1950 to almost thirty percent in 1970. While such increases are normally attributed to a trend toward later marriage, in Douglas, the increasing number of adolescents and the prevalence of early childbirth favor the conclusion that no significant change has taken place in the pattern of early marriage. There were more single people because no matter how many leave Douglas, many others are coming up the age ladder.

The greater number of males among late adolescents stands in sharp contrast with the predominance of women at older ages. In 1970, for

example, there were a hundred and ten males for every hundred females in the fifteen to nineteen age category. While this may have been partially affected by the presence of students at Cochise College, or by the immigration of Mexican males, it suggests that chances for marriage were not the same for both sexes. In a community oriented to early marriage, young men would be at a disadvantage to find marriageable partners, another possible incentive for out-migration.

The disproportion was particularly evident among Mexican Americans, for whom the 1970 census showed a ratio of one hundred and fifteen males for every hundred females in the fifteen to nineteen age category. It also became evident in the vital register information on births. Only a small percentage of fathers were below twenty years old, while the median age fell in the twenty-five to twenty-nine category, significantly higher than the median of twenty years for mothers. The large disparity in age between the sexes is well out-of-line with the trend that has been taking place in the United States for decades; husbands are usually one or at most, two years older than their wives. Again, the bicultural question arises, since it is generally held that age differences among spouses are greater in Mexico, and that migration and uprooting lengthen the time men take to marry and father children.

Illegitimate births provide yet another understandable motivation for out-migration among youth. Regardless of ethnicity or sex, illegitimate births often disrupt the usual sequence of life events and may force unexpected commitments into a person's life. Of all the babies born in Douglas during 1968 and 1969, nearly ten percent were recorded to unmarried parents, somewhat higher than the figure for the United States of

about eight percent. While the Mexican American rate was average for the nation, the Anglo rate was higher, especially in 1969, when it was almost thirteen percent. It is also known that where early marriage and child-birth prevail, legitimate first births include a fair number of pregnancies originating before marriage. In these places, accidental or intentional pregnancies are often a major reason for marriage. Assuming that the Douglas community is no more permissive than most small cities, conception before or outside marriage would provide an additional motive for out-migration or early marriage. In this respect, Douglas may differ somewhat from national trends. Illegitimacy has decidedly increased in the United States since 1940, but the latest trend toward postponed marriages and the legalization of abortion have reversed the trend, while the emerging alternatives to traditional marriages have lent a certain social acceptability to children previously designated as born out of legal wedlock.<sup>5</sup>

An analysis of birth records provided several additional insights into these delicate aspects of social life in Douglas. The records showed that about one out of every four deliveries belonged to parents who were not residents of Douglas. Forty percent of the non-resident births were to parents living in Mexico, high enough to suggest that medical facilities on the United States side were used by preference rather than on an unintended or emergency basis. Some Mexican parents most likely desired to have their child delivered and registered in Douglas to secure United States citizenship, and in many cases, dual citizenship when the child was also registered in Mexico. The remaining non-resident births were mostly

to Arizona residents, many reporting addresses in Cochise county and some from Pima County. Thus, the two Douglas hospitals were mainly providing maternity services for natives, but also for parents from outlying areas and for Douglas natives who settled elsewhere in Arizona and chose to return to Douglas for childbirth, perhaps in order to be with relatives.

In almost every respect, the characteristics of non-resident births resemble those of resident births: about seventy-five percent Spanish surname (either or both parents) with approximately the same distribution by age of parents, birth order, and time since last pregnancy. Both residents and non-residents made greater use of the Phelps-Dodge Hospital than of the Cochise County Hospital, especially in 1969, when births taking place at the latter diminished sharply as compared with the previous year.

Birth records also indicated that the biological characteristics of the child, its length, weight, and the instances of premature and still-birth deliveries, did not significantly differ from national figures. However, the usual sex ratio was reversed. In contrast to the one hundred and four to one hundred and six males born for every one hundred females in almost all large populations with recorded data, female births outnumbered male births in Douglas by a slight margin. No immediate explanation seems evident, except that in small populations unusual cases may be found on a random basis. This possibility has not been researched in any extensive manner and is virtually ignored in demographic literature.

## Mortality

Life tables and detailed death rates are usually based on populations much larger than Douglas, which by their magnitude offer a firm basis for tracing the incidence and patterned regularities of this event. Since deaths were less numerous than births and were distributed among all age groups, it was not possible to construct a full array of statistics. For this reason, our analysis of mortality will concentrate on a general overview and interpretation of whatever results came from the research.

In view of the rather large proportion of older persons in the Douglas population, the general mortality rates reported for the city in the Arizona Vital Statistics publications seem somewhat low (about 11 deaths per 1,000 inhabitants). The national rate of nine to ten deaths per 1,000 is typical of a population with a much larger proportion of young adults, who have a minimal risk of dying. On further examination, it was discovered that a major portion of deaths occurring in Douglas were of Anglo residents, whose death rate was more than twice the national average, obviously reflecting the older age structure of the Anglo population. Whatever death rates could be calculated from age 50 on were comparable to national rates, which implies that no unusual conditions were operating relative to Anglo life chances.

The Douglas mortality rate was undoubtedly reduced by the tendency for members of the Mexican ethnic group to go elsewhere to die. Among the elderly, deaths recorded in public records were too infrequent for usual conditions, suggesting that Mexican Americans with serious illnesses often resorted to medical treatment and hospitalization outside Douglas. Another

reason for the low deaths rates may be a tendency to retire or return to Mexico. Both explanations seem plausible, given the large and increasing number of older persons in the Douglas population who are of Mexican origin. Lower costs, greater accessibility, socialized medicine, and easier verbal communication is generally believed to attract many persons of a Mexican heritage to medical services across the international border.

Data on causes of death were informative regarding alternate health care systems. As with births, about one death in four occurred to non-residents of Douglas. But, very few Spanish surnamed persons were found among the non-resident deaths, suggesting that for terminal ailments, Mexicans were not seeking medical treatment in Douglas. Secondly, more than half of the deaths of persons with Spanish surnames involved heart attacks and cerebrovascular hemorrhages, illnesses marked by sudden and unexpected appearance. Although these are leading causes of death in the United States, their prevalence among Mexican Americans in Douglas (in contrast to chronic illnesses) seems to indicate that local facilities were more often used by them in such emergency cases. In Mexico, by contrast, senility outranks the cardiovascular diseases as the leading cause of death among the elderly; other long term degenerative ailments are an important element of the mortality picture.<sup>6</sup>

In line with national trends, heart disease claimed the most lives among Anglos at a rate even higher than among Mexican Americans. In both ethnic groups cancer was less frequent than generally found in the United States, and the rate attributable to accident and violence (suicide and



homicide) was exceptionally low. The near-universal pattern of higher death rates for males held true among Anglo Americans, which helps explain the large proportion of elderly women and widows. The Mexican American ethnic group had an inconsistent pattern, the female rate of demise being slightly higher than that of males, except during middle age. Again, the smallness of the population and the availability of alternatives for medical services may notably affect these results.

Special mention is needed for two surprising findings: the virtual absence of respiratory diseases as a recorded cause of death, contrary to expectations in a mining-smelter community marked by a high level of chemical and dust pollution; and the similar absence of the infective, parasitic and anemic diseases often found in populations affected by poverty. One wonders whether, in certain cases, the cause of death (frequently involving more than a single symptom) may have been assigned to a category other than those associated with the adverse ecological conditions.

In any population, the high risk of death in the first year of life requires particular attention, especially because the infant mortality rate is a sensitive indicator of quality in the social environment on which babies depend. This rate compares deaths with births, in order to determine how many babies die during the first twelve months of their lives. In general, the Douglas infant mortality rate for 1968-69 (18 deaths per 1,000 live births), was slightly lower than the national average (20 deaths per live births). However, the United States average for the late 1960's was high for an affluent, industrial society, compared with measures of 11 to 14 in several European nations. Since

then, some improvement has been obtained, although the American rate remains higher than in similar nations.

One of the leading explanations for the difference assumes a much higher infant mortality rate among minority and economically depressed segments of the American population and supposes that these segments bring up the national average. In the present instance, this explanation was not substantiated, since Douglas compared favorably with the national average, and the Mexican American rate (17) was even lower than that of Anglo Americans (21). Moreover, infant deaths where the parents were not residents of Douglas made up a major portion of the Anglo total. Removing these non-residents from consideration, the local picture appears even more favorable, suggesting at face value a sound environment for infants. But to accept this conclusion firmly, evidence that infants born in Douglas do not die elsewhere would be needed, and some indication as to why the age-old relation between poverty and infant mortality was not as operative as in the many cases which have given the infant death rate its traditionally negative social meaning.

#### Summary

Since the 1950s, the population of Douglas has remained at about the same level, slightly more than 12,000. This stability stands in contrast with the rapid expansion of communities of similar size and locations in Arizona and the state itself, which have recently experienced rapid population growth. The steady state cannot be attributed to fertility rates and mortality rates canceling one another with the effect of zero

population change. Fertility is high in Douglas and mortality rates are below the national and regional averages. Moreover, mortality rates fail to account for the losses in population known to have been born in Douglas. Migration, the third factor influencing population change provides a more decisive explanation for the many unusual features that emerge when the city's population structure is carefully analyzed.

The combination of high fertility, low mortality, high immigration from Mexico and somewhat lower out-migration than Anglos has fostered an increase in the proportions of peoples of Mexican and Mexican American identity in the population. This trend has left Anglos in a declining minority in terms of numbers, making up about one fourth of the population in 1970, and with no clear sign of increase.

Anglos, nonetheless, form a dominant group in the Douglas economy as is evident in their overwhelming representation among persons and families having higher incomes and higher status occupations. When Douglas was compared with other communities in Arizona, several indicators of affluence and poverty revealed it to be a relatively poor town, with limited economic opportunity and promise for future development. The consequence of this combination of circumstances has been a massive out-migration of its people. This exodus has not been uniform among the various elements of the population, however, the propensity to leave has been greatest among teenagers and young adults, with Anglos leaving more frequently than Mexican Americans and males of both ethnic groups more than females. But, even the group least affected by out-migration -- Mexican American young women -- have an impressive tendency to leave the town. The out-migration of youth affects all social and economic classes in Douglas, and variations relate

mainly to the timing of out-migration. Most upper class youth delay the decision to leave Douglas until high school graduation, while some of the middle and lower class youth leave while still at ages when senior high school attendance is usual.

The situation of Douglas on the United States - Mexico border and the economic institutions profiting from this condition have exacerbated the problem by encouraging a high rate of immigration from Mexico, creating further pressure on the employment situation. More recently, this pressure has probably been decreasing with the expansion of employment opportunities in Agua Prieta. In contrast to Douglas, Agua Prieta has more than doubled its population during the last 20 years to a point where it was twice the size of Douglas (23,272) in 1970.

Data on place of birth suggests that these out-migrants are being replaced by a less numerous, yet significant, inflow of migrants from other parts of the United States and Mexico and to a minor extent from the twin city of Agua Prieta. The consequence of this migratory exchange is that less than a quarter of those living in Douglas in 1971 were born there. Moreover, in this core group the proportion of Anglo to Mexican heritage was similar to that of the whole population, demonstrating again the pervasive character of the outward and inward movement.

Among many other results, migration has affected the dynamics of population change in the remaining population. Typical of small towns and past trends, Douglas women show an early marriage and childbirth syndrome, with fertility rates higher than the national average. Furthermore, a comparison of the fertility rates of the Anglo and Mexican heritage

populations showed that the reproductive rates of both groups were at levels between those recorded in the United States and Mexico in recent years. Mexican Americans had lower fertility rates than average for Mexico, but higher than those of Douglas Anglo women. Likewise, Douglas Anglo women had rates higher than the national American average, but lower than Douglas Mexican American women. While the "in-between" pattern suggests Douglas is a bi-cultural town, combining population patterns of Mexico and the United States, several important aspects escaped analysis due to the limitations of census and vital register data sources.

When death records were examined for all ages, mortality rates were higher than the national average for Anglos, while Mexican American death rates were unexpectedly low. This was not indicative of actual health conditions because of the large proportions of older persons among Anglos -- individuals who did not differ from the national mortality profile, but whose greater chances of dying elevated the general death rate. Older persons of Mexican origin seemed to rely on medical services and prefer retirement and death outside Douglas, judging by the relatively infrequent instances of demise in public records and the sudden and traumatic nature of the causes of deaths recorded. Mortality at younger ages followed a relatively normal pattern, except that the infant mortality rate, particularly for Mexican Americans was lower than average for the United States. This result contradicts established explanations that assume a direct relation between poverty and infant mortality.

The economic and occupational opportunities in Douglas have been adequate only to sustain a certain level of population. Beyond this, the town

is unable to absorb more people, especially the major portion of its own youth who annually become eligible for employment but who eventually leave the city, hopeful of chances elsewhere. This means that in Douglas, human resources are being educated and prepared for opportunities in other cities and states. If it were not for these economic limits to growth, the natural increase from births and in-migration would have pushed population growth to well above three percent per year. Viewed from another perspective, the population of Douglas would have doubled since 1950 rather than have held constant. Subsequent chapters will consider the social and economic adjustments Douglas has made to the inner demographic workings of the steady state just described.

### Footnotes

1. For further details, see Jose Hernandez, Leo Estrada and David Alvarez. "Census Data and the Problem on Conceptually Defining the Mexican American Population," Social Science Quarterly 53, 4 (March 1973): 671-687. The Mexican generation break-down is based on Douglas nativity distribution, excluding non-Mexican foreign stock from the foreign-born and foreign parentage categories. These figures were subtracted from the Spanish language or surname, and origin totals, to obtain the native of native parentage. Given the nationality composition and limited size of the non-Mexican foreign stock, it was assumed to follow the 1970 United States pattern, or 28 percent foreign and 72 percent foreign parentage. Between 1960 and 1970, a change in census designation for Mexican Americans may have contributed slightly to an increase in the number of persons in this group, since the new classification included persons not having a Spanish surname, but "exposed to the use of the Spanish language at home, during early childhood." But for Douglas, the margin would seem exceedingly small, probably no greater than the 67 persons enumerated as being of Spanish surname, but not Spanish language. For many United States citizens of Mexican origin today, the hyphenated term "Mexican-American" denotes the proestablishment orientation of the traditional upper- and middle-class people who favor and exemplify assimilation into the Anglo-North American life style. The new middle class of persons oriented to biculturalism, bilingualism, and innovations withing the system usually prefer the term "Mexican American" without the hyphen, to emphasize a pluralistic belief that minority groups can live in harmony, mutual respect, and equality with the majority while only partially assimilating to Anglo mainstream values. In most areas of the Southwest, the term "Chicano" is a shade closer to militancy, since it is often associated with youth, feelings of indignation toward continued minority status, and the need for structural changes in the system. The term "Mexican" commonly refers to recent immigrants who remain effectively outside the system because they cannot speak English, cannot vote, have not entered the United States legally, and so on. In everyday life these distinctions are sometimes blurred, and different terms are used depending on the circumstances and audience. At present, "Mexican American" seems the most neutral term, but the trend appears to be toward an increasing use of "Chicano," as happened in the case of "Black."
2. Measures separating each class were relatively clear cut and left very little internal variation. A correlation matrix comparing the enumeration districts according to the five variables listed in Figure 4 yielded an overall coefficient of .848, while individual measures all matched each other at .734 or higher and coefficients above .900 were obtained in four combinations.

Footnotes (Cont.)

3. Data on Tables 11 to 13 is based on an average for both years: number of births, and population estimates (the latter interpolated from 1960-70 totals). Attempts to refine on an actuarial basis yielded very similar figures. Rates for non-Spanish surname women were affected by a very small population total in the 25-29 category. Combining this with the 20-24 category produced total birth and gross reproduction rates apparently more in line with the general birth rate. Sources: computer tapes provided by the Division of Health Records and Statistics, Arizona State Department of Health, through the Arizona Regional Medical Program, and United States Census publications previously cited. Rates listed as typical of Mexico and the United States at present are based on approximations derived from the general literature and estimates for populations having crude birth rates of 42 and 18 per 1,000 inhabitants.
4. Previous studies of Mexican Americans have revealed a higher reproduction rate than usual for the United States, attributed by researchers to cultural continuity in norms for behavior. Benjamin S. Bradshaw and Frank D. Bean, "Trends in the Fertility of Mexican Americans," Social Science Quarterly 53 (March 1973): 688-696, and Some Aspects of the Fertility of Mexican Americans, Report of the Commission on Population Growth and the American Future, Research Papers, Washington, D.C., 1972. David Alvirez, "The Effects of Formal Church Affiliation and Religiosity on the Fertility Patterns of Mexican American Catholics," Demography 10 (February 1973): 19-36.
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6. Samuel H. Preston, Nathan Keyfitz and Robert Schoen, Causes of Death: Life Tables for National Populations. New York: Seminar Press, 1972. Also consulted were the Arizona State Department of Health publications, Arizona Health Trends, 1950-66 and Vital Statistics, Annual Reports, 1967, 1968, and United States Department of Health, Education and Welfare, United States Life Tables by Causes of Death: 1959-61. Washington: National Center for Health Statistics, 1968.



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