

DOCUMENT RESUME

ED 089 906

RC 007 816

AUTHOR Taylor, Benjamin J.; O'Connor, Dennis J.
TITLE Laguna Reservation Manpower Resources. Indian Manpower Resources in the Southwest: A Pilot Study. Occasional Paper Number 6.

INSTITUTION Arizona State Univ., Tempe. Coll. of Business Administration.

SPONS AGENCY Arizona State Employment Service, Phoenix.; Manpower Administration (DOL), Washington, D.C. U.S. Employment Service.

PUB DATE 69

NOTE 71p.; Related documents are ED 043 444, ED 043 445 , ED 044 198

AVAILABLE FROM Bureau of Business and Economic Research, Arizona State University, Tempe, AZ 85281 (Free while supply lasts)

EDRS PRICE MF-\$0.75 HC-\$3.15 PLUS POSTAGE

DESCRIPTORS Academic Achievement; *American Indians; Consumer Economics; *Economic Factors; Family Characteristics; Income; *Labor Force; Living Standards; *Manpower Development; *Reservations (Indian); Sex (Characteristics); Tables (Data); Unemployment; Work Experience

IDENTIFIERS *Laguna Reservation

ABSTRACT

A pilot study reported in this monograph is part of a larger study that includes data on 5 Southwestern American Indian reservations. Its primary purpose is to provide basic manpower information essential for planning and developing effective services and programs for Laguna Indians. Manpower resource characteristics are presented for age and sex, family characteristics, and educational attainment. Since no accurate records of people residing on the Laguna Reservation were available before this study, a list maintained by the Bureau of Indian Affairs (BIA) was modified to arrive at a sampling frame. The size of the reservation's total working-age human resource was estimated at 1,064 based on the modified BIA list. It is noted that about 47 percent of the Laguna working-age population are in the labor force. Information is presented on sources of income and consumption patterns. The consumption patterns show the reliance of Laguna families on cash to satisfy most of their consumer demands. Recommendations in this area include consumer education, greater employment opportunities, and income maintenance projects. (PS)

ED 089906

Occasional Paper Number 6

LAGUNA RESERVATION
MANPOWER RESOURCES



U.S. DEPARTMENT OF HEALTH,
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INDIAN MANPOWER RESOURCES IN THE SOUTHWEST

A PILOT STUDY

BENJAMIN J. TAYLOR
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ED 089906

Laguna Reservation Manpower Resources

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1969
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The research project, *Indian Manpower Resource Study*, was conducted under a contract from the Arizona State Employment Service through a research grant from the U. S. Department of Labor, Manpower Administration, United States Employment Service. Researchers undertaking research projects under Government sponsorship are encouraged to express freely their professional judgment. Points of view or opinions stated in this document do not necessarily represent the official position, policy, or opinion of the U. S. Department of Labor or of the Arizona State Employment Service.

Library of Congress Catalog Card Number 75-625831
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Preface

The Indian Manpower Resource Study was undertaken with the cooperation of five Indian tribes in Southwestern United States. Laguna officials of the New Mexico tribe made every effort to cooperate with the research staff to permit collection of valid manpower data. Funds for the project were provided the Bureau of Business and Economic Research, College of Business Administration, Arizona State University, by the Arizona State Employment Service through a grant from the United States Employment Service.

This monograph dealing with Laguna Reservation manpower resources is a part of a larger study that includes data on five Indian reservations: the Laguna, San Carlos, Papago, Fort Apache, and Acoma. It is published under the title *Indian Manpower Resources in the Southwest: A Pilot Study*.

Space does not permit a discussion of the sampling method used to generate data and thus Chapter 1 of the larger study should be consulted for a review of this important aspect. It is necessary to mention here, however, that the method used proved accurate with regard to overall population characteristics. Responses to a few individual questions were occasionally so dispersed as to leave some cell frequencies so small that they escape statistical validation. Yet, these data were suggestive and in some cases were presented since they provide the only available insights into some important problems concerning allocation of the labor resource.

The primary purpose of the study is to provide basic and necessary manpower information essential for planning and developing effective services and programs for Laguna Indians.

Benjamin J. Taylor, Director
Bureau of Business and
Economic Research

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Laguna Reservation Manpower Resources

The Laguna Reservation is located approximately 45 miles west of Albuquerque, New Mexico, and is adjacent to the Acoma Reservation, which was also studied. The origins of the Laguna population are reported to be linked to the Acoras; the Lagunas, too are Pueblos. The reservation itself takes its name from the village of Laguna founded in 1697.¹ Currently, there are seven reservation villages. The Laguna men have traditionally preferred to engage in stockraising and farming. Partly for this reason, the population has shifted location over the years in search of more adequate water supplies. Farming villages have been established around irrigable areas.² Internal political dissension also caused a movement on the part of some Lagunas. The maximum acreage recorded as being irrigated was 2,546 acres in 1911.³ In 1950, reservation range land totaled 404,763 acres with a carrying capacity of 11,355 sheep and 902 cattle.⁴

The Laguna Indians are considered relatively progressive in that they have been more willing than many tribes to accept new ideas and techniques.⁵ Two basic reasons have been offered for the greater progressiveness. First, tribal land is located on a main railroad line and recently on a major highway. Isolation from the general population has not been as acute as among the majority of Southwest tribes. Second, some of the missionaries and teachers of past years have married into the tribe and at times have even served as tribal

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governors. Through their tribal position, they have been able to exercise considerable influence over the direction of the people. In addition, early tribal teachers have been so influential that considerable emphasis continues to be placed on education.

Among the Lagunas, the basic economic unit shows less movement toward the immediate family than is the case with the Acomas. Lagunas are deemed to be more inclined toward the extended maternal household as the basic economic unit than are the Acoma.

This study deals with on-reservation employment sources, current characteristics of the manpower resource, employment and unemployment, occupation and industry characteristics, training and education, and income and expenditure patterns.

ON-RESERVATION NONFARM EMPLOYERS

On-reservation opportunities to work in nonfarm occupations are limited. Table I provides information roughly indicating the number

TABLE I
LAGUNA RESERVATION NONFARM INDIAN EMPLOYMENT

Employer	Number Employed
U. S. Public Health Service	11
Electronics manufacturer	121
Laguna Tribe	63
Trucking	8
Drilling firm	8
Trading posts	19
TOTAL	230

of jobs available on the reservation. It should be observed that the Bureau of Indian Affairs does not have offices on Laguna land, but is located in Albuquerque, New Mexico. Employment figures are lower than they would be if the BIA were located on the reservation.

The most important contributor to job opportunities is an electronics factory. It provided 121 Indian jobs as of May, 1968, more than half of the reservation employment opportunities. The factory offers a variety of assembly jobs.

The Laguna Tribe offers employment through its governmental responsibilities. Councilmen, representing the various reservation areas

receive remuneration from the tribe and, therefore, are included in the employment total along with other tribally-elected officials. In addition, various maintenance projects are required and a number of workers are employed to care for Indian property. The general services provided by most local governments are the responsibility of the Laguna authorities.

Trading posts on the reservation require nineteen Indian workers to work at such tasks as store clerks and gas station attendants. Also, an Indian Health Clinic operated by the U. S. Public Health Service on the Laguna Reservation requires the services of eleven Lagunas. Table I shows that trucking and also drilling firms each provide employment to eight individuals. These firms subcontract from the Anaconda Company. For Laguna employment opportunities to be substantial, off-reservation sources may have to be encouraged to hire Indians.

The reservation does not appear to have utilized the employment possibilities of tourism and recreational land uses, as reflected in Table I. The lack of an adequate water supply has also impeded agricultural development at the time that the need for products from small farming units has diminished. To a large extent, then, Lagunas must look to off-reservation employment opportunities. Past educational efforts on the reservation are important in assisting their endeavors in the general unsheltered labor market. Appropriate current educational efforts depend upon the current state of the population and its potential. The overall manpower characteristics of the population are examined here first.

CHARACTERISTICS OF THE MANPOWER RESOURCE

AGE AND SEX

As Table II shows, females represent 54 percent of the Laguna on-reservation population age 16 or over, and males account for 46.2 percent. For men, the largest age group is the 30-39 category, which accounts for 22.5 percent of males and 10.4 percent of the working-age population. For women, the 20-29 category is most numerous; it consists of 22 percent of all women and nearly 12 percent of the total working-age population. Males in the 20-29 group constitute only 9.6 percent of the working-age group. Women in their thirties are less numerous than those aged 20-29, but represent the

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same percentage (10.4) of the working-age population as do males. The 40-49 age group shows significant imbalance between the sexes with women representing over 10 percent and men representing only 6.5 percent of the working-age population. The age categories from

TABLE II
LAGUNA POPULATION BY AGE AND SEX

Age Group	Females		Males	
	Percent of Total Females	Percent of Total Population	Percent of Total Males	Percent of Total Population
16-19	9.3	5.0	7.5	3.5
20-29	22.1	11.9	20.8	9.6
30-39	19.3	10.4	22.5	10.4
40-49	19.3	10.4	14.2	6.5
50-59	11.4	6.2	10.0	4.6
60-69	10.0	5.4	7.5	3.5
70-79	7.9	4.2	10.8	5.0
80-89	0.0	0.0	6.7	3.1
90-99	0.7	0.4	0.0	0.0
TOTAL	100.0	53.9*	100.0	46.2*

N = 140 females; 120 males.

* The two categories combined do not sum to 100 percent due to rounding.

20-49 hold 60.7 percent of all working-age women and 57.5 percent of all working-age males. Together, these ages constitute 59 percent of the total working-age population. In terms of age, then, the majority of Laguna Indians are in prime employment age categories. Other characteristics of the human resource and of the general labor market may restrain the manpower potential, but the initial observation is favorable.

Teen-age Laguna Indians provide 8.5 percent of the working-force potential. The Indian Manpower Resource Study (IMRS) survey shows teen-age females (5 percent of the working-age population) to be slightly more numerous than males (3.5 percent of the working-age population) in the age category. The labor force demands are relatively lower for teen-age individuals, in part because they have less education and experience than is often required.

Employment possibilities for individuals in their fifties and sixties are also reduced. Laguna Reservation individuals 50-69 account for

nearly 12 percent of the working-age population, and men of this age represent 8 percent. Those 70 years and older are normally not considered as being employable. Exceptions may exist, however, in activities associated with tribal crafts that can be marketed.

The Laguna labor force potential in general appears to have a larger force of women than of men. Little labor activity by persons over 69 years of age except in handicrafts or agriculture is expected. Further, the unemployed among the younger age groups obviates the need to hire persons of advanced age.

Additional manpower characteristics of the Laguna can be cited from the survey results.

FAMILY CHARACTERISTICS

Family responsibilities provide initial insights into the need for individuals to attach themselves to the labor force. Marital status may be taken as a rough indicator of such need. Married persons are more likely to be both primary and secondary labor force participants than are single persons. Table III reveals the marital status of the Laguna on-reservation respondents.

TABLE III
MARITAL STATUS OF THE POPULATION

Marital Status	Percent
Married	57.9
Widowed	9.1
Divorced	1.2
Separated	3.2
Never-married	28.7
TOTAL	100.1*

N = 254

* Does not sum to 100 percent due to rounding.

Marital Status. Nearly 58 percent of the population aged 16 and over are married; and about 29 percent have never married. The lack of on-reservation employment opportunities may be a factor in the relatively high percentage of never-married. That is, the inability to provide economic well-being for families may lead to the postponement or to the foregoing of marriage. The imbalance of male

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and female population may not be as crucial among the Pueblo Indians as with other tribes since they have intermixed with other tribes to a greater extent than have some other groups. It may be that the inability to cover the geographical distance between the tribes affects the likelihood of intertribal marriages. The lack of economic opportunities on a reservation, however, appears to offer the best explanation.

Widowed individuals account for 9 percent of the working-age population. This status may be the reason for reservation residence among younger females, particularly if young husbands die while away from the reservation on jobs. Widows and their children are likely to return to the extended family. Most of those widowed are very probably, however, among the elderly since population declines are more pronounced after age 49 as shown in Table II.

The survey reveals that divorced and separated individuals account for 4.3 percent of the population with those divorced representing 1.2 percent, and those separated 3.2 percent. Information was not solicited regarding reasons for family breakup, but the instability may be less than these percentages indicate since many of those separated may eventually return to their mates. The overall family structure among the Laguna people appears to be stable.

Number of Children. Table IV reveals from 251 responses from all marital categories that the median number of children reported

TABLE IV
NUMBER OF CHILDREN REPORTED BY RESPONDENTS

Number of Children	Percent
None	31.9
One	11.2
Two	12.4
Three	10.0
Four	8.4
Five	8.8
Six	8.8
Seven	3.2
Eight or more	5.6
TOTAL	100.3*

N = 251

* Does not sum to 100 percent due to rounding.

by individuals is two. It should be noted that the never-married responses are included. About 12 percent of respondents reported two children. Numerous individuals in the population, however, have large families as is apparent from the number of responses in the four, five, and six children categories. Nearly 32 percent of the respondents do not have children.

Table V provides data revealing the number of children by marital status. Elimination of the never-married from a calculation of median children gives a more accurate basis for speculating on the extent of family responsibilities. The never-marrieds are included to the extent that they report having children. Six is the median number of children reported by the Lagunas other than the never-marrieds. Approximately 86 percent of single individuals over 16 years of age report no children, but 8.2 percent report having one child.

TABLE V
NUMBER OF CHILDREN BY MARITAL STATUS
(Percent)

Marital Status	Number of Children										Info. not Avail.	Total
	1	2	3	4	5	6	7	8+	0			
Married	(1)	13.5	15.5	14.9	11.5	12.8	13.5	2.0	8.8	5.4	2.0	99.9
	(2)	7.7	8.9	8.5	6.5	7.3	7.7	1.2	5.0	3.1	1.2	57.1
Widowed	(1)	4.4	17.4	13.0	13.0	13.0	4.4	13.0	4.4	17.4	0.0	100.0
	(2)	0.4	1.5	1.2	1.2	1.2	0.4	1.2	0.4	1.5	0.0	9.0
Divorced	(1)	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	50.0	0.0	100.0
	(2)	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.4	0.0	0.8
Separated	(1)	0.0	50.0	12.5	0.0	0.0	0.0	12.5	0.0	25.0	0.0	100.0
	(2)	0.0	1.5	0.4	0.0	0.0	0.0	0.4	0.0	0.8	0.0	3.1
Never-married	(1)	8.2	0.0	0.0	0.0	0.0	0.0	1.4	0.0	86.3	4.1	100.0
	(2)	2.3	0.0	0.0	0.0	0.0	0.0	0.4	0.0	24.2	1.2	28.1
Info. not avail.	(1)	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	50.0	100.0
	(2)	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.2	2.4
TOTAL	(2)	10.8	11.9	10.1	8.1	8.5	8.1	3.2	5.4	30.8	3.6	100.5*

(1) = Percent of total in each marital status category.

(2) = Percent of total responses.

* Does not sum to 100 percent due to rounding.

Married respondents disclosed a median of four children. The median number of children for the widowed category is five, for the divorced it is four, for the separated it is two. The medians revealed

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by the various groups, however, do not necessarily represent dependent children. No attempt was made to learn the ages of children reported. The data do indicate an average family size of four among the Laguna. Family size is an indicator that Laguna men have responsibilities and considerable incentive to seek work. Family size also indicates that the additional worker function normally provided by married women and children may be large for Lagunas relative to many other Indian tribes. This assertion is premised partly on the nearness to off-reservation employment. The desire for employment may not always be expressed by actively seeking a job since many factors influence such a decision.

EDUCATIONAL ATTAINMENT OF THE POPULATION

The modern world of work is characterized by an increasingly greater education attainment requirement at entry levels. That is, employer hiring standards generally reflect the demand for more education than has been the case in previous years.⁶ Educational requirements for initial hiring become even more demanding in areas with persistent unutilized pools of labor. The last year of formal education completed is usually taken as an indicator of the ability of individuals to perform skilled and unskilled tasks with a minimum of on-the-job training. In addition, formal educational attainment is considered important to the adjustment to continuously changing functions to be performed. Table VI illustrates the educational attainments of working-age Lagunas.

On-reservation Laguna females are likely to remain in school longer than males. Median educational attainment for women is eleven years, but only ten for men. Women are also more likely to both enter and remain in college longer than men. Slightly less than 1 percent of women had completed college educations. Two years of college training is the highest educational attainment for men; this degree of education was attained by only 1.7 percent of working-age males. Laguna women with some college experience account for 3.5 percent of the total working-age population whereas less than 1 percent of men have had as much education.

The agricultural orientation of the reservation is reflected most among the on-reservation men by a review of high school completions relative to women. Only 27.5 percent of men have completed high school, whereas 33.6 percent of women received diplomas. The

TABLE VI
EDUCATIONAL ATTAINMENT OF THE POPULATION

Educational Attainment by Grade Completed	Female		Male	
	Percent of Total Population	Percent of Total Females	Percent of Total Population	Percent of Total Males
None	0.4	0.7	2.3	5.0
1	0.4	0.7	0.0	0.0
2	0.4	0.7	0.4	0.8
3	0.8	1.4	1.9	4.2
4	0.8	1.4	0.8	1.7
5	1.2	2.1	1.5	3.3
6	2.3	4.3	2.7	5.8
7	1.9	3.6	1.2	2.5
8	5.0	9.3	3.5	7.5
9	4.2	7.9	3.9	8.3
10	8.1	15.0	6.9	15.0
11	5.4	10.0	6.5	14.2
12	18.1	33.6	12.7	27.5
13	1.5	2.9	0.0	0.0
14	0.8	1.4	0.8	1.7
15	0.8	1.4	0.0	0.0
16	0.0	0.0	0.0	0.0
17+	0.4	0.7	0.0	0.0
Info. not available	1.5	2.9	1.2	2.5
TOTAL	54.0*	100.0	46.3*	100.0

N = 140 females; 120 males.

* The two categories combined do not sum to 100 percent due to rounding.

requirements placed upon men to perform agricultural and related duties is reflected in the high school completion records of the sexes. Women are not as apt as men to be required to remain away from classes either to work on family land or to hire out to agricultural recruiters in the spring or other times of the year. Therefore, they are more likely to complete high school than young Indian men.

Sixty-five percent of all Laguna men 16 and over have some experience with high school instruction. However, they account for only 30 percent of the reservation population age 16 and over. Approximately 66 percent of women have completed at least one year of

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high school training as may be seen in Table VI, but all female experiences with secondary school constitute 36 percent of the population. More Laguna women than men have some high school training.

Laguna men with eight years of formal training or less represent 31 percent of all men whereas women with no high school represent 24 percent of tribal women. Together, those with no high school credit total 27.3 percent of the 16 and over population.

Five percent of tribal men are without a single year of completed formal education whereas only 0.7 percent of women are so handicapped. It seems apparent that those without formal educational experience are concentrated among the elderly unless physical or mental deficiencies restrict some of the younger people.

The educational attainments of the Laguna people reflect long standing agricultural orientations. At the same time the attainment levels are comparable with those of the nonwhite general labor force. As of March, 1967, nonwhite females attained a median of 11.5 years; for nonwhite males it was 10.2.⁷ For the Laguna women and men, it is currently eleven and ten, respectively. However, the U. S. data do not include 16 and 17 year olds. Lagunas are, therefore, in roughly the same educational attainment position as the general nonwhite labor force. Improvement in education is needed, but it is not as pressing as among many other Southwestern tribes.

Facility with English. The agricultural influence upon Lagunas is reflected in the ability to utilize the English language. Several questions were asked of respondents in an attempt to gauge their competence in basic communications. The first question was: "What language is spoken most frequently in your home?" Seventy percent of the population communicate in English most frequently in the home. However, 30 percent continue to rely on their Indian language in the home. This may be an indication that efficiency with English is lost or has never been achieved. Replies to the question indicate that some basic language instruction is needed before many Indians could execute job-related instructions without need of interpreters.

Respondents were also asked: "Do you speak English?" Ninety-five percent replied in the affirmative. Only 5 percent consider that they are unable to communicate in the language. As mentioned, the percentage may well be much greater because of the widespread tendency to use the Indian language in the home. Still another question was asked to ascertain English ability: "Do you read English?" Ninety-two percent feel they can do so; eight percent cannot. The

discrepancy between those who consider they can speak but not read English is reflected in the possible range of illiteracy revealed in Table VI. Some may very well be able to speak, but due to their lack of training are unable to read.

In summary, it appears that basic communications may be a considerable problem among the Laguna. The tendency of nearly one-third of the population to use the Indian language most frequently in the home indicates a possible loss of efficiency in the use of English. Basic language instruction for the Lagunas may well be required in addition to skills training for greater employability.

UTILIZATION OF THE HUMAN RESOURCE ON THE LAGUNA RESERVATION

No accurate records of people residing on the Laguna Reservation were available prior to this study. A list maintained by the Bureau of Indian Affairs was modified in order to arrive at the sampling frame. A sample of 527 was drawn from the modified BIA list. Of this 527, 52 percent are known to be on the reservation. On the basis of this information, the Laguna population aged 16 and over is estimated at 1,064. This was the size of the reservation's total working-age human resource at the time the survey was conducted.

There are various indices of manpower utilization. The labor force participation rate is one such index. The participation rate indicates the extent to which Lagunas are committed to the labor market. Unemployment rates provide another means of indicating the degree of utilization. The latter reveals the extent to which those in the labor force are being utilized. The unemployment rate is not a comprehensive measure since some people that are considered employed may only be employed part-time or on a seasonal basis even though they desire full-time, year-round employment. Various indices of manpower utilization will now be reviewed.

LABOR FORCE PARTICIPATION

The people contacted in the survey were asked about their primary activity in the year prior to the survey. Their responses are presented in Table VII.

Almost 45 percent of the people interviewed reported that their primary activity during the year prior to the survey was working. An

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additional 3 percent of the respondents reported that they were with a job, but not at work, or that they were looking for work. These two groups comprise those people of the Laguna Reservation who are in the labor force. Table VII shows that about 47 percent of the Laguna working-age population are in the labor force. This compares to a labor force participation of 59.4 percent for the United States.

TABLE VII
MAJOR ACTIVITY MOST OF THE YEAR PRIOR TO THE SURVEY

Activity	Percent
Working	44.8
With a job but not at work	0.4
Looking for work	2.7
Keeping house	25.3
Going to school	11.9
Unable to work	8.1
Retired	4.6
Other	2.3
TOTAL	100.1*

N = 261

* Does not sum to 100 percent due to rounding.

Thus, the labor force participation rate on the Laguna Reservation is approximately 80 percent of the U. S. labor force participation rate.

The comparatively low rate of labor force participation on the Laguna Reservation may be in part due to age distribution. The data suggest that there may be slight differences in the age distributions of the United States and the Lagunas. An examination of Table VIII reveals these differences. It can be seen that the percentage of adult Lagunas in the 30-60 year old groups is below the percentage of people in the United States that are in the same age bracket. Since this is the age bracket that is likely to have the highest labor force participation rate, the Laguna age distribution may contribute to a lower labor force participation rate in the Laguna community. Note also the relatively high proportion of Laguna residents who are seventy years of age or older. This group is likely to have low labor force participation rates.

An important factor in the Laguna age distribution is the off-reservation employment pattern of many members of the Laguna

community. Many Laguna males leave the reservation during their middle years to take employment with the Santa Fe railroad or to seek other jobs in the cities. The Laguna people have had a long standing agreement with the Santa Fe railroad that in exchange for right-of-way privileges, employment opportunities would be granted the members of the tribe. What the Lagunas call "colonies," have sprung up along the Santa Fe mainlines, the largest of which is located in Barstow, California. Some people leave the reservation for twenty or thirty years. Meanwhile, their residence may remain empty and fall into disrepair. Upon returning, they may repair their residence and resume their life on the reservation. Some may develop ties elsewhere and never return.

Although some Indians in the United States are reluctant to leave their reservations, this does not appear to be the case for the Laguna community. Whereas, the BIA population register for the Pueblo of

TABLE VIII
AGE DISTRIBUTION: LAGUNA AND UNITED STATES
(Percent 16 years of age or older)

Age Group	Laguna	U. S.
16-19	8.5	8.7
20-29	21.5	17.9
30-39	20.8	20.2
40-49	16.9	18.6
50-59	10.8	14.9
60-69	8.9	11.1
70 and over	12.7	8.5
TOTAL	100.1*	99.9*

N = 260

* Does not sum to 100 percent due to rounding.

Source: U.S. Census of Population, 1960, for U.S. age distribution.

Laguna contains 3,203 names of Lagunas, 16 years of age or older, the survey results support the estimate that only 1,064 are on the reservation. Some of the "missing" Lagunas are deceased, but most are residing in places like Barstow, Albuquerque, or even Chicago. Lagunas appear to move, and often to distant places. Why is it that the Lagunas are likely to move and other Indians are reluctant to do so? One factor present on the Laguna Reservation and not in most

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other Indian communities, is the employment opportunities with the Sante Fe railroad. One is tempted to conclude on the basis of these observations, that it is the lack of economic opportunity off the reservation that keeps many Indians from leaving the reservation.

Labor force participation is related to age. Table IX presents labor force participation rates by age groups for both the Laguna population and the United States as a whole. The most noteworthy fact shown in Table IX is that the Laguna participation rate for the 30-39 age group is above the rate for the United States. Of the fifty-four individuals in the survey that are between 30-39 years of age, thirty-nine are in the labor force. Although the difference between the U. S. rate and the Laguna rate could be explained by sampling variation, it appears that the Laguna rate compares well with the

TABLE IX
CIVILIAN LABOR FORCE PARTICIPATION RATES:
LAGUNA RESERVATION AND UNITED STATES
(Percent by age group)

Age Group	Laguna	U. S.
16-19	22.7	44.2
20-29	51.8	67.0
30-39	72.2	70.3
40-49	54.5	73.4
50-59	60.7	74.2
60 and over	16.1	29.5
All age groups	47.3	59.4

Source: Manpower Report of the President, 1964, for U.S. rates.

U. S. rate. In fact, the labor force participation rates for all groups in the 20-59 age bracket are reasonably high, as compared to the other tribes in the study. Those workers below 20 years of age and over 59 years of age have relatively low labor force participation rates. The young are usually in school, and the older men may have become discouraged, or they may have retired.

High labor force participation is the case for both males and females. Labor force participation rates for female Lagunas are presented in Table X. There appears to be a stability of labor force participation over all age groups. Note that for the sample, the labor

force participation rate for females in the 30-39 age group was almost equal to the U. S. rate for the same group. Some of the small differences in labor force participation may be due to sampling variation. The difference between the U. S. and the Laguna female participation rates can be attributed to what appears to be relatively low

TABLE X
FEMALE CIVILIAN LABOR FORCE PARTICIPATION RATES:
LAGUNA RESERVATION AND UNITED STATES
(Percent by age group)

Age Group	Laguna	U. S.
16-19	30.8	37.4
20-29	45.2	49.2
30-39	44.4	45.2
40-49	37.0	52.2
50-59	37.5	55.9
60 and over	38.5	17.8
All age groups	33.6	41.5

Source: Manpower Report of the President, 1964, for U.S. rates.

participation of the 40-59 age group. Notice the relatively high rate for Lagunas over 60 years of age. The data suggests that female Lagunas have a relatively strong attachment to the labor force.

TABLE XI
MALE CIVILIAN LABOR FORCE PARTICIPATION RATES:
LAGUNA RESERVATION AND UNITED STATES
(Percent by age group)

Age Group	Laguna	U. S.
16-19	11.1	51.4
20-29	60.0	88.0
30-39	100.0	97.8
40-49	82.4	96.3
50-59	91.7	92.3
60 and over	26.7	44.2
All age groups	63.3	79.7

Source: Manpower Report of the President, 1964, for U.S. rates.

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Labor force participation rates for Laguna males are presented in Table XI. Note again the very strong rate for participation of males between the ages of 20-29. Younger and older males on the Laguna Reservation, however, appear to have rates well below the national average. Again, it may be observed that there is a high rate of participation of males in the 30-39 age group; of the twenty-seven males in the survey who are in this age group, every one is in the labor force. The data suggest a strong attachment to the labor market on the part of Laguna males.

Several factors emerge from the evaluation of labor force participation rates on the Laguna Reservation compared with the U. S. rates. First, the Indian labor force participation rate is approximately 80 percent of the U. S. rate. Second, some of the difference in the participation rates may be attributed to the age distribution of the Laguna population that resides on the reservations. Finally, for certain age groups, labor force participation rates on the Laguna Reservation are comparable to the U. S. rates.

REASON FOR NOT ENTERING THE LABOR FORCE

Approximately 53 percent of the respondents 16 years of age and over residing on the Laguna Reservation are not in the labor force.

TABLE XII
REASONS GIVEN FOR NOT SEEKING EMPLOYMENT

Reason	Percent of Those Not in Labor Force*
Believes no work is available	10.6
Couldn't find work	4.5
Lacks necessary schooling, training, or experience	17.7
Employers think too young or too old	14.2
Personal handicap	5.3
Can't arrange for child care	10.6
Family responsibilities	37.5
In school or other training	14.3
Ill health or physical handicap	25.0
Other	12.5
Don't know	12.7

N = 113

* Does not sum to 100 percent due to multiple responses.

Persons in this group may be thought of as not having a job and not looking for a job. Except for males in 30-39 age group, the percentage of Lagunas of all ages in this category is higher than the national average. The question naturally arises as to why these people fail to seek employment. It should be noted at the outset that the peculiar life work pattern of the Lagunas might offer some form of explanation for the relatively high percentage of people not in the labor force. Perhaps if all members of the Laguna community, including those presently residing off-reservation due to the employment opportunities offered to them at off-reservation locations, were included in the survey, the labor force participation rate of the Laguna population might come closer to the rate of participation for the United States. The data retrieved in this study do not support an answer to this important question.

The respondents were asked: "If you are not looking for work, what are the reasons you are not looking for work?" This question

TABLE XIII
AGE DISTRIBUTION OF PEOPLE WHO WERE NOT LOOKING FOR WORK DUE TO ILL HEALTH OR PHYSICAL DISABILITY

Age Group	Percent Females	Percent Males
16-19	0.0	0.0
20-29	6.3	16.7
30-39	6.3	0.0
40-49	18.8	16.7
50-59	25.0	8.3
60-69	37.5	8.3
70-79	6.3	33.3
80 and over	0.0	16.7
TOTAL	100.2*	100.0

N = 16 females; 12 males.

* Does not sum to 100 percent due to rounding.

was asked only of those individuals who were not working during the year prior to the survey. The replies to this question are presented in Table XII.

The reason given most frequently for not seeking work was family responsibilities. More than 37 percent of the people responded that they were not looking for work for this reason; almost all of

them were women and only 7.7 percent of the women had never been married. Ill health or physical handicap was the second most frequently mentioned reason for not seeking employment. Twenty-five percent gave such reasons; it is likely that most of these are older than the population in general since illness and disability are likely to be associated with age. The age distribution of those with ill health or physical disability is presented in Table XIII. It would appear that this group is older than the population in general. However, it is clear that not all persons with health problems are old. The table suggests also that deterioration of health may be an important reason for the withdrawal of women from the labor market.

Another 14.2 percent replied that they were either too young or too old to obtain work. Nearly all the respondents giving such answers were below 20 or above 59 years of age. Persons between the ages of 20 and 59 years of age did not consider that they were too old to work. Not one of the fifty-six individuals in their 20's responded that they were too young to work. This pattern of responses is quite different from that found on some other Indian reservations. It reflects an apparently strong commitment to the labor market on the part of the Laguna people.

Many believe that labor force withdrawal is related to the individual's belief that no work is available. On the Laguna Reservation, those not seeking work for this reason amounted to 10.6 percent of those not seeking employment. It may be possible to attract these individuals into the labor force. Another 4.5 percent responded that they were not seeking employment because they could not find work. This group also appears to have some commitment to the labor market. In addition to both of these groups, 17.7 percent of the population responded that they did not seek work because they lacked the necessary training or experience. The implication is that if training were provided, these people would enter the labor market. It would appear that a relatively large number of individuals on the Laguna Reservation are being kept out of the labor market because of insufficient training, experience, and lack of economic opportunity.

EMPLOYMENT EXPERIENCE OF THOSE NOT USUALLY EMPLOYED

Those persons who were not usually working in the year prior to the survey were asked: "When did you last work at a regular full- or part-time job or business?" Usable replies were received from 110

Lagunas; approximately 95 percent of them were not in the labor force. The responses to this question are contained in Table XIV. Of those not usually employed during the year prior to the survey, 33.6 percent have never worked and 39.1 percent have not worked for five or more years. This represents 72.7 percent of those not

TABLE XIV
TIME OF LAST EMPLOYMENT OF THOSE NOT IN LABOR FORCE

Time	Percent Responding
Within past twelve months	13.6
One to two years ago	7.3
Two to three years ago	3.6
Three to four years ago	1.8
Four to five years ago	0.9
Five or more years ago	39.1
Never worked	33.6
TOTAL	99.9*

N = 110

* Does not sum to 100 percent due to rounding.

usually employed. The group as a whole appears to be isolated from the labor force and has been for years. Short-run factors are not likely to attract this group of people back into the labor market.

The proportion of Laguna individuals that has never worked is relatively small when compared to similar groups on other reservations in this study. Of the twenty-nine who never have worked, twenty-four are women, and most of the women are married. The age distribution of these women is centered around the 30-49 age groups. The data would suggest that marital status is a good explanation for women not working; age does not appear to provide the basic reason. The income levels of men also influences the decision for or against women working.

Of the thirty-seven respondents who never had worked, eight are students. Of the remaining twenty-nine, twenty-four are women and five are men. Two of the men are under 20 years of age and three women who never worked are less than 20 years of age. The median years of education of females who never worked is eight years, which compares to a median of eleven years for all Laguna females.

Of the forty-two Lagunas who have not worked for five or more years, twenty-seven are women and fifteen are men; of these women, 14.8 percent have never been married. The age distribution of women is dispersed over all age groups as illustrated in Table XXV. All but

TABLE XV
AGE DISTRIBUTION OF THOSE NOT EMPLOYED FOR FIVE OR MORE YEARS

Age Group	Percent Female	Percent Male
16-19	0.0	0.0
20-29	7.4	0.0
30-39	18.5	0.0
40-49	18.5	6.7
50-59	18.5	0.0
60-69	18.5	13.3
70 and over	18.5	80.0
TOTAL	99.9*	100.0

N = 27 females; 15 males.

* Does not sum to 100 percent due to rounding.

one of the males is 60 years of age or older. In fact, 80 percent of the men who had not worked in five or more years are 70 years of age or older. The education level of women who have not worked for five or more years is only slightly below the education level for all Laguna women residing on the reservation. The median level of education for women who have not worked for five or more years is ten years as compared to eleven years for all females on the reservation. The median years of education for men who have not worked for five or more years is five years as compared to a level of ten years for all men residing on the Laguna Reservation. This relatively low level of education reflects the age distribution of males who have not worked for five or more years. These data add support to the proposition that family obligations are likely to keep Laguna women out of the labor market. Advanced age keeps Laguna men out of labor market.

Individuals who were not usually employed during the year previous to the survey but were employed at some time in the past were asked why they left their last job. Table XVI shows the reason given most frequently is "personal, family, or school." Health, retirement, and old age are also important reasons. The next four categories in Table XXVI refer to conditions of the labor market as being the

cause for leaving last jobs. Cyclical problems affecting Indian employment are likely to lead to long-term if not permanent withdrawal from the labor market. These people could possibly be recruited back into active participation if employment opportunities were expanded.

TABLE XVI
REASON FOR LEAVING LAST JOB

Reason	Percent Responding
Personal, family or school	45.7
Health	14.3
Retirement or old age	15.7
Seasonal job completed	1.4
Slack work or business conditions	4.3
Temporary nonseasonal job completed	8.6
Unsatisfactory work conditions	2.9
Other	7.1
TOTAL	100.0

N = 70

UNEMPLOYMENT

Respondents were asked what their major activity was during most of the year previous to the survey. (Table VII contains the responses to the question.) The concept of unemployment used in this study is best described as that of being usually unemployed during the year previous to the study. It should be noted that an individual may have done some work during the year, but if he was not working most of the year he is eligible to be counted as unemployed. In addition to not usually working most of the time, the usually unemployed person must have looked for work most of the year prior to the study. Those who were not looking for work because they believed no work was available are not counted as being unemployed by the Bureau of Labor Statistics. The decision was made for purposes of the Indian Manpower Resource Study to count such persons as not being in the labor force. This exclusion from the unemployed category reflects the position that those people who spent most of one year believing that no work was available in the community and did not look for work are best described as alienated from the labor force. The exclusion from the unemployed category

of those who believe that no work is available reflects the fact that the IMRS questionnaire focused on activity over the year prior to the survey, whereas the Current Population Survey focuses on the previous week.

Of the 261 usable responses received on the Laguna Reservation only seven indicated that the respondent was unemployed for most of the year prior to the survey, and six of these are men. The overall unemployment rate for the Laguna Reservation is estimated at 5.7 percent. The unemployment rate for U. S. males is 7.9 percent. The male unemployed have no special characteristics that could distinguish them from other males on the reservation. All of the male unemployed are between 20 and 49 years of age; one is married, one is divorced, and the others were never married.

The previous sections have been directed to those who were usually unemployed; that is, those who spent most of the year prior to the survey looking for work. Another insight into unemployment can be gained by looking at that group that did not work at all during the year prior to the survey. This group includes those that were totally unemployed and those that were not in the labor force.

Of those that did not work at all during the year prior to the survey, 6.5 percent looked for employment at some time. Looking for work, however, may not have been their primary activity during the year. Included in this group, for example, could be housewives whose primary activity was keeping house, but who looked for a job at some time. Table XVII shows that some of those who sought work, sought part-time work only. Others were willing to take either full- or part-time work.

TABLE XVII
PERCENTAGE OF THOSE NOT WORKING WHO ARE LOOKING FOR WORK
(By type of work)

Category	Percent
Full-time	1.6
Part-time	1.6
Both	3.3

N = 122

The people contacted various sources in their attempts to find work. While the data are not sufficient to define any definite job

search pattern, a number of interesting, but not surprising, facts emerge. The Bureau of Indian Affairs is rarely contacted in the attempt to find employment. This is not surprising since the BIA does not have a full time representative on the reservation. The BIA office is located in Albuquerque some 45 miles from the reservation. In addition, the New Mexico State Employment Service does not appear to be a frequent source of job information. This state agency does not have a full-time office on the reservation, although frequent visits to the reservation are made. In general, it would appear that these public agencies do not provide the vital link between the unemployed and information about job opportunities that may be necessary to generate greater labor market activity.

UNDEREMPLOYMENT

Labor force participation and unemployment rates provide only a partial description of the activity of the Laguna population. Either of these measures taken alone is misleading. Even a combination of these measures fails to describe manpower utilization on the Laguna Reservation since it fails to include the irregularity of employment and the fact that employment may be on a less than full-time basis. The sections that follow provide an overall view of all the important factors combined.

About 60 percent of the females and 31.7 percent of the males responding to the IMRS survey did not work during the year prior to the survey. As shown in Table XVIII, of the 136 respondents that

TABLE XVIII
DISTRIBUTION OF THOSE WHO DID SOME WORK
BY NUMBER OF MONTHS WORKED

Months Worked	Percent
1 - 3	9.6
4 - 6	12.5
7 - 9	10.3
10 - 12	67.7
TOTAL	100.1*

N = 136

Does not sum to 100 percent due to rounding.

reported they did some work in the year prior to the survey, 67.7 percent reported that they worked between ten and twelve months. This rate of response is higher than was found on any of the other reservations covered in this study. Respondents to the questionnaire were also asked if their work was year-round, irregular, or seasonal. The responses to this question are reported in Table XIX. Of those responding, 71.5 percent reported that they work year-round. This

TABLE XIX
USUAL TYPE OF EMPLOYMENT

Type of Employment	Percent of Workers
Year-round	71.5
Seasonal	11.0
Irregular	16.8
TOTAL	99.3*

N = 136

* Does not sum to 100 percent due to rounding.

means that some people working less than ten months regard their employment as being on a year-round basis. Note that 11 percent of the respondents engaged in seasonal employment and 16.8 were employed on an irregular basis. The fact that more than 25 percent of those reporting that they did some work are dependent on seasonal or irregular employment suggests that at any given time there are likely to be a substantial number of people not gainfully employed. The seasonal employment pattern is presented in Table XX. Seasonal employment does not vary substantially from season to season although different people are likely to be employed in different seasons.

TABLE XX
DISTRIBUTION OF SEASONAL EMPLOYMENT

Season	Percent of Seasonal Workers Employed*
Spring	31.3
Winter	43.8
Fall	31.3
Summer	37.5

N = 16

* Does not sum to 100 percent due to multiple responses.

To summarize the information presented thus far, labor force participation rates on the Laguna Reservation are high and unemployment rates, while above the national average, are not drastically high. This information suggests two things: First, the Laguna Reservation appears to be less isolated from the U. S. economy than are some of the other reservations. Second, methods generally used to measure the labor force participation of the general population are not suited to obtain manpower information on Indian reservations. Reference to a U. S. labor force participation rate of 60 percent means that 60 percent of the working-age population is in the labor market, either with a job or seeking employment. Assuming a moderate unemployment rate, the number of people actually employed most of the time is approximately 95 percent of the labor force participation rate or 57 percent of the age 16 and over population. This is not so on the Laguna Reservation and is probably even less the case on many of the other reservations. At Laguna, only 35.7 percent of the population worked between ten and twelve months in the year prior to the survey. Year-round utilization of the U. S. population 16 years of age or older is approximately 60 percent higher than the year-round utilization of the Laguna population. The difference can be attributed to a somewhat lower labor force participation rate on the Laguna Reservation, but it also reflects the seasonal and irregular nature of employment in Indian communities.

TABLE XXI
AGE DISTRIBUTION BY NUMBER OF MONTHS WORKED
(Percent)

Age Group	Months Worked				
	0	1-3	4-6	7-9	10-12
16-19	10.7	15.4	17.7	7.1	3.2
20-29	15.6	46.2	64.7	35.7	16.0
30-39	11.5	23.1	5.9	28.6	34.0
40-49	14.8	15.4	0.0	14.3	23.4
50-59	9.8	0.0	0.0	14.3	14.9
60-69	13.1	0.0	5.9	0.0	6.4
70 and over	24.6	0.0	5.9	0.0	2.1
TOTAL	100.1*	100.1*	100.1*	100.0	100.0
Number in each group	122	13	17	14	94

* Does not sum to 100 percent due to rounding.

The relationship between age and number of months worked is presented in Table XXI. The table suggests that a high proportion of those working half of a year or less are younger workers. Persons in the 30-49 age group dominate the jobs that provide year-round employment.

Marital status is also related to the number of months worked. Table XXII suggests that married women are most likely not to work. If they do work, however, they are likely to work ten to twelve

TABLE XXII
DISTRIBUTION OF MONTHS WORKED FOR MARRIED LAGUNAS

Months Worked	Percent Female	Percent Male
0	57.1	21.9
1 - 3	3.6	0.0
4 - 6	4.8	3.1
7 - 9	0.0	14.1
10 - 12	34.5	60.9
TOTAL	100.0	100.0

N = 84 females; 64 males.

months. Married men are likely to work year-round. Table XXIII suggests that the never-married Lagunas are much less likely to work

TABLE XXIII
DISTRIBUTION OF MONTHS WORKED FOR NEVER-MARRIED LAGUNAS

Months Worked	Percent Female	Percent Male
0	45.5	30.0
1 - 3	9.1	17.5
4 - 6	15.2	15.0
7 - 9	3.0	10.0
10 - 12	27.3	27.5
TOTAL	100.1*	100.0

N = 33 females; 40 males.

* Does not sum to 100 percent due to rounding.

year-round. The lack of work may assist in decisions never to marry, as mentioned. There is a close relationship to marital status and

number of months worked. Table XXIV shows that more than 72 percent of all those that worked full time were married. This is the case of both males and females. The data suggest that the responsibilities of marriage affect members of the Laguna community much the same as they affect members of the general population.

TABLE XXIV
MARITAL STATUS OF THOSE WHO WORKED TEN TO TWELVE MONTHS

Marital Status	Percent Female	Percent Male
Married	72.5	72.2
Widowed	2.5	3.7
Divorced	0.0	0.0
Separated	2.5	3.7
Never-married	22.5	20.4
TOTAL	100.0	100.0

N = 40 females; 54 males.

HOURS WORKED

Respondents were also asked how many hours per week they usually worked. As illustrated in Table XXV, approximately 15 percent responded that they usually work less than 35 hours per week. Economic factors influence the incidence of part-time work. Of those

TABLE XXV
HOURS PER WEEK USUALLY WORKED BY EMPLOYED LAGUNAS

Hours	Percent of Total
1 - 14	10.9
15 - 29	3.6
30 - 34	1.5
35 - 39	0.7
40	73.2
41 - 48	4.4
49 - 59	2.2
60 or more	3.6
TOTAL	100.1*

N = 138

* Does not sum to 100 percent due to rounding.

working less than 35 hours, 20 percent do so because of personal affairs; 60 percent do so because their full-time work is less than 35 hours per week. Only 5 percent attributed their work of less than 35 hours per week to slack work conditions. Yet a majority of those workers so involved are affected by the level of aggregate demand for the goods and services produced by their places of work.

INDUSTRY AND OCCUPATIONAL EXPERIENCES

Industry and occupational experiences of the Lagunas over the past five years indicate their successes in competing for jobs in the general labor market. Several questions were asked of respondents regarding the type of job or jobs held, both at present and during the previous five-year period. Such questions were asked as: what is the present job performed, who is your employer, what is his business, and describe your job. On the basis of responses, the industries and occupations were classified in accordance to two-digit Standard Industrial Classification and the *Dictionary of Occupational Titles*.¹

INDUSTRY EXPERIENCES

The distribution of Lagunas in industries is limited as is the case with most Indians. Table XXVI reveals the industry experiences of the working-age population over the five-year period 1963-68. The industries identified in the table include employment both on and off the reservation. In order of importance, Lagunas are concentrated in four broad industry categories: government, manufacturing, mining, and services.

Government is by far the most important provider of Laguna employment opportunities. Government employment accounts for nearly 39 percent of industry experiences. The wide range of services provided Indians by the federal government require a relatively large number of workers. Tribal members for whom the services are provided are given preference to perform the necessary tasks that are outside the professional categories. In this way the federal government provides a type of sheltered employment for each tribe. Each tribe is responsible for certain types of maintenance, and for government services such as council representatives and other forms of leadership. In addition, law enforcement services are often provided by the tribes. The amount of tribal work depends upon efforts to establish and

TABLE XXVI
LAGUNA EMPLOYMENT BY INDUSTRY CLASS
(Number and percent)

Code	Industry	Number	Percent of Total
AGRICULTURE, FORESTRY, AND FISHERIES			
01	Agricultural production	9	
08	Forestry	1	
	Subtotal	10	5.9
MINING			
10	Metal mining	19	
13	Crude petroleum and natural gas	3	
	Subtotal	22	12.9
CONTRACT CONSTRUCTION			
15	Building construction—general contractors	1	
16	Construction other than building—general contractor	4	
17	Construction—special trade contractors	2	
	Subtotal	7	4.1
MANUFACTURING			
32	Stone, clay, glass and concrete products	1	
33	Primary metal industries	1	
36	Electrical machinery, equipment, and supplies	31	
	Subtotal	33	19.4
TRANSPORTATION, COMMUNICATION, ELECTRIC, GAS, AND SANITARY SERVICES			
40	Railroad transportation	3	
41	Local suburban transit and interurban passenger transit	1	
	Subtotal	4	2.4
WHOLESALE AND RETAIL TRADE			
53	Retail trade—general merchandise	1	
54	Food stores	3	
57	Furniture, home furnishings, and equipment stores	1	
	Subtotal	5	2.9
FINANCE, INSURANCE, AND REAL ESTATE			
62	Credit agencies, other than banks	1	
64	Insurance agents, brokers, and service	1	
	Subtotal	2	1.2

TABLE XXVI (continued)

Code	Industry	Number	Percent of Total
SERVICES			
72	Personal services	3	
82	Educational services	4	
86	Nonprofit membership organizations	1	
88	Private households	12	
89	Miscellaneous services	1	
	Subtotal	21	12.4
GOVERNMENT			
91	Federal government	51	
92	State government	2	
93	Local government	13	
	Subtotal	66	38.8
TOTAL		170	100.0

N = 170

operate businesses. The Lagunas do little in this respect and it is reflected in local employment. Very little work has been made available to Lagunas by the State of New Mexico; however, some has been made available, which is more than is done in some other states. Both state and local governments provide only about 22 percent of all Indian experiences in government employment. The federal government is responsible for the remainder.

Manufacturing is responsible for 19 percent of Laguna employment over the past five years. Nearly all of their work is due to one electronics firm located on the reservation. Very little progress appears to have been made in influencing other manufacturing firms to locate on the reservation.

Metal mining and extraction of crude petroleum and natural gas has been important to 13 percent of the working-age population. Again, most experience in mining has been due to the operations of a single firm, Anaconda's uranium mine. The demand for uranium has not kept pace with the ability to produce; therefore, a significant cyclical element has been introduced into Indian mining employment.

The services industry is as important as mining to Lagunas in terms of number employed. Twelve percent of the population have worked in the services industry. Obviously, income generated from

supplying services lags significantly behind mining. Lagunas provide services ranging from work in private households as domestics to educational services. Over one-half of all services provided by Lagunas are for private households.

Several other industries provide some employment, but entry is limited. Agriculture accounts for 6 percent of work experience. Contract construction employs 4 percent of the population. Wholesale and retail trade accounts for 3 percent. Transportation, primarily the Sante Fe Railroad, has, at least over the five-year period, employed 2 percent of Lagunas.

Most experiences with the several industries mentioned may well be limited to marginal types of work. Government employment is probably the most stable of all industry classes. Marginal work in the other industries carries with it the greater likelihood of job loss when the economy experiences a relative decline in aggregate demand for goods and services. Dependence is usually upon a single firm within a particular industry. More information in this regard is available by a review of occupational experiences within the industries just mentioned.

OCCUPATIONAL EXPERIENCES

Occupations within which Lagunas have worked during the five-year period prior to the study were revealed by 170 respondents. Table XXVII shows the occupations worked at recently enough to make it possible to assume that any skill required to perform similar work could be relearned with minimum cost to employers.

Within the industries where Lagunas have worked, structural occupations have been most important. Twenty-two percent of the population have worked at such occupations as welding, electrical assembly, excavating, grading, and paving of roads, or in construction. Primary concentration has been on road building or repairing and in carpentry or other construction-related work.

Indians provide service types of work in several industries; nearly 21 percent of the population have performed in this occupational class. Nearly one-half of the work is in domestic services including house-keeping and gardening. Many serve as cooks and waiters or waitresses in restaurants. Still others work as guards or policemen, both on and off the reservation.

TABLE XXVII
LAGUNA EMPLOYMENT BY OCCUPATIONAL TITLE
(Number and percent)

Code	Description	Number	Percent of Total
PROFESSIONAL, TECHNICAL, AND MANAGERIAL OCCUPATIONS			
00, 01	Occupations in architecture and engineering	5	
07	Occupations in medicine and health	3	
09	Occupations in education	3	
16	Occupations in administrative specializations	1	
18	Managers and officials, not elsewhere classified	1	
19	Miscellaneous professional, technical, and managerial occupations	5	
	Subtotal	18	10.6
CLERICAL AND SALES OCCUPATIONS			
20	Stenography, typing, filing, and related occupations	6	
21	Computing and account—recording occupations	4	
22	Material and production recording occupations	1	
29	Merchandising occupations, except salesmen	2	
	Subtotal	13	7.7
SERVICE OCCUPATIONS			
30	Domestic service occupations	16	
31	Food and beverage preparation and service occupations	2	
32	Lodging and related service occupations	4	
35	Miscellaneous personal service occupations	6	
36	Apparel and furnishings service occupations	1	
37	Protective service occupations	4	
38	Building and related service occupations	2	
	Subtotal	35	20.6
FARMING, FISHERY, FORESTRY, AND RELATED OCCUPATIONS			
40	Plant farming occupations	4	
41	Animal farming occupations	11	
42	Miscellaneous farming and related occupations	2	
	Subtotal	17	10.0
PROCESSING OCCUPATIONS			
55	Processing of chemicals, plastics, synthetics, rubber, paint, and related products.	1	
	Subtotal	1	0.6

TABLE XXVII (continued)

Code	Description	Number	Percent of Total
MACHINE TRADES OCCUPATIONS			
60	Metal machining occupations	1	
62, 63	Mechanics and machinery repairmen	4	
	Subtotal	5	2.9
BENCH WORK OCCUPATIONS			
72	Occupations in assembly and repair of electrical equipment	24	
73	Occupations in fabrication and repair of products made from assorted materials	1	
	Subtotal	25	14.7
STRUCTURAL WORK OCCUPATIONS			
81	Welders, flame cutters, and related occupations	4	
82	Electrical assembling, installing, and repairing	1	
85	Excavating, grading, paving, and related occupations	11	
86	Construction occupations, not elsewhere classified	19	
89	Structural work occupations, not elsewhere classified	3	
	Subtotal	38	22.4
MISCELLANEOUS OCCUPATIONS			
90	Motor freight occupations	6	
91	Transportation occupations, not elsewhere classified	4	
92	Packaging and materials handling occupations	1	
93	Extraction of minerals	6	
94	Occupations in logging	1	
	Subtotal	18	10.6
TOTAL		170	100.1*

N = 170

* Does not sum to 100 percent due to rounding.

Electrical assembly and repair is the predominant bench type of occupation. Nearly 15 percent of the population have worked in the occupational category. Again, the Lagunas depend upon one firm's fortunes to be able to capitalize upon experience.

Nearly 11 percent of the working-age population has functioned in the professional, technical, and managerial occupations. The majority serve in the capacity of secondary-level workers in the occupa-

tions mentioned. For example, in medicine and health, the usual occupation is that of practical nurse, an occupation below that of registered nurse. Some function as school teachers, but most are teachers' assistants. Responsibilities assigned Indians in the entire occupational category tend to be secondary.

Nearly 11 percent of the occupational experiences are in the miscellaneous group. The more significant ones are truck driving, loading of trucks, and mining. Also included, however, are those that work in railroading and logging. Once again, the occupations do not tend to require the type of skill that comes through training. Skills required tend to be learned through experience on the job.

The importance of farming occupations to the tribe is reflected in Table XXVIII; 10 percent of the population list them as their occupations. Primary attention is devoted to cattle and sheep; 64 percent of the Indians in the category work with livestock. Another 24 percent are engaged in agricultural farming. Dependence of the reservation upon agriculture is obviously similar to that of the general economy. Most Lagunas must search elsewhere for occupations in which they may work.

Nearly 8 percent of the population have experience in clerical and sales occupations. Most are engaged in normal office occupations such as record keeping, typing, filing, and general secretarial work. The majority of such work is provided Laguna women in government offices engaged in extending services to Indians. However, a few are able to obtain work in offices and stores outside of sheltered government functions.

Still another 3 percent of the population have experience in machine trade occupations as mechanics or repairmen of various types of machinery. Processing occupations are limited as a source of experience; less than 1 percent revealed such an endeavor.

In brief, Lagunas have occupational experiences that range from the more technical to the marginal labor market entry-level functions. A large number of the occupations are seasonal in nature, and it may well be that the Indians cannot depend upon them from season to season. Services performed for firms engaged in accommodating tourists are likely to be sporadic. Farm occupational demand also depends upon the nature of the harvest and tendency of the area to mechanize operations. Most of the people are highly dependent upon a single firm in order to work at their preferred occupations. As the firm goes, so goes the value of the occupation. A high level

of aggregate demand for goods and services is required before a majority of Lagunas can function adequately in the labor market. A decline in the demand for workers in certain occupations may well leave the Laguna without alternatives in the labor market. Agricultural occupations appear to be declining, which means Lagunas must be increasingly more oriented toward general labor market competition.

Location of Present Job. Lagunas reporting that they usually worked were asked if their present job was off or on the reservation. Eighty-eight percent of 139 respondents reported on-reservation work sources. Only 12 percent of the on-reservation population are successful in penetrating the general labor market. The Sante Fe Railroad lines, mines, and electronics firm are all on the reservation. On-reservation work is the most stable Indian employment outside the federal employment provided in Albuquerque, New Mexico. Despite the emphasis on education, Lagunas have not been very successful in obtaining non-sheltered work. This is the indication given, at least, by the on-reservation population at the time of the enumeration. Nothing is known of the off-reservation Indian.

Source of Learning Present Job. Individuals usually working were also asked to report where they had learned to perform their present jobs. Table XXVIII contains the information regarding the job training necessary to function productively.

Fifty-seven percent disclosed that their direct instruction was received from employers. Such a response is expected since most tasks are specifically oriented to particular employer preferences regarding how work is to be done. The same holds for skilled and unskilled jobs alike; however, it is expected that the more skilled tasks require more prolonged periods of instruction than the unskilled tasks.

TABLE XXVIII
SOURCE OF TRAINING TO PERFORM JOB

Source	Percent
Taught by employer	57.3
Government training program	10.1
Armed services	2.9
Formal schooling	13.8
Other	15.9
TOTAL	100.0

N = 138

Nearly 14 percent of workers are convinced that their formal years of school provided the necessary background to adequately function in present jobs. For some, the training received in typing, shorthand, and filing does indeed carry over almost entirely. For others, there is a close relationship between formal training and on-the-job requirements. This is particularly the case when simple reading of instructions is required.

Government training programs were identified as the source of skills by 10.1 percent of workers. Training received was varied and, seemingly, placement into jobs was where they could use the specific training they had received—for instance, heavy equipment operators later worked on road paving or grading. The armed services were viewed as the source of job training for 2.9 percent of workers. Some may have found civilian jobs that were similar to assignments in the armed forces such as cooks or clerks; however, there is normally little carry-over between military and civilian assignments.

Nearly 16 percent reported the "other" category as the source of job instruction. The category refers to such sources as self-taught and instruction from friends and relatives. Generally most persons in the category are engaged in agricultural occupations where relatives play a major role in teaching the types of functions required to plant crops or care for herds of cattle or sheep.

Union cards are held by 4.5 percent of 244 respondents. The vast majority of union members are miners, but some others belong to the building trades unions. Job training by unions has not been an important aspect of their labor market activities. Practically no effort has been made by unions to organize on Indian land. One factor in slowing down union organization has been the problems inherent in such an endeavor, but more important has been the lack of Indian involvement in the general labor market until the last several years. Another factor is the location of Indians in the Southwest, which is generally characterized by weak union movements; such is the case regardless of the state in question. In addition, Indian isolation from the major labor markets suggests that unionization of Indians occurs primarily because firms locating on Indian land already have long histories of organization. Indians may be included in such unions as a matter of course. In any event, training offered Indians through established apprenticeship programs are scarce indeed.

Skills Training Without Subsequent Job Experience. The unwillingness of many Indians to move away from the reservation is reflect-

ed in their undertaking job training only to return to Indian land without using skills that have been acquired. Respondents were asked to reveal any job training they may have received that had not been utilized on the job. Of 240 responses, 20.4 percent revealed such a situation. A variety of skills were uncovered when respondents were asked to name the specific training they had received.

Most respondents listed training that in fact involved no skill, but rather some job held in the past. Several, however, did appear to have undertaken training that could result in work if the individual had access to job information or was willing to move away from the reservation to take available jobs. Prominent among the skills listed are welders, mechanics, carpenters, beauticians, and policemen. The inability to use such skills may reflect (1) the source of training, (2) the quality of training, or (3) the unwillingness to locate where the training may lead to jobs. Even so, latent skills among the Laguna population are not abundant and extensive training of workers to make them employable may be a necessity. This is particularly the case in the semi-skilled and skilled categories.

SOURCES OF INCOME

Insights into Laguna incentives to participate in the general labor force or, alternatively, to remain on the reservation can be gained by a review of the sources and amounts of earned and unearned income. The availability of transfer payments can explain the ability of some persons and families to remain on Indian land even though there are few attempts to find gainful employment. A breakdown of the data by age, sex, and educational attainment level permits a discussion of the influence education has had on the economic well-being of the population.

Also, a determination may be made of the extent of dependency on female and elderly income. In addition, an analysis is made of individual and family income. This latter aspect will reveal the extent of income sharing within the extended family units. Weaknesses in this section are those inherent in asking persons to respond on the basis of recall without the aid of records.

EARNED AND UNEARNED INCOME

Several questions were asked of Laguna respondents in order to obtain information regarding total individual and family income. They

were asked to reveal all sources and amounts of both individual and family income. Table XXIX illustrates the answers provided by respondents. Family income is presented in two separate categories. One is unadjusted for family size, whereas the other is adjusted to eliminate multiple family member response; only one member of a family was retained in the calculation.

TABLE XXIX
INDIVIDUAL AND FAMILY INCOME

Amount (Dollars)	Individual (Percent)	Family Unadjusted (Percent)	Family Adjusted (Percent)
0	16.3		
1 - 499	23.9	17.1	14.5
500 - 999	13.0	13.4	13.0
1,000 - 1,999	13.8	7.8	8.0
2,000 - 2,999	10.5	13.8	15.2
3,000 - 4,999	10.9	16.1	17.4
5,000 - 9,999	11.7	26.7	27.5
10,000 - and over	0.0	5.1	4.4
TOTAL	100.1*	100.0	100.0

N = 239 individual; 217 unadjusted family; 133 adjusted family.

* Does not sum to 100 percent due to rounding.

Family Income. Approximately 16 percent of individuals received no income in calendar 1967. It is unlikely that any individuals earn \$10,000 per year or more. Nearly 24 percent of individuals receive income in the \$1-499 category; this includes both earned and unearned income.

Median income for individuals is in the \$500-999 bracket. Thus, it is apparent from Table XXIX that over one-half of the working-age population receive less than \$1,000 annually. Of individuals, 77.4 percent receive annual incomes totaling less than \$3,000.

Additional family workers are required to garner the subsistence level of income on the reservation. It is apparent that a single worker per family is insufficient to maintain the family units even at the level illustrated in the table. Median family income falls in the \$2,000-2,999 bracket on both an adjusted and unadjusted basis. This compares to the \$500-999 median for individuals. There is very little difference

between the adjusted and unadjusted data. Because of the similarity, the remainder of the section will concentrate on the unadjusted data.

Fifty-two percent of families receive less than \$3,000 annually. The median number of children reported by married respondents is four, but it is likely that all children are not dependent. Even so, Laguna family size is large, and with a majority of families receiving under \$3,000 annually, it is possible to classify them as living in conditions of poverty. The definition of poverty is debatable regarding income levels. One such definition is that incomes under \$3,130 in the case of multiple person families and those under \$1,540 in the case of unattached individuals, spell poverty.⁸ Under such a standard, it is possible to assert that poverty is widespread among Laguna individuals and families. Income sharing seems necessary for basic subsistence. The extended family as the basic economic unit is required for survival. The continuation of such a family structure seems to be out of necessity, if not choice.

Multiple workers within a given family are necessary to rise into the \$10,000 and over bracket and about 5 percent of families are in this category. Nearly 27 percent of families, through income pooling, are in the \$5,000-9,999 category. Only 16 percent are successful in generating incomes in the \$3,000-4,999 category. Again, it is obvious that income sharing is widespread among the Lagunas.

TABLE XXX
NON-MONEY INCOME SOURCES

Source	Percent
Homegrown and consumed agricultural products	6.6
Homemade clothing	4.6
Goods exchanged for other goods	2.5
Other barter sources	3.7

N = 241

Non-Money Income. It is believed that some Indians live in a semi-barter society. Respondents were asked: "Did you receive any non-money income last year?" Non-money can be an important supplement to low incomes. Certain activities such as vegetable gardening can often be expected, particularly if individuals are free from meeting rigid work schedules. The extent of and sources of non-money income are reported in Table XXX.

Some non-money income is earned on the reservation. Nearly 7 percent of the working-age population raise vegetables for personal consumption. Roughly 5 percent of the women make at least some of the family clothing. Some barter is admitted since 2.5 percent of Lagunas are so engaged and classify such activity as a source of income to them. Sources other than those mentioned were revealed by another 4 percent.

Many of the same individuals are likely to be engaged in two or more of the activities mentioned in Table XXX. These persons were asked to place a money value on their activities. Those who were able to generate additional income did not do very well. Table XXXI reveals their own estimate of the monetary equivalent of the activity.

TABLE XXXI
MONETARY EQUIVALENT OF NON-MONEY INCOME

Income (Dollars)	Percent
0	85.1
1 - 499	14.1
500 - 999	0.8
1,000 or over	0.0
TOTAL	100.0

N = 241

The table reveals that 85 percent of the population does not have non-money income. Nearly all those who do, 14 percent, considered their activities were worth less than \$500 per year. Less than 1 percent were active enough to to earn the equivalent of between \$500 and \$999. Obviously, a variety of activities are undertaken by Lagunas to support the members of the relatively large extended family. Gardening, sewing, trading, and other activities are undertaken to upgrade the general welfare of the people. In some cases the non-money income can total as much in value as actual money received during the year.

SOURCES OF INDIVIDUAL INCOME

Additional information was sought to determine individual sources of income, both earned and unearned. The question was asked:

“What were the sources of income received by you in the last twelve months?” There were seventeen separate categories of possible response on a yes or no basis. Table XXXII contains the replies of 252 Lagunas and, as is often the case, some individuals reported multiple income sources.

TABLE XXXII
SOURCES OF INDIVIDUAL INCOME

Source	Percent*
Gifts from children, relatives, or churches	13.1
Sale of handicrafts	5.2
Self-employed income (includes business, farm, trade or professional enterprise) individual or partnership	8.7
Earnings from a farm, ranch, or other business	8.3
Earnings from a trade	40.5
Pensions	6.0
Assistance payments from Bureau of Indian Affairs	3.6
Assistance payments from other public or private sources	7.9
Interest or dividends on personal loans and investments	7.1
Income from royalties, leases, timber sales, annuities	10.7
Judgment or settlement funds	1.2
Sale of property	2.0
Veterans payments	5.6
Social Security	9.5
Unemployment insurance	1.2
None	14.7
Other	4.0

N = 252

* Does not sum to 100 percent because of multiple income sources.

Earnings from a trade were reported by approximately 41 percent of respondents. The category includes not only skilled and semi-skilled work, but unskilled as well. Both salaried and hourly paid employees are included in the total. It is the single most important income source for the Laguna population.

Self-employed income is received by nearly 9 percent of the working-age population. The category is constituted primarily of those engaged in agricultural activities. It will be recalled that the overwhelming majority of these are engaged in work connected with

the raising of cattle and sheep. Still another 8 percent of the population in question obtain earnings from farms and ranches. Such earnings are obtained by work as hired hands. Most of it is generated on the reservation, but a few hire out to nonreservation operations.

The sale of handicrafts is an important Laguna activity. It provides a source of income to 5 percent of the population. Such activities are confined primarily to women. It is obvious that the ancient art of pottery making is very much alive among Laguna Indians. The sale of property was reported by only 2 percent of the population. Such sales are normally expected to be slight among Indians since they are forbidden by law to dispose of Indian land held in trust by the U. S. Government.

Unearned income, in the form of transfer payments of various types, is very important to the existence of the population. The most important source of unearned income is in the area of gifts from children, relatives, or churches. Thirteen percent of the population is dependent upon such sources. The category reflects not only the humanitarian activities of churches, but also the dependence of the population upon relatives. Veterans payments are received by another 6 percent of the population. Service allotments are paid to families and, also, some reported retirement benefits from twenty years of career service to the U. S. Armed Forces.

Past activity of the population in the labor force is reflected in the Social Security category. Nearly 10 percent of the population receive monthly payments from this source. Most recipients are retired, but some payments are also provided widows and dependent children because of premature deaths of the principle provider. Private pensions are received by about 6 percent of the population. This category reflects the importance of the Santa Fe Railroad to the reservation in past years. This source of retirement will be less and less important over the coming years because of the relative decline of the railroad as an employer. Welfare payments as well as aid to dependent children and the blind, to mention a few, are reflected in the two assistance categories. Nearly 4 percent receive assistance from the Bureau of Indian Affairs and another 8 percent receive assistance from state and county sources. It seems apparent that the need for welfare assistance is high among the Laguna population. Unemployment insurance provided some funds to 1 percent of the working-age population during the year prior to the study.

Sources other than those mentioned provided some income to 4 percent of the population. No specific mention was made of what source was involved.

Nearly 15 percent of the respondents in the 16 and over population was without a single source of income during the past year. Some of these respondents are in the teen-age category, but a few are in other age groups. The Laguna population is oriented toward work, and there is considerable tribal encouragement for individuals to participate in the labor force. A great deal of encouragement is offered by the tribe to seek and obtain transfer income when it is available. The tribe informs the people of the availability of assistance and is highly active in seeking job opportunities for its members.

THOSE WITH NO INCOME

Of the thirty-nine Lagunas with no income, thirty-two are women. Twenty-three of the women listed keeping house as their primary activity during the year prior to the survey; seven others listed going to school. Seven men reported no income during the year prior to the survey. Of these, four were students, one was unable to work, and two were looking for work.

TABLE XXXIII
AGE DISTRIBUTION OF FEMALES WITH NO INCOME

Age Group	Percent of Females with No Income	Percent of All Females in Age Group
16-19	15.6	9.3
20-29	18.8	22.1
30-39	25.0	19.3
40-49	31.3	19.3
50-59	6.3	11.4
60-69	3.1	10.0
70 and over	0.0	8.6
TOTAL	100.1*	100.0

N = 32

* Does not sum to 100 percent due to rounding.

Men with no income tend to be in the younger age groups. Of the seven reporting no income, six are in the two younger age groups.

44 Manpower Resources

The women with no income are dispersed over all age groups as evidenced in Table XXXIII. The age distribution of women with no income suggests that marital status and family responsibilities explain the high proportion of women with no income. They prefer to remain housewives as opposed to active participation in the labor market taking them away from their families.

EARNINGS FROM A TRADE

The most frequently mentioned source of income was earnings from a trade. Of those people interviewed, 40.5 percent responded that they had income from a trade during the year prior to the survey. This income source includes earnings from both skilled and unskilled occupations.

Sixty-two men and thirty-nine women reported earnings from a trade in accordance to the data breakdown in Table XXXIV. The

TABLE XXXIV
DISTRIBUTION OF EARNINGS FROM A TRADE
(By sex and age)

Age Group	Percent Females	Percent Males
16-19	7.7	1.6
20-29	33.3	17.7
30-39	18.0	35.5
40-49	30.8	16.1
50-59	7.7	19.4
60-69	2.6	6.5
70 and over	0.0	3.2
TOTAL	100.1*	100.0

N = 39 females; 62 males.

* Does not sum to 100 percent due to rounding.

highest proportion of women having earnings from a trade are in the 20-29 age group. For men, the highest proportion of those with earnings from a trade are in the 30-39 age group. Generally speaking, earnings from a trade is a source of income most accessible to the younger people on the Laguna Reservation.

SELF-EMPLOYMENT AND OWNERSHIP INCOME

The respondents to the questionnaire were asked if they had any income from self-employed activity and if they had any income from ownership of a business. The distinction between these two types of income is essentially the distinction between income associated with work and income associated with the ownership of an economic asset. For example, a person could have a proprietary interest in a business and derive income from that business but take no part in its operation. Such a person does not receive self-employed income, but may receive income from the business. It is not clear whether respondents were able to make the distinction between these two types of income although interviewers were instructed to attempt to clarify this distinction. As was demonstrated in Table XXXII, previously, twenty-three people, or 8.7 percent of the population, report self-employed income and twenty-one individuals, or 8.3 percent of the population, report income from ownership. In most cases these are not the same individuals. Of those individuals reporting self-employed income, fifteen are men and eight are women. Of those reporting income from ownership, ten are men and eleven are women. It should be noted that handicraft income is not included as a source of self-employed income. Men with income from ownership tend to be in the older age groups with more than half of them 70 years of age or older. Women with income from ownership also tend to be older than women in general, but not as old as males with such a source of income. Men with self-employed income tend to be concentrated in the 30-49 age group. Women with self-employed income are concentrated in the 30-59 age group. It would appear that income from ownership is a source to older members of the Laguna community, and self-employed income is a source to the middle-age groups.

INCOME FROM HANDICRAFTS

Handicraft income is reported by 5.2 percent of the population. Of those reporting this source of income, nine were women and four were men. Most of the people reporting income from this source were in the 30-49 age groups.

ASSISTANCE PAYMENTS

Assistance payments are provided by the BIA and other sources. Assistance payments from the BIA are reported by 3.6 percent of the

respondents. Assistance payments from other sources are reported by 7.9 percent of the people responding to the questions. Of the nine people receiving BIA assistance, six were women and three were men. Two-thirds of all those reporting this source of income are in the 20-29 age group. Assistance payments from other sources were reported by twenty respondents. This source of assistance includes both state and private organizations. The response to this question may have been unusually high for the year prior to the survey. During the year, the area was struck by severe snowstorms. These storms were reported throughout the country; the result was that much food and clothing were sent to the area. It is not clear if this is reported as a welfare source. Two-thirds of the men receiving assistance are 70 years of age and older. This source of income also tends to go to older women as is evident in Table XXXV.

TABLE XXXV
DISTRIBUTION OF INCOME FROM PUBLIC
AND PRIVATE SOURCES OTHER THAN BIA
(By sex and age)

Age Group	Percent Females	Percent Males
16-19	0.0	0.0
20-29	18.2	22.2
30-39	0.0	0.0
40-49	18.2	0.0
50-59	9.1	11.1
60-69	18.2	0.0
70 and over	36.4	66.7
TOTAL	100.1*	100.0

N = 11 females; 9 males.

* Does not sum to 100 percent due to rounding.

INCOME FROM SOCIAL SECURITY

Social Security is an important source of income to the people of the Laguna community. Of the twenty-four individuals reporting income from this source, eleven are women and thirteen are men. As shown in Table XXXVI, the payments were made primarily to older men and women. The importance of this source of income to older workers is shown in Table XXXVII. More than 40 percent of the

TABLE XXXVI
DISTRIBUTION OF INCOME FROM SOCIAL SECURITY
(By sex and age)

Age Group	Percent Females	Percent Males
16-19	0.0	0.0
20-29	0.0	15.4
30-39	18.2	0.0
40-49	0.0	15.4
50-59	9.1	0.0
60-69	27.3	15.4
70 and over	45.5	53.9
TOTAL	100.1*	100.1*

N = 11 females; 13 males.

* Does not sum to 100 percent due to rounding.

women 70 years of age and older receive income from this source. Only one-third of the men 70 years of age or older receive income from Social Security.

TABLE XXXVII
PERCENTAGE OF LAGUNAS RECEIVING SOCIAL SECURITY BENEFITS

Age Group	Percent Females in Each Age Group	Percent Males in Each Age Group
All age groups	7.9	10.8
60-69	21.4	22.2
70 and over	41.7	33.3

N = 11 females; 13 males.

MOST FREQUENTLY MENTIONED SOURCES

One indication of the importance of an income source to a particular age group is the frequency with which the age group mentions the income source. The most frequently mentioned income sources for female age groups is presented in Table XXXVIII. The table demonstrates a clear and not unexpected pattern. Young Laguna females rely most heavily on income from a trade. It is not until women reach their 50's that other sources of income become more frequently mentioned than earnings from a trade. Pensions, Social Security payments, and welfare are important to the older age groups.

TABLE XXXVIII
 MOST FREQUENTLY MENTIONED INCOME SOURCE OF FEMALES
 (By age)

Age Group	Most Frequently Mentioned Income Source	Percent of Females in Age Group Receiving Source*
16-19	Earnings from a trade	23.1
20-29	Earnings from a trade	41.9
30-39	Earnings from a trade	25.9
40-49	Earnings from a trade	44.4
50-59	Gifts	25.0
	Earnings from a trade	18.8
	Pensions	18.8
60-69	Pensions	28.6
	Interest on investments	28.6
70 and over	Social Security	41.7
	Other welfare	33.3

* Does not sum to 100 percent due to multiple responses.

The pattern for men is similar. Table XXXIX reveals that earnings from a trade are important for all age groups until the 70 and over age is reached. It is not until workers become old that they rely

XXXIX
 MOST FREQUENTLY MENTIONED INCOME SOURCE OF MALES
 (By age)

Age Group	Most Frequently Mentioned Income Source	Percent of Males in Age Group Receiving Source*
16-19	Gifts	22.2
	Interest on investments	22.2
20-29	Earnings from a trade	44.0
30-39	Earnings from a trade	81.5
40-49	Earnings from a trade	58.9
50-59	Earnings from a trade	100.0
60-69	Earnings from a trade	44.4
	Pensions	33.3
70 and over	Social Security	33.3
	Pensions	28.6
	Other welfare	28.6

* Does not sum to 100 percent due to multiple responses.

on pensions, Social Security, and welfare. Several other factors are evident from the data. A very important aspect of the study deals with income received by education and sex.

INCOME BY EDUCATION AND SEX

A breakdown of income received on the basis of education and sex has several advantageous features. Such data provide initial insights into Laguna motivation to obtain education for job purposes. They also permit speculation regarding female and male importance in providing for individual and family needs. The receipt of income by sex and educational attainment is reported in Table XL. Reporting is on the basis of 120 male and 140 female responses.

Opportunities for earning income seem greatest for on-reservation men who have completed high school. Nearly 28 percent of men 16 and over report that they possess high school diplomas. Median income for such men falls within the \$3,000-4,999 bracket. On the other hand, one-third of all females of working-force age report high school as their highest educational attainment. Their median income falls in the \$500-999 bracket. The median income category for all females irrespective of educational attainment is \$1-499. For men, it is in the \$1,000-1,999 bracket. Thus, female high school graduates do better than other women in total. However, it seems apparent that the usual Laguna female approach to the labor market is for the purpose of supplementing family income. It does not appear that they are attached on a career basis even though the need for their income may well be on an extended basis.

Males with eleventh grade education have a median income in the \$1-499 bracket. Men do not fare so badly in any other single educational attainment category. It is possible that males with college experience and, for that matter, many with high school diplomas have relocated off the reservation for the purpose of obtaining employment. Males that have completed at least two years of college do not fare well on Indian land. Nearly 1 percent report no income in the past year. Still another 1 percent generated less than \$500. Laguna college men obviously are unable to utilize their talents on the reservation. Therefore, most must leave. Such a situation has consequences for young Laguna men. The realization that in order to capitalize on a college education requires leaving the reservation may dictate against serious plans to enroll in higher educational institu-

TABLE XI
INCOME BY EDUCATION AND SEX
(Percent)

Education	Sex	Income								Info. Not Avail.	TOTAL
		\$ 0	1-499	500-999	1000-1999	2000-2999	3000-4999	5000-9999	10,000 +		
None	M	0.0	1.7	0.8	1.7	0.0	0.0	0.0	0.0	0.8	5.0
	F	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	F	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7
2	M	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.8
	F	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.7
3	M	0.0	0.0	1.7	0.0	1.7	0.0	0.0	0.0	0.8	4.2
	F	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	1.4
4	M	0.0	0.0	0.8	0.8	0.0	0.0	0.0	0.0	0.0	1.6
	F	0.0	0.7	0.0	0.7	0.0	0.0	0.0	0.0	0.0	1.4
5	M	0.0	0.0	0.8	1.7	0.0	0.0	0.0	0.0	0.8	3.3
	F	0.0	0.7	1.4	0.0	0.0	0.0	0.0	0.0	0.0	2.1
6	M	0.0	0.0	0.8	3.3	0.8	0.8	0.0	0.0	0.0	5.7
	F	0.7	1.4	0.7	1.4	0.0	0.0	0.0	0.0	0.0	4.2
7	M	0.0	0.0	0.0	0.0	0.8	0.0	0.8	0.0	0.8	2.4
	F	1.4	0.7	0.0	0.7	0.7	0.0	0.0	0.0	0.0	3.5
8	M	0.8	1.7	0.8	0.0	2.5	0.8	0.0	0.0	0.8	7.4
	F	2.1	2.9	1.4	2.1	0.0	0.0	0.0	0.0	0.7	9.2
9	M	0.0	1.7	0.8	1.7	0.8	0.8	2.5	0.0	0.0	8.3
	F	5.0	2.1	0.0	0.0	0.0	0.7	0.0	0.0	0.0	7.8
10	M	1.7	1.7	3.3	0.8	0.8	5.8	0.8	0.0	0.0	14.9
	F	4.3	6.4	0.7	1.4	1.4	0.7	0.0	0.0	0.0	14.9
11	M	1.7	5.8	1.7	2.5	0.0	1.7	0.8	0.0	0.0	14.2
	F	2.9	0.7	0.0	0.7	1.4	0.7	0.0	0.0	3.6	10.0
12	M	0.0	1.7	1.7	4.2	4.2	4.2	11.7	0.0	0.0	27.7
	F	5.0	10.0	3.6	1.4	4.3	3.6	2.1	0.0	3.6	33.6
13	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	F	0.7	0.7	0.0	0.0	0.0	0.7	0.0	0.0	0.7	2.8
14	M	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
	F	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4
15	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	F	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.7	1.4
16	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	F	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17+	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	F	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.7
Info. not available	M	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.4
	F	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.8
TOTAL	M	5.8	15.9	13.2	16.7	11.6	14.1	17.4	0.0	4.8	99.5*
	F	22.8	27.0	10.6	8.4	7.8	6.4	4.9	0.0	11.4	99.3*

N = 120 males; 140 females.

* Does not sum to 100 percent due to rounding.

tions. This factor may mean that Laguna men are more inclined to enroll in skills training programs requiring a lesser training period. Vocational training in some categories may result in greater success in both obtaining a job in the area of training and the retention of reservation residence.

Women with some college training including possession of degrees fare better than on-reservation men. They were able in several cases to find employment providing income in the \$5,000-9,999 bracket. The \$3,000-4,999 bracket was also mentioned. Females with college training are more likely to find reservation employment because of the nature of employment. They are more likely than men to obtain jobs in the public schools and in the offices of various employers.

On-reservation men also fare relatively well with eighth grade educational attainments. Median income for the category is in the \$2,000-2,999 bracket. For women who ended their formal training with the eighth grade, the median is in the \$1-499 bracket. Men completing the ninth and those completing the tenth grades have median incomes in the \$1,000-1,999 bracket. Females do not fare nearly so well, particularly at the ninth grade level.

In short, men of the Laguna Reservation are the prime earners of income. Women, however, are relied upon as additional workers to supplement the primary male responsibility. It seems that there is a strong motivation for males to end their educational careers at the close of high school. Achievements beyond this level go unrewarded, at least so long as reservation residence is maintained. Women, however, do best when they go on to college. Monetary rewards are not certain even for them as may be seen in Table XLI. The data seem to indicate that men may be highly responsive to government- and business-sponsored skills training programs. This is particularly the case if it seems possible to obtain employment and remain on tribal property at the same time.

CONSUMPTION PATTERNS

Indian consumption patterns provide initial insights into possible avenues for training Indians to operate on-reservation businesses. It is necessary to analyze how income is spent by family income category, on what it is spent, and where it is spent. The nature of expenditures also provides information regarding family accessibility to transportation. The demand for automobile repairs indicates the

ability to commute from the reservation to adjacent areas to work or seek work. It also indicates the ability to commute from one part of the reservation to another for the same reasons. The lack of access to transportation may have some bearing on quit rates and absenteeism, which is of interest to employers considering locating on Indian land.

Information such as was mentioned was obtained by asking respondents separate questions regarding where their families usually purchased groceries, automobile repairs, and clothing. One reason for asking such questions was to learn if Lagunas usually purchased each category of goods on or off the reservation, part on and part off, or made no purchases of the particular goods at all. The method of payment, cash or credit, was also a factor, particularly with respect to family income level. Each will be analyzed in turn.

TABLE XLI
WHERE GOODS AND SERVICES ARE PURCHASED BY FAMILIES
(Percent)

Place	Item		
	Groceries	Automobile Repairs	Clothing
On-reservation	24.6	4.7	6.2
Off-reservation	20.7	50.6	60.3
Half and half	53.1	13.7	33.1
Do not know	1.6	3.1	0.4
None	0.0	27.8	0.0
TOTAL	100.0	99.9*	100.0

N = groceries 256; automobile repairs 255; clothing 257.

* Does not sum to 100 percent due to rounding.

PURCHASE OF GOODS AND SERVICES

Table XLI reveals the places where Lagunas usually purchase goods and services. Location of Laguna villages near off-reservation sites make it possible for a majority of families to split their grocery purchases between on and off Indian land stores. Fifty-three percent of families usually spend their grocery dollars in this fashion. Still another factor contributing to the split in such expenditures is the incidence of relatively high family incomes. Nearly 21 percent of family units usually purchase all their grocery needs from off-reser-

vation stores. The ability to behave in such a fashion is evidence of either credit availability from both sources or the lack of credit need. About one-fourth of families usually frequent on-reservation trading posts to provide their grocery needs. Less than 2 percent did not know the source of their family food supply.

The purchase of automobile repairs is predominantly from off-reservation sources. Nearly 51 percent indicated such a pattern. On-reservation repairmen, usually at service stations on Indian land near the highways, provide services to nearly 5 percent of families. Only 3.1 percent did not know where such repairs were obtained. Roughly 28 percent of families do not demand the services of automobile mechanics. In general, such data indicate the extent of families without an independent source of transportation. However, it is recognized that some families are able to provide repair services for themselves on a do-it-yourself basis. Others may hire qualified Indians outside the family to perform such tasks as indicated in the 4.7 percent of families satisfying demands from reservation people. Despite the limitations noted, it is probable that about a fourth of

TABLE XLII
METHOD OF PAYING FOR FAMILY PURCHASES
(Percent)

Method of Payment	Item		
	Groceries	Automobile Repairs	Clothing
Cash	64.7	56.8	77.4
Credit	32.2	33.0	21.4
Oil company credit card	0.0	1.6	0.0
Do not know	3.1	8.7	1.2
TOTAL	100.0	100.1*	100.0

N = groceries 255; automobile repairs 185; clothing 257.

* Does not sum to 100 percent due to rounding.

all family units are restricted in their ability to commute to areas on or off tribal property. Consequently, the ability to participate in the labor force is restricted. In such cases, greater than normal reliance may be made upon friends and relatives to communicate job information. Thus, horizons are limited because job information depends primarily upon the imperfect and largely limited knowledge of other Indians on the reservation.

Clothing expenditures are usually made at off-reservation stores by 60 percent of families. Only 6 percent usually make such purchases from trading posts on Indian land. Still another 33 percent split their purchases between the two alternatives. Such a record indicates both the lack of clothing inventories carried by trading posts and the limited range of selection. The periodic nature of clothing buys also reveals the possibility of less reliance upon credit terms. Thus, off-reservation specialty stores may be preferred to the on-reservation general merchandising stores. For that matter, the entire range of goods and services bought may be closely associated with availability of credit terms to Lagunas at trading posts and off-reservation stores.

METHOD OF PAYMENT

Dependence upon credit terms in the purchase of goods and services restricts freedom of choice regarding where consumer expenditures will be made. The lower the incomes, the more susceptible families become to reliance upon credit terms. Indians, in varying degrees, are often considered more dependent upon credit than the general population because of their lower incomes. It is known that once credit is extended to low-income families for groceries, the possibility of trading elsewhere is highly restricted unless credit obligations previously incurred are not honored. The lack of funds remaining after paying bills indicates the inability to seek alternatives to present practices. Table XLII provides insights into this difficult problem.

A majority of families usually provide most of their needs for goods and services on a cash basis. Nearly 65 percent do so on grocery purchases, 57 percent on automobile repairs, and 77 percent on clothing. Approximately the same percentage of families require credit for both grocery items and automobile repair services. Slightly more than one-fifth (21.4 percent) of families usually require credit for clothing purchases. The infrequent nature of clothing buys is a partial explanation for the situation. Difficulty in arranging credit terms from off-reservation merchants may well be an important factor also.

Very few families have, desire, or qualify for oil company credit cards. Only 1.6 percent of families indicated access to this service. It is possible that on-reservation purchases are largely made by families in the lowest-income groups because of the greater need for credit and at the same time a greater inability to obtain it. For this

reason, we now turn to an analysis of cash and credit payments by family income group.

METHOD OF PAYMENT BY FAMILY INCOME LEVEL

Table XLIII provides information regarding the nature of cash and credit purchases by family income level. The use of credit is important to nearly all Laguna families throughout the entire range of income levels. Its importance to particular families depends largely upon their income level and family size. Each category of expenditure is reviewed separately since the use of credit varies by type of goods or service.

Groceries. Grocery items include quite an array of goods, which constitute more than food. The degree to which non-food items are included in market baskets depends upon income. The same seems to be the case with credit and cash use.

TABLE XLIII
EXTENT OF CASH AND CREDIT USE BY INCOME LEVEL
(By percent of each income group)

Family Income	Item Purchased					
	Groceries		Automobile Repairs		Clothing	
	Cash	Credit	Cash	Credit	Cash	Credit
\$ 0 - 499	65.7	34.3	75.0	25.0	86.1	13.9
500 - 999	59.3	40.7	69.2	30.8	72.4	27.6
1,000 - 1,999	58.8	41.2	75.0	25.0	81.2	18.8
2,000 - 2,999	48.2	51.8	50.0	50.0	72.4	27.6
3,000 - 4,999	62.9	37.1	44.4	55.6	80.0	20.0
5,000 - 9,999	79.0	21.0	62.5	37.5	77.2	22.8
10,000 and over	100.0	0.0	77.8	22.2	100.0	0.0
Info. not avail.	63.9	36.1	68.2	31.8	75.7	24.3

N = groceries 247; automobile repairs 170; clothing 253.

Note: Summation is horizontally by good or service in each income category.

Nearly 66 percent of families with income totaling less than \$500 annually usually purchase groceries on a cash basis. The remaining 34 percent usually use credit. Undoubtedly, such families are required to make use of cash because of their inability to obtain credit

terms. Families in the \$500-2,999 categories seem to be in a better financial position to obtain credit from merchants than those with receipts of less than \$500. The use of credit in grocery purchases increases as the income level rises through the \$2,000-2,999 bracket. The income category just mentioned contains 52 percent of families that usually utilize credit for food-related items.

Families in income categories above \$3,000 annually utilize credit less as income rises. For example all the families in the \$10,000 and over bracket usually buy groceries on a cash basis. In the \$5,000-9,999 category, 21 percent usually use credit, but its use increases among families (37 percent) in the \$3,000-4,999 bracket. Families with greater access to credit use it less than families with lesser ability to repay. On the low end of the income scale, families seem to take advantage of credit terms to the extent it is made available. It is out of necessity that credit terms are sought. At the higher-income levels, credit is used principally because it is convenient.

Automobile Repairs. Automobile repair services obtained on a cash basis seem to reflect both the ability to repay and extent of ownership. Families earning less than \$500 annually are not likely to own vehicles, but when they do, repairs are made principally on a cash basis. This reflects the inability to obtain credit terms, particularly from most service stations and garages. Essentially the same appears to be the case with families in all income categories below \$3,000 per year.

Income groups above \$3,000 per year seem to have greater success in arranging credit terms. However, those families with incomes in excess of \$5,000 seem to require less credit than lower-income groups. This may be due to (1) the ownership of later model vehicles requiring fewer repairs, or (2) the greater ability to offer cash when repairs are needed.

In general, automobile repairs are usually obtained on a cash basis. The cash requirement may have the effect of substantially reducing the availability of transportation among Laguna families. Lower-income groups are apt to purchase older vehicles in the first place. Once repairs are required, there is a strong possibility that automobiles remain idle for extended periods because substantial proportions of the total cost are required before services will be provided. During the period of vehicle disrepair, the ability to either commute to jobs or to seek them in the first place is reduced.

Clothing. The purchase of clothing on a cash basis is more pronounced among Lagunas than any other consumer item considered

TABLE XLIV
METHOD AND EXTENT OF PAYMENT BY FAMILY INCOME LEVEL
GROCERIES, AUTO REPAIRS, AND CLOTHING
(Percent)

Family Income	Method of Payment											
	Cash			Credit								
	Percent of Total Purchasing Item (1)Gro.	Percent of Total Paying Cash (2)Auto (3)Cloth. (4)Gro. (5)Auto (6)Cloth.	Percent of Total Purchasing Item (1)Gro. (2)Auto (3)Cloth. (7)Gro. (8)Auto (9)Cloth.	Percent of Total Purchasing Item (1)Gro. (2)Auto (3)Cloth. (7)Gro. (8)Auto (9)Cloth.	Percent of Total Purchasing Item (1)Gro. (2)Auto (3)Cloth. (7)Gro. (8)Auto (9)Cloth.	Percent of Total Purchasing Item (1)Gro. (2)Auto (3)Cloth. (7)Gro. (8)Auto (9)Cloth.	Percent of Total Purchasing Item (1)Gro. (2)Auto (3)Cloth. (7)Gro. (8)Auto (9)Cloth.	Percent of Total Purchasing Item (1)Gro. (2)Auto (3)Cloth. (7)Gro. (8)Auto (9)Cloth.	Percent of Total Purchasing Item (1)Gro. (2)Auto (3)Cloth. (7)Gro. (8)Auto (9)Cloth.			
\$ 0 - 499	10.1	8.2	13.0	15.1	13.3	16.6	4.9	2.9	2.4	14.6	7.7	11.1
500 - 999	6.5	5.3	8.3	9.7	8.6	10.6	4.4	2.3	3.2	13.4	6.1	14.8
1,000 - 1,999	4.1	3.5	5.1	6.1	5.7	6.5	2.8	1.2	1.2	8.5	3.1	5.6
2,000 - 2,999	5.3	7.1	8.3	7.9	11.4	10.6	5.7	7.1	3.2	17.1	18.5	14.8
3,000 - 4,999	8.9	7.1	11.1	13.3	11.4	14.1	5.3	8.8	2.8	15.9	23.1	13.0
5,000 - 9,999	18.2	17.7	17.4	27.3	28.6	22.1	4.9	10.6	5.1	14.6	27.7	24.1
10,000 or more	4.5	4.1	4.4	6.7	6.7	5.5	0.0	1.2	0.0	0.0	3.1	0.0
Info not avail.	9.3	8.8	11.1	13.9	14.3	14.1	5.3	4.1	3.5	15.9	10.8	16.7
TOTAL	66.9	61.8	78.7	100.0	100.0	100.1*	33.3	38.2	21.4	100.0	100.1*	100.1*

N = (1) Groceries = 247
 (4) Cash = 165
 (7) Credit = 82
 (2) Auto repairs = 170
 (5) Cash = 105
 (8) Credit = 65
 (3) Clothing = 253
 (6) Cash = 199
 (9) Credit = 54

* Does not sum to 100 percent due to rounding.

n the study. The \$10,000 and over group reported all their needs were supplied by use of cash. Eighty-six percent of families with less than \$500 annually provide their clothing needs with cash. Credit is usually used most often by the \$500-999 and \$2,000-2,999 groups. The greater the income, the greater the consumer choice of retail establishments; lower-income groups are restricted in choice and appear to utilize credit to the fullest possible extent.

EXPENDITURE PATTERNS

Additional information regarding Laguna family consumption is possible by a further refinement of expenditure data. Such a refinement is provided in Table XLIV, which offers a breakdown of expenditures on the basis of cash and credit use relative to (1) the total purchasing the item and (2) the percentage of each method used by income classification.

First, it is obvious that two-thirds of all Laguna families, regardless of income, provide their grocery needs on the basis of cash. The largest proportion of all families making cash outlays (18 percent) are in the \$5,000-9,999 income bracket. The same group is most numerous in the other consumer categories in terms of cash outlays relative to the total of all families purchasing the items. The second largest consumer family group that pays cash is the less than \$500 per year group.

Roughly 79 percent of all families purchasing clothing do so by usually paying cash. Auto repairs are usually obtained on a cash basis by 62 percent of all family units. Families in the lowest-income category are not only the second most numerous of the seven groups, but they are required more than most others to pay for their needs with cash.

The percent of total purchasers using credit varies by consumer item. Grocery credit is used most frequently by families in the \$2,000-4,999 brackets. Grocery credit is used equally by both the \$0-499 and \$5,000-9,999 groups. On the other hand, the three income groups in the \$2,000-9,999 range make the greatest use of credit in automotive repair services. The lesser use of credit by the other groups reflects the lack of accessibility to such terms, except for the group earning \$10,000 or more annually.

Credit is used most extensively by the \$5,000-9,999 income group in the purchase of clothing. Approximately 24 percent of all clothing

credit is provided this group. Fifteen percent of all clothing credit is extended to the \$2,000-2,999 units as is also the case with the \$500-999 bracket.

In summary, it seems possible that the reliance of Laguna families upon cash to satisfy most of their effective consumer demands is related to the lack of on-reservation retail outlets. Off-reservation retail stores may be less inclined to extend credit because of their inability to depend upon repayment. Stores that do cater primarily to reservation families are the ones that assume most of the credit risks; for this reason, they are likely to charge higher prices than those that provide little or no credit. Families in the lowest-income groups are penalized most heavily because of their inability to patronize other stores due to their dependence on credit terms.

Consumer education is undoubtedly called for among all the families regardless of income level. However, benefits would not be realized by the lower-income groups because of the inability to break out of credit terms relationship with stores. Freedom of action can only be gained by raising the level of income among a majority of families. This can be done by (1) greater employment opportunities or (2) income maintenance projects.

NOTES

¹Mary Roberts Coolidge, *The Rain-Makers* (New York: Houghton Mifflin Co., 1929), p. 23.

²Fred Eggan, *Social Organization of the Western Pueblos* (Chicago: The University of Chicago Press, 1950), p. 253.

³United Pueblos Agency, *Long Range Plan, Laguna Pueblo*, 1959, p. 6.

⁴*Ibid.*, p. 20.

⁵Eggan, *op. cit.*, pp. 254-55.

⁶See Charles C. Killingsworth, "The Continuing Labor Market Twist," *Monthly Labor Review*, XCI, 9 (September, 1968), 14.

⁷U. S. Department of Labor, *Handbook of Labor Statistics 1968*, Bulletin No. 1600 (Washington, D.C.: U. S. Government Printing Office, 1968).

⁸Leon H. Keyserling, *The Role of Wages in a Great Society* (Washington: Conference on Economic Progress, 1966), p. 64.

Conclusions

At first glance one is inclined to predict that Laguna on-reservation individuals fare relatively well economically. Tribal government offers employment to sixty-three persons and an electronics plant employs over one hundred Indians. The tribe has placed considerable emphasis upon the necessity of formal education. Also, there is encouragement offered by the leaders to penetrate off-reservation employment sources.

In some age categories civilian labor force participation rates approach those experienced by the general U. S. population. This is particularly the case with females of age 20-39 and males of age 30-59.

At first glance, it appears that the relatively high labor force participation rates among Lagunas in the age categories mentioned may result from their ability to compete somewhat successfully in an unsheltered labor market off the reservation. Median educational attainment of females is grade eleven and for men, it is grade ten. Seventy percent of families usually communicate in English while at home. Both of these factors indicate that Lagunas may fare relatively well on pre-employment tests administered by employers or other agencies.

Closer examination of the data indicate, however, that while some families and individuals do well, many do not. The majority of workers find their jobs on the reservation and not off it. Railroads and mines are required to hire a sizable proportion of Lagunas in order to obtain tribal approval to operate on Indian land. The tribe is aggressive in attempts to attract employers to the reservation with the condition that Lagunas will be hired.

When jobs are found by the Indians, they have been successful in obtaining those that provide year-round employment. Approximately 68 percent of workers are on the job ten to twelve months per year.

Only 28 percent of those that usually work do so on a seasonal or irregular basis.

The most important industry providing Laguna employment is government, accounting for 39 percent of all experience over the past five years. Manufacturing is next in importance, accounting for 19 percent of industry experiences. The mining and service industries follow in that order. Most services provided are in private households as domestics.

Service occupations do not constitute the most important category of Laguna experiences. Over the past five years, 21 percent of the Indians have performed such tasks. Construction occupations account for 22 percent of experiences during the same period of time and such tasks provide considerably more income to individuals than do service occupations. Electrical assembly occupations account for 15 percent of experiences. These were obtained because of the physical location of an electronics plant on the reservation.

The economic payoff for all the expended efforts of on-reservation Lagunas has not been as large as might be initially expected. Approximately 76 percent of individuals over 16 receive under \$3,000 per year. Allowing for multiple workers in families, 52 percent still receive less than \$3,000 annually and this amount is used to provide for a median family size of four children reported by married persons. It cannot be denied that some families fare relatively well since nearly 27 percent receive incomes in the \$5,000-9,999 bracket. Nearly 12 percent of working-age individuals earn between \$5,000-10,000 per year. Another 5 percent of families earn \$10,000 or more per year. Median family income is in the \$2,000-2,999 range.

At the same time, it should be realized that 13 percent of individuals 16 and over receive unearned income from various sources and this is an important aspect of economic well-being. One effect of low incomes is that about 28 percent of families do not own automobiles vital to their ability to participate in the labor force. The ability to stretch limited incomes is decreased also by a restricted ability to patronize a variety of off-reservation stores where goods and services may be cheaper. Thus, a significant percentage of Laguna families do not fare as well as may be initially believed.

Laguna individuals are aggressive and continue to probe into areas that may advance them economically. They are quite willing to leave the reservation to work, but do not appear to remain away for long periods of time. Their efforts are directed toward raising the educa-

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tional and skill levels of individuals in order to attract businesses to the reservation. Important penetrations have been made into labor markets off the reservation, but not nearly to the extent that may be implied by the income data. Penetration has come largely from tribal arrangements made with firms that use reservation resources. Lagunas are more isolated from the general society than is often believed. Continued educational efforts should break down the remaining barriers to their economic activities in nonreservation areas.