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Preliminary Report on  
Population  
Marianas District

A detailed study on the characteristics of the present population with a general history of population growth and projections for 20 years of future growth.

Prepared by the Office of the  
Marianas District Planner  
June 24, 1974

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## INTRODUCTION

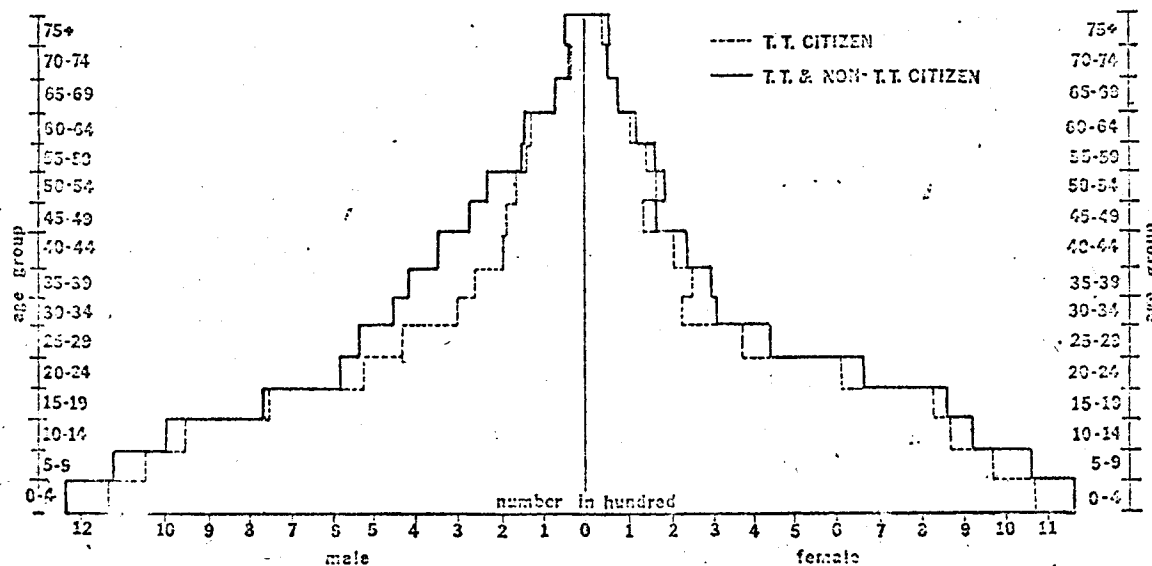
Source material on the present population is the Trust Territory Census Office and the 1973 Census. It should be noted that this data has not been checked by the demographer and therefore, may contain certain slight errors in the grouping of population. The whole numbers or figures on the total projection are considered accurate. Projections which were made by the Department of Health Services are not official government projections at this time but the figures are generally the same as the Planning Office arrived at through entirely different projection methods.

Historic material was taken from the Saipan Master Plan, as developed in 1968 by Hawaii Architects and Engineers; and Problems of Resettlement on Saipan, Tinian and Rota, by Neal M. Bowers.

Present Population Characteristics

The population of the Marianas consist of a majority of Micronesian (Chamorro, Kanaki, and other districts Micronesian), and a minority of alien (American, Philippines, Japanese, European, etc.). In fact the vast mixture of racial stocks is one of its most obvious trates. The is incredibly young with the medium age at 15.9 and 72% of the popula-tion below the age of 30.

The graph below illustrates the difference between sexes age groups and nationality of the present population. The concentration of alien males between the age of 20 and 69 are obviously people working here but the graph also indicates that their dependents are represented in nearly all age groups and both sexes.



comparative census population 1973

prepared by: district planning office

June 1974

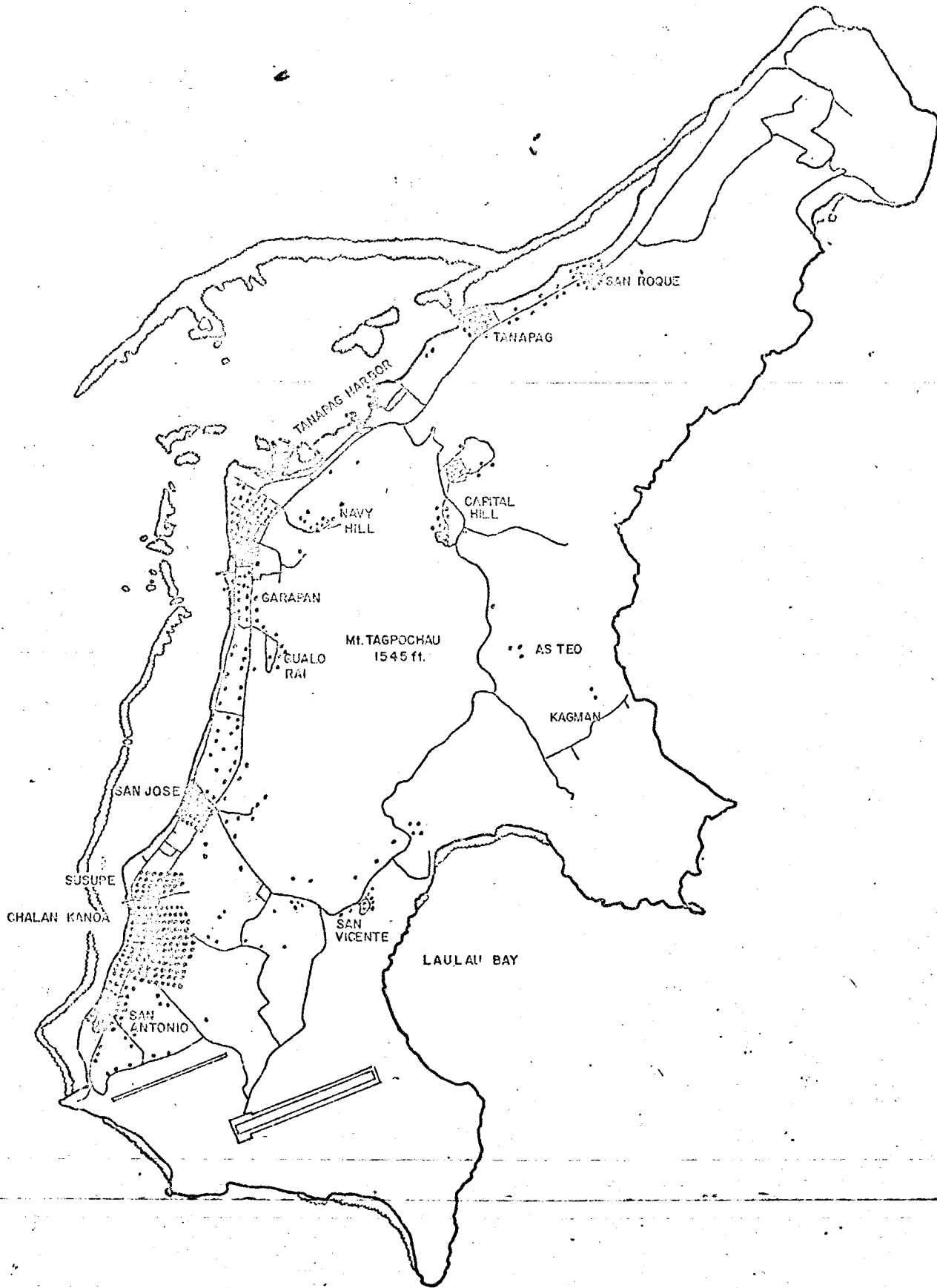
The indigenous population is also exceptionally youthful with medium age at 14.68 and 76.3% of the population twenty-nine (29) years old or younger. The sex ratios (all person) is 109 males per 100 females on a district wide basis. The indigenous population represent 98.7% of the total population.

The total population is distributed over six islands in the following proportions:

<u>Island</u>	<u>Population</u>	<u>Percent of total population</u>
Rota	1,104	7.7%
Tinian	714	4.9%
Saipan	12,394	86.4%
Agrihan	48	.33%
Pagan	57	.35%
Alamagan	25	.17%

All other islands are uninhabited. Typically the population concentrate near the Leeward shore line. In Saipan there is a slowly growing trend to disperse more widely as shown by the map on the next page. Further descriptions of population concentration and movement will be given latter.

The present population can best be described as a people in the middle of change. A large number of young people and an increase in the variety of nationalities are all placing pressure on the more traditional middle and upper aged segments of the population.



POPULATION DISTRIBUTION

SAIPAN, MARIANA ISLANDS

one dot equals 25 persons

SOURCE: T.T. population

census 1973

Population - 12,284

Historical Change and Movement

Growth and Change:

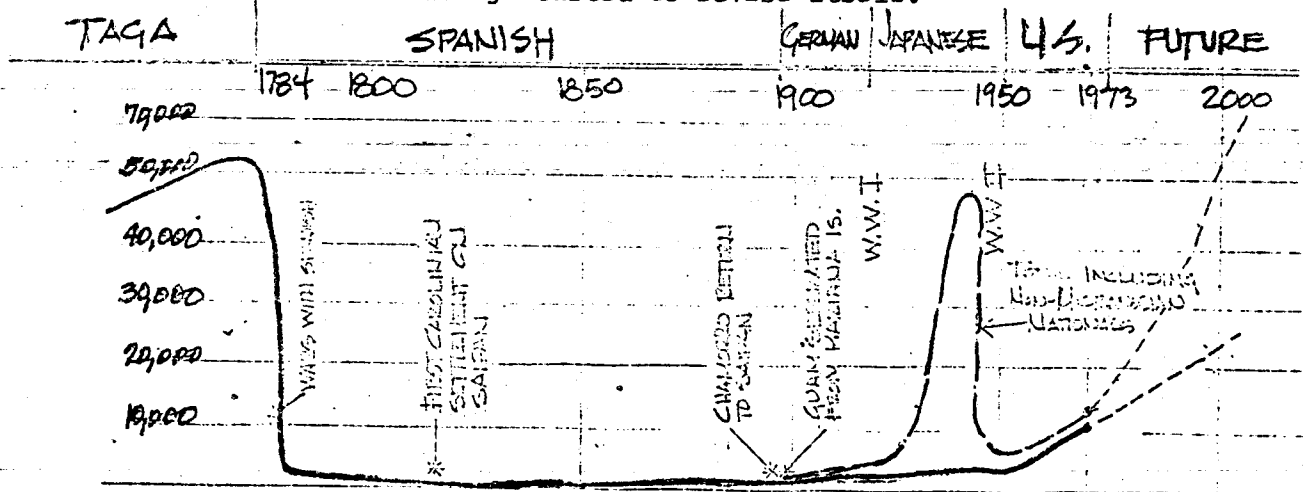
While Census were taken as far back as the Spanish period, there are few reliable, readily available records of population growth in the Marianas. A general is somewhat unreliable picture of population change has been placed together from various historic records.

The original chamorro population was estimated by the Spanish at between 40,000 and 73,000 but by 1784 only 3,169 were counted and this number decreased to 1,639 in 1790 and further to 600 in 1925. By the beginning of the German Period in 1898, Saipan had been repopulated by 1,631 people of whom 621 were the Carolians decedent from the group which settled Saipan in 1815. A 1937 Japanese census reports a population of 45,709 of which 4,145 were "native". In 1945 the U.S. Navy counted 2,966 Chamorro and 1,025 Carolian along with 13,954 Japanese and 1,411 Koreans. The 1949 total population was recorded at 6,255 and the T. T. annual reports show the following population growth since that time.

1954	-	7,380
1958	-	8,220
1962	-	9,586
1966	-	10,743

The recent 1973 Census recorded a total population of 14,333 of which 12,581 are Micronesian. The map on the next page illustrates a part of this population change and the general distribution of the population throughout the District.

The population growth pattern is a dynamic one which has been radically effected by two dramatic events the first contact with the west and World War II. In both cases the population has taken a sudden dive and slowly started to revise itself.



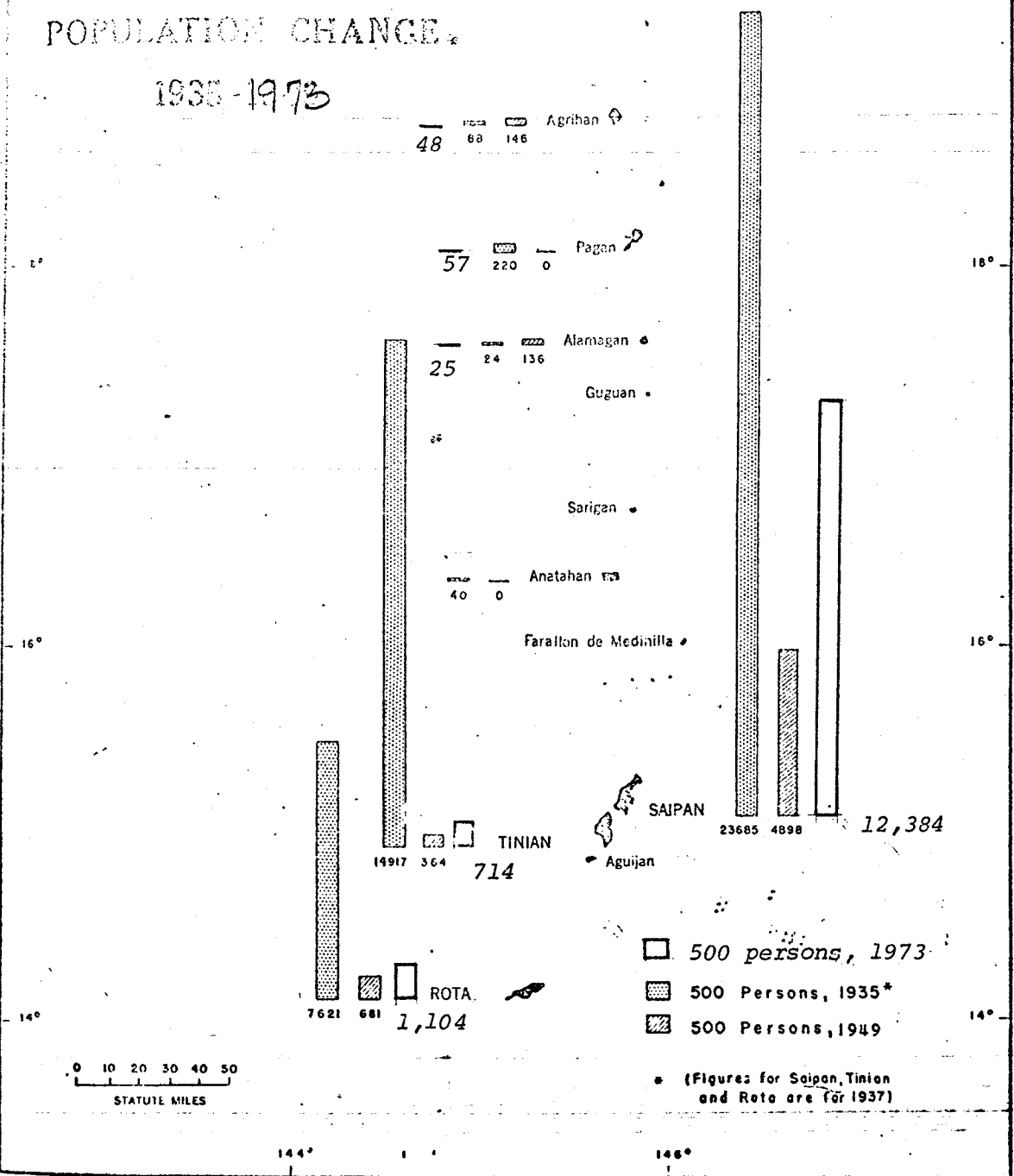


Distribution and Movement:

After war and disease had taken its toll in the 1780's what remained of the Chamorro population was moved to Guam. A small group did manage to escape and remain on Rota but the bulk of the Marianas population was concentrated on Guam between 1790 and 1890. Spanish control and influence during this period was considerable and far reaching. By 1898 the Marianas had been divided into the Trust Territory of Guam and what is now the Mariana Islands District. The population of the District remained concentrated on Saipan in Garapan and Tanapag.

Little effort was made by the German to colonize the other island by the Japanese had colonies on the Northern Islands from 1890 to 1907 when the Germans took over the business ventures and employed the Japanese. By 1944 considerable population were located on seven (7) of the islands.

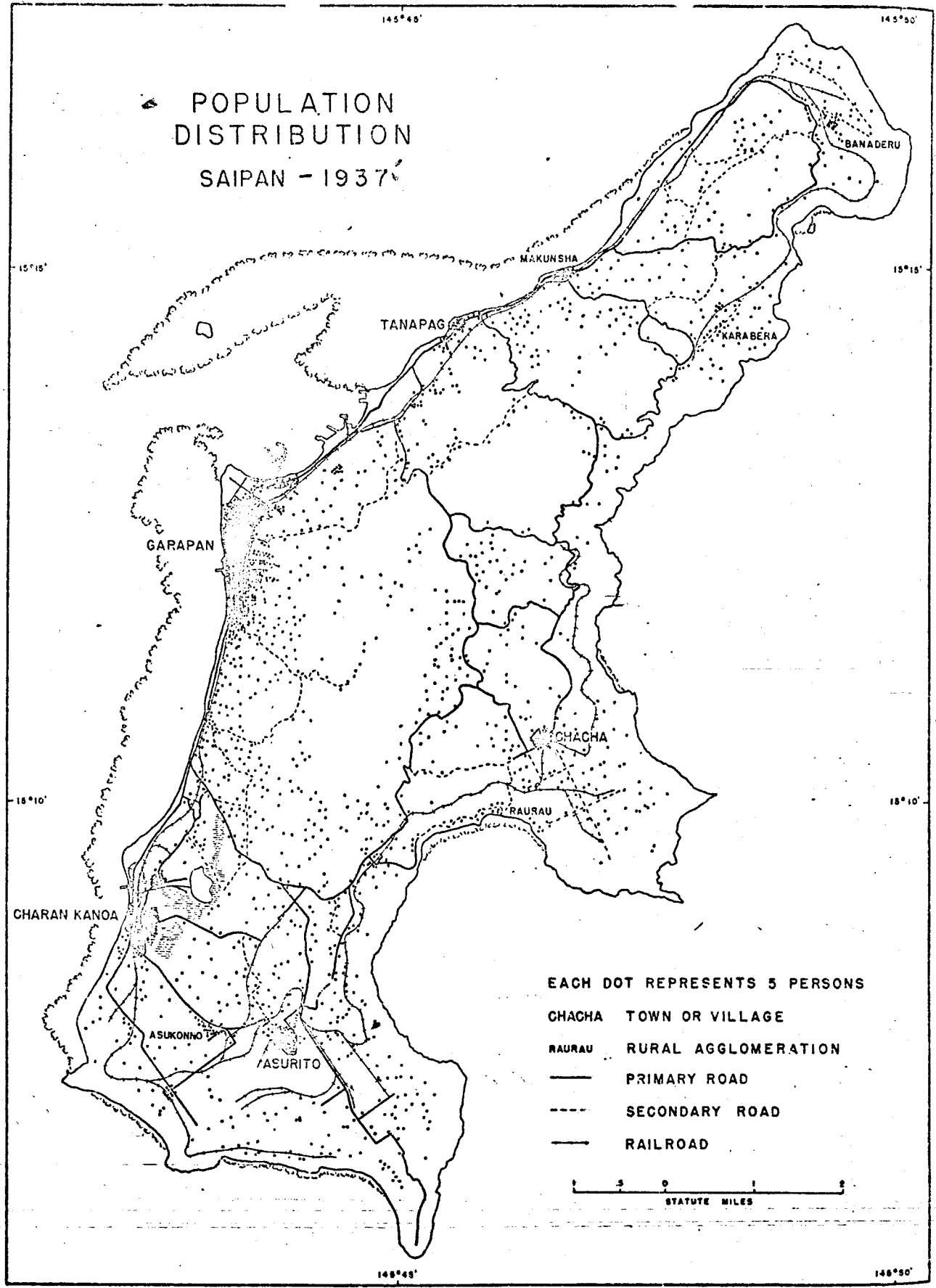
MARIANA ISLANDS  
POPULATION CHANGE  
1935-1973



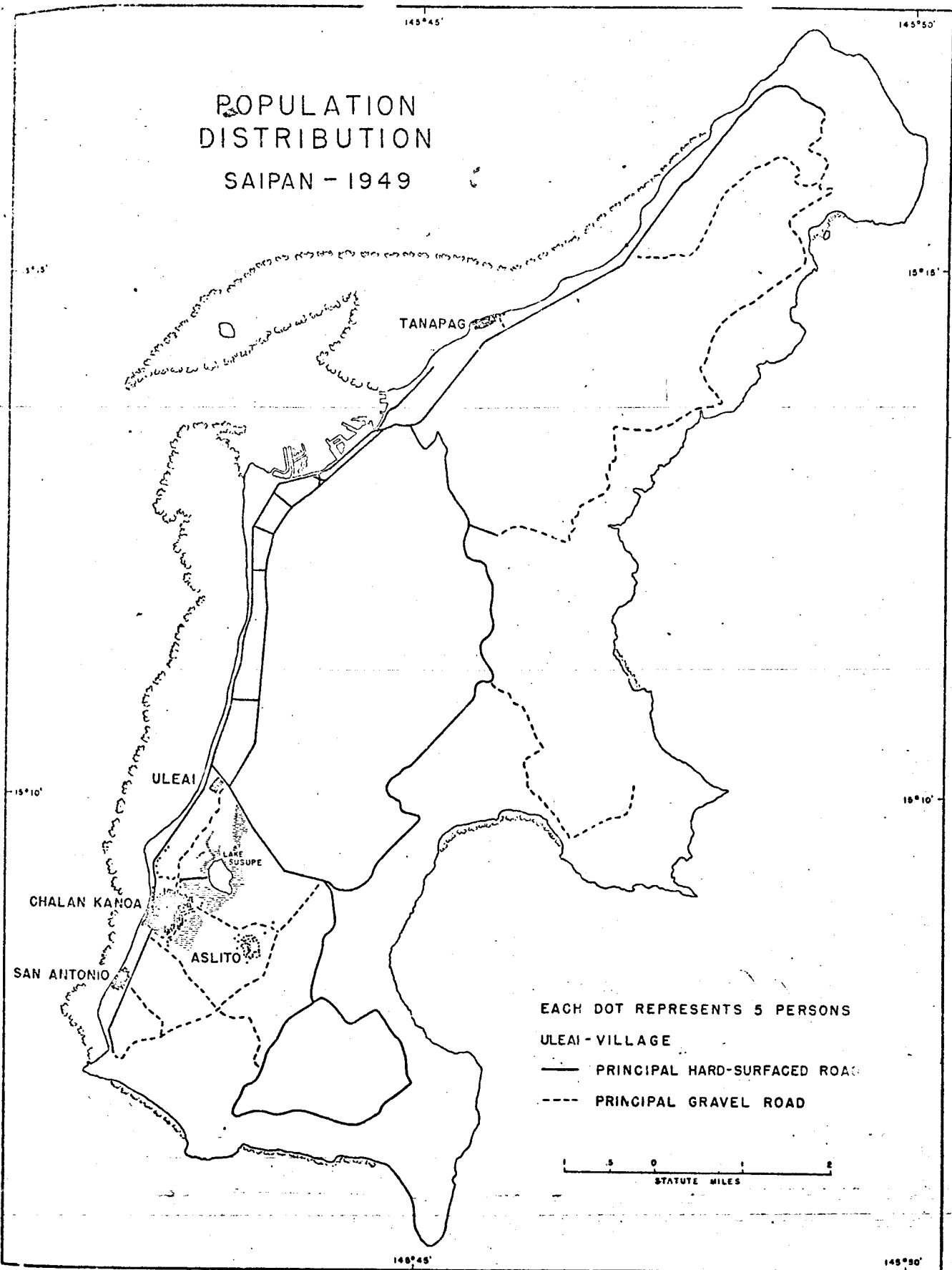
Fairly good records are available on the population distribution on Saipan and the next four maps illustrate this distributions. In the first two maps one dot represents five people while in the last of two one dot represents 25 people. This tends to make it appear that there was a greater difference in population than actually existed. The primary purpose of these maps is to illustrate areas of population concentration rather than actual numbers.

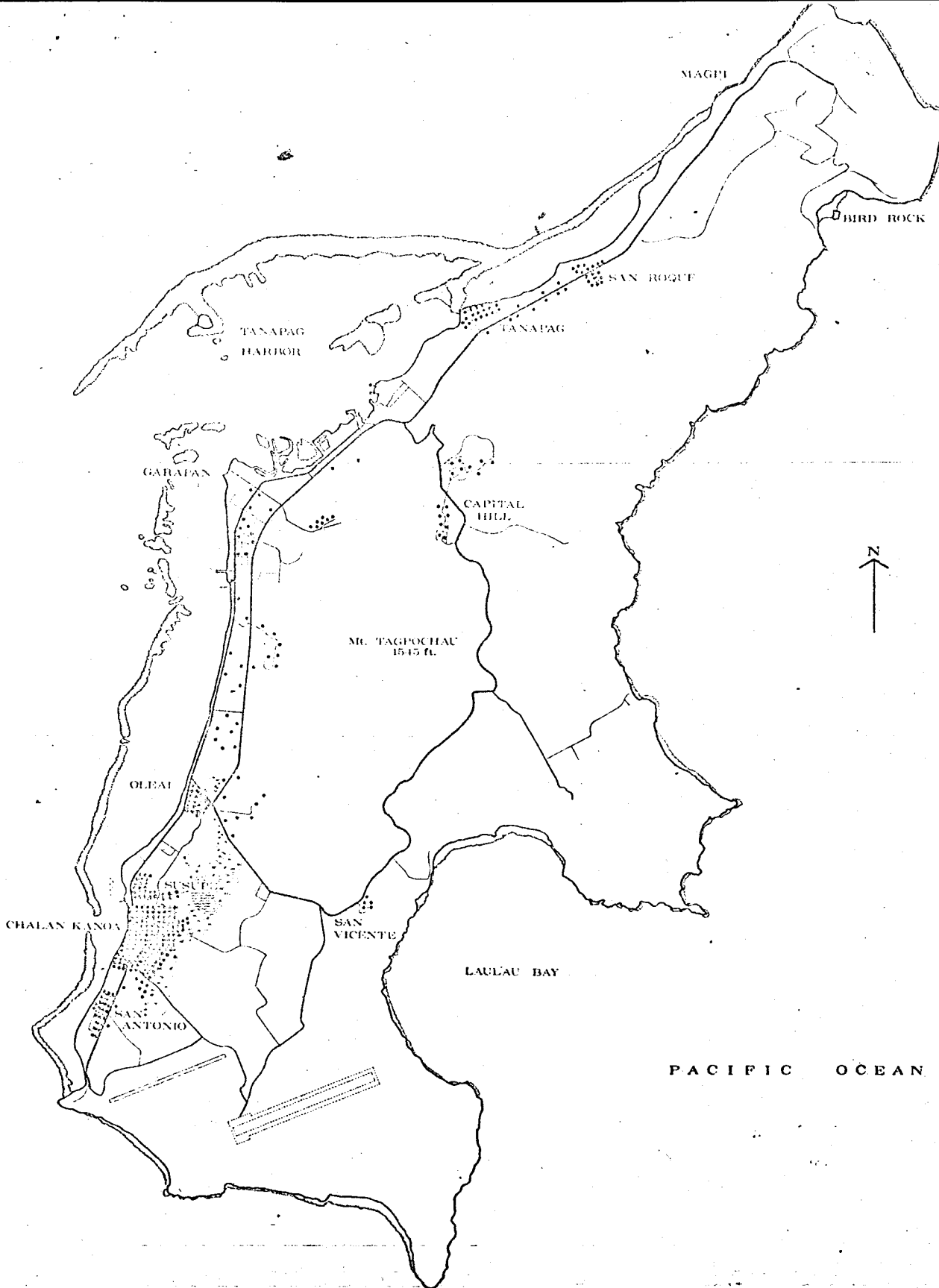
It can be seen that up to recent times population has been concentrated in Garapan and generally heaviest along the west coast. The distribution of population during the Japanese period was characterized by a large city at Garapan and several small villages scattered throughout the island along the rail road routes. In addition to these concentrations there were scattered families living on or close to their farms.

POPULATION  
DISTRIBUTION  
SAIPAN - 1937



POPULATION  
DISTRIBUTION  
SAIPAN - 1949





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TRUST TERRITORY PHYSICAL PLANNING PROGRAM  
**SAIPAN MARIANA DISTRICT**  
 population distribution

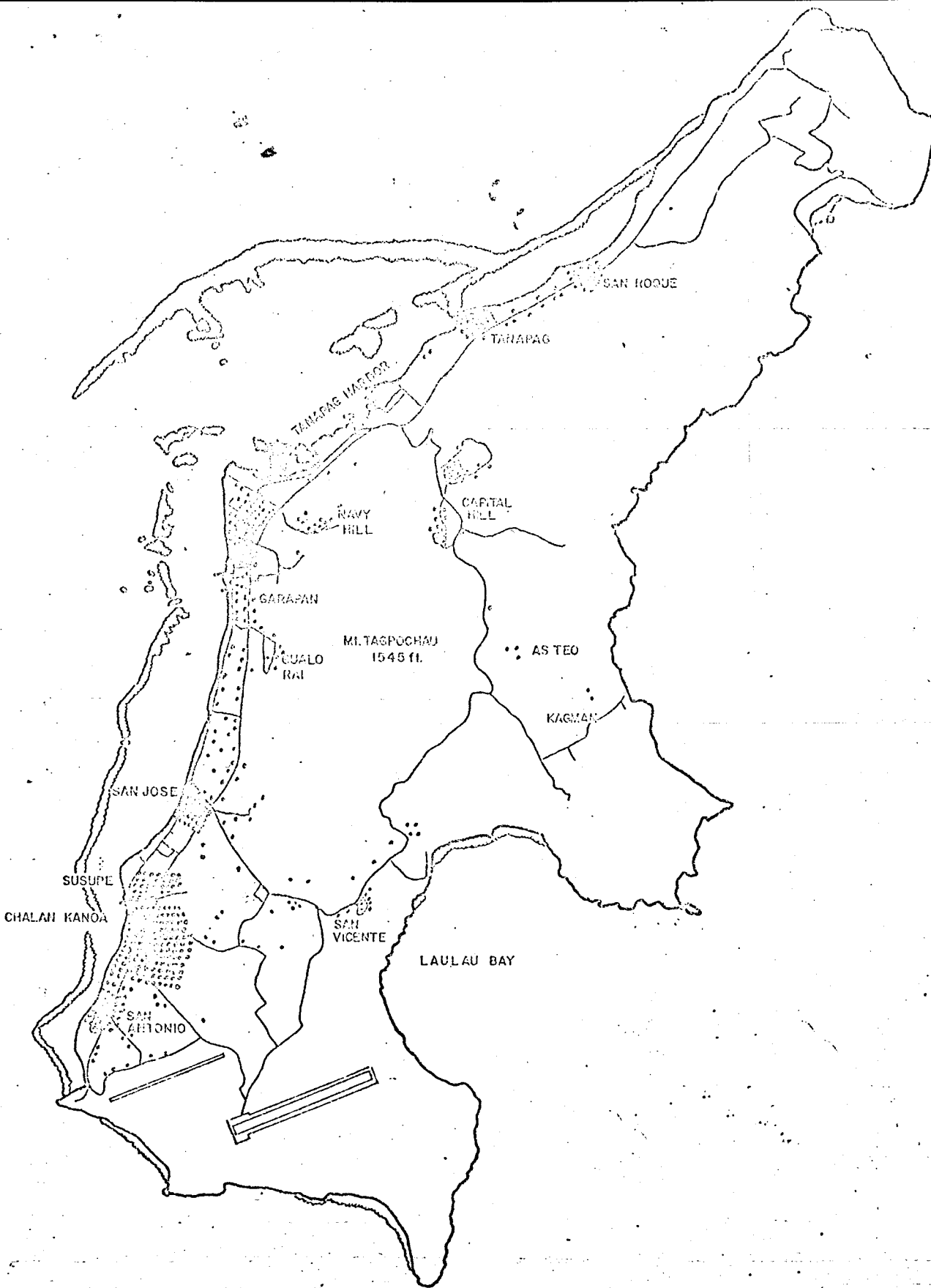
Final Submission October 1, 1968



HAWAII ARCHITECTS & ENGINEERS, INC.

one dot equals 25 persons

SOURCE: PEACE CORPS POPULATION  
 CENSUS 1967  
 POPULATION - 9,015



**POPULATION DISTRIBUTION  
SAIPAN, MARIANA ISLANDS**

one dot equals 25 persons

SOURCE: T.T. population  
census 1973

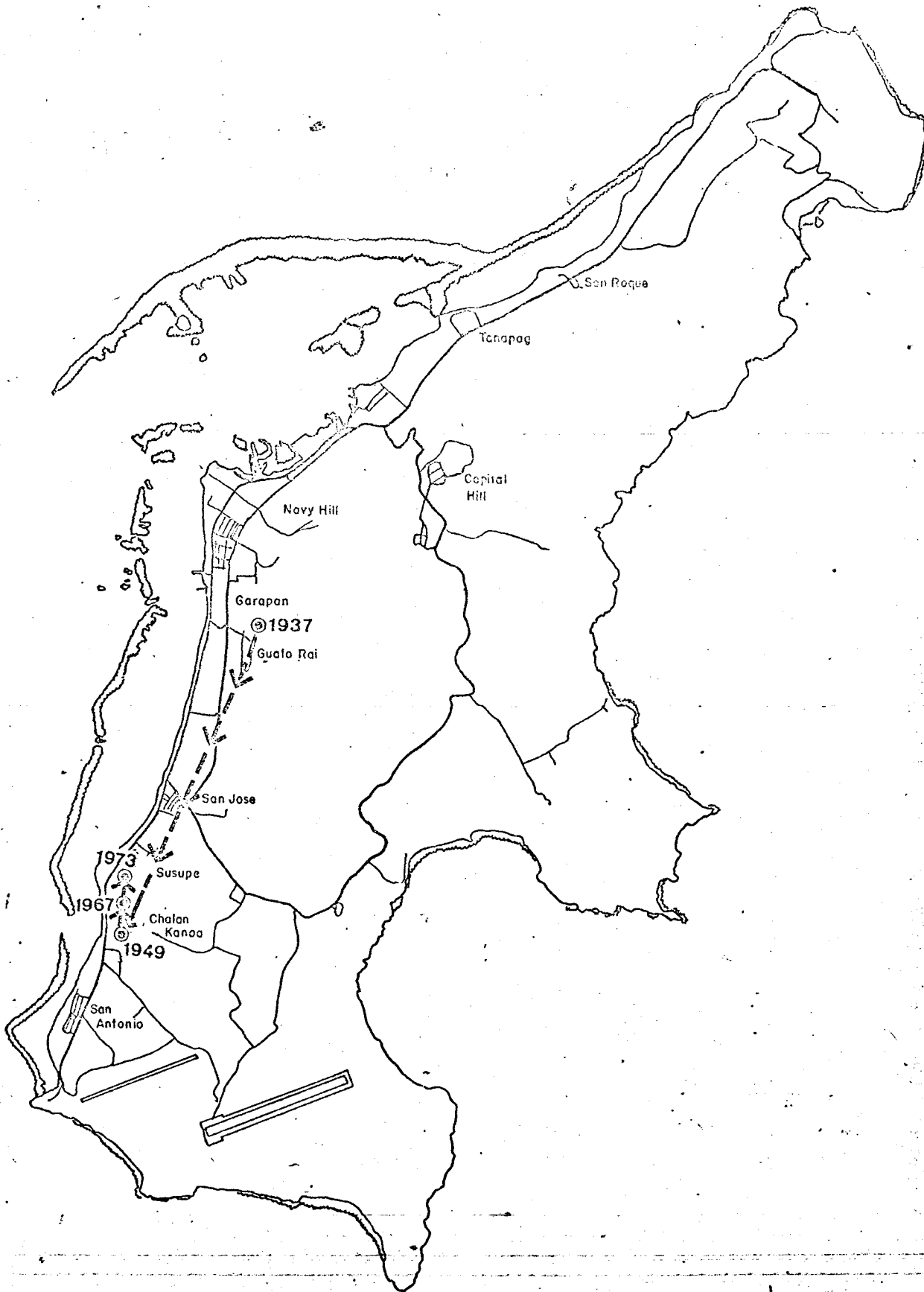
Population - 12,384

Prepared By: DISTRICT PLANNING OFFICE  
JUNE 1974

The Geographic Center of Population:

The center of population is simply a reference point which indicates the general movement of the population and shifts in population concentration. The shifts in the geographic center of population are shown on map 7. This map illustrates how during Japanese times the geographic center of population was located in Gualo Rai as a result of the high concentration of people in Garapan. After the war the population started its slow but steady movement north out of Chalan Kanoa into Garapan. The northward tack is not following its former course though because the repopulation of the windward side is not as pronounced as it was. The present geographic center of population lies somewhere in Joeten's Shopping Center. This means that the same number of people live to the north as do to the south and to the east as do to the west of the shopping center.





**Movement of the Geographic  
Center of Population  
1937-1973**

Population Growth  
Projections

Health Services, Projection:

This projection is a simple rate of growth percentage figured on the difference between the 1967, and 1973 census. While the results of this projection have not been completely checked and are thus unofficial at this time they have been verified by other independent projections. These projection were carried out to 1980 only.

All People Indigenous Plus Alien:

	Census		Annual Growth Rate				
	1967 March 26	1973 Sept. 18	(Mid Year <u>July 1</u> , Population)				
	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
District	14,802	15,422	16,741	16,741	17,442	18,173	18,934
Saipan	12,964	13,504	14,175	14,880	15,620	16,396	17,211

Micronesian Citizens only:

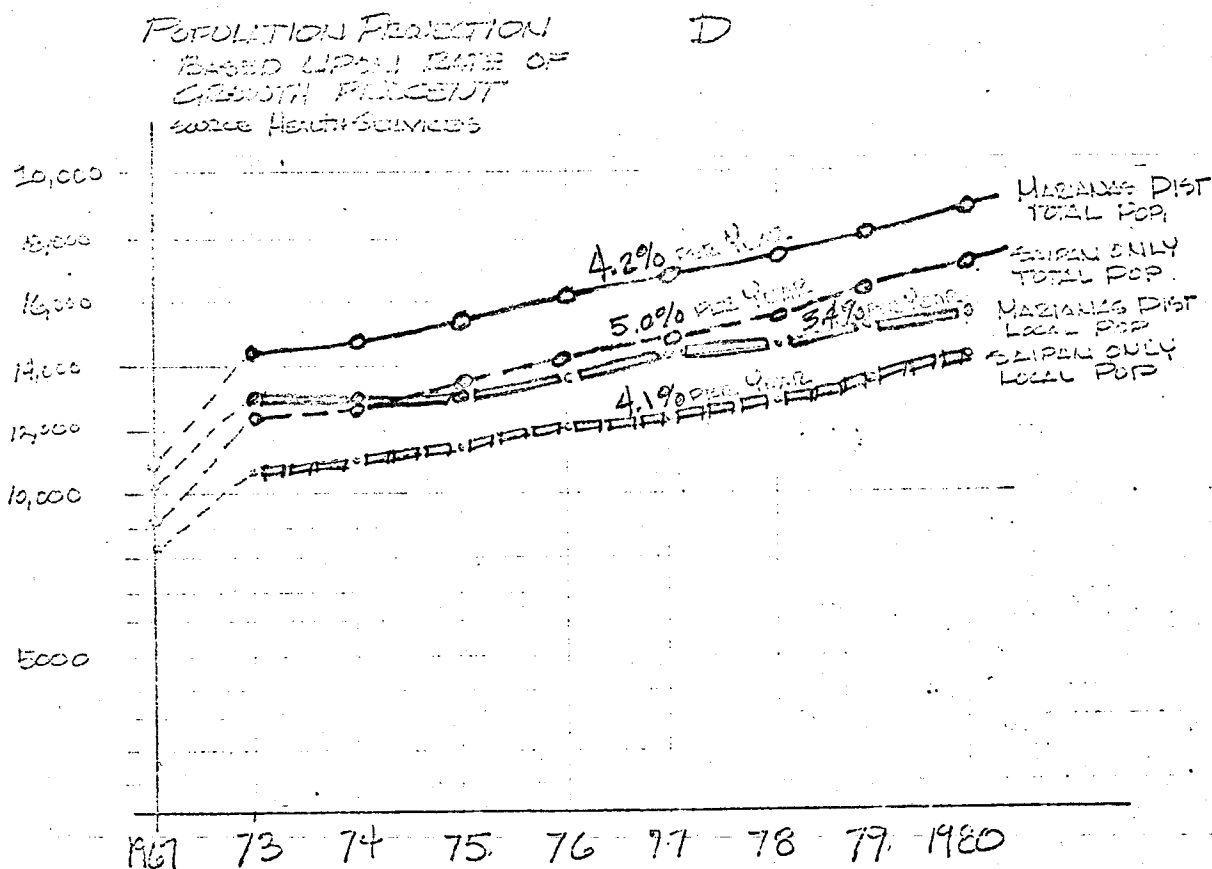
District	10,163	12,583	3.4%
Saipan	8,294	10,777	4.1%

(Mid Year July 1, population)

	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
District	12,911	13,334	13,791	14,253	14,731	15,225	15,735
Saipan	11,123	11,581	12,059	12,556	13,073	13,612	14,173

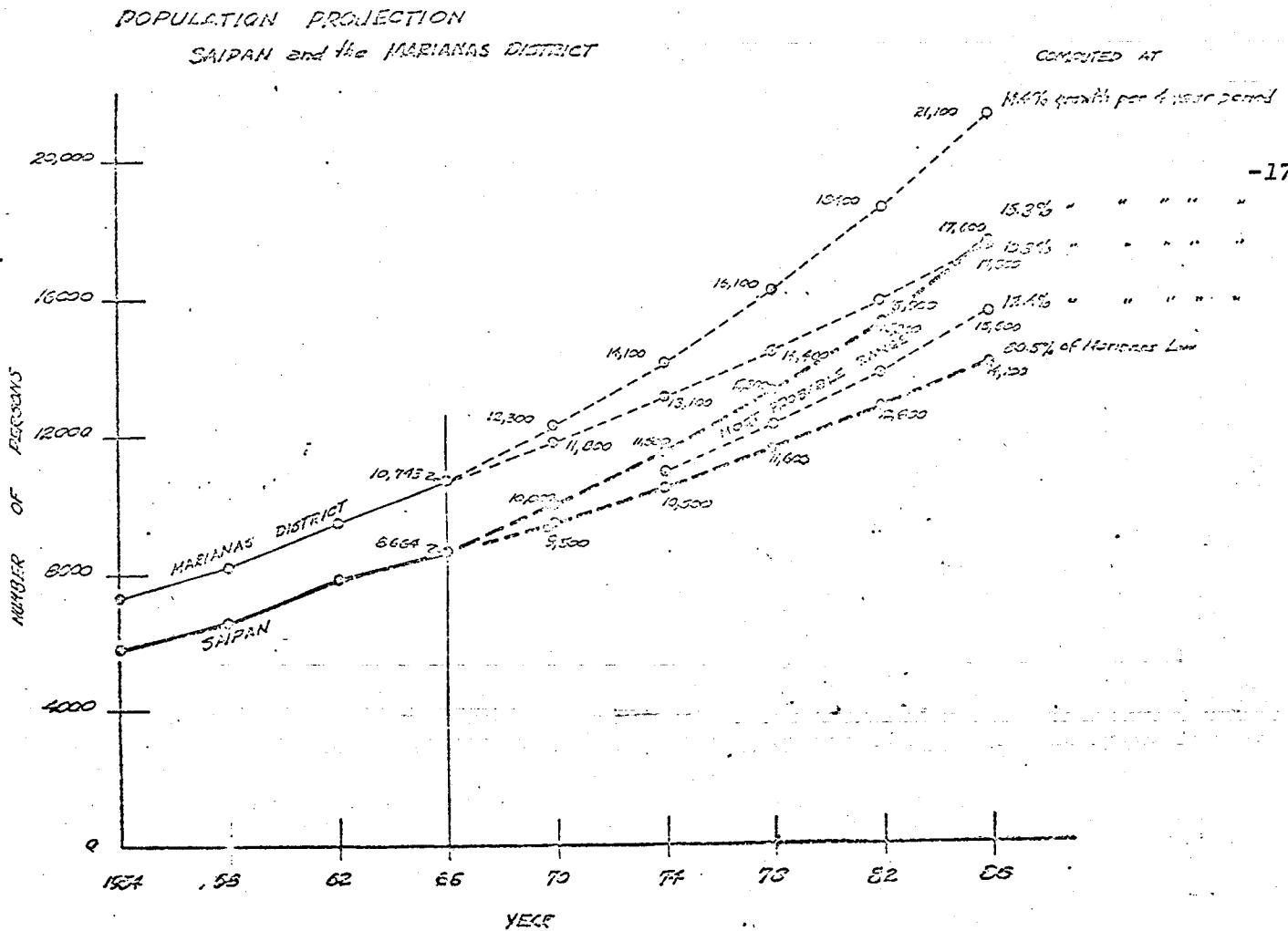
The projections also predict that the Marianas will grow in proportion to the total micronesesian population from 12.5% at present to 13.0% of the total population in 1980. Saipan's population will also grow from 86.4% of the districts population to 90.9% in 1980.

These figures have been put into graphic form below:



1968 Hawaii Architects and Engineers Projections:

The projection developed for use in the Saipan Master Plan have proven generally accurate to date. There are two weaknesses of these projections which were pointed out in the report. First they represent only indigenous growth as no projections of alien influx was attempted at that time. Second they are based primarily on the trends established in the T. T. annual reports and as a result may tend to be somewhat lower than actual population. This projection indicates a 1980 District population of 16,200 for micronesia population only as compared to 15,735 projected by Health Services. When it comes to Saipan the HA&E projections are for 13,150 as compared to 14,173 in the Health Services Projections.



Office of the District Planner Projections: 7

Our projections are carried out to 1973<sup>4</sup>, and are based upon projected labor force demands and the growth created by imported labor and their dependents. Since the Tourist Industry has the best access to tourist potential and a vested interest in accurate growth projection it is assumed that the proposed growth of this industry is well within reasonable bounds. It is also assumed that economic growth here will attract a large alien population. Which this population may be transient and in a state of constant turn over the whole numbers may be expected to remain constant and closely related to the number of available jobs.

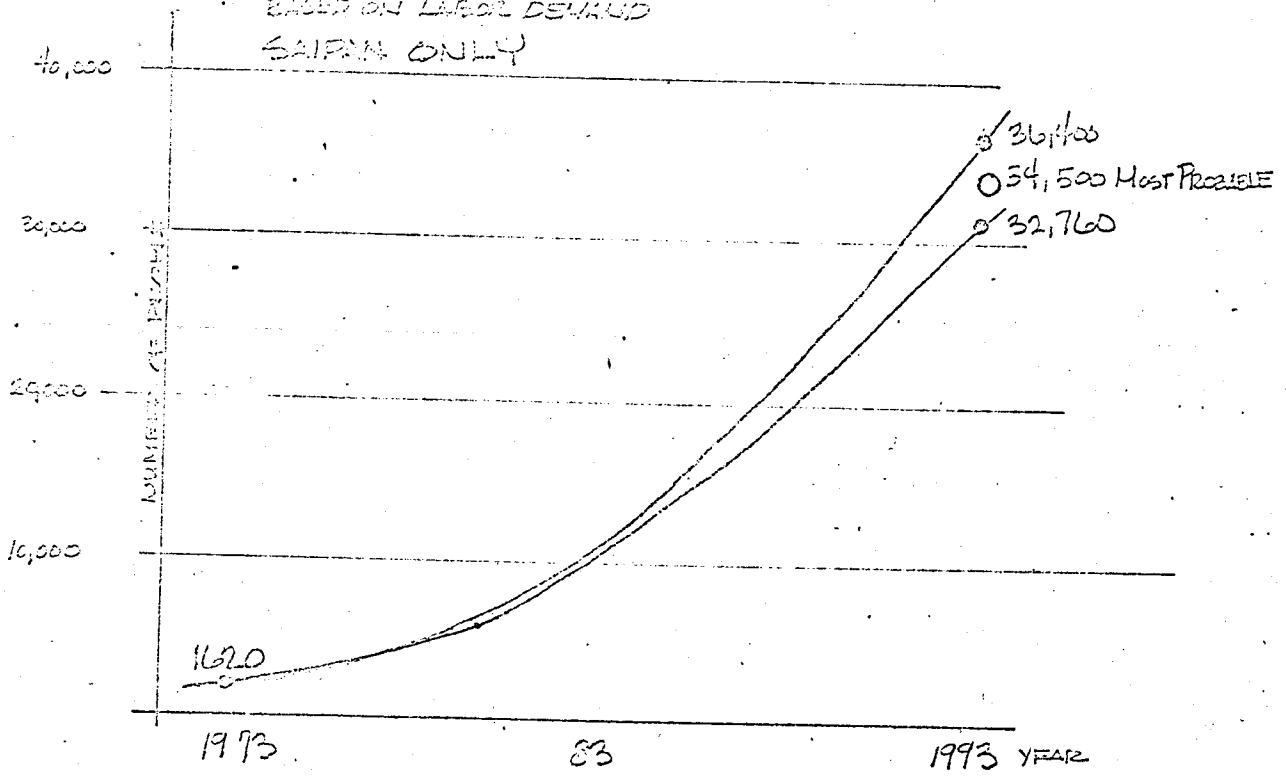
The reader is therefore, referred to the May 14, 1974. Planning on Labor Situation in Saipan and its labor demand growth projections as was pointed out earlier at present an alien labor force of 938 on Saipan supporting a total alien population of 1,620 or a ratio of 1:0.72 dependent per alien worker. There is some difficulty in predicting possible changes in this ratio since it will depend greatly upon restrictions placed upon alien labor. It should also be noted that upon resolution of the status question it is likely that other district micronesians may be classed alien labor and further effect these projections.

It is assumed though that any attempts to limit alien labor from bringing its dependents will meet with the same failure that it has in every other country where this course of action was attempted. Unfortunately, these dependents will create the same stress upon local infrastructure that they have elsewhere. We are projecting a high ratio of 1:1 and a low ratio 1:0.8. Commerce who will desire steady labor will encourage permanent or semi-permanent settlement of select classes of workers and tend to drive this ratio toward the higher level.

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The most probable labor shortage range for 1973<sup>4</sup> is projected to be 18,200 jobs resulting in 18,200 alien workers or a high alien population of 36,400 and a low of 32,760 for Saipan. District wide ratios and conditions will probably be proportionally the same.

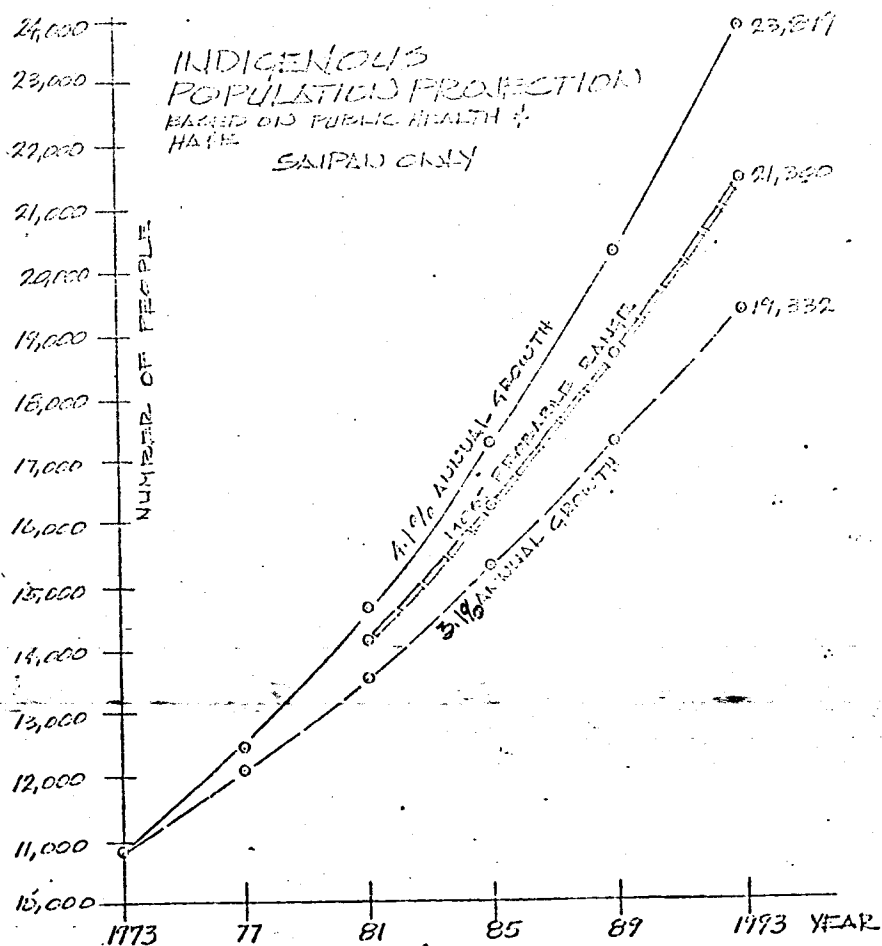
# ALIEN POPULATION PROJECTION BASED ON LABOR DEMAND SAIPAN ONLY



The local population will find itself entering upon a time of grave moral decision as pressure to reduce family size comes into conflict with church norms against birth control and social/cultural norms about fertility and large families.

As the economic problems of supporting and properly educating large families mount, it can be expected that a lowering the birth rate will result. It will probably not become a significant factor in population growth up to 1993 but its effects can be expected to increase as time passes.

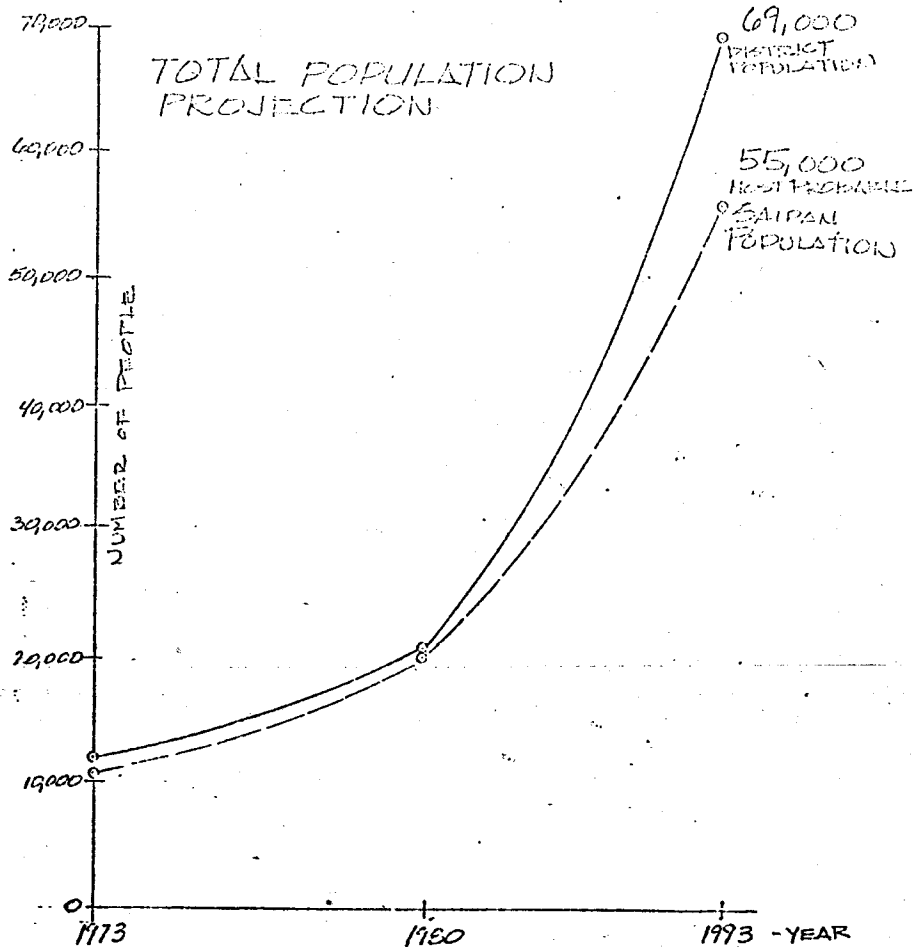
By continuing the present Health Services projections at 4.1% per year and the HA&E projection a 3.1% per year up to 1993 a probable spread of population can be arrived at. These are generally maximum populations to be lower if the birth rate decrease faster than is expected at present.



Adding the levels of both graphs results in a probable Saipan total population growth line.

The total most probable 1993 Saipan populations is 55,800 and the most probable four years growth rate is 50.0% as compared to the present 20.0% per four years period (5% annual for four years based on growth from 1967 to 1973.)

Projecting this island population up to the district wide population becomes a problem of deciding upon a reasonable ratio between island and district populations. This is not easy as another look at map # 2 will illustrate. In 1935, Saipan's population was only 50.8% of the total district population. Since World War II, commercial governmental activities in Saipan have caused it to grow faster than the district to 86.4% at present and 90.9% in 1980. There is considerable potential though for accelerated growth in Tinian and to a lesser extend in Rota and it is reasonable to assume that the ratio will begin to decrease by 1993. For these reasons a sliding ratio has been use which increase from 86.4% in 1973 to 90% in 1980 and back down to 80% by 1993. The resultant district wide population is also shown on the graph below.





The degree of population growth illustrated in this chart seems and may prove to be impossible to achieve due to the problem and expense of supplying demands at such an alarming rate. Maximum population to be served by water on Saipan has been set at somewhere between 30,000 and 45,000 people but this limited could be extended somewhat through the use of individual water systems development of residential and commercial areas may then become the limiting factor, but costs of land will, under development pressure, raise to the point where even the most is born land border will be tempted to sale out. Rising costs, inflation, and limited resources will always be only a step behind and it may finally reach the point where these factors discourage further development and thus slow down population growth.

In short while the potential for economic growth and thus is population growth is considerable, this growth will create problems of its own and demand resources allocation to itself. Somewhere a point of balance exist beyond which further development will be impossible or impracticable.

Proposed Areas of Needed  
Policy and Strategy

Two facts should be quite clear by now; the population consist of a vast majority of young people, and very real reasons exist for expecting the population to grow very quickly over the next 20 years.

Major policy formation and strategy is required to contend with these two areas. As was the case in the labor study there exists a basic question. Is it desirable to seek growth at a rate which will eventually force the Chamorro and Kanaki races into a minority? It happened in Hawaii and is happening in Guam and there is no reasons to believe it will not happen here if left unchecked. Controll of population can not be achieved by attempting to controll immigration. If it can only be achieved by controlling that which is drawing the immigrants and transit labor. A counter question to this may be to look above race and ask how can social and political stability be maintained under such rapid population growth. This basic question must be considered and answered before any effectives system of policy and stragety can be implemented.

The Future and Youth:

At present there are about 2,500 teenagers in the district in five years there will be over 4,000 and in ten years 4,500. Presently there are a little over 2,000 children between 5 and 10 years old and about 2,500 preschool children.

These children represent a considerable portion of the population and more importantly its future. Very definite policy is required in the area of educational and recreational facilities and programs for these young people. The presents of children in such great numbers and the trend of traffic to increase in number and speed will unboubt- (undoubtedly) able result in accidents especially since the roads are presently doubling as playgrounds. A system of neighborhood playgrounds and a general policy on the public responsibility for children is needed quickly. Teenagers while they require a higher level of recreation and social systems do require as much attention as the youngsters. At present these young people create some minor problems but with their number increasing in proportion to the social tensions to which they are so sensitive, there is potential for juvenile delinquency becoming a very serious problem in five (5) to ten (10) years. Considerable planning policy, and action is required in the area of youth and their needs.

The young people are an unrepresented majority who should be included in decisions which effect their future and whose needs must be satisfied at least in balance with the needs of those who are represented. The politic ramification of such large numbers of voters becominig organized are outstanding, five years could see a complete change in political power from the "old guard" into the youthful hands of new young voters. Ths potential places a great amount of responsibility upon the teenagers to become informed about current events and to mature quickly.

### Population Growth

The ramifications of a 300% increase in population in twenty (20) years bugles shocks the mind. While it is doubtful that the population will actually grow at this speed the potential is present and difference between 200% and 300% growth when dealing in small numbers is not very great. The greatest danger is an ultimate drop in the quality of life as a result of too many demands being placed upon the district natural resources. As an example; labor saving machines will rise the quality of life but only as long as there is sufficient water and power to operate them, job security may be gained at the sacrifice of inconvenience at home and a separation from natural and the sea. These are difficult and abstract concepts to deal with. While it is true that the quality of life is improving and will continue to do so for a while, the ultimate long range picture must also be considered. Thinking must shift from comparing present and past to considering what is possible in the future.

The people of the Marianas are now in a position of being able to write their own future but if they fail to do so quickly and definitely they will lost the ability perhaps forever.

Once the basic question has been resolved a complete systems of policy and stragety will have to be developed to deal with everything from position on the political standing of immigrant to the extend of public health services.

APPENDIX