

DEMOGRAPHIC PROFILE OF GUAM

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BING BENHART
BUREAU OF PLANNING
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Guam is an unincorporated territory of the United States. This political status impacts upon the island's ability to implement some population policies. For example, Guam's immigration matters falls under the purview of the U.S. federal government and as a result, Guam receives only limited information on the number of people migrating in and out of the island and it cannot control this migration. Guam's political status also impacts upon the conducting of its census as the U.S. federal government's Bureau of the Census is responsible for designing Guam's census questionnaire with input from the Government of Guam, conducting the census and releasing the data from the census.

Guam is the largest and most populated island in the western Pacific Ocean and it is located between Hawaii and the Philippines. The island is shaped like a peanut and is 30 miles long and ranges from 4 miles at its narrowest point to 8.5 miles at its widest, with an area of 209 square miles. Guam is substantially closer to many Asian countries than to its nearest State, Hawaii. It lies 3,700 miles west-southwest of Honolulu, 1,500 miles east of Manila, and 1,500 miles south-southeast of Tokyo. Because of Guam's proximity to Asia and other Micronesian Islands, individuals from these areas migrate to Guam because it is apart of the U.S. and transportation costs are far less than if they went to Hawaii or the U.S. west coast. In addition, because Guam is considered a part of the U.S., individuals are continually migrating from the island to Hawaii and the west coast.

According to the preliminary information released from Guam's 1980 census, Guam's total population, as of April 1980, was 105,821 persons. This figure represents an increase of 20,825 persons or a 24.5 percent increase from the 84,996 inhabitants enumerated in the 1970 census. Guam's population is growing almost twice as fast as neighboring islands. This growth can be attributed in part to the island's improved health care delivery system, a high birth rate and uncontrolled external migration to the island.

Based upon the preliminary census information, the historical pattern of Guam's natural rate of increase and the historical pattern of defense activities on the island, the following table on Guam's projected growth for the period of 1980 through 1990 was developed:

GUAM'S
PROJECTIONS OF TOTAL POPULATION
1980 - 1990

Year	Low Projection	Medium Projection	High Projection
1980	103,800	105,800	106,900
1981	104,300	107,000	108,300
1982	105,300	108,700	110,300
1983	106,500	110,000	112,700
1984	107,700	111,200	115,200
1985	108,900	112,300	117,600
1986	110,200	113,500	120,000
1987	111,400	114,700	122,400
1988	113,300	116,100	125,200
1989	115,300	117,400	127,800
1990	117,300	118,700	130,400

Source: Economic Research Center, Department of Commerce, Government of Guam.

During 1980 there were 2,538 births and 358 deaths resulting in a natural increase of 2,225 persons. The following table shows the island's natural increase and the rate of increase for the ten year period of 1971 through 1980:

LIVE BIRTHS, DEATHS, AND NATURAL INCREASE IN POPULATION
1971 - 1980

Year	Live Births	Deaths	Natural Increase	Births	Deaths	Rate of Increase
1971	3,068	364	2,704	34.5	4.1	30.4
1972	3,206	409	2,797	34.1	4.4	29.7
1973	3,234	435	2,799	30.8	4.1	26.7
1974	3,226	449	2,777	30.9	4.3	26.6
1975	3,163	441	2,722	30.9	4.3	26.6
1976	3,048	466	2,582	30.3	4.6	25.7
1977	3,007	380	2,627	30.2	3.8	26.4
1978	2,903	424	2,479	28.3	4.1	24.2
1979	2,950	377	2,573	28.9	3.7	25.2
1980 ^P	2,583	358	2,225	24.4	3.4	21.1

Source: Office of Vital Statistics, Department of Public Health and Social Services, Government of Guam.

With respect to deaths, between 1976 and 1980, there was an average of 414 deaths per year which slowed the island's crude death rate from a high of 4.8 deaths per 1,000 population in 1976 to a low of 4.1 deaths per 1,000 population in 1980. By sex, Guam's average male mortality rate for the period was 4.9 deaths per 1,000 males. This rate significantly exceeded the female mortality rate of 3.1 deaths per 1,000 females for the same period. Over 50 percent of these deaths can be attributed to six chronic diseases: heart disease, cancer, cerebrovascular disease (stroke) cirrhosis of the liver and diabetics mellitus.

It should be noted that with the decline in Guam's crude death rate, life expectancy at birth has increased. During the period of 1976 through 1978 life expectancy at birth was 78.4 years for females and 67.8 years for males.

While Guam's average crude death rate was 4.16 deaths per 1,000 population, during the period of 1976 through 1980 its infant mortality rate for the same period was 15.32 deaths per 1,000 live births. Guam's annual infant mortality rate while remaining high has fluctuated during the years of 1971 through 1980 from a high of 23.3 deaths per 1,000 live births in 1974 to a low of 10.2 deaths per 1,000 live births in 1979. While there was a downward trend in infants deaths during the 1970's, there was a significant increase during 1980 when the island's infant mortality rate increased to 14.3 deaths per 1,000 live births. The decline in the infant mortality rate during the later half of the decade is due largely to the reduction in the neonatal infant mortality rate as neonatal deaths account for the majority of Guam's infant deaths. Common causes for neonatal deaths on Guam's are: congenital anomalies, injuries at birth, prematurity and other causes which are not easily prevented by modern medical and health measures.

With respect to births, Guam's crude birth and general fertility rates have declined over the five year period of 1976 through 1980. While these rates are declining, they still remain high in relation to the overall U.S. rates. More specifically, Guam's crude birth rate has declined from 31.4 births per 1,000 population during 1976 to 28.4 births per 1,000 population during 1980. With respect to the island's general fertility rate, it has declined from 147.6 births per 1,000 women ages 15-44 in 1976 to 125.9 births per 1,000 women ages 15-44 in 1980.

Because Guam cannot control migration at its borders, the island lacks reliable information on in and out migration and there is no reliable way for Guam to obtain this information. However, because Guam has an excellent vital registration system, the island's overall net migration pattern can be determined during those times when the census is taken. Census information needed to determine Guam's net migration pattern is not available at this time. Although information on external migration is extremely limited, this is not the case with internal migration. With the use of periodic wage surveys and building permits for the construction of homes and apartments, population estimates within the island's nineteen villages can be determined on an ongoing basis. The preliminary information on population by election districts, which has been released by the U.S. Census Bureau, is also an excellent indicator of the population movement which has occurred during the past decade, even though the geographic boundaries for the villages are not exactly the same as those used by the Census Bureau. The preliminary census information shows that Guam's population is slowly shifting northward to the central and northern villages of the island while growth in the island's southern villages are essentially static or

declining in population. Population growth in the central and northern villages can be attributed to several factors: (a) the geological structure of this portion of the island more readily accommodates development and thus housing costs are reduced; (b) the employment centers are located in this portion of the island; (c) most public service agencies are located in this portion of the island; and (d) the infrastructure (i.e., roads, power, sewers, and telephone) needed to support residents' needs is readily available.

Guam's census is taken every 10 years by the U.S. Census Bureau. Guam's last census was conducted during April 1980. Because Guam is only a Territory of the U.S., it has been given low priority by the Census Bureau in the release of its census information. To date, the Census Bureau has only released a preliminary report which provides only the island's total population, population by election district and number of housing units on Guam. Complete reliability of the preliminary census data is at this time questionable as the final count is subject to further processing and review. Basically, the types of information sought from the respondents about themselves and members of their household in the 1980 census questionnaire include: sex, age, ethnicity, marital status, educational attainment, citizenship, year of immigration, place of birth, place of residence, place of residence five years ago, languages spoken, income, occupation, employment history, type of housing the respondent is occupying and the condition of the housing.

The analysis of the 1980 census information is still pending and will take place once the census data is finally released by the Census Bureau. Population projections based upon the released preliminary data have been developed; however, those projections which were developed based upon the 1970 Census are still widely utilized by many of the government of Guam's department and agencies for planning purposes because they contain age by sex information. However, once the data is finally released the Government of Guam will reassess the projections, prepare new projections if required and discontinue the use of the 1970 projections. Other types of analytical activities that will occur upon the data's release include, but are not limited to, examining the island's age by sex structure, ethnic composition, rate of growth as a result of migration, life expectancy, fertility, occupation and employment history, income structure, housing needs and transportations needs.

Once the census data is released, the Department of Commerce will be responsible for the overall analysis of the data. Technical assistance in analyzing the data may be provided to the Department by the U.S. Census Bureau or the South Pacific Commission. While the Department of Commerce will conduct the overall analysis, many of the Government of Guam's departments and agencies will at the same time conduct an analysis of that data which is pertinent to their own functional areas. Assistance in analysis of their data may be provided to these departments by hired private consultants.

The population data from the census will be utilized for both general and functional planning purposes. The information obtained from the census will be utilized for numerous purposes; to name just a few: land use planning, infrastructure planning, health care planning, education planning, services for the aged planning, criminal justice planning, employment planning, economic development planning, transportation planning and to assess current and future housing needs. In addition, the data will be used to support the Government of Guam's applications to the U.S. Government for federal assistance.

The information obtained from the 1980 census will be widely used for a variety of planning purposes. There is however, not one department which is identified as solely responsible for the overall preparation and implementation of population policies and for monitoring population trends. As a general rule the various functional departments and agencies will develop the island's population policies for their respective areas. For example, the Department of Commerce is responsible for preparing population projections and monitoring the island's population growth and for utilizing the data to prepare policies which will encourage economic growth; the Bureau of Planning is responsible for preparing policies to limit and encourage growth in certain areas of the island and for preparing position papers on subject matters such as immigration; the Guam Health Planning and Development Agency is responsible for formulating health policies and for monitoring related population trends and the Department of Education is responsible for education related policies, etc.

The availability of complete, accurate and timely demographic data is an essential ingredient in Guam's efforts to promote economic growth, to meet the social and physical needs of its residents and to protect the island's environment. A complete and timely demographic profile of Guam's military and civilian residents will allow the island to plan for current and future public services and infrastructure. Demographic data, for example will assist Guam to effectively plan for health care services, education services, services to the aged and poor, and for employment training programs and public housing programs. Demographic data also assists Guam to determine where and when to construct new infrastructure so that the island can continue to promote economic growth and to meet its residents' needs. With respect to infrastructure planning, it assists in making decisions regarding the island's road, electrical power, telephone, water and sewage systems. Lastly, demographic data on the island's population growth and movement will assist the island to make better decisions to protect the island's delicate balance of man and environment.

Guam is presently at a point in its economic and social development where the availability of complete, accurate and timely data are critically needed if the island is to continue to promote development. In order to ensure that the island has access to such demographic data, the following improvements in the island's present collection and retrieval of demographic information are required:

- . Guam should be allowed to process its own raw census data as it has the computer capabilities to allow for the processing of the census data in a timely manner and in a form which would best enhance its planning capabilities; and
- . Guam should conduct a mini census at five year intervals between the National ten year census so that the island can update its continually changing demographic profile in order to enhance its planning capabilities.