Yap State Census Report

2000 FSM Census of Population and Housing



December 2002

Yap Branch Statistics Office
Division of Statistics
Department of Economic Affairs
National Government
Colonia, Yap 96943
Federated States Of Micronesia

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President's Message

It gives me a great pleasure to publicize the results of the 2000 FSM Census of Population and Housing and to transmit to the people of Yap State the Volume 1 of the Yap State Census Report.

The people of the State of Yap and the citizens of the FSM are our single most significant economic assets. The well-being of our citizens and that of our future generations depends on better planning and sound decision-making process undertaken today. These processes require full understanding and utilization of the Yap State Census Report as an important development tool. The census data as contained in this Report serve as benchmark information for both government and the private sector in terms of planning, coordination and integration of essential social services with the growing population. The census data also serve in large measures in our daily efforts for developing domestic resources in a manner that would meet the aspirations of our people, and would ensure that everyone equitably benefits from the highest possible living standards. Nevertheless, the census monographs contain essential information that permits policy makers and planners to establish direction and improvement strategies in dealing with economic development to accommodate the ever-expanding population.

I would also like to join the leaders at all levels of the government to express our gratitude for the technical support provided by the United States Government (Department of Interior) and the Secretariat of the Pacific Community for providing financial and technical support for the 2000 FSM Census Project. It is extremely important to extend special appreciation to Dr. Michael Levin from the U.S. Department of Interior (International Program Center) and Mrs. Vilimaina Rakaseta from the Secretariat of the Pacific Community for actively taking part in the planning and analysis of data in the census project. Furthermore, I would like to extend special recognition to the Secretary of the Department of Economic Affairs, the Honorable Sebastian L. Anefal and his staff within the Division of Statistics for bringing the 2000 FSM Census Project to a successful completion.

I would therefore encourage everyone to fully utilize the Yap State Census Report for better planning of any programs related to the development and well being of the State of Yap as well as the nation. Once again, the Office of the President wishes to express its special thanks to you all by saying "Kam Margargad", "Kinisou Chapur", "Kalahngan", "and Kulo Malulap".

President

Federated States of Micronesia



THE GOVERNOR STATE OF YAP

GOVERNOR'S MESSAGE

I am pleased to present this new publication entitled, "Yap State Census Report", as part of the 2000 FSM Census of Population and Housing. I would like to join the President of the FSM in expressing my gratitude and that of the Government and the people of Yap State for the invaluable financial assistance rendered to this important project by the U.S. Department of Interior's office of Insular and International Affairs and the assistance of other U.S. Government, agencies including the U.S. Department of Commerce for allowing Dr. Michael Levin to work with our staff on this project and other assistance he has provided on previous related projects. Our gratitude also goes to the agencies of the United Nations and other international agencies for their important assistance to the realization of this project.

I am most encouraged for the displayed sense of commitment and cooperation between the National Government through its Department of Economic Affairs and our officials at the state level in the compilation of this report. This positive and supportive working relationship between official at the FSM National Government and its constituent states has proved vital in the work on this important project and I encourage its continuation in the many fields awaiting our collective attention in the future.

This Census Report provides detailed analysis of Yap States Statistics and is presented as a monograph of Yap State Statistics that can be used and easily understood by officials of government, private sector individuals and interested persons for their respective purposes. I encourage all to make use of this very important book, as the information and data in it are relevant and current.

Let me express, lastly my gratitude and congratulations to all the people, individuals and leaders of the municipal and state government and in particular, the staffs at the Yap Branch Statistics Office for the important work they have undertaken to make this publication possible.

Thank you all very much, and Kammagar gad.

Vincent A. Figir Governor, Yap State

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Acknowledgement

The 2000 Yap State Census Report is part of Volume 1 of the 2000 FSM Census of Population and Housing published for the FSM by the Department of Economic Affairs. The data presented in this publication are important for planning and research by both government and the private sector. The 1994 Census Report, along with the 2000 Yap State Census Report, provides a wider range of useful information on the size, structure, distribution and socioeconomic patterns of the population.

In this regard, I present to you this new publication with anticipation that planners and policy-makers would find it a very useful source of population reference and information. I would encourage leaders at all levels of government to fully utilize the information in the publication as a tool for formulating policy decisions predicated upon how the population is changing and how it may impact future planning and development activities in the State of Yap.

I would like to express our appreciation for the tremendous assistance that the United States Department of Interior, the Secretariat of the Pacific Community and all other international organizations involved have provided for this census project. I would also like to extend special appreciation to the FSM Congress for favorably considering the census project among other priorities. Without such support, the census project could not have been made possible.

It is also with great pleasure to offer recognition to Mr. Eneriko Suldan, Assistant Secretary for Statistics, and to the tireless efforts of all the staff in the Division of Statistics, technical experts, and enumerators who were involved in this major census undertaking.

As we concentrate our efforts toward improving the statistical program activities in the FSM to become more responsive to those who use the data, the Department of Economic Affairs welcomes any constructive observation and comments regarding the 2000 Yap State Census report.

Secretary//
FSM Department of Economic Affairs

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PREFACE

The Division of Statistics, Department of Economic Affairs, FSM is the primary statistical arm of the government, which prepares for and conducts periodic censuses of population and housing. It also conducts surveys and research on various aspects of socio-economic conditions including national accounts, labor and employment and price situations in the country for the use of the government and the public. It also collects and processes data for statistical purposes from various offices and agencies of the government. More importantly, it enforces and carries out the provision of the FSM Public Law 5-77 in all statistical activities.

As demand for timely and reliable census of population and housing increased, it was decided to conduct another census count in the year 2000. The previous Censuses of the FSM were conducted in 1985, 1986, 1987, 1989 and 1994. The planning and preparation phases of the 2000 FSM Census of Population and Housing was conducted in 1999 mostly by the local staff within the Division of Statistics. The 2000 Census was the second to be organized and conducted at one point in time, therefore data from the two censuses are comparable. The third FSM Census of Population and Housing will be conducted by the year 2010.

During the 2000 Census, technical supports were received from the United States Bureau of the Census (USBC), International Programs Center, and the Secretariat of the Pacific Community (SPC). From the USBC, Dr. Michael Levin participated in the preparation phase until the final review of the census product. From SPC, Mrs. Vilimaina Rakaseta involved with the analysis phase. The Government of the FSM funded the 2000 Census with support from the United States Government. The FSM Congress appropriated \$500,000 for the project and the United State Government through U.S. Office of the Insular Affairs provided in-kind contributions.

The actual enumeration was conducted from April 1 to 17, 2000. The field staff consisted of 39 field supervisors in Chuuk, 8 in Yap, 25 in Pohnpei and 5 in Kosrae. For Enumerators, 48 were hired for Yap, 185 for Chuuk, 130 for Pohnpei and 32 for Kosrae. Those with a good fieldwork record were hired for the preliminary review, coding and keying operation. There were 44 editors and coders recruited to edit and code the remaining variables not covered during the preliminary process and these were retained and trained as computer operators. Text tables were designed for the preparation of the 5 analytical reports: one for each state and a consolidated set to cover the entire FSM. The Division of Statistics staff and State Field Supervisors coordinated the write up of the census analytical reports for the FSM and each of the four states. The experts from USBC assisted in the review process and made comments on the reports. It was agreed that the State Census Reports would basically adopt the format used in the National Census Report, but detailed to the municipality level for consistency and comparison purposes.

It is important to thank the individual staff that were directly involved and dedicated their efforts to the 2000 FSM Census project. Mr. Tilson Kephas was responsible for programming and supervising the data processing and production of the tables. Ms. Brihmer Johnson, Ms. Itorie Amond and Mr. Joston Edmond were dedicated workers in their assignments and Ms. Alice Bridge Ehmes played a key role in the final report writing. The four state field supervisors namely Mr. Anthony Albert from Chuuk State, Mr. Stoney Taulung from Kosrae State, Ms. Virginia Helgenberger from Pohnpei and Mr. Thomas Foruw from Yap State, all worked closely with the Division of Statistics staff from the planning and designing phase until the finalization of the report. Many other staff of the statistics office also assisted including Ms. Mary Rose Nakayama of the Chuuk Branch Statistics Office, who was involved in the final editing of the report, Mrs. Marsellie Obed who was responsible for the administrative work of the project, and Mr. Glenn McKinlay who currently serves as the Statistics Advisor, whose services are funded by the Australian Aid for International Development, and provided tremendous work during the final phase of the project. The individuals involved in the 2000 Census project are permanent staff of the Statistics Division. This project would not have been possible without these individuals' contributions.

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I also wish to extend a special appreciation to Dr. Michael Levin from the USBC, International Program Center, who has contributed a lot to the 1994 and 2000 FSM Censuses. The type of support given by Dr. Levin is superb and hopefully the good working relationship will be continued in future statistical activities.

The 2000 FSM Census project provided a wealth of information needed to monitor and evaluate many aspects of the progress in the FSM. Such a project can only be conducted occasionally. The questionnaire, operations and presentation of the 2000 Census were kept consistent with the 1994 Census to ensure that the 2000 information can be compared directly with the 1994 Census. Together, these two censuses provide a comprehensive record of changes that are occurring in our country at this time. It is a rarity for a Pacific Island country to have two consistent and comprehensive censuses conducted so close together in time. It is also the second for the FSM and we who have worked on this project hope that the information will be used to benefit our country.

"Kamagar", "Kinisou Chapur", "Kalahngan" and "Kulo Malulap"

Eneriko Suldan

Assistant Secretary for Statistics

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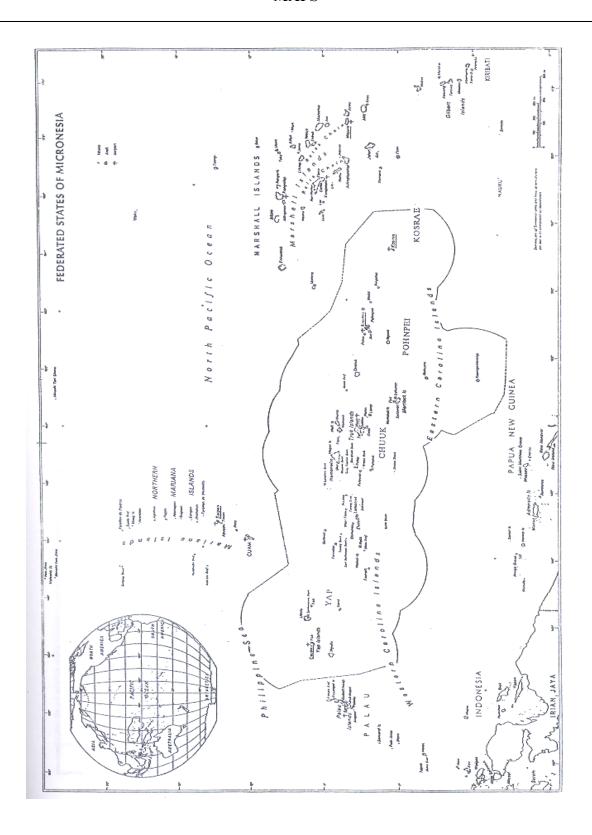
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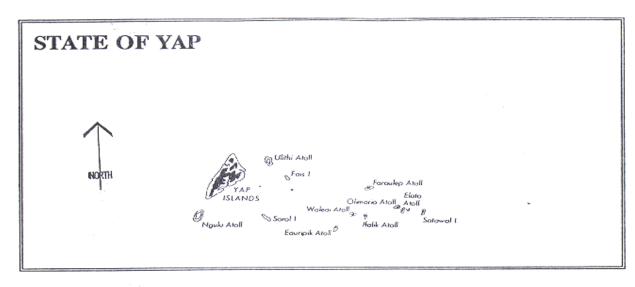
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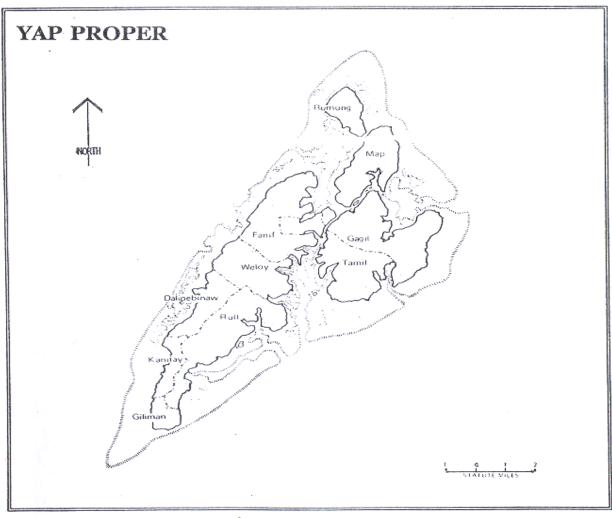
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SYMBOLS

- A dash "-" represents zero or a percent which rounds to less than 0.1
- Three dots "..." means not applicable, or information suppressed for reasons of confidentiality
- NA means not available







EXECUTIVE SUMMARY

This report presents the 2000 Yap census data, along with historical data from selected previous censuses. Information on the population's demographic, social, economic and housing conditions are briefly summarized. Apart from the obvious use of the report in planning, policy formulation, and in administration processes, the data presented in the report can also serve as a benchmark information in monitoring and evaluation activities.

The following paragraphs present a few of the major facts about the resident population of Yap. These are only a few of the main outcomes and should not be viewed as the only information available.

Demographic Characteristics

Population Size and Growth. The population of Yap increased from about 7,900 in 1973 to 11,178 in 1994 and further to 11,241 in 2000. The population by region in 2000 was 7,391 in Yap Proper and 3,850 in the Outer Islands. The population of Yap grew by about 1.8 percent per year between 1973 and 1987, by about 1.4 percent annually between 1987 and 1994 and by about 0.1 percent annually between 1994 and 2000. The decline rate in the recent period attributed to the decline in fertility and increased emigration.

Population Density. The population density (persons per square mile) in Yap in 2000 was 244, about similar to that of 1994. By region, the population density for Yap Proper and the Outer Islands were 190 and 550, respectively. In comparison, the population density in 1994 was lower for Yap Proper at 179 persons and lower for the Outer Islands at 587 persons.

Median Age. The median age - the age at which half of the population is younger and half older - in Yap increased by 1 year, from 19.7 years in 1994 to 20.9 years in 2000. Yap had one of the younger populations compared to other Pacific Island nations.

Sex Ratio. The sex ratio is the number of males per 100 females. In most populations there are more male than female births. As the population ages, the difference decreases because of higher male mortality. The sex ratio for Yap in 2000 was about 96, the lowest in the FSM, and the second lowest among the neighboring Pacific Island countries. By region, the sex ratio was 100 for Yap Proper and 89 for the Outer Islands in 2000. The sex ratio was higher in the previous census years, about 105 in 1973, 1980, and 1987, then declined to 99 in 1994 and 2000.

Households. The total number of households increased from over 1,900 in 1994 to over 2,000 in 2000. By region, the total number of households was about 1,400 in Yap Proper and 600 in the Outer Islands. The average number of persons per households in Yap decreased to around 5.4 persons in 1994 and 2000. In 2000, there was an average of 4.9 persons per household in Yap Proper compared to 6.2 in the Outer Islands.

Marital Status. Adults in Yap increasingly delay marriage. The average age at first marriage in Yap decreased from about 22 years in 1973 to 24 years in 1987 and further to about 27 years in 2000. The proportion of married population decreased from about 50 percent in 1994 to and 2000. In 2000, the proportion married was higher in Yap Proper (51.2 percent) than the Outer Islands (47.6 percent).

Fertility. Fertility decreased in Yap over the two decades before the 2000 census. The crude birth rate was about 26 per 1,000 in 2000. The total fertility rate (TFR) increased from just over 3.7 children per woman in 1994 to about 4.2 children per woman in 2000. The fertility rate in the regions in 2000 varied. The TFR was 2.6 in Yap Proper and 4.7 in the Outer Islands in 2000, suggesting that the use of family planning services, female educational attainment, and female participation in the labor force contributed to the differences in the level and pattern of fertility.

Mortality. With the introduction of modern health care, mortality continued to decrease, resulting in longer life and lower infant, childhood and maternal mortality. Nevertheless, census data suggested that these improvements might have slowed down during the mid 1980's. For Yap, the 1994 census indirectly estimated an Infant Mortality Rate (IMR) of 39 per thousand live births and a life expectancy at birth of 67 years. The 2000 census showed an estimated IMR for Yap of about 23 per thousand live births and a life expectancy at birth of 70 years.

Birthplace. About 92 percent of Yap residents in 2000 were born in Yap. The remaining 8 percent constituted the immigrants to Yap. The largest proportion of foreign-born individuals came from Asia. The proportion of foreign born was higher in Yap Proper (about 11 percent of its total population) and lower in the Outer Islands (less than 1 percent of its total population).

Residence in 1995 (5 years prior to the census). The population's residence 5 years before the census shows the level and pattern of short-term migration. Among the 2000 residents aged 5 years and over, about 8 percent live outside of Yap during 1995 (11 percent for Yap Proper and less than 1 percent for the Outer Islands). The result provided an estimated interstate net migration rate of -2.1 per thousand annually for the period 1995 to 2000. the corresponding estimated internal net migration rates for Yap Proper and Outer Islands for the same period were 1.2 per hundred and - 2.0 per hundred, respectively.

Social Characteristics

Religion. The Roman Catholic Church has been the dominating religion since 1973. In 2000, about 83 percent of the Yap's population were Catholics, about the same proportions found in 1973 and 1994. Protestant, the second leading religious institution in the state, showed a slight decline in 2000 (about 3 percent of the total population) compared to the previous two censuses in 1973 and 1994. Other religions constituted about 8 percent, and about 6 percent refused or claimed to have no religion.

Ethnicity and Language Spoken at Home. About 90 percent of Yap residents in 2000 had native ethnicity (48 percent Yapese and 42 percent Outer Islanders). This was closely similar to the 1994 census results where residents of native ethnicity also comprised 86 percent (49 percent Yapese and 36 percent Outer Islanders) of the total population. About 91 percent reported a local language as their most commonly used language for both 1994 and 2000. Conversely, English was reported by at least 90 percent of persons 5 years and over as their second most commonly used language during both censuses.

School Enrollment. As the population of Yap increased, the number of persons attending school in the state also increased from about 2,300 in 1973 to about 3,700 in 1994, but dropped to about 3,400 in 2000. The actual decrease in school attendance in 2000 was perhaps due to increasing migration of the school age population. In both the 1994 and 2000 censuses, private schools enrollment among elementary and high schools remained at about the same level: 14 percent and 7 percent respectively. In 1994, enrollment reached its peak at the ages of 9 to 13. In 2000, the peak was a bit earlier at the age of 7 to 9. In both census years, dropout rates were quite high throughout Yap starting from the age of 17, indicating that most Yapese teenagers never went on to further their education after high school.

Educational Attainment. In Yap in 2000, over half (64.2 percent) of all persons 25 years old and over were at least high school graduates, increased from 57.6 in 1994 and 33.5 in 1980. The proportion of the population with no schooling decreased from about 25 percent in 1980 to around 10 percent in 1994 and 2000.

Economic Characteristics

Labor Force Participation. Labor force participation was compiled based on the current economic activity (that is, economic activities during a seven-day reference period). The overall labor force participation rate of persons 15 years and over during the week before the census in Yap was 72 percent in 2000 (increasing from about 55 percent in 1994). For Yap Proper and Outer Islands, the labor force participation rates were 67 percent and 83 percent, respectively. The male participation rate in 2000 for males and females was about similar; at 72 percent and 73 percent, respectively. The unemployment rate in 2000, based on ILO classification, was 4.1, decreasing from 9.9 percent in 1994. In 2000, the unemployment rate for males was about 5.4 percent compared to around 2.8 percent for females.

Subsistence. Out of about 5,000 employed persons, about 2,000 or 45 percent were engaged in agricultural, fishery, and related activities (increasing from 1,300 persons or 37 percent in 1994). About 93 percent of the agricultural, fishery or related activity workers were engaged in pure subsistence -- did subsistence for household consumption only and did not sell – a slight decline from the 97 percent in 1994.

Industry and Occupation. The current formal work force in Yap in 2000 was about 2,600, a slight increase from about 2,100 in 1994. In both the 1994 and 2000 censuses, about 19 percent of the employed persons 15 years and over in Yap were managerial and professional workers. Technicians and associate professionals in 1994 and 2000 (about 22 and 17 percent, respectively) and crafts and related workers (about 15 and 25 percent, respectively) were also reported as major occupations. Skilled agricultural and fishery workers constituted about 5 and 2 percent of all experienced workers in 1994 and 2000, respectively.

Class of Workers. In 2000, about 61 percent were employed in the private sector and 39 percent employed in the public sector (compared to 43 percent public sector workers and 58 percent private sector workers in 1994). In 2000, majority of both males (56 percent) and females (68 percent) were employed in the private sector. In contrast, more males (60 percent) and females (51 percent) were employed in the public sector than in the private sectors in 1994.

Income. In 2000, out of the 2,030 occupied households, about 1,600 reported cash income in 1999. This indicated an increase in the number of households receiving cash income when compared to about 1,400 households out of the total of 1,925 in 1994. Furthermore, the median household income increased to about 500 dollars from about \$6,000 in 1994 to \$6500 in 2000. Similarly, the mean household income increased to about \$10,300 in 2000 from about \$8,300 in 1994. The median income of individuals was about \$3,500 in 1994. Since then, it has decreased slightly to about \$3,400 in 2000. By region, however, median household income was about \$6,700 in Yap Proper and about \$3,800 in the Outer Islands in 1994, but has increased since then in both areas to about \$7,300 and \$4,200, respectively, in 2000.

Housing. The total number of housing units increased from about 1,906 in 1980 to 1,980 in 1994, and had since increased further to 2,246 in 2000. About 84 percent of all housing units were reported occupied during 1980 and 97 percent in 1994. In 2000, the proportion housing units reported to be occupied decreased to about 90 percent. The number of housing units with 5 or more rooms increased from 4 percent in 1980 to about 12 and 13 percents, respectively, in 1994 and 2000. Housing conditions in Yap improved over the two decades. Slightly less than half (45 percent) of all housing units were built between 1985 and 2000; about 57 percent of the housing units had electricity compared to 53 percent in 1994 and 41 percent in 1980. About 53 percent of all housing units had piped water compared to about 51 percent in 1994 and 5 percent in 1980. Of all housing units in 2000, over 29 percent had flush toilet and about to 53 percent had bathtubs, or showers, compared to about 18 percent with flush toilet and about 7 percent with bathtubs or shower in 1980.

Additional Census Tables

Lastly, a set of basic tables is presented at the end of the report. A set of detailed tables is also available in a separate publication. These tables provide a breakdown on data by municipality, and may serve as a basic source of data on Yap's population and housing characteristics.

CHAPTER 1 INTRODUCTION

The creation of the independent and sovereign nation of the Federated States of Micronesia (FSM) under the Compact of Free Association with the United States caused a growing need for social and economic development planning. Consequently, social, economic, and demographic data were needed by both the government and private sectors. The 2000 FSM Census was thus conducted as part of the overall effort to provide current and updated information required for planning and administrative purposes.

This report provides the basic analysis of the 2000 FSM census for Yap State. Chapter 1 locates Yap State geographically and presents a brief history and the population distribution of Yap in selected census years, along with some background to the 2000 FSM Census. Chapter 2 presents population change and structure. Chapter 3 presents the household and marital status. Chapters 4 to 6 discuss population dynamics (fertility, mortality, and migration) of the State of Yap. Chapters 7 to 11 provide the basic analysis for social and economic characteristics. Chapter 12 presents a summary of population estimates and population projections for the next 20 years. Chapter 13 discusses the housing characteristics. Supplemental information and data from previous selected censuses (1973, 1980, 1987, and the 1994 state censuses) are used to present change overtime. A separate publication presenting detailed tabulations of the 2000 FSM Census results for Yap State will also be compiled and disseminated by the National Statistics Office under the Department of Economic Affairs.

Geographical location and a brief history of Yap State

Geographical location, climate, and size

Yap State stretches from about 6 to 10 degrees North latitude and 137 to 148 degrees West longitude and encompasses approximately 500,000 square miles of area in the Western Caroline Islands. It consists of about 78 islands of which 22 are inhabited. Yap State consists of approximately 45.8 square miles of land area. Most of the islands are volcanic origin and some are of raised limestone.

The temperature is moderately high, spanning the 80 degrees Fahrenheit range (approximately 26 degrees Celsius) with consistently high humidity. Yap is affected by intermittent trade winds and monsoons. The wettest months are from July to November when the rains come almost daily from the West to the Southwest.

The Outer Islands of Yap are small and formed primarily from coral. All are either raised coral islands or atolls. Vegetation on the Outer Islands federally is sparse because of porous, poor soil and high salinity both in the ground water and from ocean spray. Due in part to the fundamentally different adaptive challenges faced by outer island residents, in part to their history, and in part to geographic separation, the Outer Islands are distinct culturally and speak a different language from Yap Proper. The eastern islands have close links to the outer islands of Chuuk, through their part of the Trukic continuum and migration patterns.

During traditional times, Yap contained chiefdoms - sociocultural systems characterized by ascribed hierarchical social ranking. Bilineal descent determined social position, inheritance, kinship structure, residence patterns, and land tenure. A single chiefdom, in Gagil municipality, maintained ties and oversaw control over the outer islands. Several chiefs resided on the large island of Yap Proper - dividing the island into separate municipalities which individual chiefs controlled. Although Yap society has changed dramatically over the past 300 years of contact with people from outside Micronesia, traditional society continues to play important roles both in daily activities and in the political operation of Yap State, particularly in more rural areas. In fact, Yap remains the most traditional of the four FSM states.

As is the case with most of Micronesia, Yap has a long history of interaction with more technologically advanced societies. In many cases, this interaction has had profound effects on the native residents, leading to population change, introducing different strategies of economic development, and ultimately changing the traditional sociocultural system. A brief overview of this history provides useful background for an examination of the information obtained from the 2000 FSM Census.

Brief History of Yap State

Yap State was unknown to the West until Portuguese and Spanish explorers sighted islands in the western Carolines during the 1520s (Muller 1917:1; Office of the Chief of Naval Operations 1944:21; Less 1966:5; Hezel 1983:14-19). Although Spain claimed Yap State as part of its growing global empire, few Westerners visited the region until the nineteenth century. Western interest in Yap State was revived with visits by British ships to the area between 1786 and 1802, and grew with a resurgence of Spanish desires for further economic growth and with the general expansion of trading and whaling throughout Micronesia (Lingenfelter 1975:183; Hezel 1983:82-83). In 1827 a Russian expedition led by Frederic Lutke explored portions of the Caroline Islands east of Yap Proper (Lutke 1971). Interaction with Westerners following the Lutke expedition was intermittent; traders and whalers began frequent visits after 1840 in the Eastern Carolines, although the Western Carolines largely remained unknown to outsiders (Office of the Chief of Naval Operations 1944:23). A German trading company finally established a European presence on the High Islands in 1869 (see Shineberg 1971; Hezel 1983:181-182, 264-265).

Unfortunately, demographic data for the long period of early contact between components of the present Yap State and Western nations are limited. Available evidence suggests that despite the sporadic, infrequent contact with outsiders, major periods of depopulation were well underway in the nineteenth century. This was due largely to the introduction of influenza, tuberculosis, smallpox, and venereal disease (see Labby 1976: 2; Peattie 1988: 86-87). Although details are unknown, by the latter half of the nineteenth century depopulation had nearly crippled traditional hereditary mechanisms guiding the transfer of ritual information and status (Muller 1917).

Yap State's commercial position in the Pacific grew during the 1870s and 1880s through the activity of German companies. By 1880 Yap Proper had become the commercial center for all the Caroline Islands, emerging as an important source of both copra and trepang (beche-demer) (Hezel 1983: 28). Germany officially challenged Spain's sovereignty in 1885, annexing the High Islands - an action overturned by Pope Leo XIII's arbitration shortly thereafter (Hezel 1983: 308-312 and Shinn 1984: 326). Germany finally acquired Yap State when it purchased the Carolines and Northern Marianas from Spain in 1899 following the Spanish-America War. German efforts to develop the area economically focused primarily on the production of and trade in copra, in the process introducing technological innovations such as new roads, a, and a cable station (Office of the Chief of Naval Operations 1944: 25). Although the Germans administered the Yapese primarily through native chiefs, acts such as the reorganization of administrative districts and the abolition of warfare greatly affected the sociopolitical dynamics of the society (Lingenfelter 1975: 183-184; Labby 1976: 3-4). These cultural changes coincided with continued depopulation on Yap Proper, and probably to a lesser degree on several of the Outer Islands. Between 1899 and 1911, population on the High Islands decreased from approximately 7,800 to slightly less than 6,200 (Hunt et al. 1954: 23), and continued to decline after that.

Capitalizing upon Germany's involvement in the World War I, in 1914 Japan occupied the Carolines militarily. Japan had begun commercial efforts in the area as early as 1890, and by 1912 had succeeded in establishing itself as a major trading power (Labby 1976: 4). In 1920, the League of Nations awarded Japan a Class C Mandate over Yap State and other German islands in the Pacific north of the equator (Peattie 1988: 56-59). As with Germany, Japan's presence had both commercial and political motives. However, Yap State's physical composition and location limited its immediate value to the Japanese. Although a naval contingent arrived in 1915, adding Yap Proper as the sixth Japanese Naval District in Micronesia, its military value was minimal (Peattie 1988: 64, 231-132). Moreover, the predominantly hilly High Islands and small, generally infertile Outer Islands restricted agricultural potential (Peattie 1988: 181-182; see also Clyde 1967: 47-48).

Yap State quickly proved to be a source of frustration for the Japanese, in large part due to population dynamics. One concern was the frequent need to relocate people forcibly, usually from Yap Proper to the Outer Islands and other areas in Micronesia, in pursuit of military and commercial goals (Lingenfelter 1975: 186). But the main demographic problem faced by Japanese was continued depopulation. The immediate reasons for this decline appeared to be a high death rate, linked to tuberculosis and infant diarrhea, and a low birth rate due to gonorrhea (Office of the Chief of Naval Operations 1944: 32-38; Clyde 1967: 151). In addition to carrying out economic, cultural, and social changes in establishing its authority and improving commerce in the area (see Shuster 1978), Japan introduced better health care and related training in 1915 to help stem depopulation. But these efforts were unsuccessful; by 1937 the population of the Yap High Islands had declined to roughly 3,400 Pacific Islanders (Hunt et al. 1954: 23).

U.S. military forces either captured or bypassed islands in Yap State in World War II (Peattie 1988: 297-307). Following the Japanese surrender in August 1945, the United States began to administer island groups throughout Micronesia. In 1947, the islands in Yap State became part of the Trust Territory of the Pacific Islands (TTPI), a strategic area established by the United Nations with the United States as "administering authority" (Shinn 1984: 303-305). For the first decade of its administration, the United States generally tried to avoid involvement in Yapese affairs - restricting visits and trade from outside and enabling the Yapese to elect district leaders or "chiefs" (Lingenfelter 1975: 188-189). After 1956 increased trade outside Yap State, coupled with growing opportunities for wage labor, led to greater changes. Under successive administrations by the U.S. Navy (1945-1951) and the U.S. Department of the Interior (1951-1986) depopulation ceased, followed by gradual population growth. In the 1970s, total population finally reached the highest levels documented earlier this century. Afterwards, growth declined because of out-migration to Guam and the U.S.

On 10 May 1979, Yap and three other Caroline districts of the TTPI (Chuuk, Kosrae, and Pohnpei) approved a constitution and became the self-governing nation of the Federated States of Micronesia. The U.S. Congress ratified a Compact of Free Association in 1986, establishing future relations between the FSM and the United States. Under the compact, the United States provides grant funds and program assistance for fifteen years, as the states of the FSM strive for economic and political development (Shinn 1984: 308-311). During the first seven years of independence, population growth in Yap State occurred on an order previously undocumented, reaching an average annual rate of 3.3 percent.

History of Census Taking in Yap State

The demography of Yap State is poorly documented before 1920, when the Japanese South Seas Bureau (Nan'yocho) conducted the first systematic census of the entire region. Population data are available from the late eighteenth century for certain portions of Yap Proper, initially collected by explorers and missionaries, and later by German administrators (see Muller 1917; Kramer 1937; Damm 1938). But demographic data preceding 1920 often represent estimates prepared at irregular dates, with no single set covering all islands in Yap State at one time. This paucity of detailed evidence is particularly unfortunate in the present setting, for researchers generally believe that the early population was much greater even than that found currently - possibly between 25,000 and 50,000 on the High Islands during the late eighteenth century (Labby 1976:2; see also Office of the Chief of Naval Operations 1944: 32-33; Mahoney 1958; Hunter-Anderson 1983).

Various agencies and organizations conducted a total of thirteen systematic censuses of Yap State during the twentieth century, including the 2000 census: four by the Japanese South Seas Bureau (1920, 1925, 1930, and 1935), two by the Office of the High Commissioner of the TTPI (1958 and 1973), one through a joint effort by the U.S. Peace Corps and the University of Hawaii School of Public Health (1967), two by the U.S. Bureau of the Census (1970, 1980), one by the TTPI Office of Planning and Statistics (1977), one by the Yap Office of Planning and Budget (OP&B) in 1987, one by the joint effort of the National Office of Planning and Statistics and Yap OP&B (1994), and the latest one by the National Statistics Office under the Department of Economic Affairs. Table 1.1 and Figure 1.1 present the total population of Yap State recorded by twelve of these censuses. These census data indicate two trends in the evolution of the total population of Yap State; a steadily decline until 1958 and a steady increase since then.

Table 1.1: Proportional Distribution by Municipality, Yap State: Selected Census Years

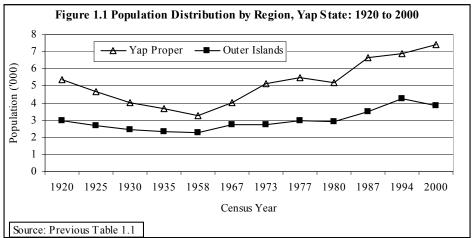
_	Census years											
Municipality	1920	1925	1930	1935	1958	1967	1973	1977	1980	1987	1994	2000
Total	8,338	7,366	6,486	6,006	5,540	6,761	7,870	8,480	8,100	10,139	11,178	11,241
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Yap Proper	64.5	63.2	62.0	61.5	58.5	59.5	65.3	64.6	64.1	65.6	61.9	65.8
Rumung	3.0	2.9	2.6	2.3	2.2	2.4	1.6	1.5	1.6	1.0	1.3	1.1
Maap	8.0	7.6	7.2	6.5	5.4	4.5	4.3	3.8	3.9	5.1	4.9	5.3
Gagil	10.1	8.4	8.9	8.3	7.2	5.2	6.8	7.1	7.6	7.0	6.4	6.5
Tomil	8.7	8.9	8.1	7.9	9.1	8.0	8.5	7.7	8.8	8.3	8.0	9.1
Fanif	NA^1	5.9	5.8	6.4	6.4	5.8	4.7	4.4	4.8	4.5	4.1	4.9
Weloy	12.7	8.2	8.6	10.0	9.3	11.8	13.0	12.0	11.4	14.2	10.6	10.6
Rull	10.6	10.2	10.2	10.0	9.5	13.9	18.6	20.0	17.7	18.3	17.7	18.0
Gilman	3.7	3.5	3.4	3.1	2.6	2.6	2.8	2.7	2.8	1.8	1.8	2.1
Kanifay	4.0	3.9	3.7	3.5	3.3	3.0	3.0	2.8	2.8	2.7	2.2	2.4
Dalipebinaw	3.7	3.8	3.5	3.3	3.6	2.3	2.1	2.5	2.6	2.6	4.9	5.7
Outer Islands	35.5	36.8	38.0	38.5	41.5	40.5	34.7	35.4	35.9	34.4	38.1	34.2
Ulithi	5.4	6.9	6.9	6.8	8.3	8.1	9.0	10.1	8.8	8.4	9.1	6.9
Fais	12.2	6.4	5.7	5.2	4.2	3.2	2.7	2.3	2.6	2.5	2.7	1.9
Sorol	NA^2	0.1	-	0.1	0.2	0.2	0.1	0.1	0.1	-	-	-
Ngulu	0.9	1.1	1.0	1.0	0.8	0.3	0.1	0.2	0.3	0.3	0.3	0.2
Woleai	7.7	7.4	8.3	8.7	8.8	9.5	7.7	7.9	7.9	7.8	7.6	8.7
Eauripik	NA^2	1.4	1.7	1.7	2.5	2.2	1.6	1.4	1.5	1.0	1.1	1.0
Ifalik	NA^2	4.0	4.7	4.2	5.4	4.8	4.0	4.2	4.8	4.7	5.8	5.0
Faraulap	1.7	2.1	2.2	2.3	2.1	2.2	1.6	1.7	1.6	1.8	2.0	2.0
Elato	3.0	1.2	1.1	1.2	0.7	0.7	0.4	0.6	0.6	0.7	1.1	0.9
Lamotrek	1.1	2.8	2.5	2.9	3.1	3.6	3.0	2.4	3.0	2.7	3.4	3.0
Satawal	3.5	3.4	3.9	4.4	5.1	5.8	4.5	4.5	4.8	4.6	5.0	4.7

Source: Nan'yo (1927, 1931, 1937); Office of the Census Coordinator (1975); Office of High Commissioner (1959); School of Public Health (n.d).; US Bureau of Census (1972, 1983a); Yap Office of Planning and Budget

(1992a, 1988, 1989); 1994 FSM Census, Table 13; 2000 FSM Census Table P2-1 Notes: 1/Fanif was included in Weloy. 2/Sorol, Eauripik, and Ifalik were included in Fais.

Figure 1.1. Population Distribution by Region, Yap State: 1920-2000

Figure 1.1 Population Distribution by Region, Van State: 1920 to 2000



The following paragraphs briefly examine Yap State's changing regional demography in two sections: one based on censuses conducted during the Japanese period, spanning the four census between 1920 and 1935 when the population declined slowly; and another one based on the remaining eight censuses (1958, 1967, 1970, 1973, 1977, 1980, 1987, and 1994), when the population ceased to decline, and then began to increase once more. We confine our presentation to essential data, in particular drawing attention to possible causes of population change.

Population of Yap State during the Japanese Period: 1920, 1925, 1930, and 1935

In 1920, the Japanese South Seas Bureau conducted the first detailed census of Yap State (the Yap District of the Mandated Territory; see Nan'yo-cho 1937). The South Seas Bureau conducted similar censuses in 1925, 1930, and 1935, providing an extremely detailed database for the period of Japanese administration. The demographic picture

emerging from these data is one of steadily declining population, on both the High Islands and Outer Islands, with the average annual decrease in the total population between censuses ranging from 1.5 to 2.5 percent (see Table 1.1). We discuss these censuses briefly below, focusing upon Pacific Islanders and for the most part excluding any examination of resident Japanese.

Nearly 8,350 Pacific Islanders resided in Yap State in 1920 (Nan'yo-cho 1937). This number probably represents a decrease from earlier in the century, although the magnitude and rate of decrease are unknown. Total population was recorded for each municipality in Yap State, excluding Fanif (recorded with Weloy) and Eauripik, Ifalik, and Sorol atolls (all combined with Fais Island). In 1920 nearly twice as many persons resided on Yap Proper (64.5 percent of the total) as on the Outer Islands. The major populations on Yap Proper were in Gagil and Rull municipalities; the population of Weloy Municipality, important in later years, is uncertain because it was combined with Fanif. Woleai Atoll had the largest population of the Outer Island units recorded separately in 1920.

The population of Yap State declined by roughly 1,000 between 1920 and 1925, by about 2.5 percent annually (Nan'yo-cho 1927). Yap Proper experienced the greatest decline; all municipalities had losses averaging in excess of 2.0 percent annually, with Gagil's annual losses reaching 6.0 percent. The loss of population on the Outer Islands was much less; cases of substantial loss (such as Elato Atoll) were compensated for by marked gains in other places (such as Lamotrek Atoll), suggesting a role for inter-island migration during this five-year period (or, possibly, visitors from Elato to Lamotrek at census time). In terms of relative proportions of total Yap State population, with the exception of Elato and Lamotrek atolls the distribution remained about the same in 1925 as in 1920.

The population of Yap State decreased at an annual average rate of 2.5 percent between 1925 and 1930, a decline of nearly 900 individuals (see Table 1.1; Nan'yo-cho 1931). Once again, most of the decrease occurred on Yap Proper, where all municipalities had some reduction. Depopulation on the Outer Islands was less severe but nevertheless substantial; all but two municipalities experienced decreases. Although the proportion of total population residing on Yap Proper decreased for the second time (to 61.9 percent), in general the regional distribution remained constant.

Although vital statistics and migration data for Yap State during the Japanese period were limited, some information on fertility, mortality, and migration were available. Between 1925 and 1929 the crude birth rate for Yap State was 14.4 (Yanaihara 1967: 46). This is low fertility for Micronesia, substantially less than the 24.4 recorded for the remainder of the western Carolines (Palau) during the same period and less than one-third that recorded for Japanese living in Yap State between 1925 and 1929 (Office of the Chief of Naval Operations 1944: 36). Crude death rate, on the other hand, averaged 44.1 for the period 1925-1929 (Yanaihara 1967: 46). This figure is more than twice that recorded for Palau and nearly eight times that recorded for Japanese residents over the same six years.

The population in Yap State continued to decline between 1930 and 1935, the loss of nearly 500 persons representing an average annual decrease of 1.5 percent (Nan'yo-cho 1937). As during the previous two five-year intervals, Yap Proper experienced the greatest absolute and relative losses in population, with decreases in all but two places. Depopulation on the Outer Islands was less severe, four actually gaining residents during these five years. The relative proportion of total Yap State population residing in various municipalities remained roughly the same as in 1930. Weloy, one of the two municipalities on Yap Proper that grew between 1930 and 1935, registered the greatest relative change.

Yap State's crude birth rate decreased from the 1925-1929 average of 14.4 to 12.0 in 1935 (Yanaihara 1967:46). Once again, this value compares poorly with fertility measures for other populations in the area, being about one-half the Palauan crude birth rate and about one-third the crude birth rate for Japanese residing in Yap State. The crude death rate for the district decreased to 28.0 in 1935 (Yanaihara 1967: 46). Despite this drop, mortality still was roughly twice that in Palau, although only slightly greater than the mortality of resident Japanese (Office of the Chief of Naval Operations 1944:36).

Population of Yap State in 1958 - 1994

In 1958, the Office of the TTPI High Commissioner conducted the first systematic census of Yap State since the end of Japanese administration (Office of the High Commissioner 1959). Resulting data indicate that the population continued to decrease during the first thirteen years of U.S. administration (see Table 1.1). The 1958 census recorded 466 fewer persons living in Yap State than in 1935 (an average annual decrease of 0.4 percent). As before,

the greatest decrease occurred on Yap Proper, which for the first time recorded less than 60 percent of the total population. All but two of the municipalities on Yap Proper, and all but five of the Outer Islands, lost population between 1935 and 1958.

The 1967 census indicated that population grew by more than 1,200 over the decade following the 1958 census, an average annual growth rate of 2.2 percent (School of Public Health n.d.). This marked the first population increase between censuses in forty-seven years. Population grew more rapidly on Yap Proper (to 59.5 percent of the total) than on the Outer Islands. Two Municipalities in Yap Proper (Gagil and Dalipebinaw) lost population, while Rull and Weloy increased significantly to 11.8 and 13.9 percent, respectively.

The 1970 Census was conducted by the U.S. Bureau of the Census. Unfortunately, geographic designations for Yap State were incorrect. Thus, although the total for Yap may be accurate, data desegregated to individual municipalities were not. Over the preceding three years, the population of Yap State grew by more than 850 persons, an average annual rate of 4.1 percent.

The 1973 Trust Territory census indicated that population growth in Yap State continued, at an average annual rate of slightly more than 1.0 percent since 1970. Moreover, the proportion of total population living in Yap Proper increased markedly, with 65.3 percent of the total residing in the state. Population grew in all but two municipalities in Yap Proper over the six years preceding 1973, with greatest relative and absolute increases in Rull, Gagil, and Weloy. Relative decreases in population occurred throughout the Outer Islands. The exception was Ulithi Atoll, which for the first time on record contained the largest number of persons outside Yap Proper - possibly due to the opening of a high school there in early 1960s.

The TTPI Office of Planning and Statistics conducted another census of Yap State in 1977 (Office of Planning and Statistics 1982). Unlike all other censuses discussed in this section, the 1977 census focused upon *de jure* rather than de facto population and was designed primarily to document the distribution of skills throughout the state. Because this was not a complete census, detailed data were unavailable on population characteristics such as age-sex composition. Moreover, because the data collected were de jure, strictly speaking they are not fully comparable with the de facto data collected in other census years. Nevertheless, information exists on the distribution of population throughout the region, and it probably provides a reasonable indication of the de facto arrangement of people (see table 1.1). Note in particular the continued dominance of Yap Proper, which contained nearly 65 percent of the total population - once again dominated by Rull and Weloy municipalities. Similarly, note the continued dominance of Ulithi and Woleai atolls in the Outer Islands, which together accounted for more than half of the population outside Yap Proper.

The U.S. Bureau of the Census conducted a second detailed census of the Trust Territory in 1980 (U.S. Bureau of the Census 1983a), making demographic data available for the entire state of Yap as well as for individual municipalities. Unfortunately, careful examination of the data revealed some undercount (Yap Office of Planning and Budget 1988a:4). These undercounts, coupled with results of the de jure census of 1977 and likely heavy outmigration to the United States during the late 1970s (to take advantage of the recently established Education Opportunity Grants), seemed to give the impression that population decreased between 1977 and 1980 - the first decrease between census years since 1958. The data also show that the relative population distribution on Yap Proper and in the Outer Islands in 1980 continued in the general proportions recorded in both 1973 and 1977. The earlier importance of certain municipalities began to diminish, with the relative contributions of Rull and Weloy on Yap Proper and Ulithi Atoll in the Outer Islands decreasing slightly.

In 1987, the Yap Office of Planning and Budget conducted its first Census after the approval of the Compact of Free Association with the U.S. (Yap Office of Planning and Budget 1988a). The results indicated similar population distribution, but different level of population growth than that of 1980. The total number of inhabitants grew by more than 2,000 during the first seven years of the 1980s, an average annual increase of 3.2 percent (see Table 1.1). The proportion residing on Yap Proper grew slightly between 1980 and 1987; the populations of all but two municipalities there increased and the demographic dominance of Rull and Weloy continued to grow. Though the proportion of Yap State population residing on Outer Islands declined during this period, the absolute population of all but two Outer Island Municipalities grew. Ulithi and Woleai atolls remained the largest population centers in the Outer Islands.

In 1994, through a joint effort of the National Office of Planning and Statistics and the Yap Office of Planning and Budget, the second detailed census of the FSM was conducted under the Compact of Free Association (1994 FSM Census). The 1994 FSM census, a *de jure* count of the population, showed similar trends in population distribution and growth compared to the 1987 census. The total population in the state increased by a little over a thousand in the preceding seven years since 1987; an average annual increase of 1.3 percent (see Table 1.1). Although the proportion of the population living on Yap Proper decreased during the ensuing years, Yap Proper was still home to over 61 percent of the total population in the state. Of the municipalities on Yap Proper, all but two show slight decline in population total, with Rull and Weloy continuing to lead in number of residents. In the Outer Islands, the proportion of Yap State's population living there increased to 38.1 percent; compared to 34.4 percent in 1987. All islands there except for one (Woleai) indicated some sort of population growth during the seven inter-censal years. Nevertheless, Ulithi and Woleai continued to remain the dominant population center in the area.

The 2000 FSM Census

The 2000 FSM census covered all persons usually residing in each of the FSM states, as of April 1, 2000. A census of the usual residents is a *de jure* count of the population. Only people who had resided or intended to reside in the state for six months or more prior to the census were counted. Thus short-term visitors, staying for less than six months, were excluded. Usual residents who were overseas at the time of the Census were included if they intended to return to the state within six months. The States' citizens who were away for more than six months were not considered to be usual residents of the states, and were excluded from the Census.

The census also covered housing units (living quarters), both occupied and intended for occupancy (vacants) at the time of the census. Excluded were buildings for businesses, offices, institutions and other structures not used as living quarters.

The 2000 Census implementation phases are briefly summarized below. Except for a pretest operation, which was done in 1994, all implementation phases of the 2000 FSM Census followed the same guideline adopted in the previous census.

Planning and Preparation

A series of workshops were conducted to establish the administrative setup for the census and plan out the different phases of the census. Participants in the workshops were representatives from the national and state governments and officials from collaborating agencies such as the U.S. Department of Interior and US Bureau of the Census. Additional training was also provided to the state branch office on fieldwork, survey sampling and interviewing techniques.

Mapping

A mapping operation was conducted in conjunction with the actual enumeration throughout the FSM. The objective of this operation was to update the Enumeration Districts (ED) maps. The estimates of housing units at the block level used the 1994 ED Maps to delineate the field assignments for the 2000 census.

Enumeration

Field Workers (crew leaders and enumerators) were hired and trained to carry out the enumeration. Each crew leader was responsible for supervising about 5 enumerators on average. Each enumerator was assigned to conduct interviews for every housing unit and household (about 50 housing units on the average) in his or her enumeration district (ED), and fill out a questionnaire for every person in each household. The fieldwork was scheduled to commence from April 4 through 17, although the actual enumeration took much longer and lasted till the early part of June due to callbacks and questionnaire verifications.

Editing, Coding, and Data Processing

The census questionnaires were edited, coded, and keyed at the state branch office. The Preliminary data editing and coding operation were completed for the purpose of compiling a preliminary count. Preliminary tables were

compiled and disseminated from this operation. The questionnaires were then reviewed (for processability), coded, keyed, and verified for further analysis. Following the verification of the keyed data, specifications and programs were developed for data cleaning. The US Bureau of Census assisted the national staff in carrying out the data cleaning and programming activities in Washington D.C. The software used in data cleaning, processing, and table production was the Integrated Microcomputer Processing Systems (IMPS).

Data Analysis and Report Writing

A data analysis and training workshop was held to review the progress of the report writing and consistency of the data presented in the report. Dr. Michael Levin from USBC and Ms. Vilimaina Rakeseta, a demographer from UNFPA/Country Support Team (CST) led the training and provide much needed guidelines and suggestions to carry out the editing process in terms of analyzing the census data and writing up the report.

Population Distribution in 2000

One of the important uses of a census is to provide a geographical population distribution. This information is very useful in the decision making process of a nation such as allocation of funds, development planning, policymaking, and apportionment of seats in the decision making body.

Table 1.2 presents a comparative analysis of the distribution of Yap State's population by municipality and sex between 1994 and 2000. The state's population increased slightly from about 11,180 in 1994 to about 11,240 in 2000 (an average annual growth of rate of 0.1 percent). Majority of the population resided on Yap Proper, more so in 2000 than in 1994. Of the total population living in Yap State in 2000, about 7,391 (about 66 percent) were residing on Yap Proper while the remaining 34 resided in the Outer Islands. This general pattern was also evident for the sexes.

The distribution of the population varied by municipality. In 1994, nearly 62 percent of the total population was residing on Yap Proper, while the remaining 38 percent was residing in the Outer Islands. Rull (18 percent) and Weloy (about 11 percent) had the largest share of the total population. Ulithi, in the Outer Islands, was the third largest. Just over 9 percent of the total population was residing in Ulithi in 1994. The share for the remaining municipalities varied from about 8 percent for Tomil and Woleai to less than half of a percent in Ngulu. By 2000, the population of Yap Proper had increased to about 66 percent of the total population. Meanwhile, the Outer Island's population had decreased to about 34 percent. Rull (18 percent) and Weloy (about 11 percent) continued to have the largest population share among the municipalities. The population of Tomil also increased dramatically during this period by about 130 persons to make it the third leading municipality in terms of population. Incidentally, these three municipalities are located on Yap Proper and all three have large pockets of Outer Islanders living in them in specially designated areas. Consequently, one could say that the rise in Yap Proper population and the decline in the Outer Island's may be attributed to increasing out-migration from the Outer Islands to Yap Proper. This was further supported by fact that, with the exception of Woleai, all island groups in the Outer Islands experienced certain degrees of population decline in 2000 as compared to 1994. And even then, Woleai's case had to be considered with caution since the rise in population may not be mainly due to increasing births or returning residents, but rather, to rising student population from neighboring eastern islands residing and attending the recently built Neighboring High School on the island.

Table 1.2. Population Distribution by Municipality, Yap State: 1994 and 2000

		1994 Census						2000 Census					
Municipality	Number				Percent			Number			Percent		
	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	
Total	11,178	5,565	5,613	100.0	100.0	100.0	11,241	5,508	5,733	100.0	100.0	100.0	
Yap Proper	6,919	3,464	3,455	61.9	62.2	61.6	7,391	3,696	3,695	65.8	67.1	64.5	
Rumung	143	80	63	1.3	1.4	1.1	126	58	68	1.1	1.1	1.2	
Maap	547	277	270	4.9	5.0	4.8	592	310	282	5.3	5.6	4.9	
Gagil	716	375	341	6.4	6.7	6.1	734	384	350	6.5	7.0	6.1	
Tomil	897	449	448	8.0	8.1	8.0	1,023	524	499	9.1	9.5	8.7	
Fanif	462	247	215	4.1	4.4	3.8	547	285	262	4.9	5.2	4.6	
Weloy	1,188	629	559	10.6	11.3	10.0	1,197	629	568	10.6	11.4	9.9	
Rull	1,973	1,006	967	17.7	18.1	17.2	2,019	1,019	1,000	18.0	18.5	17.4	
Gilman	204	103	101	1.8	1.9	1.8	233	110	123	2.1	2.0	2.1	
Kanifay	245	138	107	2.2	2.5	1.9	275	152	123	2.4	2.8	2.1	
Dalipebinaw	544	160	384	4.9	2.9	6.8	645	225	420	5.7	4.1	7.3	
Outer Islands	4,259	2,101	2,158	38.1	37.8	38.4	3,850	1,812	2,038	34.2	32.9	35.5	
Ulithi	1,016	533	483	9.1	9.6	8.6	773	405	368	6.9	7.4	6.4	
Fais	301	160	141	2.7	2.9	2.5	215	103	112	1.9	1.9	2.0	
Sorol	-	-	-	-	-	-	0	0	0	0.0	0.0	0.0	
Ngulu	38	21	17	0.3	0.4	0.3	26	10	16	0.2	0.2	0.3	
Woleai	844	374	470	7.6	6.7	8.4	975	452	523	8.7	8.2	9.1	
Eauripik	118	56	62	1.1	1.0	1.1	113	42	71	1.0	0.8	1.2	
Ifalik	653	327	326	5.8	5.9	5.8	561	261	300	5.0	4.7	5.2	
Faraulap	223	102	121	2.0	1.8	2.2	221	98	123	2.0	1.8	2.1	
Elato	121	57	64	1.1	1.0	1.1	96	42	54	0.9	0.8	0.9	
Lamotrek	385	179	206	3.4	3.2	3.7	339	152	187	3.0	2.8	3.3	
Satawal	560	292	268	5.0	5.2	4.8	531	247	284	4.7	4.5	5.0	

Source: 1994 FSM Census, Table 13; 2000 FSM Census Table P2-1

Population Density in 2000

Table 1.3 presents the population density in Yap State by region. The population density (number of persons per square mile) in 1994 was over 240 persons per square mile; a figure that remained on a slightly constant level in 2000. By region, however, Yap Proper showed an increase in the number of persons per square mile: from about 180 in 1994 to 190 in 2000. In the Outer Islands, the opposite outcome was observed with the number of person per square mile decreasing from about 590 in 1994 to 550 in 2000. Despite this decline, population pressure in the Outer Islands is assumed to be quite high given the limited resources found in that region. Population pressure will be worse in the future, unless appropriate measures are implemented to limit population growth.

Table 1.3. Population Density, Yap State: 1994 and 2000

		1994 Census		2000 Census				
		Region	1		Region			
Characteristics	Total	Yap Proper	Outer Islands	Total	Yap Proper	Outer Islands		
Population	11,178	6,919	4,259	11,241	7,391	3,850		
Land area (in square miles)	46	39	7	46	39	7		
Density (per square mile)	243	179	587	244	190	550		

Sources: 1994 FSM Census, Table 13; 2000 FSM Census Table P2-1; FSM Information Handbook, No. 1 vol. 1, 1992.

Conclusion

Census taking improved in the 50 years prior to the 2000 census. A summary of the population count from the recent 13 censuses in Yap shows two major population changes. The population of Yap declined from over 8,000 in 1920 to about 5,500 in 1958 (that is, during the Japanese period); and began to increase steadily since then. The reason for decline of the population during the 1920 to 1958 was in part due to a high level of mortality during the Japanese period.

The geographical distribution of the population also shifted in the 50-year period observed. During 2000, nearly 66 percent of the total population was residing in Yap Proper, while the remaining 34 percent was residing in the Outer Islands. The Outer Islands' limited land area of about 7 square miles makes population density a potential problem.

CHAPTER 2 AGE AND SEX STRUCTURE

Introduction

The age and sex structure of a population provides basic information needed for planning and for providing key insights on social and economic characteristics. The age composition helps identify populations for schooling, employment, voting, and retirement. The sex distribution is important for identifying social characteristics, trends in community structure, and the population's economic potential.

In Chapter 1 we discussed the historical demography of Yap State, geographical distribution, and population density. Recent fertility, mortality, and migration trends - the three main mechanisms by which a population changes over time - have shaped the age and sex composition of Yap State. These processes will be discussed in later chapters.

Data Description

Age

The 2000 census obtained information on age from the response to the date of birth question and the age are reported in questionnaire items 4a and 4b. Age was in completed years as of April 1, 2000. In cases where age was not reported or clearly appeared to be incorrect, the Census Office employees imputed age according to relationship, marital status and other related characteristics of other individuals.

Data on age were used to determine the applicability of other questions for an individual and to classify other characteristics in census tabulations. Because of the important role played by age data in interpreting most social and economic characteristics, age was tabulated by single years as well as different groupings, such as 5-year age groups.

Sex

Information on sex was asked of all persons in the census. In cases where sex was not reported, census personnel determined it from the person's name. Otherwise, sex was imputed according to relationship, marital status and other related variables.

Limitations and Comparability

There is no limitation to the 2000 age and sex data. Every census conducted in Yap collected age and sex data.

Analysis of Age and Sex Data

Some important measures derived from the age and sex data will be analyzed in this chapter, namely the sex ratio, dependency ratio, intercensal growth rate, and median age. Also, we will look at the changes in the population distribution and age-sex structure and some probable causes for these changes.

Population Change and Intercensal Growth

One of the most important uses of any census is to throw light on the rate at which the population is growing annually (the intercensal growth). Table 2.1 presents the intercensal growth for four periods, 1973-1980, 1980-1987, 1987-1994 and 1994-2000. The intercensal growth rate for the first three periods fell within the range of .4 to 3.2 percent annually. In the period 1994-2000, the intercensal growth was 0.1. This showed that the population for Yap State had remained static or had actually declined in the recent years. The major cause for this almost zero growth in the population may have more to do with out-migration in search of jobs or education rather than declining fertility or increasing mortality rates.

The annual growth rate for the 1973-1987 was 1.8. For the period 1973-1994, the growth rate was 1.7 percent. For the period 1973-2000 the growth rate was 1.6 and because of the long period covered, is most certainly a good

reflection of average growth over the years. However, it should be noted that had it not been for the effect of increasing emigration, the intercensal growth rate would have been higher.

The annual growth rate varied significantly by age group. Over the two decades before the census, the growth rate for the very young (0 to 4 age group) declined from 0.6 between 1973 and 1980 to -1.2 between 1994 and 2000. Similar to the youngest population, the annual growth rate of the very old age groups (75 years and above) declined from 2.9 percent in 1973 to -3.4 percents in 1994, and increased to 2.5 in 2000. The decline in the growth rate among the young may be due to the decline in fertility (lowering the growth rate of the young).

Table 2.1. Population Change and Annual Growth Rate by Age Group, Yap State: 1973 to 2000

]	Population of		Percent change					
					_		(+ or -	.)		((Annual growth)			
		1	Number			1973-	1980-	1987-	1994-	1973-	1980-	1987-	1994-	
Age groups	1973	1980	1987	1994	2000	1980	1987	1994	2000	1980	1987	1994	2000	
Total	7,870	8,100	10,139	11,178	11,241	230	2,039	1,039	63	0.4	3.2	1.4	0.1	
Less than 5 yrs	1,203	1,252	1,540	1,476	1,372	49	288	-64	-104	0.6	3.0	-0.6	-1.2	
5 to 9 years	1,093	1,164	1,498	1,457	1,361	71	334	-41	-96	0.9	3.6	-0.4	-1.1	
10 to 14 years	999	1,018	1,229	1,491	1,355	19	211	262	-136	0.3	2.7	2.8	-1.6	
15 to 19 years	854	769	923	1,252	1,353	-85	154	329	101	-1.5	2.6	4.4	1.3	
20 to 24 years	623	735	823	936	998	112	88	113	62	2.4	1.6	1.8	1.1	
25 to 29 years	440	625	823	761	708	185	198	-62	-53	5.0	3.9	-1.1	-1.2	
30 to 34 years	351	461	776	768	697	110	315	-8	-71	3.9	7.4	-0.1	-1.6	
35 to 39 years	380	329	590	764	718	-51	261	174	-46	-2.1	8.3	3.7	-1.0	
40 to 44 years	309	308	326	619	723	-1	18	293	104	-	0.8	9.2	2.6	
45 to 49 years	291	312	312	416	590	21	0	104	174	1.0	-	4.1	5.8	
50 to 54 years	324	215	279	259	399	-109	64	-20	140	-5.9	3.7	-1.1	7.2	
55 to 59 years	298	248	261	250	227	-50	13	-	-23	-2.6	0.7	-0.6	-1.6	
60 to 64 years	201	220	208	248	221	19	-12	40	-27	1.3	-0.8	2.5	-1.9	
65 to 69 years	139	152	210	155	207	13	58	-55	52	1.3	4.6	-4.3	4.8	
70 to 74 years	124	93	125	156	115	-31	32	31	-41	-4.1	4.2	3.2	-5.1	
75 yrs & over	162	199	216	170	197	37	17	-46	27	2.9	1.2	-3.4	2.5	

Source: 1973 & 1980 TTPI Censuses; 1987 Yap Census; 1994 & 2000 FSM Census, unpublished data.

Note: the 79 "Not stated" age cases in 1973 were not distributed among the age groups but accounted for in the Total.

Age and Sex Distribution

Table 2.2 shows the percentage distribution of the Yap population by sex, from 1973 to 2000. The proportion for both sexes less than 5 years of age decreased by 3 percentage points over the period. With few exceptions, the proportion aged 10 to 49 years tended to increase from 1973 and 2000. The reduction in the proportion of the population below 5 years of age (from 0 to 4) is a consequence of a decline in fertility and age-selective migration. The increase growth rate among the middle age groups is especially evident among persons aged 30 to 44 in 1994 and among persons aged 40 to 44 in 2000, as a consequence of the age selective migration.

Table 2.2. Distribution of Population by Age Group and Sex, Yap State: 1973 to 2000

			Males					Females		
Age groups	1973	1980	1987	1994	2000	1973	1980	1987	1994	2000
Total	4,044	4,137	5,193	5,565	5508	3,826	3,963	4,946	5,613	5733
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 yrs	15.7	15.4	15.6	13.9	12.9	14.8	15.5	14.7	12.5	11.5
5 to 9 years	14.0	14.9	15.4	13.3	12.7	13.7	13.8	14.1	12.8	11.5
10 to 14 years	13.3	13.0	12.2	14.4	12.5	12.1	12.1	12.0	12.3	11.7
15 to 19 years	10.2	9.6	8.7	11.3	12.3	11.6	9.4	9.5	11.1	11.8
20 to 24 years	7.9	8.4	7.5	6.7	8.1	8.0	9.8	8.8	10.0	9.6
25 to 29 years	6.0	7.2	7.9	6.0	5.5	5.2	8.3	8.4	7.6	7.1
30 to 34 years	4.0	6.2	7.8	6.8	5.4	4.9	5.1	7.5	7.0	7.0
35 to 39 years	4.7	4.0	6.3	6.9	6.4	5.0	4.1	5.3	6.8	6.4
40 to 44 years	3.4	3.4	3.5	5.9	6.4	4.5	4.2	3.0	5.1	6.5
45 to 49 years	3.5	3.7	2.8	4.3	5.7	3.9	4.0	3.4	3.2	4.8
50 to 54 years	3.7	2.7	2.7	2.2	4.0	4.6	2.6	2.9	2.4	3.1
55 to 59 years	4.6	3.0	2.7	2.1	1.9	2.9	3.2	2.5	2.4	2.2
60 to 64 years	2.6	2.8	1.9	2.1	1.9	2.5	2.6	2.2	2.4	2.0
65 to 69 years	1.7	1.9	1.8	1.4	1.8	1.9	1.8	2.4	1.4	1.9
70 to 74 years	1.6	1.1	1.3	1.2	1.0	1.5	1.2	1.2	1.6	1.0
75 yrs & over	3.2	2.6	2.1	1.5	1.6	2.9	2.3	2.1	1.5	1.9

Source: 1973 TTPI Census, T4a; 1980 TTPI Census, unpublished; 1987 Yap Census; 1994 & 2000 FSM Census, unpublished

A useful representation of the age and sex data of the population is the population pyramid. It provides insights into the population structure of a country and is useful for future planning. The age and sex structure is affected by each of the components of population growth: fertility, mortality, and migration. Figure 2.1 shows the Yap Population pyramids from 1973 to 2000 for comparative purposes.

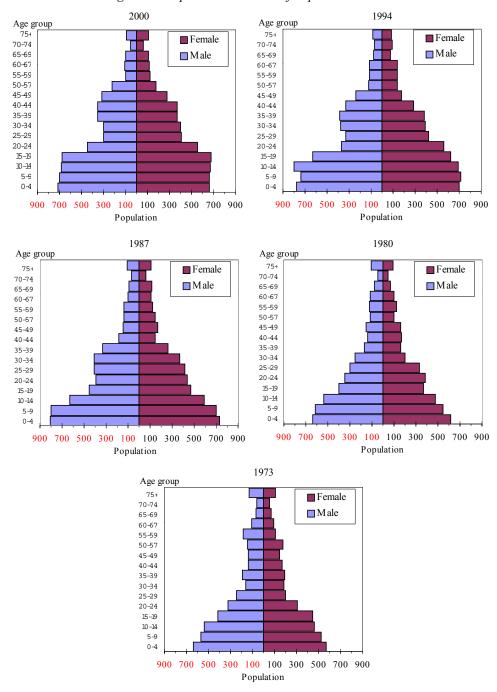


Figure 2.1 Population Structure of Yap: 1973 to 2000

Source: Preceding Table 2.3

Consider the population structure in 2000. The wide base for age group 0 to 4, 5 to 9, and 10 to 14 represents the recent births. It is noteworthy that the lowest two bars are almost the same length, indicating that fertility has been declining. The narrowed bars show fewer people at older ages. The most obvious explanation is that people die

when they grow old; therefore, the narrow bars at the old ages reflect mortality. Another interesting feature of this pyramid is the sharp indenting of the bars at ages 20 to 24 for the males, and 25 to 29 for females. The result of this however does not come from mortality, especially as mortality at these ages is relatively low. The more likely explanation lies in overseas emigration, as young people seek education and job opportunities abroad.

When comparing the population structure of 2000 to that of 1994, the shape remained virtually the same. However, when considering over the long period of 27 years (2000 to 1973), the change in the age-sex structure was rather pronounced. The population structure for 1973 portrays higher level of fertility and different migration pattern compared to that of 2000.

Table 2.3 shows the recent distribution of the Yap population. The distribution showed that the older the age group, the smaller the group. For instance, the proportion of the population in 1994 below 5 years comprised 13 percent of the population, whereas the population aged 75 and above accounted for less than 2 percent. In 2000, persons 5 years and below accounted for about 12 percent. Those aged 75 years and above comprised about 2 percent. This decline reflects the effect of mortality and some migration. A similar pattern is found among the sexes, although at different levels.

Table 2.3. Population by Age Group and Sex, Yap State: 1994 and 2000

			19	994						2000)		
	1	Number]	Percent			Νυ	unber			Percent	
Age groups	Total	Males	Females	Total		Females	То	tal	Males	Females	Total	Males	Females
1994 Census													
Total	11,178	5,565	5,613	100.0	100.0	100.0	11,2	41	5,508	5,733	100.0	100.0	100.0
Less than 5 yrs	1,476	773	703	13.2	13.9	12.5	1,3	72	713	659	12.2	12.9	11.5
5 to 9 years	1,457	739	718	13.0	13.3	12.8	1,3	61	700	661	12.1	12.7	11.5
10 to 14 years	1,491	799	692	13.3	14.4	12.3	1,3	55	687	668	12.1	12.5	11.7
15 to 19 years	1,252	629	623	11.2	11.3	11.1	1,3	53	675	678	12.0	12.3	11.8
20 to 24 years	936	375	561	8.4	6.7	10.0	9	98	445	553	8.9	8.1	9.6
25 to 29 years	761	335	426	6.8	6.0	7.6	7	08	303	405	6.3	5.5	7.1
30 to 34 years	768	377	391	6.9	6.8	7.0	6	97	297	400	6.2	5.4	7.0
35 to 39 years	764	384	380	6.8	6.9	6.8	7	18	351	367	6.4	6.4	6.4
40 to 44 years	619	331	288	5.5	5.9	5.1	7	23	351	372	6.4	6.4	6.5
45 to 49 years	416	238	178	3.7	4.3	3.2	5	90	315	275	5.2	5.7	4.8
50 to 54 years	259	122	137	2.3	2.2	2.4	3	99	222	177	3.5	4.0	3.1
55 to 59 years	250	118	132	2.2	2.1	2.4	2	27	103	124	2.0	1.9	2.2
60 to 64 years	248	116	132	2.2	2.1	2.4	2	21	104	117	2.0	1.9	2.0
65 to 69 years	155	77	78	1.4	1.4	1.4	2	07	97	110	1.8	1.8	1.9
70 to 74 years	156	67	89	1.4	1.2	1.6	1	15	56	59	1.0	1.0	1.0
75 yrs & over	170	85	85	1.5	1.5	1.5	1	97	89	108	1.8	1.6	1.9

1994 FSM Census, Table 13; 2000 FSM Census Table P2-1

Median Age

An important indicator derived from data on age is median age. This measure divides the age distribution into two equal parts, one-half of the persons younger than the median age and the other half older. In most cases, computing median age employs more detailed age intervals than are shown in census publications. A median based on less detailed data may differ slightly from a corresponding median for the same population based on a more detailed distribution.

Change in the median age shows whether the population is aging or growing younger. The median age is especially useful when comparing the composition of a population over time and to other populations. Table 2.4 shows that the median age of Yap increased by two years over the three decades before the census, indicating an aging population. This aging of the population may be due primarily to increasing out-migration of the younger generation (high school age and college age population), which tends to drive up the median age. Further indications of reduced fertility (discussed in Chapter 4) and reduced mortality (discussed in Chapter 5) also compounded the increase in median age.

The median age in 2000 was about 21 showing that Yap had the oldest population among the FSM states and was moderately old when compared to other Micronesian Island groups (see Table 2.8). From 1973 to 2000 the median age for males increased by over one and half years while for females increased by three years, reflecting the female selective immigration in recent years.

Table 2.4. Median Age by Municipality and Sex, Yap State: 1973 to 2000

Dagion		Total					Males					Females				
Region	1973	1980	1987	1994	2000	1973	1980	1987	1994	2000	1973	1980	1987	1994	2000	
Total	18.5	19.0	19.3	19.7	20.9	18.2	18.5	20.1	18.7	19.8	18.8	19.5	18.2	20.6	21.8	
Yap Proper	18.6	19.3	18.2	20.9	21.9	18.8	19.3	19.1	20.3	21.9	18.4	19.3	16.9	21.2	21.9	
Outer Islands	18.4	18.5	18.4	18.3	19.1	17.1	17.0	18.5	17.2	17.1	19.5	19.9	18.6	19.6	21.6	

Source: 1973 TTPI Census, T4a; 1980 TTPI Census; 1987 Yap Census; 1994 FSM Census, Table 13; 2000 FSM Census Table P2-1

The median age varied among the regions in Yap in the last census, as well as the census years before that. In 2000 Yap Proper had a higher median age of about 22, compared to 19 in the Outer Islands. The median age for both Yap Proper and the Outer Islands increased by about 1 year during the period observed. Once again, the rise in median age for the two regions may be due, among other things, to increasing out-migration of the younger population.

Age and Sex Ratios

Ratios permit comparisons of phenomena over time and between countries and areas. Analysis of age and sex data often requires examining large data sets. We can better discuss the complexities of changing age and sex compositions by using ratios. Here we apply two measures: the sex ratio (the number of males per 100 females) and the dependency ratio (the number of dependents -- person below 15 years old plus persons aged 65 and over -- per 100 individuals of working age -- persons aged 15 to 64 years of age). The dependency ratio is sometimes divided into young dependency and old dependency ratio.

Sex Ratio

The sex ratio of Yap declined over the past decades before the 1994 and 2000 census. In 1973, there were about 106 males to every 100 females in Yap, decreasing to about 99 in 1994 and 96 in 2000 (Table 2.5). This trend held for Yap Proper as well. Compared to other FSM states (as well as other Micronesian countries) Presented in Table 2.8, the Yap sex ratio of 96 was one of the lowest. There were more females in Yap State in 1994 and even more in 2000 partly due to the longer life expectancy of females, the increased out-migration of males, and immigration of females employed by the garment factory.

Table 2.5. Sex Ratio by Municipality, Yap State: 1973 to 2000

Municipality	1973	1980	1987	1994	2000
Total	105.6	104.4	105.0	99.1	96.1
Yap Proper	113.5	115.2	110.9	100.3	100.0
Rumung	89.7	120.3	161.5	127.0	85.3
Maap	108.0	103.2	100.0	102.6	109.9
Gagil	105.7	106.7	115.5	110.0	109.7
Tomil	116.2	113.5	102.6	100.2	105.0
Fanif	113.4	100.0	105.4	114.9	108.8
Weloy	110.7	114.8	112.7	112.5	110.7
Rull	116.7	119.6	113.1	104.0	101.9
Gilman	117.0	130.3	85.6	102.0	89.4
Kanifay	139.8	147.3	135.9	129.0	123.6
Dalipebinaw	113.9	119.8	114.8	41.7	53.6
Outer Islands	92.2	87.6	94.6	97.4	88.9
Ulithi	129.0	109.4	118.9	110.4	110.1
Fais	89.3	109.1	130.0	113.5	92.0
Sorol	100.0	133.3	-	-	_
Ngulu	100.0	110.0	85.7	123.5	62.5
Woleai	71.3	75.3	74.5	79.6	86.4
Eauripik	92.4	86.2	94.1	90.3	59.2
Ifalik	89.2	80.9	86.3	100.3	87.0
Faraulap	56.4	67.1	87.6	84.3	79.7
Elato	60.0	64.5	100.0	89.1	77.8
Lamotrek	82.0	79.3	79.4	86.9	81.3
Satawal	101.1	85.6	98.7	109.0	87.0

Source: 1973 TTPI Census, T4a; 1980 TTPI Census; 1987 Yap Census; 1994 FSM Census, Table 13; 2000 FSM Census Table P2-1

The sex ratio also differed by municipality. With the exception of Dalipebinaw, municipalities on Yap Proper displayed a rather masculine population. Dalipebinaw's situation may be due to the location in the area of the garment factory, which employed a large number of female immigrant workers. In contrast, the municipalities in the Outer Islands had female-dominated population, possibly as a result of selective migration for males.

Table 2.6 compares the sex ratio among age groups. In most societies more males are born than females, therefore the excess of males at the young ages of less than 5 years in both 2000 and 1994 was not surprising. The shortage of

males is especially evident at ages 20 to 34, and 50 years and older. The shortage of males for ages 20 to 34 is attributed to emigration, while the shortage of males at ages 50 and older is explained by a combined effect of emigration and mortality (the tendency for males to die younger than females, resulting in the excess of females in the older age groups). By regions, Yap Proper appeared in both censuses to have a higher male to female sex ratio than the Outer Islands, perhaps because of higher number of males migrating to Yap Proper.

Table 2.6. Sex Ratio by Age Group and Region, Yap State: 1994 and 2000

		1994 FSM Census	3		2000 FSM Census	3
Age groups	Total	Yap Proper	Outer Islands	Total	Yap Proper	Outer Islands
Total	99.1	100.3	97.4	96.1	100.0	88.9
Less than 5 yrs	110.0	108.3	112.6	108.2	116.1	97.1
5 to 9 years	102.9	103.3	102.4	105.9	99.1	118.9
10 to 14 years	115.5	112.3	120.6	102.8	99.3	108.8
15 to 19 years	101.0	94.5	109.0	99.6	92.6	115.5
20 to 24 years	66.8	57.7	87.7	80.5	87.1	67.6
25 to 29 years	78.6	87.3	65.1	74.8	79.9	64.1
30 to 34 years	96.4	98.0	93.7	74.3	89.8	46.9
35 to 39 years	101.1	115.2	77.6	95.6	97.2	92.3
40 to 44 years	114.9	129.9	92.1	94.4	105.7	72.0
45 to 49 years	133.7	137.3	126.7	114.5	135.1	82.2
50 to 54 years	89.1	109.0	62.7	125.4	141.3	100.0
55 to 59 years	89.4	96.5	76.6	83.1	108.6	50.0
60 to 64 years	87.9	91.1	83.0	88.9	109.7	55.6
65 to 69 years	98.7	122.2	66.7	88.2	84.2	97.1
70 to 74 years	75.3	80.7	65.6	94.9	112.5	74.1
75 yrs & over	100.0	100.0	100.0	82.4	89.9	69.2

Source: 1994 FSM Census, Table 13; 2000 FSM Census Table P2-1

Dependency Ratio

The dependency ratio measures the degree of economic ease or hardship inherent in a given age-sex structure. However, it is only an index since it assumes certain age groups as exclusively "producers" or "consumers". The dependency ratio should not be confused with the percent economically active. The former considers all persons of working age, while the latter considers only those individuals of working age who are economically active, which is usually less than the dependency ratio (see Chapter 9).

In 2000 the dependency ratio of the Yap was 69 (meaning that for every 100 persons of working-age there are 69 consumers, in terms of food, clothing, shelter, and so forth). The dependency ratio declined from 91 in 1973 to 69 in 2000, showing a relative increase in the working age population (see Table 2.7). The young dependency ratio was about 62 and the old age dependency ratio was about 8, showing that the dependency burden was particularly high among the young. Similar to the total dependency ratio, the young and old dependency ratios decreased over the two decades before the census, as a result of the decline in fertility and increase in emigration of working-age adults.

The dependency ratio varied between the regions in Yap. The dependency ratio for Yap Proper was 63 while the Outer Islands was 82 in 2000, indicating a higher burden of dependency in the Outer Islands.

Table 2.7. Dependency Ratio by Municipality, Yap State: 1973 to 2000

			Total					Young					Old		
Region	1973	1980	1987	1994	2000	1973	1980	1987	1994	2000	1973	1980	1987	1994	2000
Total	91.4	91.8	89.7	78.2	69.4	81.0	81.3	79.8	70.5	61.6	10.4	10.5	9.9	7.7	7.8
Yap Proper	92.4	90.1	85.0	75.9	63.4	81.4	79.7	76.4	68.3	55.9	11.0	10.3	8.6	7.7	7.5
Rumung	152.9	128.1	141.3	116.7	137.7	127.5	105.3	113.0	112.1	118.9	25.5	22.8	28.3	4.5	18.9
Maap	95.3	89.9	108.1	111.2	82.2	83.1	73.8	91.5	97.3	72.0	12.2	16.1	16.7	13.9	10.2
Gagil	107.8	102.0	100.9	79.4	68.0	97.3	89.8	90.3	71.2	59.3	10.5	12.1	10.5	8.3	8.7
Tomil	91.6	86.2	105.5	88.8	67.7	76.7	78.3	95.0	77.7	59.5	15.0	7.8	10.4	11.2	8.2
Fanif	98.3	90.3	91.7	81.9	77.0	85.6	78.6	79.2	71.7	67.3	12.7	11.7	12.5	10.2	9.7
Weloy	91.4	88.2	65.5	76.8	62.0	81.7	80.5	60.6	71.1	55.3	9.7	7.7	4.9	5.7	6.6
Rull	79.8	84.1	81.1	71.3	60.0	72.6	75.1	75.6	65.1	53.4	7.2	9.0	5.4	6.2	6.6
Gilman	81.5	86.9	95.7	106.1	94.2	67.2	70.5	83.7	89.9	80.0	14.3	16.4	12.1	16.2	14.2
Kanifay	96.6	92.3	78.6	89.9	85.8	84.0	79.5	70.4	79.8	75.7	12.6	12.8	8.2	10.1	10.1
Dalipebinaw	134.7	102.9	70.9	27.1	24.0	115.3	95.2	63.3	24.3	21.3	19.4	7.7	7.6	2.8	2.7
Outer Islands	89.7	95.0	98.7	82.0	82.4	80.2	84.2	86.3	74.3	73.9	9.5	10.8	12.4	7.7	8.5
Ulithi	72.1	80.7	74.9	56.8	73.3	59.2	70.7	62.9	52.6	67.3	12.9	9.9	12.0	4.2	6.1
Fais	78.2	137.9	141.5	96.7	110.8	64.7	110.3	120.8	85.6	103.9	13.4	27.6	20.8	11.1	6.9
Sorol	14.3	250.0	-	-	-	14.3	150.0	-	-	-	-	100.0	-	-	-
Ngulu	40.0	16.7	-	81.0	160.0	40.0	16.7	-	52.4	110.0	-	-	-	28.6	50.0
Woleai	100.3	92.7	95.3	90.5	74.1	90.7	85.5	84.9	79.7	63.8	9.6	7.3	10.4	10.8	10.4
Eauripik	119.0	95.2	80.4	61.6	61.4	110.3	85.5	69.6	56.2	51.4	8.6	9.7	10.7	5.5	10.0
Ifalik	84.8	102.6	102.4	86.6	82.7	80.0	92.2	95.2	82.3	75.2	4.8	10.4	7.1	4.3	7.5
Faraulap	91.7	78.4	117.4	81.3	82.6	83.3	71.6	105.5	75.6	75.2	8.3	6.8	11.9	5.7	7.4
Elato	47.6	88.9	119.8	89.1	77.8	38.1	85.2	112.1	82.8	75.9	9.5	3.7	7.8	6.3	1.9
Lamotrek	109.0	100.0	105.9	98.5	93.7	103.6	92.6	97.1	90.2	85.7	5.4	7.4	8.8	8.2	8.0
Satawal	112.1	112.1	123.0	106.6	99.6	105.5	95.1	103.8	93.4	88.7	6.7	17.0	19.1	13.3	10.9

Source: 1973 TTPI Census, T4a; 1980 TTPI Census; 1987 Yap Census; 1994 FSM Census, Table 13; 2000 FSM Census Table P2-1

Table 2.8 gives some selected demographic indicators of Yap in 2000 and some neighboring countries in the Pacific in earlier years. Among the FSM States, Yap had the oldest population and lowest dependency ratio. Compared to neighboring Pacific countries, Yap was among those with average median age and dependency ratio.

Table 2.8. Selected Demographic Indicators from Other Pacific Countries, Yap State: Various Years

Country	Census year	Intercensal growth (%)	Median age	Sex ratio	Dependency ratio
FSM	(2000)	0.3	18.9	103	79
Yap	(2000)	0.1	20.9	96	69
Chuuk	(2000)	0.1	18.5	103	81
Pohnpei	(2000)	0.4	18.9	105	79
Kosrae	(2000)	0.9	19.2	101	83
Guam	(2000)	1.5	27.4	105	56
Kiribati	(1995)	2.5	19.8	97	77
Marshall Islands	(1999)	2.0	17.7	105	82
Nauru	(1992)	2.9	18.0	105	83
CNMI	(2000)	3.2	28.7	86	32
Palau	(1995)	2.2	30.4	114	47

Source: 1973 TTPI Censuses, T4a; 1980 TTPI Census, Unpublished; 1994 & 2000 FSM Census, unpublished; "Oceania Population 2000", SPC; "2000 Census of Population and Housing: Summary population and housing characteristics, Guam, 2000", IPC, US Bureau of Census; "2000 Census of Population and Housing: Summary population and housing characteristics, Commonwealth of the Northern Mariana Islands, 2000, ", IPC, US Bureau of Census.

Accuracy Analysis for Age and Sex Data

To evaluate the accuracy of the age and sex data, the Myers and Bachi methods were used to measure the level of digit preference. The methods measure the preference and dislike for ages ending in all the digits (0 to 9). The Myers and Bachi indices measure the excess or deficit of persons reporting ages ending with any of the 10 digits, expressing these deviations as percentages. Values close to zero indicate accurate age reporting. In 2000, the Myers and Bachi indices were 3.9 and 2.5 respectively (see Table 2.9). Ages ending with 0, 2, and 7 were most preferred in both calculations, whereas ages ending with 5 were least preferred.

The Myers Index of 4.9 for males and 3.7 for females in 2000 showed accurate age reporting for females compared to males. Both indices showed that reporting of ages was most accurate in the last two censuses, especially for females. Also, these indices showed improvement in reporting of age data over the period of close to 30 years observed.

Table 2.9. Myers and Bachi Method of Measuring Digit Preference, Yap State: 1973 to 2000

	M	yers method		Ва	chi method	
Terminal digit	Total	Males	Females	Total	Males	Females
2000:	3.9	4.9	3.7	2.5	3.1	2.7
0	0.0	-0.1	0.2	-0.2	-0.6	0.2
1	0.3	0.4	0.1	0.7	0.9	0.5
2	0.0	-0.1	0.0	0.5	0.7	0.3
3	-0.9	-1.6	-0.2	-0.5	-1.3	0.3
4	0.2	0.6	-0.1	0.3	0.8	-0.1
5	-1.0	-0.5	-1.5	-0.9	-0.4	-1.3
6	0.3	0.8	0.0	0.5	0.2	0.8
7	0.0	-0.2	0.1	0.1	-0.2	0.4
8	0.3	0.2	0.4	-0.8	-0.7	-0.9
9	0.8	0.5	1.0	0.6	0.6	0.6
Index						
1994	2.2	4.7	4.6	1.9	3.2	2.7
1987	6.0	6.8	6.3	3.2	4.2	3.3
1980	6.9	7.6	8.3	5.7	5.3	7.7
1973	5.3	5.6	5.8	4.0	3.5	5.3

Source: 1973 & 1980 TTPI Censuses; 1987 Yap State Census; 1994 & 2000 FSM Censuses

Note: The index for Myers method is the sum of the absolute values of the deviations; for Bachi method, the index is the sum of the positive deviations (one-half the sum of the absolute deviations).

Conclusions

The age and sex composition of Yap changed over the last two decades. These shifts in the age-sex structure have important implications for future planning.

The annual growth rate of Yap between 1994 and 2000 was 0.1 percent, declining from a 1.4 percent rate from 1987 to 1994. This decline is attributed mostly to a decline in fertility and increasing emigration. Compared to other Micronesian countries, Yap's current 0.1 annual rate of growth was moderate.

The sex ratio decreased over the past three decades, from about 106 in 1973 to slightly over 96 in 2000. Yap State in 2000, therefore, had roughly 96 males to every 100 females, making the population overwhelmingly females. This was partly due to longer life expectancy for females and increased out-migration for males and in-migration for females, especially those employed at the garment factory.

The median age was approaching 21 years in 2000, an increase of just over one year from the previous census years, suggesting that the population had gradually aged over the two decades. This increase almost certainly came from the combination of declining fertility (females having fewer children), low mortality (people dying at an older age now than they were before), and selective migration (immigration of working age persons). The median age remain about stable in the outer islands, whereas in Yap Proper it increased by 1 year over the period observed.

The dependency ratio decreased over the past three decades. Although the decrease in the dependency ratio can be considered as a positive change (as it implied more people of working-age and fewer people to support), the dependency ratio is still considered high, even by Pacific standard. This is true despite the fact that Yap has the lowest dependency ratio compared to the other three FSM States.

CHAPTER 3 HOUSEHOLDS AND MARITAL STATUS

Introduction

Demographic changes and socioeconomic shifts affect household and family structure. The results from recent censuses, including the 2000 census, show that as Yap continue to have more and more interactions with other cultures typical extended family household structure is becoming less common. The number of single parent families increased, possibly as the result of increasing divorce and emigration of one parent to find cash employment. This chapter presents a summary of the analysis based on the 2000 FSM census results on the size and composition of households and families and marital status in the State of Yap. The analysis also compares the results to those of recent censuses.

Definitions

Household Type and Relationship

The 2000 FSM Census defined a household to include all persons who occupy a housing unit. A housing unit is a house, apartment, mobile home, group of rooms, or single room that is occupied (or, if vacant, intended for occupancy) as a separate living quarter. Separate living quarters are those in which the occupants live and eat separately from any other persons in the building and who have direct access from the outside of the building or through a common hall. Occupants may be a single family, one person living along, two or more families living together, or any other group of related or unrelated persons who share living arrangements. The count of households or householders either equals or greater than the count of occupied housing units.

Persons per household was obtained by dividing the number of persons in households by the number of households (or householders). In cases where persons in households are cross-classified by ethnic origin or race, persons in the households are classified by the ethnic origin or race of the householder rather than the ethnic origin or race of each individual.

Relationship to householder data were derived from questionnaire item 2, and asked of all persons.

Householder -- the person (or one of the persons) in whose name the home was owned, being bought, or rented and who is listed as person 1 on the census questionnaire. If there was no such person in the household, any adult household member 15 years old and over could be designated as the householder. Households were classified by type according to the sex of the householder and the presence of relatives to the householder. The census distinguished two types of householders: a "family householder" and a "non-family householder". A family householder is a householder living with one or more persons related to the householder by birth, marriage, or adoption. The householder and all persons in the household related to him or her are family members. A non-family householder is a householder living alone or with non-relatives.

Husband/wife -- a person reported as the husband or wife of the "householder". There may be other married couples in the household but the entry for "Husband/wife" was only marked for the person reported as married to the "householder".

Natural-born son/daughter -- a son or daughter of the householder by birth, regardless of the age of the child.

Adopted son/daughter -- a dependent child residing in the household being raised as a son or daughter of the householder and for whom the householder provided the principal means of support with intent of the child remaining in the household as a son or daughter.

Brother/sister -- the brother or sister of the householder, including stepbrothers, stepsisters, and brothers and sisters by adoption. Brothers-in-law and sisters-in-law were included in the "other relative" category on the questionnaire.

Father/mother -- a person who was the father or mother of the "householder". This includes natural parents, stepparents and parents by adoption.

Other relatives -- anyone else related to the householder by blood, marriage, or adoption. This includes in-laws.

Non-relatives -- any household member not related to the householder by birth, marriage, or adoption or cannot be described in by the other categories given.

Person per family is obtained by dividing the number of persons in families (or family householders) by the total number of families (or family householders). In cases where the measure "persons in family" or "persons per family" are cross-tabulated by ethnic origin or race, the ethnic origin or race refers to the householder rather than the ethnic origin or race of each individual.

Group Quarters

The 2000 FSM Census classified all persons not living in households as living in group quarters. Two general categories of persons in group quarters were recognized: (1) institutionalized persons and (2) other persons in group quarters (also referred to as "non institutional group quarters"). Group quarters have not played a particularly important role in Yap.

Institutionalized persons included persons under formally authorized, supervised care or custody in institutions as of the time of enumeration. Such persons were classified as patients or inmates of an institution (i.e., prison, hospital, etc.) regardless of the availability of nursing or medical care, length of stay, or number of persons in the institution. Generally, institutionalized persons were restricted to the institution buildings or grounds (or must have passes or escorts to leave) and thus had limited interaction with the surrounding community. Also, institutionalized persons generally were under the care of trained staff who had the responsibility for their safekeeping and supervision.

Other persons living in group quarters included those who lived in group quarters other than institutions. Persons who lived in rooming houses, group homes (homes for the mentally ill, mentally retarded, physically handicapped, abusers of drug or alcohol, and other group homes), and religious group quarters were classified as other persons in group quarters when there were 10 or more unrelated persons living in the unit; otherwise, these living quarters were classified as housing units. Persons living in college dormitories, agricultural workers' dormitories, and other workers' dormitories, were classified as other persons living in group quarters regardless of the number of inhabitants, as were crews of maritime vessels and staff residents of institutions.

Slight changes were made to the definition of group quarters between censuses, however these changes should not significantly affect the comparability of data with earlier censuses because of the relatively small number of persons involved.

Marital Status

The 2000 FSM Census collected information on marital status with questionnaire item 5, asked of all the persons. The marital status classification refers to the status at the time of enumeration (April 1, 2000). All persons were asked whether they were "now married", "widowed", "divorces", "separated". or "never married". Traditional marriages were reported as "now married". The questionnaire did not classify remarried persons, if a person divorced and remarried they were classified as married. The census office tabulated marital status data for all persons aged 15 years and over.

- Never married -- included all persons who never married.
- Now married -- included all persons whose current marriage has not ended by widowhood or divorce.
- Separated -- included persons legally separated or otherwise absent from their spouse because of marital discord. It includes persons who had been deserted or who had parted because they no longer want to live together but who had not obtained a divorce.
- Divorced -- included persons who are legally divorced and who have not remarried.
- Widowed -- included widows and widowers who have not remarried.

When a person did not report marital status, census personnel imputed this information according to the relationship to the householder and sex and age of the subject.

Limitations and Comparability. No systematic errors appeared in the data collected by the 2000 FSM Census on household and marital status. However, slight variations in certain definitions needed to be addressed to avoid

confusion and erroneous conclusions. The 2000 definition of a household was the same as that used in 1994., but slightly different from the definition used during the 1987 census. While the 1994 and 2000 censuses considered the status of occupancy by a household as well as the housing unit itself, the 1987 definition was based only on the unit in a structure. Furthermore, the relationship categories, "natural-born son/daughter and "adopted son/daughter," shown in the 2000 and 1994 censuses are not the same in the 1987 census, which only considered "son" and "daughter" for these two relationship categories.

Analysis of Data on Households and Marital Status

Households and Families

The total number of persons living in regular households in Yap State increased from about 7,600 in 1973 to over 10,800 in 2000. Persons living in group quarters also increased from about 350 in 1973 to about 530 in 1994, but declined to about 410 in 2000. Total number of persons per household has fluctuated since 1973, from 5.2 to 5.3 in 2000, although in 1994, there was an average of 5.5 persons per household in the state. The number of persons per family also increased significantly from 4.3 in 1973 to 5.9 in 1994. In 2000, the number of person per family had dropped to around 5.7 (see Table 3.1).

Table 3.1: Type of Living Quarters in Yap State: 1973 to 2000

		Census years		
Characteristics	1973	1987	1994	2000
Total persons	7,923	10,139	11,178	11,241
In regular households	7,570	10,044	10,648	10,832
Percent	95.5	99.1	95.3	96.4
In group quarters	353	95	530	409
Percent	4.5	0.9	4.7	3.6
Inmate of institution	-	-	18	26
Other	353	95	512	383
Persons per household	5.2	4.7	5.5	5.3
Persons per family	4.3	-	5.9	5.7
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Source: 1973 TTPI Census, Table T3; 1987 Yap Census; 1994 FSM Census, Table P14; 2000 FSM Census, Table P-2-2.

Of the total regular household members (10,832) in 2000, close to 19 percent were householders, a decrease of 0.3 percentage point from 1973 (Table 3.2). Among the household members, children continued to lead in numbers (about 36 percent). Nevertheless, the proportion of children living in the household decreased considerably between 1994 and 2000; a difference of about 10 percentage points.

Other relative's contribution to the overall household composition in the State remained roughly stable at over 20 percent between 1973 and 1994. By 2000, it increased to a little over 32 percent. The proportion of non-relatives decreased from over 2 percent in 1973 to about 1 percent in 2000. Thus, it cannot be stated with certainty that household composition in the state shifted from the traditional extended family to a more westernized or immediate family setup. It might be true that more and more people were beginning to adopt the westernized concept of the "family," but still, as shown by the 2000 census results, there were still a large number of families that maintained the more traditional concept of extended family.

The composition of households in Yap State changed between 1973 and 2000 in terms of relationship to the householder (Table 3.2). In 2000, about 19 percent of the total household members were householders, a decrease of nearly 2 percentage points from 1987; the census year with the highest proportion of householders recorded. This trend was consistent with the increase and decrease of the size of household.

Table 3.2: Households Composition, Yap State: 1973 to 2000

		Census Y	ears	Percent					
Relationship	1973	1987	1994	2000	1973	1987	1994	2000	
In regular households	7,570	10,044	10,648	10,832	100.0	100.0	100.0	100.0	
Householder	1,438	2,124	1,925	2,030	19.0	21.1	18.1	18.7	
Spouse	915	1,248	1,249	1,304	12.1	12.4	11.7	12.0	
Child	3,280	3,737	4,826	3,850	43.3	37.2	45.3	35.5	
Other relative	1,775	2,868	2,496	3,514	23.4	28.6	23.4	32.4	
Non-relative	162	67	152	134	2.1	0.7	1.4	1.2	

Source: 1973 TTPI Census, Table T3; 1987 Yap Census; 1994 FSM Census, Table P14; 2000 FSM Census, Table P-2-2.

Yap Proper and the Outer Islands had slightly different household compositions (Table 3.3). In 1994, householders made up about 20 percent of the household composition on Yap Proper, as opposed to about 15 percent in the Outer

Islands. The proportion of spouses in the household composition was about 13 percent for Yap Proper, and 9 percent for the Outer Islands. Similar trends for householders and spouses were observed during the 2000 census. In both censuses, natural children constituted the largest proportion of the household composition. Other relatives living in the household showed a much higher proportion in the Outer Islands than on Yap Proper. In 1994, other relatives made up roughly 26 percent of the household composition on Yap Proper compared to about 38 percent in the Outer Islands. In 2000, the proportion of other relatives living in households on Yap Proper increased slightly to about 29 percent, while that of the Outer Islands remained at about 38 percent: the same level as 1994. Still, other relatives living in the households were much more prevalent in the Outer Islands due to a more heightened sense of the traditional extended family setup. For non-relatives living in the households, the Outer Islands consistently showed a higher proportion than that of Yap Proper. Among the islands there, Woleai had the largest proportion in 1994 (about 7 percent). By 2000, Ulithi had the greatest share of non-relatives per household in the state at about 4 percent.

Table 3.3: Household Composition by Municipality, Yap State: 1994 & 2000

				1994							2000			
		Total	House-		Natural	Other	Non-		Total	House-		Natural	Other	Non-
Usual residence	Total	Percent	holder	Spouse	child	relative	relative	Total	Percent	holder	Spouse	child	relative	relative
Total	10,648	100.0	18.1	11.7	38.3	30.5	1.4	10,832	100.0	18.7	12.0	35.5	32.4	1.2
Yap Proper	6,488	100.0	19.9	13.3	40.1	25.5	1.3	6,982	100.0	20.2	13.4	36.0	29.2	1.1
Rumung	139	100.0	19.4	12.9	43.2	24.5	-	126	100.0	20.6	14.3	40.5	24.6	-
Maap	547	100.0	20.8	13.0	41.7	24.1	0.4	592	100.0	19.4	12.3	36.5	30.6	1.2
Gagil	674	100.0	20.2	13.1	38.7	28.0	-	734	100.0	21.5	14.2	40.2	23.4	0.7
Tomil	878	100.0	19.1	13.0	44.5	23.2	0.1	1,023	100.0	19.0	12.2	34.1	32.4	2.3
Fanif	462	100.0	20.8	13.2	35.3	30.1	0.6	547	100.0	18.5	12.4	34.7	33.8	0.5
Weloy	1,140	100.0	19.2	12.7	38.4	27.0	2.6	1,134	100.0	20.4	13.8	35.4	28.9	1.5
Rull	1,933	100.0	19.8	14.2	39.5	24.5	2.1	1,992	100.0	20.4	14.0	34.2	30.2	1.2
Gilman	204	100.0	20.1	12.7	44.6	22.1	0.5	233	100.0	22.7	11.2	44.2	21.9	-
Kanifay	245	100.0	18.8	11.4	40.8	27.3	1.6	275	100.0	20.7	13.8	40.7	24.7	-
Dalipebinaw	266	100.0	23.3	14.3	39.1	22.9	0.4	326	100.0	21.8	15.3	35.9	27.0	-
Outer Islands	4,160	100.0	15.2	9.3	35.6	38.3	1.7	3,850	100.0	16.0	9.6	34.6	38.4	1.4
Ulithi	917	100.0	17.0	9.5	42.2	30.0	1.3	773	100.0	19.3	11.6	35.8	28.8	4.4
Fais/Sorol	301	100.0	15.0	11.3	45.2	28.2	0.3	215	100.0	20.5	13.0	43.3	22.8	0.5
Ngulu	38	100.0	28.9	7.9	21.1	42.1	-	26	100.0	23.1	7.7	19.2	50.0	-
Woleai	844	100.0	12.0	6.8	23.6	51.2	6.5	975	100.0	12.2	7.6	29.1	50.1	1.0
Eauripik	118	100.0	20.3	10.2	38.1	31.4	-	113	100.0	10.6	2.7	30.1	55.8	0.9
Ifalik	653	100.0	11.5	8.6	32.6	47.3	-	561	100.0	14.6	9.1	36.0	40.3	-
Faraulap	223	100.0	18.4	9.9	38.6	32.7	0.4	221	100.0	19.0	10.9	40.7	28.1	1.4
Elato	121	100.0	14.0	9.1	42.1	34.7	-	96	100.0	14.6	9.4	24.0	52.1	-
Lamotrek	385	100.0	14.8	11.2	47.5	26.5	-	339	100.0	16.2	9.1	44.0	30.7	-
Satawal	560	100.0	19.1	10.7	30.5	39.5	0.2	531	100.0	17.7	10.5	33.3	37.5	0.9

Source: 1994 FSM Census, Table P14; 2000 FSM Census, Table P-2-2.

Table 3.4 presents the number of persons per household by region and municipality between the 1994 and 2000 censuses. In 1994, the total number of persons per household was greater in the Outer Islands (6.6 persons) then that in Yap Proper (5.0 persons). The same trend was also observed in 2000 where the Outer Islands had about 6.2 persons per household compared to about 4.9 for Yap Proper. This again corresponds to the fact that the extended family is still common in the Outer Islands.

Furthermore, 119 households had 10 or more persons residing in them in 1994. A majority of these households (64) were in the Outer Islands compared to 55 on Yap proper. These types of households increased in numbers in 2000 to 205, with Yap Proper having the largest share at 120 households compared to 85 in the Outer Islands.

Table 3.4: Persons per Households by Municipality, Yap State: 1994 and 2000

		19	994 Census			2000 Census					
				Household						ds with 10	
		House-	Person per _		e persons		House-	Person per		ore persons	
Usual residence	Persons	holds	household	Number	Percent	Persons	holds	household	Number	Percent	
Total	10,648	1,925	5.5	119	0.1	10,832	2,030	5.3	205	0.1	
Yap Proper	6488	1,291	5.0	55	-	6,982	1,413	4.9	120	0.1	
Rumung	139	27	5.1	1	-	126	26	4.8	2	0.1	
Maap	547	114	4.8	2	-	592	115	5.1	10	0.1	
Gagil	674	136	5.0	6	-	734	158	4.6	7	-	
Tomil	878	168	5.2	5	-	1,023	194	5.3	12	0.1	
Fanif	462	96	4.8	5	0.1	547	101	5.4	11	0.1	
Weloy	1,140	219	5.2	10	-	1,134	231	4.9	22	0.1	
Rull	1,933	382	5.1	21	0.1	1,992	407	4.9	34	0.1	
Gilman	204	41	5.0	1	-	233	53	4.4	4	0.1	
Kanifay	245	46	5.3	3	0.1	275	57	4.8	5	0.1	
Dalipebinaw	266	62	4.3	1	-	326	71	4.6	13	0.2	
Outer Islands	4,160	634	6.6	64	0.1	3,850	617	6.2	85	0.1	
Ulithi	917	156	5.9	15	0.1	773	149	5.2	10	0.1	
Fais/Sorol	301	45	6.7	-	-	215	44	4.9	2	-	
Ngulu	38	11	3.5	-	-	26	6	4.3	-	-	
Woleai	844	101	8.4	25	0.2	975	119	8.2	40	0.3	
Eauripik	118	24	4.9	-	-	113	12	9.4	5	0.4	
Ifalik	653	75	8.7	17	0.2	561	82	6.8	13	0.2	
Faraulap	223	41	5.4	-	-	221	42	5.3	1	-	
Elato	121	17	7.1	2	0.1	96	14	6.9	1	0.1	
Lamotrek	385	57	6.8	1	-	339	55	6.2	7	0.1	
Satawal	560	107	5.2	4	-	531	94	5.6	6	0.1	

Source: 1994 FSM Census, Table P15; 2000 FSM Census, Table P-2-3.

Table 3.5 further presents the distribution of the households in Yap State during 1987, 1994, and 2000. As the three censuses differed slightly in the definition of housing units, the results should be used with caution. The 1987 definition was based on the units in a structure, while the 1994 and 2000 censuses considered the status of occupancy by a household as well. Of the three census years, 1994 showed the highest percentage of households with 8 or more persons at about 23 percent. In 2000, close to 21 percent of all households in the states had 8 or more members; an increase of about 5 percentage points from that of the 1987 census. On Yap Proper, households with 8 or more people remained at about the same level (between 16.8 and 18.4 percent) during the three censuses. In the Outer Islands, a big increase in the proportion of housing with 8 or more persons occured, from a low of about 14 percent in 1987 to a high of over 33 percent in 1994.

Smaller households with 3 or fewer persons decreased between the 1987 and 1994 censuses but had slowly started to increase especially on Yap Proper by 2000 probably as a result of more westernized influence on the island and less attachment to the more traditional notion of the extended family.

Table 3.5: Household Size by Region, Yap State: 1980,1994 and 2000

	Numbe	r of Housel	holds	Annual Perc	ent Change	I	Percent		Cumul	ative. Perce	ent
Size of Household	1987	1994	2000	1987-1994	1994-2000	1987	1994	2000	1987	1994	2000
Total	2,119	1,925	2,049	-10.1	6.1	100.0	100.0	100.0			
1	267	152	168	-75.7	9.5	12.6	7.9	8.2	100.0	100.0	100.0
2	281	179	180	-57.0	0.6	13.3	9.3	8.8	87.4	92.1	91.8
3	267	200	240	-33.5	16.7	12.6	10.4	11.7	74.1	82.8	83.0
4	312	284	303	-9.9	6.3	14.7	14.8	14.8	61.5	72.4	71.3
5	274	257	302	-6.6	14.9	12.9	13.4	14.7	46.8	57.7	56.5
6	206	224	255	8.0	12.2	9.7	11.6	12.4	33.9	44.3	41.8
7	177	181	174	2.2	-4.0	8.4	9.4	8.5	24.2	32.7	29.3
8+	335	448	427	25.2	-4.9	15.8	23.3	20.8	15.8	23.3	20.8
Yap Proper	1,408	1,291	1,432	-9.1	9.8	100.0	100.0	100.0			
1	217	119	143	-82.4	16.8	15.4	9.2	10.0	100.0	100.0	100.0
2	190	141	151	-34.8	6.6	13.5	10.9	10.5	84.6	90.8	90.0
3	171	163	187	-4.9	12.8	12.1	12.6	13.1	71.1	79.9	79.5
4	197	201	225	2.0	10.7	14.0	15.6	15.7	58.9	67.2	66.4
5	167	176	209	5.1	15.8	11.9	13.6	14.6	45.0	51.7	50.7
6	120	138	162	13.0	14.8	8.5	10.7	11.3	33.1	38.0	36.1
7	110	116	108	5.2	-7.4	7.8	9.0	7.5	24.6	27.3	24.8
8+	236	237	247	0.4	4.0	16.8	18.4	17.2	16.8	18.4	17.2
Outer Islands	711	634	617	-12.1	-2.8	100.0	100.0	100.0			
1	50	33	25	-51.5	-32.0	7.0	5.2	4.1	100.0	100.0	100.0
2	91	38	29	-139.5	-31.0	12.8	6.0	4.7	93.0	94.8	95.9
3	96	37	53	-159.5	30.2	13.5	5.8	8.6	80.2	88.8	91.2
4	115	83	78	-38.6	-6.4	16.2	13.1	12.6	66.7	83.0	82.7
5	107	81	93	-32.1	12.9	15.0	12.8	15.1	50.5	69.9	70.0
6	86	86	93	-	7.5	12.1	13.6	15.1	35.4	57.1	54.9
7	67	65	66	-3.1	1.5	9.4	10.3	10.7	23.3	43.5	39.9
8+	99	211	180	53.1	-17.2	13.9	33.3	29.2	13.9	33.3	29.2

Source: 1980 TTPI Census; 1994 FSM Census, Table P15; 2000 FSM Census, Table P-2-3.

Marital Status

Information of marital status is useful in social studies and in developing plans or policies directly or indirectly related to household and families. Data on marital status are also important in connection with fertility. When females delay marriage - for schooling, to enter the work force, or for some other reason - they decrease both their period of exposure to fertility and their total fertility. A strong relationship exists between age at first marriage and the number of children a woman has, partly because earlier marriage gives more time for births, and partly because younger women are more fertile than older women.

Table 3.6 presents marital status for the resident population in Yap during the last four census years: 1973, 1987, 1994, and 2000. Among the persons 15 years and over in 2000, 50 percent were reported married, about 39 percent were never married, 5 percent were separated or divorced, and about 7 percent were widowed. The proportion of married persons decreased from nearly 57 in 1973 to about 50 percent in 2000. On the other hand, the proportion of those never married increased from about 28 in 1973 to nearly 39 percent in 2000. This shows a delay in age at marriage and a decreasing trend in the number of married couples in Yap State over the years.

The proportion separate/divorced as well as widowed showed a consistent gradual decline as well. The proportion widowed declined by over 3 percentage points from about 10 percent in 1973 to about 7 percent in 1994 and 2000. The declining widowhood could be, among other things, due to declining mortality or increasing life expectancy. The result of marital status for males aged 15 years and over was similar to that of the total population, except for a relatively higher proportion of never married men as well as married, and a relatively lower proportion of separated/divorced and widowed men as compared with the total population. In 2000, the proportion of married and never married men was about 53 and 40 percent, respectively. This conformed to the inverse relationship between married couples and single individuals whereby there is a growing trend of declining numbers of married couples compared to an increase in single individuals.

Marital status for females in Yap State was also similar to the total population. Unlike the males, females had a lower proportion married and never married than the total population. The proportion separated/divorced and widowed was higher than the males. The higher rate of widowhood was most likely due to higher male mortality in later ages.

The proportion of females never married increased by about 14 percentage points between 1973 and 2000. Some of this increase was possibly due to larger proportion of females in the younger age groups, who had not yet married, and were likely to delay their marriage to later in life. The proportion married declined from about 57 percent in 1973 to about 47 percent in 2000. The proportions of separated and divorced females were slightly higher than males, possibly because of higher likelihood of males remarrying after a divorce, or divorce/separated males leaving the island. The proportion of females widowed decreased by about 4 percentage points from 1973 to 2000.

Table 3.6: Marital Status for Aged 15 Years and Over by Sex, Yap State: 1973 to 2000

		Census Years		
Marital status	1973	1987	1994	2000
Total	4,347	5,872	6,754	7,153
Percent	100.0	100.0	100.0	100.0
Never married	27.8	31.2	37.8	38.5
Now married	56.5	55.9	50.6	50.0
Separated/divorced	6.1	5.9	5.1	5.0
Widowed	9.6	7.0	6.5	6.5
Males	2,143	2,947	3,254	3,408
Percent	100.0	100.0	100.0	100.0
Never married	32.6	34.9	39.0	40.3
Now married	56.2	56.3	53.6	52.9
Separated/divorced	5.7	5.3	4.5	4.0
Widowed	5.5	3.5	2.8	2.8
Females	2,204	2,925	3,500	3,745
Percent	100.0	100.0	100.0	100.0
Never married	23.2	27.5	36.7	36.9
Now married	56.8	55.4	47.8	47.4
Separated/divorced	6.4	6.6	5.6	5.8
Widowed	13.6	10.5	9.9	9.8

Source: 1973 TTPI Census, Table T15; 1987 Yap Census; 1994 FSM Census, Table P22; 2000 FSM Census, Table P2-10.

Table 3.7 presents marital status by municipality and region. In 2000, Yap Proper had a higher proportion married than the Outer Islands, 51 and 48 percent, respectively. This is similar to the distribution of marriage couples by municipalities and regions in 1994 where Yap Proper led Outer Islands by a difference of about 8 percentage points. The difference in age structure on the Outer Islands, where the population was younger compared to that of Yap Proper (see Chapter 2, Table 2.4), may be the cause of this disparity in marital distribution. On Yap Proper the proportion of never-married was lower (37 percent) than in the Outer Islands (43 percent). The high proportion of never married in Dalipebinaw (slightly less than 69 percent) was due to the garment factory workers most of whom were reported as never married.

The proportion separated/divorced was consistently higher in Yap Proper than the Outer Islands by about 5 percentage points in both 1994 and 2000. The lower proportion of separated/divorced in the Outer Islands was most likely due to the more traditional values of maintaining a marriage on the Outer Islands.

Table 3.7: Marital Status for Age 15 Years and Over by Municipality, Yap State: 1994 and 2000

			1	994					20	000		
			Never	Now	Separated/				Never	Now	Separated/	
Municipality	Total	Percent	married	married	divorced	Widowed	Total	Percent	married	married	divorced	Widowed
Total	6,754	100.0	37.8	50.6	5.1	6.5	7,153	100.0	38.5	50.0	5.0	6.5
Yap Proper	4,234	100.0	33.9	53.4	6.9	5.7	4,862	100.0	36.5	51.2	6.6	5.7
Rumung	69	100.0	18.8	59.4	13.0	8.7	63	100.0	19.0	60.3	11.1	9.5
Maap	295	100.0	27.5	53.2	11.2	8.1	358	100.0	32.4	53.9	8.1	5.6
Gagil	432	100.0	33.3	52.5	6.9	7.2	475	100.0	34.7	52.4	5.1	7.8
Tomil	528	100.0	35.8	49.8	6.8	7.6	660	100.0	36.2	48.6	8.5	6.7
Fanif	280	100.0	29.6	56.4	8.2	5.7	339	100.0	33.6	50.7	9.4	6.2
Weloy	710	100.0	26.8	60.4	7.9	4.9	788	100.0	31.5	57.1	6.3	5.1
Rull	1,223	100.0	28.9	61.1	5.6	4.5	1,345	100.0	30.5	57.9	6.2	5.4
Gilman	115	100.0	26.1	53.0	9.6	11.3	137	100.0	34.3	48.2	6.6	10.9
Kanifay	142	100.0	34.5	50.0	7.7	7.7	163	100.0	35.0	49.7	9.2	6.1
Dalipebinaw	440	100.0	69.1	24.8	3.6	2.5	534	100.0	68.7	26.2	2.8	2.2
Outer Islands	2,520	100.0	44.3	45.8	2.1	7.9	2,291	100.0	42.7	47.6	1.6	8.1
Ulithi	675	100.0	59.3	33.5	1.0	6.2	473	100.0	44.8	47.4	1.3	6.6
Fais/Sorol	170	100.0	41.8	45.3	2.4	10.6	109	100.0	33.0	58.7	1.8	6.4
Ngulu	27	100.0	29.6	40.7	18.5	11.1	15	100.0	20.0	53.3	13.3	13.3
Woleai	491	100.0	38.9	49.7	2.4	9.0	618	100.0	41.7	49.0	2.3	7.0
Eauripik	77	100.0	40.3	49.4	-	10.4	77	100.0	51.9	36.4	-	11.7
Ifalik	365	100.0	42.2	50.4	2.2	5.2	330	100.0	48.2	41.5	1.8	8.5
Faraulap	130	100.0	46.9	43.1	-	10.0	130	100.0	40.0	49.2	2.3	8.5
Elato	68	100.1	36.8	51.5	1.5	10.3	55	100.0	32.7	56.4	3.6	7.3
Lamotrek	210	100.0	38.6	49.5	1.9	10.0	189	100.0	47.1	45.0	-	7.9
Satawal	307	100.0	30.9	58.0	3.6	7.5	295	100.0	38.0	49.8	0.3	11.9

Source: 1994 FSM Census, Table P22; 2000 FSM Census, Table P2-10.

Table 3.7.1 presents the results of marital status for male aged 15 years and over, which was similar to that of the total population, except for a relatively lower proportion of separated/divorced and widowed men as compared with the total population. In 2000, the proportion of married and never married men was about 53 and 40 percent respectively, while the proportions of separated/divorced and widowed were about 4 and 3 percent respectively. This was similar to the results of male marital status found in 1994 where the proportion of married and never married men was 54 and 39 percent, respectively. Likewise, the proportions of separated/divorced and widowed males were about 5 and 3 percent, respectively.

Table 3.7.1: Marital Status for Males Age 15 Years and Over by Municipality, Yap State: 1994 and 2000

			19	94					20	00		
			Never	Now	Separated/				Never	Now	Separated/	
Municipality	Total	Percent	married	married	divorced	Widowed	Total	Percent	married	married	divorced	Widowed
Total	3,254	100.0	39.0	53.6	4.5	2.8	3,408	100.0	40.3	52.9	4.0	2.8
Yap Proper	2,070	100.0	34.3	56.6	6.3	2.8	2,404	100.0	38.6	53.2	5.6	2.6
Rumung	43	100.0	23.3	48.8	16.3	11.6	29	100.0	17.2	65.5	10.3	6.9
Maap	146	100.0	30.1	54.1	11.6	4.1	185	100.0	38.4	51.9	7.0	2.7
Gagil	227	100.0	39.2	50.7	4.8	5.3	244	100.0	36.5	52.0	5.7	5.7
Tomil	256	100.0	40.2	49.6	6.6	3.5	328	100.0	39.9	49.4	7.9	2.7
Fanif	145	100.0	33.1	55.2	8.3	3.4	174	100.0	37.4	49.4	9.8	3.4
Weloy	369	100.0	29.3	64.2	5.1	1.4	425	100.0	37.9	56.2	3.8	2.1
Rull	640	100.0	32.8	61.9	4.1	1.3	694	100.0	35.0	59.4	4.0	1.6
Gilman	58	100.0	31.0	53.4	10.3	5.2	63	100.0	38.1	50.8	6.3	4.8
Kanifay	78	100.0	41.0	43.6	11.5	3.8	88	100.0	46.6	45.5	6.8	1.1
Dalipebinaw	108	100.0	44.4	48.1	6.5	0.9	174	100.0	55.7	37.9	4.6	1.7
Outer Islands	1,184	100.0	47.3	48.3	1.4	3.0	1,004	100.0	44.3	52.3	0.3	3.1
Ulithi	358	100.0	65.1	31.8	0.6	2.5	250	100.0	50.0	46.0	0.4	3.6
Fais/Sorol	85	100.0	51.8	45.9	2.4	-	49	100.0	36.7	61.2	2.0	-
Ngulu	15	100.0	40.0	40.0	13.3	6.7	4	100.0	-	100.0	-	-
Woleai	202	100.0	40.1	55.4	0.5	4.0	269	100.0	43.9	54.3	-	1.9
Eauripik	33	100.0	30.3	63.6	-	6.1	24	100.0	50.0	50.0	-	-
Ifalik	176	100.0	41.8	54.3	3.4	0.4	140	100.0	48.6	46.4	-	5.0
Faraulap	49	100.0	38.8	59.2	-	2.0	48	100.0	35.4	64.6	-	-
Elato	32	100.0	37.5	59.4	-	3.1	23	100.0	26.1	65.2	4.3	4.3
Lamotrek	89	100.0	38.2	57.3	1.1	3.4	73	100.0	41.1	56.2	-	2.7
Satawal	145	100.0	33.8	60.0	2.1	4.1	124	100.0	41.1	53.2	-	5.6

Source: 1994 FSM Census, Table P22; 2000 FSM Census, Table P2-10.

Table 3.7.2 presents marital status for females aged 15 years and over in Yap State during 1994 and 2000. Unlike the males, females had a lower proportion married and never married than the total population. This was true for both censuses where the proportion of never married and married females remained at slightly below 37 and above 47 percent, respectively. On Yap Proper, never-married females increased slightly in proportion from about 34 to 35 percent between 1994 and 2000 while married females decreased from 51 to 49 percent during the same period. The unusually high proportion (about 77 percent) of never married females in Dalipebinaw was largely due to the unmarried Chinese females working in the garment factory. In the Outer Islands, the proportion of never married and married females remained at about the same level between 1994 and 2000.

Table 3.7.2: Marital Status for Females Age 15 Years and Over by Municipality, Yap State: 1994 and 2000

			1	1994					2000					
_			Never	Now	Separated/				Never	Now	Separated/			
Municipality	Total	Percent	married	married	divorced	Widowed	Total	Percent	married	married	divorced	Widowed		
Total	3,500	100.0	36.7	47.8	5.6	9.9	3,745	100.0	36.9	47.4	5.8	9.8		
Yap Proper	2,164	100.0	33.5	50.5	7.5	8.5	2,458	100.0	34.5	49.2	7.6	8.7		
Rumung	24	100.0	12.5	75.0	8.3	4.2	34	100.0	20.6	55.9	11.8	11.8		
Maap	147	100.0	24.5	52.4	10.9	12.2	173	100.0	26.0	56.1	9.2	8.7		
Gagil	211	100.0	27.0	55.0	9.0	9.0	231	100.0	32.9	52.8	4.3	10.0		
Tomil	275	100.0	31.3	49.8	7.3	11.6	332	100.0	32.5	47.9	9.0	10.5		
Fanif	135	100.0	25.9	57.8	8.1	8.1	165	100.0	29.7	52.1	9.1	9.1		
Weloy	336	100.0	24.1	56.8	10.7	8.3	363	100.0	24.0	58.1	9.4	8.5		
Rull	583	100.0	24.5	60.2	7.2	8.1	651	100.0	25.7	56.4	8.6	9.4		
Gilman	57	100.0	21.1	52.6	8.8	17.5	74	100.0	31.1	45.9	6.8	16.2		
Kanifay	64	100.0	26.6	57.8	3.1	12.5	75	100.0	21.3	54.7	12.0	12.0		
Dalipebinaw	332	100.0	77.1	17.2	2.7	3.0	360	100.0	75.0	20.6	1.9	2.5		
Outer Islands	1,336	100.0	41.7	43.5	2.6	12.2	1,287	100.0	41.5	44.0	2.6	12.0		
Ulithi	317	100.0	52.7	35.3	1.6	10.4	223	100.0	39.0	48.9	2.2	9.9		
Fais/Sorol	85	100.0	31.8	44.7	2.4	21.2	60	100.0	30.0	56.7	1.7	11.7		
Ngulu	41	100.0	46.3	34.1	7.3	12.2	11	100.0	27.3	36.4	18.2	18.2		
Woleai	289	100.0	38.1	45.7	3.8	12.5	349	100.0	40.1	45.0	4.0	10.9		
Eauripik	44	100.0	47.7	38.6	-	13.6	53	100.0	52.8	30.2	-	17.0		
Ifalik	189	100.0	43.4	47.6	1.1	7.9	190	100.0	47.9	37.9	3.2	11.1		
Faraulap	52	100.0	48.1	34.6	-	17.3	82	100.0	42.7	40.2	3.7	13.4		
Elato	36	100.0	36.1	44.4	2.8	16.7	32	100.0	37.5	50.0	3.1	9.4		
Lamotrek	121	100.0	38.8	43.8	2.5	14.9	116	100.0	50.9	37.9	-	11.2		
Satawal	162	100.0	28.4	56.2	4.9	10.5	171	100.0	35.7	47.4	0.6	16.4		

Source: 1994 FSM Census, Table P22; 2000 FSM Census, Table P2-10.

Change in age at first marriage is best analyzed using a technique called *Singulate Mean Age at Marriage*, also known as SMAM. This method estimates the mean age of the population at their first marriage (Hajnal, 1953). Table 3.8 presents the average age of marriage for both sexes over the past three censuses. The average age of marriage for both sexes rose steadily from about 22 in 1973 to about 27 in 1994, and remained so in 2000. Likewise, the singulate mean age of marriage for males and females in 2000 remained at about the same level as 1994, while during the interim years since 1973, the average age of marriage for both sexes rose by approximately 4 years. The difference in average age of marriage between males and females fluctuated slightly during this period, from a high of 2.9 in 1987 to a low of 1.7 in 2000. Although males were much likely to delay their first marriage than females, the latter based on the decreasing SMAM differences in recent censuses were also seen to be delaying their marriages as well.

Table 3.8: Singulate Mean Age at Marriage for Aged 15 Years and Over by Sex, Yap State: 1973 to 2000

		Census years			
Sex	1973	1987	1994	2000	
Total	22.3	24.1	26.7	26.7	
Males	23.7	25.5	27.6	27.6	
Females	21.1	22.7	25.5	25.9	
Difference	2.6	2.8	2.1	1.7	

Source: 1973 TTPI Census; 1987 Yap State Census; 1994 FSM Census, Table P22; 2000 FSM Census, Table P2-10.

Table 3.9 further presents the mean age at first marriage for Yap State by sex and municipality during 1994 and 2000. Singulate mean age at marriage remained at the same level, just over 26 years, during both censuses, having risen steadily over the preceding 21 years before 1994. On Yap Proper, the mean age at first marriage was similar to

that of the total population in that it remained at a constant level at around 26 years of age. In the Outer islands, the average age of first marriage increased from about 27 years in 1994 to about 28 in 2000.

The mean age at marriage increased for both males and females between 1973 and 1994, but more significantly for males. Between 1994 and 2000, the mean age of marriage for males remained at the same level, 27.6 years, while that of females increased slightly to 25.9 years. In 1994, singulate mean age at marriage surpassed 27 years in 2 of the 10 municipalities in Yap Proper and in 6 of the 11 Outer Islands. Of all the municipalities and islands, Dalipebinaw had the highest mean age of marriage at a little over 30 years of age. By 2000, the same two municipalities, Tomil and Dalipebinaw, remained the only municipalities on Yap Proper with singulate mean age at marriage of over 27 years while in the Outer Islands; the numbers has dropped to four islands. Lamotrek and Dalipebinaw had the highest mean age of marriage at around 31 years.

Table 3.9: Singulate Mean Age at Marriage for Aged 15 Years and Over by Municipality, Yap State: 1973 to 2000

		1994		<u> </u>	2000	
Municipality	Total	Males	Females	Total	Males	Females
Total	26.4	27.6	25.3	26.7	27.6	25.9
Yap Proper	26.2	27.4	25.0	26.2	27.2	25.4
Rumung	22.1	23.6	20.0	24.7	25.3	24.2
Maap	23.1	24.2	23.5	23.2	23.2	22.8
Gagil	26.9	29.8	23.7	24.7	25.6	23.1
Tomil	27.3	29.2	25.5	27.2	28.2	26.4
Fanif	25.6	28.0	23.4	26.7	28.7	25.7
Weloy	24.4	26.2	22.5	25.1	26.5	23.3
Rull	25.1	26.8	23.1	25.7	27.5	23.9
Gilman	26.0	27.7	23.1	22.1	22.9	22.6
Kanifay	26.6	29.6	22.8	23.5	24.2	22.7
Dalipebinaw	30.2	28.4	31.2	31.0	30.6	31.4
Outer Islands	26.7	27.7	25.7	28.0	28.5	27.3
Ulithi	28.7	29.5	28.6	28.6	28.5	28.8
Fais/Sorol	27.7	27.3	27.8	25.2	24.8	25.6
Ngulu	20.0	27.5	10.0	22.5	15.0	25.0
Woleai	25.7	27.7	24.9	26.7	28.0	25.8
Eauripik	20.7	16.8	27.0	23.1	30.0	11.7
Ifalik	27.0	28.6	25.6	30.2	32.1	29.2
Faraulap	29.6	28.3	30.4	25.7	23.6	24.8
Elato	27.5	23.8	31.7	25.9	24.5	27.6
Lamotrek	28.0	27.7	28.4	31.1	29.6	31.7
Satawal	23.8	28.8	20.2	28.2	29.1	27.6

Source: 1973 TTPI Census; 1987 Yap State Census; 1994 & 2000 FSM Census, Table P22

Conclusions

The total number of householders in Yap increased from about 1,438 in 1973 to 2,030 in 2000 (41 percent increase). Separation and divorce seem to be less common in 2000 than in previous census years. However, the overall number of divorce and separation increased due to the increase number of people getting married. Widowhood decreased, perhaps because of an increasing acceptance of remarriage after the death of a spouse. Mean age at marriage reached over 26 years in 2000, about the same level as 1994. However, it is useful to note that the mean age at marriage increased steadily over the preceding 27 years between 1973 and 2000. Likewise, the mean age at marriage increased for both males and females between 1973 and 2000, but more significantly for males. Nevertheless, the gap in average age of marriage for men and women became narrower over the years, especially when comparing the 1973 and 2000 censuses with differences for both sexes at 2.6 and 1.7 years, respectively.

CHAPTER 4 FERTILITY

Introduction

In the absence of migration, population growth is determined solely by the difference between the number of people being born and the number of people dying, that is, of natural causes. Today births are not the only determining factors for population growth, but they are a significant portion, especially in the Pacific region where most families have high fertility.

Birth or fertility rates measure the impact that births have on population structure and growth. As a rule, censuses do quite well in estimating fertility as questions and techniques have been refined over the years. There are two approaches for measuring fertility, direct measures and indirect measures, both of which can be applied to the 2000 FSM Census. Since either method can be used, a useful starting point is to compare the results obtained from each. If the results differ widely, it suggests that the data used in one or both methods are incorrect, or the indirect method used does not apply.

Changes in fertility patterns and levels are often due to family planning methods (contraceptives), women's educational background, and the women's participation in the labor force. Census data on fertility provide benchmark information on fertility to look for changes in patterns and levels. In many countries, family planning methods, such as contraceptives, usually lowers fertility levels of older women first. In a nation where family planning is prevalent, we would expect to see lower fertility levels for the older women.

Data Description

Vital registration in Yap is not complete, so fertility estimates must be derived from a census survey. The 2000 FSM Census asked 4 questions on fertility in order to get information on recent births, previous births, and child mortality. Fertility questions were asked to all females born before April 1, 1987 (all women age 13 and over) but were tabulated for women age 15 and over. Questions asked included how many children born to each woman were living at home, living elsewhere, or dead and categorized by sex. Also asked was the date and sex of the last child born alive and whether that child was still alive.

Limitations and comparability. Accurate fertility data are often difficult to capture because of poor recollection by mothers on number of births or dates of births of their children. Indirect methods of measuring fertility help to compensate for these weaknesses in the data. The 1973 TTPI Census asked questions on children ever born, children still alive and date of the last child born, by sex, to women ages 14 and over. The 1980 Census asked women 15 and over for number of children ever born and surviving and babies born in the 12 months before the census. The 1980 collection technique would have caught women who had multiple births in the year while the 1973, 1994 and 2000 only considered most recent births, missing those women who had multiple births in the year before the census. Fertility data editing techniques for the earlier censuses were slightly different than the 1994 and 2000 censuses.

Analysis of Fertility Data

Crude Birth Rate

A *crude birth rate* (CBR) is calculated by the total number of births during a given year (usually a calendar year) divided by the mid-year population, multiplied by 1,000. Note that the mid-year population is not the census population, that is, the reported births refer to the last 12 months while the population refers to the date of enumeration, and must be adjusted to the mid-year. The CBR is a crude rate because the base of the calculation is the whole population, and the rate is affected by the age and sex structure. Thus, comparison overtime and between populations should be done with caution.

At least two measures of how many births occurred in the 12 months prior to the census can be derived from census data. The first is the number of births reported by women in the census; the second is the population under 1 year plus the estimated number of infant deaths (deaths during the year to persons under 1 year). These two figures were not equal for the period April 1999 to April 2000.

For 2000, if we use the data on births reported by women of reproductive ages in the year before the census we find a CBR of 26.4 (297 divided by 11,235 and multiplied by 1,000), which means over 26 births per 1,000 in the year preceding the census. However, this is likely to be an over count in view of the estimate derived from the second method. The second method is based on reverse survival. This estimate considers that the children counted in the census below 1 year of age, were born in the year before the census. The method recognizes that some babies born during this year died before the census was taken. Once these "deaths" have been added to the children counted in the census, an estimate of births during the year is obtained. It is further assumed that the effects of migration on the estimates of births are negligible (and the migration data suggest that for children below age 15, this assumption is reasonable).

Using the survivorship ratios and the population counted in the census aged 0, we find the crude birth rate (Table 4.1). The survivorship ratio permits the estimation of children who have died before the census. Survivorship ratios have been selected from model life tables (Coale-Demeny West level 20--for calculation see Chapter 5 on mortality), which are required since the birth and death civil registration systems in the state of Yap are not complete. In theory, the survivorship ratios are intended to calculate survivors forward to a later age, while here, we are surviving them backward in time to estimate the number of births; hence the term "reverse survival". To calculate the estimated number of births in the year, the number of persons enumerated in the census aged 0 to 1 (column 1) is divided by the survivorship ratio (column 2). It is then necessary to estimate the mid-year population. The earlier mid-census population was estimated using the approximate annual growth rate of 0.1 percent between 1994 and 2000 (see Table 2.1 in Chapter 2) and the total census population. As the last column shows, the CBR using reverse survival for April 1999 to April 2000 was 24.3 per 1,000.

Table 4.1: Crude Birth Rate, Yap State: 1993 to 1994 and 1999 to 2000

-	1	994 census				2000 census							
Population	Survivorship	Estimated	Mid-period	CBR	Population	Survivorship	Estimated	Mid-period	CBR				
age zero	ratio	births 1993-94	population	1993-94	age zero	ratio	births 1999-2000	population	1999-2000				
(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)				
302	0.9626	314	11,094	28.3	264	0.9665	273	11,235	24.3				

Source: 1994 FSM Census, Table P-16 and unpublished data; 2000 FSM Census, Table P2-4 and unpublished data

The same procedure was used for 5-year periods going back 15 years before the census. Again, the Coale-Demeny West model life table was used to obtain the survivorship ratios for the three different 5-year periods. Results from these calculations as shown by the estimated crude birth rates were given in Table 4.2. The table revealed a great deal about fertility in the state of Yap. For the most recent period covered in the table below, 2000-1995, the CBR was 25.6 per thousand populations. Although this rate was high, the trend shown suggested declining fertility. In the period 1985-1989, about 10 to 15 years before the 2000 census, the CBR was 30.2. During that same period to the most recent period (1995-00), fertility declined by about 15 percent. The rate from the year before the census was 24.3. Note that this was lower than the most recent five-year rate, showing that the fertility decline observed has probably continued during the five years before the census.

Table 4.2: Estimation of Crude Birth Rates, Yap State: 1979 to 2000

			Survivorship	Estimated		Crude
	Years in	Census	ratio since	births in 5	Mid-period	birth
Age group	which born	population	birth	year period	population	rate
0-4	1995-2000	1,372	0.9559	1,435	11,212	25.6
5-9	1990-1994	1,361	0.9471	1,437	10,462	27.5
10-14	1985-1989	1,355	0.9430	1,437	9,502	30.2

Source: 1994 & 2000 FSM Census, unpublished data; 1994 FSM Census, Table P15; 2000 FSM Census, Table P2-3.

te : Survivorship ratio is the life table probability of surviving from birth to the age groups specified and is approximately Equivalent to the average probability of surviving from birth during the period specified to the time of the census.

Table 4.3 further presents the CBR as compiled from registration statistics obtained from the Department of Health, for comparison purposes. As mentioned earlier, the registration data lacked completeness, and the coverage was not consistent over the years. Nevertheless, there seemed to be some improvements with the vital registration data, as

seen from the estimated CBR obtained from the 1999 registration, which indicated coverage of about 96 percent of the births. In retrospect, this was a big improvement over the 1993 registration data, which seemed to cover only 77 percent of the births, and was the second to the lowest in the FSM at that time (see 1994 FSM census reports for Chuuk, Kosrae, and Pohnpei).

Table 4.3: Registered Births by Calendar Year and Implied Crude Birth Rate, Yap State: 1986 to 2000

							Yea	ır						
Indices	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Registered births	328	273	273	264	209	268	255	241	212	200	249	248	259	255
Implied crude birth rate (CBR)	33.2	27.2	26.8	25.5	19.9	25.2	23.6	22.0	19.0	17.9	22.2	22.1	23.1	22.7

Source: Department of Health Services, FSM, unpublished data

As long as there are no other data available on which to base a fertility estimate, the correctly chosen life table and calculated rate of growth are sufficient to estimate the level of fertility. The principal merits of the CBR as a measure of fertility are its relative simplicity and its interpretation as a direct contribution to the rate of natural growth. However, the CBR in relation to the total population tells little about the fertility of women neither at reproductive ages nor about the age structure of childbearing. We must be very careful in using CBR for comparison. The CBR estimates are dependent on the age structure of a population. As a result, unless standardized, they will not be comparable over time or across regions with different age structures. Fortunately, the census data do enable us to measure fertility in more detail.

Age Specific Fertility

To look at the recent age structure of births, children born in the past year can be classified by the age group of mothers. This tabulation enables the calculation of *age specific fertility rates* (ASFR), that is, the average number of children born to each woman in an age group during a year. Relating fertility experience to age provides a more detailed description of fertility behavior, or family formation, and provides a control for changes in age structure for comparative purposes.

This report provides two methods for calculating and adjusting age specific fertility rates. One involves reverse survival of births and the other involves comparing current fertility to previous fertility to check for under-counting. The reverse survival method is discussed first.

Before producing age specific rates through reverse survival, we adjusted the number of births in the past year reported by women (see Table 4.1). Results for this type of question are often under-reported and considerable care is needed when using the results. In this particular census, however, the reported births in the past year seemed to be over-reported, surpassing the estimated births. Consider, for example, the 273 estimated births for the year 1999-2000 based on reverse survival and shown in Table 4.1. Assuming that the effects of migration for infants below one year were moderate and discrepancies arising from multiple births and maternal deaths were negligible, the response to the question eliciting information on births in the past year should be the same, or at least very close. Yet, as Table 4.4 shows, the total number of births reported by women in the past year was 297, more than the 273 estimated using reverse survival.

In order to correct for the over count, an adjustment factor was calculated by dividing the estimated births from reverse survival by the reported number of births. In this case it would be 273 estimated births divided by 297 reported births resulting in an adjustment factor or 0.92 (see Table 4.4). The adjustment factor was then applied to the births to correct for the over count.

Table 4.4: Adjustment of Births in Year Prior to the Census, Yap State: 1994 and 2000

			1994 census			2000 census					
Age groups	Number of women	Reported births	Unadjusted ASFR	Adjusted births	Adjusted ASFR	Number of women	Reported births	Unadjusted ASFR	Adjusted births	Adjusted ASFR	
Total	2,847	303		313		3,050	297		273		
15 to 19 years	623	41	0.066	42	0.068	680	21	0.031	19	0.028	
20 to 24 years	561	77	0.137	80	0.142	553	90	0.163	83	0.150	
25 to 29 years	426	65	0.153	67	0.158	399	75	0.188	69	0.173	
30 to 34 years	391	65	0.166	67	0.172	404	59	0.146	54	0.134	
35 to 39 years	380	46	0.121	48	0.125	367	32	0.087	29	0.080	
40 to 44 years	288	5	0.017	5	0.018	372	18	0.048	17	0.045	
45 to 49 years	178	4	0.022	4	0.023	275	2	0.007	2	0.007	
TFR			3.414		3.538			3.352		3.084	

Source: 1994 FSM Census, Table P15; 2000 FSM Census, Table P2-3.

Note: Adjustment factor equals total births (reverse survival) divided by the number women reporting a birth in the past year.

The technique used took advantage of the relative strengths of two approaches. Using the ratio of births estimated from reverse survival to the mothers reporting a birth as a correction factor retained the age specific pattern of fertility, but fixed the level of fertility based on the more plausible reverse survival estimate of births.

The fertility pattern illustrated in the last column of Table 4.4 appears very smooth. The low rates at 15 to 19 reflected the delay in childbearing due to a later age of marriage. Nevertheless, peak fertility in 2000 was reached at ages 25 to 29, with 0.173 children per women, indicating that childbearing among the younger age group has slowly increased since 1994 when peak fertility was highest (0.172 children per women) among women aged 30 to 34 years. While age specific fertility fell quite sharply after age 35 in 1994, the slope was not sufficiently steep to suggest the use of family planning; for example, women ages 45 to 49 continued to bear on average 0.023 children each year. In 2000, age specific fertility rate declined after age 29, although at a much moderate and consistent rate, resulting in an even slope. Although the slope might not be steep enough to suggest effective use of family planning, it certainly indicated a decline in childbearing for older women, as seen by the low ASFR (0.007) for women aged 45 to 49. This decline in fertility was also seen among teenagers who bore on average 0.068 children per year in 1994, but has since dropped to 0.028 in 2000, indicating to some extent a certain degree of success in family planning practices in the state.

Age Specific fertility rates provide too much detail to be practical for some comparisons. A very useful composite index is the *total fertility rate* (TFR), which effectively sums the current age specific fertility for each year of a woman's reproductive life. The TFR thus provides a measure of the average number of children a woman would bear under a given schedule by the end of her childbearing years. Computation from the age specific rates is relatively simple, involving the summing of annual age specific rates. The rates provided in Table 4.4 would yield a TFR of 3.5 per woman in 1994 and 3.1 in 2000. Given the fertility levels in 1993-1994, each Yap woman would give birth on average to 3.5 children during her reproductive lifetime. In comparison to the fertility level between 1999 and 2000, each Yap woman was expected to give birth on average to 3.1 children during her reproductive lifetime.

The results of the reverse survival method are very similar to the second method using the indirect P/F ratio shown below in Table 4.5. The P/F ratio method of estimating fertility compares the reported historical fertility (parity) of women to the current fertility of the same women and establishes a correction factor to apply to the age specific fertility rates to calculate a more precise total fertility rate. The correction factor adjusts for under-response and poor recollection of fertility data by older women who might under report births. Once we find the difference in reported parity and fertility, we can correct for the under count. In the case of Yap in 1994, we have chosen a correction factor of 1.07, which corrected the age specific fertility rates and results in an adjusted TFR of 3.7. In 2000, a correction factor of 1.269 was selected which corrected the age specific fertility rates and results in an adjusted TFR of 4.3. The correction factor used in 1994 was taken from the P/F ratios taken from women age 20 to 24 and 25 to 29 to average out the fluctuations caused by reporting errors. Similarly in 2000, the correction factor used was also based on women aged 20 to 24 and 25 to 29. (For more details on this method, see United Nations Manual X "Indirect Techniques for Demographic Estimation"). The increase in the P/F value suggested that there was a growing disparity between current fertility and parity and supported our conclusion that current fertility was lower than previous fertility, or fertility was declining.

Table 4.5. Calculation of Total Fertility Rate with P/F Ratio, Yap: 1994 and 2000.

			1994 C	ensus					2000 Ce	ensus		
•	Children	Age	Summation		Parity		Children	Age	Summation		Parity	
	ever	specific	of ASFR's	Adjust-	divided by	Adjusted	ever	specific	of ASFR's	Adjust-	divided by	Adjusted
	born per	fertility	multiplied	ment	adjusted	ASFR	born per	fertility	multiplied	ment	adjusted	ASFR
	woman	rates	by 5	of phi	phi	by factor	woman	rates	by 5	of phi	phi	by factor
Age group	(Parity, P)	(ASFR, F)	(phi)	(F)	(P/F)	of 1.08	(Parity, P)	(ASFR, F)	(phi)	(F)	(P/F)	of 1.27
15-19	0.151	0.066	0.329	0.583	0.259	0.071	0.081	0.031	0.154	0.056	1.454	0.051
20-24	0.688	0.137	1.015	0.725	0.949	0.147	0.859	0.163	0.968	0.607	1.415	0.219
25-29	1.739	0.153	1.778	1.459	1.192	0.163	1.729	0.188	1.908	1.539	1.124	0.236
30-34	3.082	0.166	2.607	2.292	1.345	0.178	2.663	0.146	2.638	2.371	1.123	0.178
35-39	3.966	0.121	3.215	3.024	1.311	0.130	3.542	0.087	3.074	2.910	1.217	0.106
40-44	4.545	0.017	3.302	3.226	1.409	0.019	4.430	0.048	3.316	3.243	1.366	0.054
45-49	4.871	0.022	3.414	3.368	1.446	0.024	4.873	0.007	3.352	3.344	1.457	0.007
TFR		3.414				3.656		3.352				4.255

Source: 1994 and 2000 FSM Censuses, unpublished data.

Given the fertility levels for 1999 to 2000, a Yap woman is expected to bear 4.3 children on average in her lifetime. This showed a slight increase over the fertility levels for 1993 and 1994, when a Yapese woman was expected to give birth to approximately 3.7 children during her childbearing years. In any case, the overall fertility trend in the state over the past three decades seems to suggest declining fertility among women of childbearing age as seen by the decline in crude birth rates over the past 15 years. Furthermore, the adjusted age specific fertility rates show a similar trend falling from over 7 children per mother in 1973 to 4 children per mother in 1994 and 2000 (see Table 4.6). The high fertility levels in 1973 were probably a reflection of fertility before changing health conditions in Yap. In 1973, improved public health had brought down child mortality but women were still having large families to replace those children who would not survive.

Figure 4.1 displays the changes in ASFRs over time. The reduction in the peak at ages 30 to 34 and the flattening of the curve suggests an overall decline in fertility. Nevertheless, women aged 20 to 29 showed a certain degree of increase in fertility since 1994, implying small effects of contraceptives on fertility behavior among these younger age groups. Among older women, aged 45 to 49, a pattern was established showing a clear drop in fertility level since 1994. Finally, a reduction in the early reproductive ages can be seen in the figure; these were probably due to the delay in marriage mentioned in Chapter 3 on marital status.

Table 4.6: Age-specific Fertility Rates, Yap State: 1973 to 2000

Age groups	Implied 1973	Adjusted 1973	Implied 1980	Adjusted 1980	Implied 1987	Adjusted 1987	Implied 1994	Adjusted 1994	Implied 2000	Adjusted 2000
15 to 19 years	0.084	0.107	0.062	0.092	0.079	0.098	0.066	0.071	0.031	0.051
20 to 24 years	0.225	0.286	0.188	0.279	0.170	0.212	0.137	0.147	0.163	0.219
25 to 29 years	0.292	0.371	0.153	0.226	0.196	0.244	0.153	0.163	0.188	0.236
30 to 34 years	0.234	0.298	0.246	0.365	0.172	0.214	0.166	0.178	0.146	0.178
35 to 39 years	0.186	0.236	0.159	0.235	0.121	0.151	0.121	0.130	0.087	0.106
40 to 44 years	0.083	0.106	0.072	0.107	0.062	0.077	0.017	0.019	0.048	0.054
45 to 49 years	0.028	0.035	0.032	0.047	0.012	0.015	0.022	0.024	0.007	0.007
TFR	5.663	7.199	4.559	6.751	4.054	5.06	3.414	3.656	3.353	4.255
Adj. factor		1.27		1.48		1.25		1.07		1.27

Source: 1973 & 1980 TTPI Censuses, unpublished data; 1987 Yap Census, unpublished data; 1994 & 2000 FSM Census, unpublished data

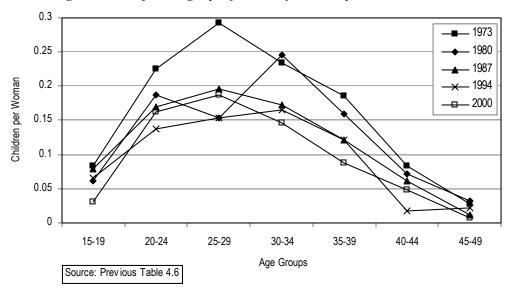


Figure 4.1 Unadjusted Age Specific Fertility Rates, Yap State: 1973-2000

The gross reproduction rate (GRR) and net reproduction rate (NRR) measure only female births and are indices of generational replacement. The GRR is the average number of daughters born that will replace each woman in the absence of female mortality from birth through the childbearing years. Given a TFR of 4.3 the gross reproduction rate can be calculated by multiplying the proportion of female births by the TFR. For Yap in 2000, the GRR, or number of daughters a woman will have on average, was 2.19; a slight increase since 1994 when the GRR was shown to be around 1.75.

The net reproduction rate is calculated by taking the mortality of the daughters into account because some daughters will die before having children. In 2000, the NRR comes to 2.12, which was slightly higher than the 1994 NRR of 1.6. A common benchmark for the NRR is when the NRR equals 1, which is replacement level fertility. This implies that each woman will be replaced by exactly one woman after a generation. For Yap the current fertility level suggests that each woman will be replaced by 2 women in about 29 years time (given that an average generation is 29 years). This remained at about the same level between 1994 and 2000.

Fertility of Population Subgroups

Different economic and social groups tend to have varying fertility rates. In this report we have chosen to use both the parity (children ever born) as well as total fertility rate in order to compensate for the small numbers.

Table 4.7 presents age specific fertility rates for different educational backgrounds. A pattern seems to be evident in the relationship between the fertility level of a woman and her education level. Those women with higher education had fewer children while those women with less education tended to have more children. Table 4.7 presents this pattern clearly for both 1994 and 2000. Given the 1994 fertility rates, women with a college education had on average 3.0 births over their lifetime, while women with a high school education had on average 3.7 children. In 2000, female college graduates had roughly the same average number of births (3.1) over their lifetime, while women with a high school education had on average 2.6 children. This decline among female high school graduates indicates a significant drop in fertility level among this group of women. Although this may be attributable to a much more heightened awareness in family planning methods, it may very well be a direct result of better counseling to delay childbearing for a much later age and give one ample time to pursue further educational and other personal goals. In 1994, women with no schooling had lower fertility (3.3) than those women with elementary or high school education (3.7). This finding is common because some education often increases a woman's health awareness enough to improve her ability to bear children and to understand the importance of pre-natal care. However, once this threshold has been met, increased education seems to reduce fertility. This trend was not repeated in 2000, as seen by the high fertility level among those with no schooling (5.3) compared with those with at least an elementary or high school education.

Table 4.7: Children Ever Born per Woman and TFR by Mother's Educational Attainment, Yap State: 1994 and 2000

		No	Elem-	High	H.S.	Some	College
Age groups	Total	school	entary	school	graduates	college	graduates
1994 CENSUS							
15 to 19 years	0.151	0.275	0.2	0.089	0.108	0.286	-
20 to 24 years	0.688	0.673	1.219	0.462	0.645	0.478	0.333
25 to 29 years	1.739	1.685	2.01	2.141	1.609	1.328	0.571
30 to 34 years	3.082	3.852	3.068	3.667	3.022	2.085	1.529
35 to 39 years	3.966	4.173	4.17	4.686	3.602	3.412	1.875
40 to 44 years	4.545	4.727	4.852	4.387	4.806	3.541	2.000
45 to 49 years	4.871	4.791	5.4	4.929	4.786	3.895	2.375
TFR	3.41	3.29	3.73	2.77	3.67	3.69	2.97
2000 CENSUS							
15 to 19 years	0.081	0.182	0.097	0.078	0.055	0.059	-
20 to 24 years	0.859	1.857	1.353	1.182	0.539	0.528	0.588
25 to 29 years	1.729	2.000	2.356	2.055	1.467	1.121	1.303
30 to 34 years	2.663	1.875	3.213	3.208	2.345	1.887	2.222
35 to 39 years	3.542	3.813	3.719	4.158	3.278	3.379	2.552
40 to 44 years	4.430	3.833	4.922	4.868	4.239	3.036	3.438
45 to 49 years	4.873	4.447	5.143	5.839	5.065	4.235	3.448
TFR	3.35	5.29	4.55	3.38	2.64	2.43	3.06

Source: 1994 FSM Census, Table P102; 20000 FSM Census, Table P7-3

Another determinant of fertility was whether a mother was in the labor force. Table 4.8 presents data on fertility rates for women who were in the labor force, employed or unemployed, and those who were not in the labor force. As would be expected, those women who were in the labor force had lower fertility levels than the women who were not in the labor force. For instance, in 1994, women in the labor force had a TFR of about 2.8 compared to about 4.4 for those not in the labor force. Similarly, in 2000, women in the labor force showed a lower fertility rate of about 3.1 compared to about 4.4 for those not in the labor force. Among those employed, women who were working full time (35 + hours) had the lowest fertility rates. This was true in both censuses, but was more distinct in 2000 where the fertility level was shown to around 1.5 compared to about 2.2 in 1994. Women who were looking for work (or unemployed) in 1994 had lower fertility (2.4 children per woman) than the women who were not in the labor force (4.4 children per woman). In 2000, the unemployed females reported a slightly higher fertility rate of 4.8 compared to about 4.4 in 1994.

Table 4.8. Children Ever Born and Unadjusted TFR by Labor Force Participation, Yap: 1994 and 2000.

			1994 Cens	us					2000 Cer	ısus		
			Labor for	rce					Lal	or force		
		Total	Emplo			Not in		Total	Emplo	yed		Not in
	All	in labor		35+	Unem-	labor	All	in labor		35+	Unem-	labor
Age group	women	force	Total	hours	ployed	force	women	force	Total	hours	ployed	force
15-19	0.180	0.313	0.325	0.194	0.222	0.140	0.081	0.059	0.050	0.032	0.286	0.107
20-24	0.688	0.557	0.838	0.592	0.218	0.972	0.859	0.777	0.771	0.380	0.900	1.134
25-29	1.739	1.543	1.543	1.596	1.545	1.908	1.729	1.644	1.653	1.107	1.467	2.110
30-34	3.082	2.983	2.941	2.650	3.900	3.226	2.663	2.657	2.655	2.085	2.800	2.688
35-39	3.966	3.895	3.887	3.561	4.143	4.085	3.542	3.492	3.491	3.122	3.500	3.750
40-44	4.545	4.276	4.250	3.849	4.778	5.000	4.430	4.341	4.344	3.744	4.200	4.759
45-49	4.871	4.621	4.610	4.396	5.000	5.213	4.873	4.831	4.828	4.330	5.000	5.060
TFR	3.41	2.78	3.02	2.22	2.37	4.35	3.35	3.07	3.00	1.48	4.82	4.35

Source: 1994 FSM Census, Table P134; 2000 FSM Census, Table P9-3.

Finally, fertility differentials by region are considered in Table 4.9. The P/F ratio method of estimating fertility was used to calculate these rates. In 1994, the Outer Islands had a higher fertility rate of about 3.7 births on average per woman. This increased to about 4.7 in 2000, while the fertility level on Yap Proper decreased from 3.3 in 1994 to about 2.6 in 2000. By age groups, however, Yap Proper showed consistently higher fertility at young ages than the Outer Islands. This finding suggests the need to heighten family planning awareness among these younger age groups, especially on Yap Proper.

Table 4.9: Age-specific Fertility Rates by Region, Yap State: 1994 and 2000

		1994		2000			
Age group	Total	Yap Proper	Outer Islands	Total	Yap Proper	Outer Islands	
15 to 19 years	0.066	0.084	0.043	0.031	0.034	0.024	
20 to 24 years	0.137	0.144	0.123	0.163	0.145	0.197	
25 to 29 years	0.153	0.146	0.163	0.188	0.127	0.313	
30 to 34 years	0.166	0.165	0.168	0.146	0.124	0.186	
35 to 39 years	0.121	0.084	0.182	0.087	0.072	0.120	
40 to 44 years	0.017	0.011	0.026	0.048	0.028	0.088	
45 to 49 years	0.022	0.017	0.033	0.007	-	0.019	
TFR	3.41	3.26	3.69	3.35	2.65	4.73	

Source: 1994 & 2000 FSM Census, unpublished data

The number of children ever born per woman provides the total number of children a woman is likely to have had by the time she has reached a specified age group. This measure does not reflect current fertility, except for the youngest age group. The final age group, ages 45 to 49, gives an estimate of lifetime fertility. Women in Yap Proper who were finishing their reproductive years (ages 45 to 49) in 1994 had on average 4.8 children over their lifetime (Table 4.10) compared to about 4.9 in 2000. Conversely in the Outer Islands, lifetime fertility for women ages 45 to 49 declined from about 5.1 to 4.8 between 1994 and 2000. This, in effect, has narrowed down the lifetime fertility level for the two regions to about the same level in 2000.

Table 4.10: Children Ever Born per Woman by Region, Yap State: 1994 and 2000

		1994 Census			2000 Census	
Age groups	Total	Yap Proper	Outer Islands	Total	Yap Proper	Outer Islands
15 to 19 years	0.151	0.157	0.145	0.081	0.097	0.043
20 to 24 years	0.688	0.628	0.825	0.859	0.742	1.085
25 to 29 years	1.739	1.808	1.633	1.704	1.601	1.992
30 to 34 years	3.082	3.173	2.923	2.690	2.521	2.917
35 to 39 years	3.966	3.970	3.958	3.542	3.448	3.776
40 to 44 years	4.545	4.552	4.535	4.430	4.348	4.556
45 to 49 years	4.871	4.780	5.050	4.873	4.905	4.822

Source: 1994 FSM Census, Table P15; 2000 FSM Census, Table P2-3

Conclusion

Yap had a total fertility rate of 4.3 according to the 2000 FSM Census, an increase over the 3.7 rate shown for the 1994 census. Both rates, however, are high by World standards and create a rapidly growing population. Fertility, however, is not the only factor influencing population size. Mortality and migration also play a large role in the population dynamics of Yap.

Despite the noted increase in fertility between 1994 and 2000, fertility levels in general continue to decrease in Yap, as they have been for the past two decades. Furthermore, fertility rates were lower for those women with higher education and those women who were in the labor force suggesting that if policy makers want to lower population growth due to fertility, policies could be directed at increasing female education levels and increasing women's participation in the work force. Also, given current age specific fertility rates, it appears that the uses of family planning which initially lowers fertility in the older age groups, is still rather limited.

CHAPTER 5 MORTALITY

Introduction

As reported in Chapter 4, fertility rates in the State of Yap, despite a slight increase between 1994 and 2000, seemed to be declining in general, especially when compared to fertility levels in the past three decades. However, mortality rates in the state of Yap have been brought to a low level, and thus little decline occurred in the recent past. This has contributed to a moderation of the growth rate. In this chapter, we estimate mortality indirectly for the state of Yap in 2000 to find the effect of mortality reduction on growth and to compare mortality over time.

Data Description

Mortality cannot be estimated through direct methods from the 2000 FSM Census because no direct questions were asked regarding deaths. Indirect estimates of early age mortality can be derived from the questions concerning children ever born and children still alive (questionnaire item 17a.) The proportion of children surviving can be applied to model life tables to produce basic mortality rates. Children ever born and surviving were asked of women in the 1973, 1980, 1987, and 1994 censuses as well and data were provided for comparison.

Mortality indices of interest are crude death rate, infant mortality rate, child mortality rate, and life expectancy at birth. The *crude death rate* (CDR) is the most common direct measure of mortality and is defined as the number of deaths per 1,000 persons. Similar to the crude birth rate, the crude death rate is dependent on the age-sex structure, thus it is a crude measure. An adjustment must be made before any attempt can be made to compare mortality over time or for different regions or countries. The *infant mortality rate* (IMR) is defined as the number of infant deaths per 1,000 live births during the year. The IMR is a good indicator of the quality of health care in a nation because mortality is high during the first months of life and small improvements can be measured. It is also an adjusted measure that is not dependent on the age-sex structure of a region. The *child mortality rate* is defined as the probability of dying between ages 1 and 5. *Life expectancy at birth* is the average number of years a newborn baby can expect to live, given the current level and pattern of mortality. Unlike the crude birth rate this measure is independent of the age structure of a nation and is thus a good measure for comparison between countries or regions.

Analysis of Mortality Data

Crude Death Rate

Direct measures of mortality could be calculated using deaths registered with the Department of Health. Unfortunately these events are under-registered and inconsistently covered, providing only a guide to the patterns of mortality but not to the level. To compensate for the different levels of coverage and to smooth some erratic patterns, Table 5.1 presents the average age-specific mortality rates for two different periods during the past two censuses in Yap State. The CDR between 1992 and 1995 was approximately 5 per 1,000 persons, and between 1995 and 2000, the CDR was approximately 4 per thousand, which, as we will see shows large under-reporting. The CDR is calculated using the total number of deaths in a year divided by the estimated mid-year population. The actual CDRs for the two periods are more likely to be higher than the reported figures. This is in part due to the fact that age-specific mortality rates in Yap, as in most Pacific Island Countries, were erratic and inaccurate because of the small number of persons and deaths and because of inaccuracies in reporting.

Table 5.1: Average Age-specific Mortality Rates, Yap State: 1986 to 1989 & 1990 to 1993 & 1995 to 2000

		1992-1995			1996-1999	
		Mid-period	Age-specific		Mid-period	Age-specific
Age	Deaths	population	mortality rate	Deaths	population	mortality rate
Total	57	11,006	5.2	43	11,190	3.8
Less than 1 year	6	297	20.2	3	284	10.6
1 to 4 years	1	1,187	0.8	1	1,144	0.9
5 to 9 years	-	1,463		-	1,413	
10 to 14 years	1	1,451	0.9	1	1,428	0.4
15 to 19 years	1	1,200	0.8	1	1,296	0.4
20 to 24 years	2	919	1.9	2	967	1.6
25 to 29 years	2	770	2.6	1	733	1.0
30 to 34 years	1	769	1.0	2	737	3.1
35 to 39 years	1	737	1.7	2	743	3.0
40 to 44 years	3	568	5.7	2	665	2.6
45 to 49 years	2	400	4.4	3	491	5.1
50 to 54 years	4	262	15.3	3	319	7.8
55 to 59 years	4	252	13.9	4	239	17.8
60 to 64 years	4	242	14.5	3	235	11.7
65 to 69 years	8	162	46.3	4	178	23.9
70 to 74 years	7	151	47.9	5	136	38.5
75 yrs & over	12	176	68.2	8	182	43.9

Source: Department of Health Services, FSM; 1994 & 2000 FSM Censuses, unpublished data

The crude death rate, based on the registration system, is likely to be an underestimate due to the incomplete registration of deaths. In order to get better estimates of mortality, we used an indirect method to calculate child and infant mortality and find a model life table applicable to the state of Yap. The life table is basically a statistical model of mortality experience based on given mortality rates. Model life tables allow us to project mortality rates (and other demographic indices) once we have matched a model to the population. Given the model life table we have estimated the crude death rate to be approximately 7 per 1,000 individuals.

Infant and Child Mortality Rates, and Life Expectancy at Birth

The life table is indirectly estimated from child survival information (for further discussion on this method see United Nations Manual X "Indirect Techniques for Demographic Estimations"). The 2000 FSM Census asked women for the number of children ever born and the number of children surviving. With these data, estimations were made about the level of child mortality over the past 6 to 27 years. This technique assumes that the survivorship of children from women in different age groups reflects the child mortality for given periods before the census. The technique provides estimations of infant mortality, child mortality, and life expectancy at birth for different years prior to the census. When we apply this method to the past four censuses, we can approximate the change in level over the three decades before the census.

The method requires the calculation of children who were born to mothers aged 15 to 49 but died before the census. The average age of children born to mothers in each five-year age group provides a convenient way of tracing mortality. As mothers age, so too the average age of their children. As the proportion dead represents the risk of dying between birth and the average age of children at the time of the census, by calculating this rate for successive ages of mothers, the method essentially describes the mortality pattern for infants and children.

Table 5.2 shows the historical trends of proportion of children surviving by age of mother. As can be seen from the table, the proportion of children surviving has increased over time. In 1973 only 82 percent of children born to women ages 45 to 49 years survived to the census day. In 2000, about 92 percent of all children born to mothers ages 45 to 49 years survived to the census day. Thus, we can assume that child mortality in the state of Yap improved between 1973 and 2000.

Table 5.2: Number of Children Ever Born (CEB) and Children Surviving (CS) and Proportion Surviving (PS) by Age Group of Mother, Yap State: 1973 to 2000

	1	973			1980			1987			1994			2000	
Age groups	CEB	CS	PS	CEB	CS	PS	CEB	CS	PS	CEB	CS	PS	CEB	CS	PS
15 to 19 years	101	95	94.1%	72	70	97.2%	90	78	86.7%	94	88	93.6%	55	55	100.0%
20 to 24 years	400	377	94.3%	513	488	95.1%	483	456	94.4%	386	373	96.6%	475	464	97.7%
25 to 29 years	572	525	91.8%	830	779	93.9%	932	871	93.5%	741	707	95.4%	690	672	97.4%
30 to 34 years	895	808	90.3%	763	711	93.2%	1,368	1,241	90.7%	1,205	1,137	94.4%	1,076	1,020	94.8%
35 to 39 years	1,240	1,091	88.0%	824	757	91.9%	1,196	1,078	90.1%	1,507	1,406	93.3%	1,300	1,266	97.4%
40 to 44 years	1,062	926	87.2%	920	833	90.5%	842	768	91.2%	1,309	1,202	91.8%	1,648	1,552	94.2%
45 to 49 years	742	608	81.9%	959	857	89.4%	1,070	935	87.4%	867	797	91.9%	1,340	1,258	93.9%

Source: 1973 TTPI Census, Table T25 & T26; 1980 TTPI Census, Table T19; 1989 Yap Census; 1994 FSM Census, Table P15; 2000 FSM Census, Table P2-15

Data on children ever born and children surviving classified by age of mother can be used to determine probabilities of surviving to specific ages. These probabilities of surviving can then be fit to a model life table, which allows us to calculate the approximate infant mortality rates and the corresponding life expectancy at birth for different time periods. The resulting mortality indices for recent censuses are summarized in Table 5.3. Data for women aged 15 to 19 years were ignored because the numbers were small and child mortality for young mothers is often selectively high. The data for the final three age groups were also disregarded because of poor recollection by mothers resulting in an underestimate of the mortality rates. The most accurate information, therefore, applied to the remaining three age groups of women aged 20 to 35 years. Data from these three age groups of mothers revealed an overall decline in both infant mortality rates and child mortality rates over the 27 years prior to the census. As such, children born in this decade have a much greater chance of surviving their early childhood years compared to those born in earlier decades. Life expectancy at birth also improved dramatically during this period as shown by newborn babies of mothers aged 25 to 30; from about 61 years in 1973 to around 72 years in 2000.

Table 5.3: Indirect Estimates of Early Age Mortality CEB/CS, Yap State: 1973 to 2000

	Children	Children	Prop-		Prob. of	Ref-	Infant	Child	Life
	ever	survi-	ortion	Age	dying by	erence	mort.	mort	expect-
Age Groups	born	ving	dead	(x)	age (x)	date	rate	rate	ancy
1973 Census									
20 to 25 years	1.325	1.248	0.058	2	0.061	Apr. 1971	0.053	0.019	63.8
25 to 30 years	3.092	2.838	0.082	3	0.084	Aug. 1969	0.066	0.026	60.9
30 to 35 years	5.114	4.617	0.097	5	0.100	Aug. 1967	0.072	0.030	59.6
1980 Census									
20 to 25 years	1.322	1.258	0.048	2	0.050	Mar. 1978	0.044	0.014	65.9
25 to 30 years	2.538	2.382	0.061	3	0.060	Apr. 1976	0.049	0.017	64.8
30 to 35 years	3.759	3.502	0.068	5	0.067	Aug. 1973	0.051	0.017	64.4
1987 Census									
20 to 25 years	1.110	1.048	0.056	2	0.058	Apr. 1985	0.050	0.017	64.5
25 to 30 years	2.251	2.104	0.065	3	0.065	Apr. 1983	0.053	0.018	64.0
30 to 35 years	3.668	3.327	0.093	5	0.093	Dec. 1980	0.068	0.027	60.6
1994 Census									
20 to 25 years	0.688	0.665	0.033	2	0.035	Jan. 1992	0.031	0.008	69.2
25 to 30 years	1.739	1.660	0.045	3	0.047	Sep. 1990	0.039	0.012	67.1
30 to 35 years	3.082	2.908	0.056	5	0.060	Feb. 1989	0.046	0.015	65.6
2000 Census									
20 to 25 years	0.859	0.839	0.023	2	0.025	Apr. 1998	0.023	0.004	71.6
25 to 30 years	1.729	1.684	0.026	3	0.026	Feb. 1996	0.023	0.04	71.6
30 to 35 years	2.663	2.525	0.052	5	0.051	May. 1993	0.040	0.012	67.0

Source: 1973 & 1980 TTPI Censuses, unpublished data; 1987 Yap State Census, Unpublished; 1994 & 2000 FSM Census, unpublished data

The estimates provide mortality indices for years prior to the census (see the reference dates in Table 5.3). The averages of the three age groups 20 to 24, 25 to 29, and 30 to 34 give the most accurate data and apply to an average reference date of about 4 years before each census. Table 5.4 contains the average of these age groups and the summary of the indicators. The 2000 data provide estimates that refer to 1996, the 1994 data refer to 1990 data, the data from 1987 refers to 1983, the data from 1980 refer to 1976, and the 1973 data refer to 1969.

Table 5.4: Summary Indicators from Indirect Estimation of Early Age Mortality, Yap State: 1969 to 2000

	Infant	Child	
	mortality	mortality	Life
Reference date	rate (per '000)	rate (per '000)	expectancy
1996	29	7	70.1
1990	39	12	67.3
1983	57	21	63.0
1976	48	16	65.0
1969	64	25	61.4

Source: Preceding Table 5.3

Note: These rates are calculated using the Coale-Demeny life table model West 20.

Mortality indicators improved during both time intervals. The ratio of infant deaths to births in a year decreased from 64 per 1,000 persons to 23 per 1,000 between 1969 and 1996. The probability of dying between ages 1 and 5 decreased from .025 in 1969 to .011 in 1996. The average length of life that a person could expect to live increased significantly by about 10 years between 1969 and 1996. In fact, for the first time in the recent past, life expectance at birth in Yap has surpassed 70 years of age. The rapid improvements in longevity that occurred between 1969 and 1976 were also present between 1983 and 1990, and between 1990 and 1996.

The trend observed in Infant Mortality and Life Expectancy at birth could have also been slightly distorted by the quality of the mortality data in earlier censuses. As in the case of many developing countries, the quality of data collection is improving over time (better educated enumerators and respondents, better computational facilities, etc.). In this respect, the higher life expectancy and lower Infant Mortality rate observed in 1976 could be partly due to the suspected under reporting on mortality data in 1980 census.

Nevertheless, given the result of the 2000 census alone, the Infant Mortality Rate in the state is still relatively high and should be a worry for Yap State policy makers, particularly in the Health sector. Although it had improved considerably between 1990 and 1996, there is still room for improvements, especially when comparing the state's IMR to other neighboring Pacific Island nations. A comparison of mortality rates for Yap State and the FSM to other neighboring Pacific Islands is summarized in Table 5.5. Yap's infant mortality rate of 23 was significantly lower than the average of 40 for FSM, and also slightly lower than the average of 25, for neighboring Island nations. Nevertheless, Yap's IMR is still higher than most of the neighboring island nations as shown by the infant mortality indices of Guam, Nauru, CNMI, and Palau. Only Kiribati and the Marshall Islands have infant mortality rates higher than Yap.

Table 5.5: Estimated Mortality Data from Yap and Other Pacific Island Nations, Various Years

	Infant	Life
Country	mortality (per '000)	expectancy
FSM	41 (1996)	67.0 (1996)
Yap	29 (1996)	70.1 (1996)
Guam	9 (1990-95)	72.1 (1990)
Kiribati	62 (1992-93)	61.5 (1990-95)
Marshall Islands	37 (1999)	67.5 (1997-99)
Nauru	13 (1991-93)	57.6 (1991-93)
CNMI	10 (1992-96)	69.5 (1994-96)
Palau	19 (1994-96)	67.0 (1990)

Source: Secretariat of the Pacific Community, "Oceania Population 2000."

Finally, for the purpose of generating life tables for Yap, we used life expectancy at birth, computed separately from males and females survivorship data of 2000 FSM census (see appendix Table B03A). The male and female life expectancy at birth for the period around 1996 was estimated at 70.1 and 71.1 years, respectively. Using a Coale and Demeny model life table for West pattern, we generated a life table for Yap that best matched the estimated life expectancies at birth. The result is presented in Table 5.6. The life table could serve useful purposes both within the demographic community and also in the world at large. The Life Table provides estimates of life expectancies at the various ages, survival ratios for each age group that could be used in population projections, constructing actuarial tables, etc. It is, however, important to note that the life table was based on a selected level of childhood mortality. The resulting level and pattern of adult mortality may not be accurate, and therefore should be used with caution.

Table 5.6 Life Table as implied by Coale & Demeny Model Life Table for the West pattern of Female and Males, Yap State: 1997 to 1998

AGE	M(x,n)	Q(x,n)	I(x)	D(x,n)	L(x,n)	S(x,n)	-	T(x)	E(x)	A(x,n)
FEMALE										
0	0.02880	0.02810	100000	2810	97568	0.96943	/a/	7100032	71.0	0.134
1	0.00165	0.00659	97190	641	387145	0.99447	/b/	7002464	72.0	1.478
5	0.00059	0.00297	96550	286	482032	0.99732		6615319	68.5	2.500
10	0.00048	0.00239	96263	231	480740	0.99701		6133287	63.7	2.500
15	0.00077	0.00385	96033	370	479300	0.99539		5652547	58.9	2.667
20	0.00107	0.00536	95663	513	477089	0.99403		5173247	54.1	2.609
25	0.00132	0.00657	95150	625	474240	0.99272		4696158	49.4	2.583
30	0.00162	0.00809	94525	765	470787	0.99078		4221918	44.7	2.596
35	0.00212	0.01056	93760	990	466444	0.98760		3751132	40.0	2.619
40	0.00294	0.01460	92770	1354	460659	0.98219		3284688	35.4	2.644
45	0.00436	0.02160	91416	1974	452453	0.97352		2824029	30.9	2.657
50	0.00653	0.03214	89441	2874	440470	0.96053		2371576	26.5	2.656
55	0.00986	0.04819	86567	4171	423083	0.93942		1931106	22.3	2.662
60	0.01569	0.07569	82396	6237	397451	0.90285		1508022	18.3	2.671
65	0.02618	0.12338	76159	9396	358840	0.84109		1110571	14.6	2.664
70	0.04470	0.20208	66763	13492	301816	0.74489		751731	11.3	2.628
75	0.07583	0.32001	53271	17047	224820	0.50030	/c/	449914	8.4	2.564
80	0.16093		36224	36224	225094			225094	6.2	6.214
MALE										
0	0.02941	0.02867	100000	2867	97491	0.96947	/a/	6929976	69.3	0.125
1	0.00137	0.00546	97133	530	387243	0.99489	/b/	6832485	70.3	1.567
5	0.00063	0.00315	96603	304	482255	0.99712		6445242	66.7	2.500
10	0.00052	0.00261	96299	251	480867	0.99645		5962987	61.9	2.500
15	0.00098	0.00489	96048	470	479158	0.99405		5482120	57.1	2.698
20	0.00137	0.00681	95578	651	476306	0.99312		5002962	52.3	2.567
25	0.00137	0.00682	94927	648	473031	0.99283		4526656	47.7	2.523
30	0.00155	0.00770	94280	726	469638	0.99132		4053625	43.0	2.576
35	0.00200	0.00997	93553	933	465559	0.98785		3583987	38.3	2.634
40	0.00300	0.01488	92620	1379	459903	0.98086		3118429	33.7	2.680
45	0.00491	0.02427	91242	2214	451102	0.96891		2658525	29.1	2.694
50	0.00798	0.03918	89028	3488	437076	0.94948		2207423	24.8	2.689
55	0.01315	0.06382	85539	5459	414996	0.91962		1770347	20.7	2.673
60	0.02093	0.09973	80080	7986	381638	0.87518		1355351	16.9	2.651
65	0.03340	0.15472	72094	11155	334003	0.80741		973713	13.5	2.627
70	0.05381	0.23811	60940	14510	269676	0.70858		639710	10.5	2.586
75	0.08658	0.35632	46429	16544	191087	0.48360	/c/	370035	8.0	2.518
80	0.16701		29886	29886	178947			178947	6.0	5.988

Source: Implied by childhood survivorship data from 1994 FSM Census, unpublished data.

Note: $\frac{1}{4}$ Value given is for survivorship of 5 cohorts of birth to age group 0.4 = L(0.5)/500000

/b/ Value given is for S(0,5)=L(5,5)/L(0,5)

/c/ Value given is S(75+,5)=T(80)/T(75)

M(x,n) = Age specific central death rate

Q(x,n) = Probability of dying between exact ages x and x+n (age-specific mortality rate)

L(x) = Number of survivors at age x.

D(x,n) = Number of deaths occurring between ages x and x+n

L(x,n) = Number of person-years lived between ages x and x+n

T(x) = Number of person-years lived after age x.

E(x) = Life expectancy at age x.

A(x,n) = Average person-years lived by those who die between ages x and x+n

Conclusion

The data from the 2000 FSM Census suggest that Yap State's life expectancy has increased by about 10 years between 1973 and 2000; from over 61 years to about 72 years of age. Indeed, this is the first time in recent decades that life expectancy in the state has exceeded the 70 years old mark. Similarly, child survival has improved as well between 1973 and 2000, though, it is evident from comparison with other Pacific Island nations that the state's mortality indices are still moderately high and needs further improvements. Given the result of the 2000 census alone, the high level of infant mortality rate should be a real worry for Yap State policy makers, particularly in the Health sector. Furthermore, improvements in the vital registrations system are highly recommended to improve the accuracy and quality of estimating mortality indices in the state.

CHAPTER 6 MIGRATION

Introduction

In previous chapters we discussed several demographic topics including population structure, fertility, and mortality. From these discussions, it is very clear that migration plays an important role in the population dynamics of Yap. Migration is one of the main determinants of population size and growth (the others are fertility and mortality). The measurement of migration, however, is more complex. Unlike fertility and mortality (which predictably happen once in each person's lifetime), some people may not ever migrate, but those that do migrate may do so more than once and for different reasons. Some people migrate for employment, for education, for vacation, visiting, and so forth.

Migration involves movement from one place to another. In the case of Yap two types of migration are present; internal Migration (between the regions in Yap) and interstate migration (between Yap and other FSM states), and international migration (between Yap and outside of Yap, including other FSM states). A person who migrates is referred to as an immigrant or in-migrant with respect to the area of destination, and an emigrant or out-migrant with respect to the place of origin (in each case the former term is used for international migration and the latter for internal and interstate migration). Censuses, as we shall see, are not the most reliable sources for measuring international migration. Data from other sources will be used in this report to provide at least some insight into emigration from the Yap. On the other hand, the census is a reliable source for measuring internal and interstate migration.

Migration has emerged as an extremely important factor shaping the demography of the Pacific (Connell, 1990). This is true for Yap, although the levels and patterns of migration differ in many respects from other parts of the Pacific.

To be useful, a definition of migration must take into account both space and time, to distinguish migration from the many other movements that people make. Because the census asks different questions about migration, it actually defines migration in different ways for different purposes. This is an important point for census data users to understand because it means that different migration figures presented in the different tables may not be strictly comparable with each other. For example, even though data on birthplace and residence 5 years ago provide a basis for measuring migration, the measures so obtained are defined differently, serve different purposes, and are not comparable.

Data Description

Birthplace

The 2000 census followed the same procedure used in 1994 regarding people's birthplace. It asked everyone for details of place of birth and recorded island/village, municipality, and FSM state if a person was born in the FSM. When a person's birthplace was outside the FSM, the name of the foreign country was recorded. If a person was born in the hospital, the mother's place of usual residence just prior to being admitted was recorded as the place of birth for the child. This was important in Yap State, especially for Outer Islanders and

Citizenship and Legal Residence

Details of citizenship and legal residence were obtained for all persons in Yap, and again followed the same procedure used in the 1994 census. The question requested the municipality and state of legal residence (place where a person is a registered voter) for Yap and Other FSM Citizens. For non-FSM citizens, the country of citizenship was recorded.

Continuous Residence

Continuous residence was obtained from questionnaire items P11a and P11b and corresponded to the same question found in the 1994 census questionnaire. The question requested respondents to provide the month and year they started living continuously at the present place of residence. If respondents had not been living continuously in the

present residence since birth, they were requested to provide the name of the municipality, FSM state, or foreign country in which they previously resided.

Residence in 1995

All individuals who responded that they lived in a different municipality or overseas on April 1, 1995 (five years prior to the census) were requested to give the name of the municipality and FSM state, or foreign country of residence.

Limitations and Comparability

Due to changes in the boundaries of foreign countries over the past decades, some persons may have reported their place of birth in terms of boundaries that existed at the time of their birth but have since changed.

Not all migratory moves in the five years before the census were covered. For example, some persons may have resided in the same place in the 1995 and 2000 but moved in the interim. This migration was not taken into account. Where persons moved more that once in the five years before the census, only the place of residence five years before and the current place of residence were recorded.

Data on family members residing abroad were not collected in the 2000 census as it was done in 1994. Family members, entire families, and sole individuals without any immediate family living outside the FSM may have been missed entirely since questions related to this subject were not asked.

Analysis of Migration Data

The data obtained from the 2000 census were used in this chapter to determine the migration pattern in Yap and are based primarily on the place of birth, citizenship and legal residence, continuous residence, and residence in 1995.

Birthplace

Birthplace provides useful data on lifetime migration and mobility patterns, covering an indefinite time interval, determined by people's ages and the timing and direction of movement. Table 6.1 compares the birthplace of Yap residents between 1987 and 2000.

The data show that the non Yap-born immigrant population increased, from 610 to 852, over the 7 years before the 1994 census, and increased further to 938 in 2000. While the Yap-born population grew in 1994 by about 9 percent (824 persons), the non Yap-born population increased by about 40 percent (an additional of 242 persons). By comparison, Yap-born population in 2000 decreased by about 0.2 percent (less 23 persons), while the non Yap-born population increased by about 10 percent (86 persons). By sex, the Yap-born population went from a male dominated population in 1987 (about 103 males to 100 females) to a predominantly female population in 2000 (about 98 males to 100 females). Interestingly, the ratio of male to female Yap-born population was about equal in 1994. For the non Yap-born population, their population was predominantly male in 1987. This situation was reversed in 1994 and 2000 to being predominantly female, partly because of the immigration of female workers at the Kingtex garment factory. The male to female ratios for the non Yap-born population in 1994 and 2000 were shown to be about 81 and 76 males to 100 females during those respective years.

Table 6.1: Birthplace of Yap Residents by Sex: 1985 to 2000

	1987					1994				2000			
				Sex				Sex				Sex	
Birthplace	Total	Male	Female	ratio	Total	Male	Female	ratio	Total	Male	Female	ratio	
Total	10,112	5,179	4,933	105	11,178	5,565	5,613	99	11,241	5,508	5,733	96	
In Yap	9,502	4,811	4,691	103	10,326	5,184	5,142	101	10,303	5,103	5,200	98	
Yap Proper	6,116	3,146	2,970	106	5,709	2,889	2,820	102	5,870	2,985	2,885	103	
Outer Islands	3,386	1,665	1,721	97	4,617	2,295	2,322	99	4,433	2,118	2,315	91	
Outside Yap	610	368	242	152	852	381	471	81	938	405	533	76	

Source: 1987 Yap Census; 1994 FSM Census, Table P17; 2000 FSM Census, Table P2-5.

Table 6.2 cross-classifies place of usual residence by country of birth for 1994 and 2000 to reveal some details of international migration. More than 92 percent of the Yap residents in 1994 were born in Yap compared to about 8 percent of those born outside the state. In 2000, the proportion of Yap residents born in Yap decreased slightly to below 92 percent, while non Yap-born individuals increased to over 8 percent of the total population. The highest

percentage of non Yap-born individuals in 1994 came from Asia (at 54 percent), which comprised mostly of Chinaborn and Philippine-born persons, likely to be fishermen in the fishing industry, garment workers or hired labor for construction businesses. Similarly in 2000, Asians also outnumbered all other non Yap-born groups comprising about 56 percent of all those born outside of Yap. Again, persons born in China and the Philippines accounted for the largest proportion.

On Yap proper, the highest percentage of foreign-born were born in Asia, at about 56 percent in 1994, and about 59 percent in 2000. In the Outer Islands, the highest proportions of foreign-born persons were shown to be from the other FSM states (47 percent in 1994 and 69 percent in 2000).

Table 6.2: Birthplace of Yap Residents: 1994 and 2000

	1994								200	00							
	Number				Percent			Number Percei			Percent	nt					
		Yap	Outer		Yap	Outer		Yap	Outer		Yap	Outer					
Place of birth	Total	Proper	Islands	Total	Proper	Islands	Total	Proper	Islands	Total	Proper	Islands					
Total	11,178	6,919	4,259	100.0	100.0	100.0	11,241	7,391	3,850	100.0	100.0	100.0					
Yap	10,326	6,099	4,227	92.4	88.1	99.2	10,303	6,489	3,814	91.7	87.8	99.1					
Outside Yap	852	820	32	7.6	11.9	0.8	938	902	36	8.3	12.2	0.9					
Other FSM state	95	80	15	0.8	1.2	0.4	101	76	25	0.9	1.0	0.6					
USA	139	130	9	1.2	1.9	0.2	173	164	9	1.5	2.2	0.2					
Asia	462	461	1	4.1	6.7	-	528	528	-	4.7	7.1	-					
China and Taiwan	282	281	-	2.5	4.1	-	351	351	-	3.1	4.7	-					
Philippines	166	166	1	1.5	2.4	-	149	149	-	1.3	2.0	-					
Other Asia	14	14	-	0.1	0.2	-	28	28	-	0.2	0.4	-					
Elsewhere	156	149	7	1.4	2.2	0.2	136	134	2	1.2	1.8	0.1					

Source: 1994 FSM Census, Table P17; 2000 FSM Census, Table P2-5.

Note: USA includes Guam and CNMI

Table 6.3 shows lifetime migration between the regions. Of the 10,326 Yap-born residing in Yap in 1994, 9,856 (93 and 99 percent for Yap Proper and Outer Islands respectively) resided in their region of birth. In 2000, Yap-born residents decreased slightly to 10,303, of whom 9,538 (89 and 98 percent for Yap proper and Outer Islands, respectively) resided in their respective region of birth. The difference of 470 persons in 1994 and 765 persons in 2000 who resided in a region other then the one in which they were born were called the internal lifetime migrants.

The direction of internal migration flows was principally towards Yap Proper, which gained migrants from the Outer Islands. This was observed from the results of both the 1994 and 2000 censuses, and was mainly due to the state center, Colonia, being located on Yap Proper. For example, in 1994, 430 lifetime migrants moved from the Outer Islands to Yap Proper and 40 moved in the opposite direction yielding a net flow of 390 persons from the Outer Islands to Yap Proper. Most of the 40 from Yap were either Outer Islanders born on Yap or students at Outer Islands High School and Neighboring Islands Middle School. In 2000, the same inflow of internal lifetime migrant was also observed with a net flow of about 619 persons from the Outer Islands to Yap proper.

For those who were born outside of the state, the direction of migration flow was also towards Yap Proper in both censuses. In 1994, over 84 percent of persons born in other FSM states and close to 98 percent of those born elsewhere were residing on Yap Proper. The same trend was repeated in 2000 with over 75 percent of persons born in other FSM states and close to 99 percent of those born elsewhere living on Yap Proper.

Table 6.3: Place of birth by Region of Usual Residence, Yap State: 1994 and 2000

		1994 Census			2000 Census				
Region and state of birth	Total	Yap Proper	Outer Islands	Total	Yap Proper	Outer Islands			
Total	10,421	6,179	4,242	10,404	6,565	3,839			
Yap	10,326	6,099	4,227	10,303	6,489	3,814			
Yap Proper	5,709	5,669	40	5,870	5,797	73			
Outer Islands	4,617	430	4,187	4,433	692	3,741			
Other FSM states	95	80	15	101	76	25			
Chuuk	57	45	12	47	24	23			
Pohnpei	33	30	3	51	50	1			
Kosrae	5	5	-	3	2	1			
Elsewhere	757	740	17	837	826	11			

Source: 1994 FSM Census, Table P17 and unpublished data; 2000 FSM Census, Table P2-5 & unpublished data

The effects of lifetime migration on the composition of the Yap population can be seen in Table 6.4. The last column of table 6.4 describes net-migration as a rate, dividing the net-migrants by the total population. However, since the timing of the migration is undetermined, the rate expressed does not itself relate to any specific period, but enables broad comparisons between regions.

The effects of internal lifetime migration shows that in 1994 Yap Proper had a lifetime migration rate of 6.6 per hundred, while the Outer Islands had lifetime migration rate of -8.8 per hundred. By 2000, internal lifetime migration rate for Yap Proper had increased to 10.0 per 100 while that of the Outer Islands had decreased even further to -15.2 per hundred. This showed that interstate migration in Yap was essentially towards Yap Proper. Outer Island males constituted the majority of these migrants at -9.6 per hundred in 1994 and -16.6 in 2000.

Table 6.4: Internal Lifetime Migration, Yap State: 1994 and 2000

			1994 Censu	ıs			2000 Census					
Region	Non- movers	In- migrants	Out- migrants	net- migrants	Lifetime migra- tion rate (%)	Non- movers	In- migrants	Out- migrants	net- migrants	Lifetime migra- tion rate (%)		
Total					•							
Yap Proper	5,669	430	40	390	6.6	5,797	692	73	619	10.0		
Outer Islands	4,187	40	430	-390	-8.8	3,741	73	692	-619	-15.0		
Males												
Yap Proper	2,867	232	22	210	7.0	2,949	360	36	324	10.3		
Outer Islands	2,063	22	232	-210	-9.6	1,758	36	360	-324	-16.6		
Females												
Yap Proper	2,802	198	18	180	6.2	2,848	332	37	295	9.7		
Outer Islands	2,124	18	198	-180	-8.1	1,983	37	332	-295	-13.6		

Source: 1994 FSM Census, Table P17 and unpublished data; 2000 FSM Census, Table P2-5 & unpublished data

Note: Lifetime migration is defined as the net migrants divided by the number of non-movers (multiplied by 100 to make it a percent).

Table 6.5 shows interstate lifetime migration, that is, between Yap and other FSM states. In 1994, the number of people moving out of Yap to the other FSM states was greater than the number coming in from these states. For example, 213 lifetime migrants moved from Yap to the other FSM states and 95 moved in the other direction, yielding a net outflow of 118 persons. The same pattern of Yapese out-migration to the other FSM states was also seen in 2000 where a net outflow of 230 persons resulted from the difference between the 331 lifetime migrants who moved out from Yap and the 101 who moved in from the other states. The vast majority of these interstate movers migrated to Pohnpei, largely because of the presence of national government and the college. On the other hand, the interstate in-migrants were mostly from Chuuk in 1994. This changed in 2000 when Pohnpei-born in-migrant surpassed the Chuuk-group, possibly as a result of returning national government workers and their family.

Table 6.5: State and Region of Birth by State of Usual Residence, Yap State: 1994 and 2000

		State of F	Residence in	1994		State of Residence in 2000				
State and Municipality of birth	Total	Yap	Chuuk	Pohnpei	Kosrae	Total	Yap	Chuuk	Pohnpei	Kosrae
Total	102,116	10,421	52,571	32,306	6,818	104,163	10,404	53,334	33,105	7,320
Yap	10,539	10,326	36	171	6	10,634	10,303	79	238	14
Yap Proper	5,825	5,709	19	92	5	6,116	5,870	63	171	12
Outer Islands	4,714	4,617	17	79	1	4,518	4,433	16	67	2
Other FSM States	91,577	95	52,535	32,135	6,812	93,529	101	53,255	32,867	7,306
Chuuk	53,012	57	52,347	588	20	54,122	47	53,108	888	79
Pohnpei	31,595	33	170	31,233	159	32,171	51	130	31,691	299
Kosrae	6,970	5	18	314	6,633	7,236	3	17	288	6,928

Source: 1994 FSM Census, Table P18; 2000 FSM Census, Table P2-6.

Citizenship and Legal Residence

Similar to the approach used in the previous section using place of birth to determine migration patterns, this section uses citizenship and legal residence to establish migration patterns for Yap residents. Most residents in Yap were legal residents of Yap (see Table 6.6). Once again, the majority of the non-Yap citizens were Asians. Persons of Asian citizenship accounted for about 4 and 5 percent of the total Yapese residents in 1994 and 2000, respectively. Among non-Yapese citizens Asians accounted for about 54 and 71 percent of the population during the two census years mentioned earlier.

Table 6.6: Usual Residence by Citizenship, Yap State: 1994 and 2000

			1994							2000				
Usual residenc	Total	Percent	Yap	States	USA	Asia	Elsewhere	Total	Percent	Yap	States	USA	Asia	Elsewhere
Total	11,178	100.0	92.4	0.8	1.2	4.1	1.4	11,241	100.0	93.4	0.3	0.9	4.7	0.7
Yap Proper	6,919	100.0	88.1	1.2	1.9	6.7	2.2	7,391	100.0	90.2	0.3	1.3	7.1	1.0
Outer Islands	4,259	100.0	99.2	0.4	0.2	-	0.2	3,850	100.0	99.5	0.4	0.1	0.0	0.0

Source: 1994 FSM Census, Table P18; 2000 FSM Census, Table P2-6.

In Table 6.7, we restrict the data to the legal residents of Yap presenting their place of usual residence within the FSM. *Legal Residence* is defined as the place in which a person is a registered voter. The data showed that a vast majority of the population lived in their region of legal residence. For example, more than 97 percent of the legal residents of Yap Proper in 1994, and about the same level in 2000, resided on Yap Proper during the time of the two censuses. In 1994, 581 people (about 12 percent) stayed in the municipalities on Yap Proper and were registered voters of the Outer Islands. In 2000, the proportion of Yap proper residents who considered themselves legal residents of the Outer Islands increased to 17 percent of all registered voters from the Outer Islands. Out of these Outer Islanders living on Yap Proper, the largest proportions were from Woleai and Ulithi. This general pattern is also evident in the Outer Islands, although at much lower level, as seen from the following: 0.3 and 0.1 percent of Yap proper legal residents living in the Outer Islands were shown to be mainly from Rull in 1994 and Rumung in 2000. In other FSM states, the proportion of Yapese legal residents living there increased slightly from 2.1 to 2.6 percent between 1994 and 2000. Most of the Yapese legal residents living in these other states were from Gagil municipality in 1994 and Rull municipality in 2000.

Table 6.7: Municipality and State of Legal Residence by Municipality of Usual Residence, Yap State: 1994 and 2000

					1994				2000							
		Numb	er			Per	cent			Num	ber			Percent		
				Other				Other				Other				Other
Legal		Yap	Outer	FSM		Yap	Outer	FSM		Yap	Outer	FSM		Yap	Outer	FSM
Residence	Total	Proper	Islands	states	Total	Proper	Islands	states	Total	Proper	Islands	states	Total	Proper	Islands	states
Total	10,748	6,271	4,247	230	100.0	58.3	39.5	2.1	10,779	6,669	3,832	278	100.0	61.9	35.6	2.6
Yap Proper	5,838	5,690	18	130	100.0	97.5	0.3	2.2	6,062	5,865	9	188	100.0	96.8	0.1	3.1
Rumung	252	242	4	6	100.0	96.0	1.6	2.4	203	177	3	23	100.0	87.2	1.5	11.3
Maap	648	643	-	5	100.0	99.2	-	0.8	659	638	1	20	100.0	96.8	0.2	3.0
Gagil	726	688	-	38	100.0	94.8	-	5.2	802	771	0	31	100.0	96.1	-	3.9
Tomil	903	875	4	24	100.0	96.9	0.4	2.7	869	855	1	13	100.0	98.4	0.1	1.5
Fanif	587	579	-	8	100.0	98.6	-	1.4	557	540	0	17	100.0	96.9	-	3.1
Weloy	727	699	-	28	100.0	96.1	-	3.9	831	814	2	15	100.0	98.0	0.2	1.8
Rull	1,215	1,193	6	16	100.0	98.2	0.5	1.3	1,225	1,181	2	42	100.0	96.4	0.2	3.4
Gilman	201	198	2	1	100.0	98.5	1.0	0.5	241	234	0	7	100.0	97.1	-	2.9
Kanifay	270	269	-	1	100.0	99.6	-	0.4	280	273	0	7	100.0	97.5	-	2.5
Dalipebinaw	309	304	2	3	100.0	98.4	0.6	1.0	395	382	0	13	100.0	96.7	-	3.3
Outer Islands	4,910	581	4,229	100	100.0	11.8	86.1	2.0	4,717	804	3,823	90	100.0	17.0	81.0	1.9
Ulithi	1,052	108	934	10	100.0	10.3	88.8	1.0	861	156	691	14	100.0	18.1	80	1.6
Fais/Sorol	413	72	318	23	100.0	17.4	77.0	5.6	327	76	248	3	100.0	23.2	75	0.9
Ngulu	38	11	27	-	100.0	28.9	71.1	-	23	2	21	0	100.0	8.7	91.3	-
Woleai	965	160	785	20	100.0	16.6	81.3	2.1	1,149	233	882	34	100.0	20.3	76.8	3.0
Eauripik	189	45	135	9	100.0	23.8	71.4	4.8	186	49	123	14	100.0	26.3	66.1	7.5
Ifalik	725	12	706	7	100.0	1.7	97.4	1.0	682	82	594	6	100.0	12.0	87.1	0.9
Faraulap	268	28	240	-	100.0	10.4	89.6	-	268	25	242	1	100.0	9.3	90.3	0.4
Elato	124	6	118	-	100.0	4.8	95.2	-	129	22	103	4	100.0	17.1	79.8	3.1
Lamotrek	478	59	406	13	100.0	12.3	84.9	2.7	429	71	352	6	100.0	16.6	82.1	1.4
Satawal	658	80	560	18	100.0	12.2	85.1	2.7	663	88	567	8	100.0	13.3	85.5	1.2

Source: 1994 FSM Census, Table P18; 2000 FSM Census, Table P2-6.

Continuous Residence

We also use data on continuous residence to determine migration levels and patterns. Table 6.8 gives the distribution of the non-migrant population. In 1994, almost 67 percent of the Yap population responded that they had been living in their present municipality of residence their entire life, or were non-movers. This segment of the population increased to about 70 percent in 2000. On the other hand, the proportion of those who have previously lived elsewhere, or were movers, have decreased from about 34 percent in 1994 to slightly over 30 percent in 2000.

The table shows different patterns and levels between the regions. Persons in the Outer Islands were most likely to be non-movers (8 out of every ten in 1994 and about 9 out of ten in 2000). For Yap Proper, about 6 out of every 10 were non-movers in during both 1994 and 2000. These differences were partly due to the different immigration and in-migration levels experienced in each region.

Table 6.8: Distribution of Non-movers and Previous Residence, Yap State: 1994 and 2000

Residence since birth		1994 Census			2000 Census	
and previous place	F	lace of residence		I	Place of residence	
of residence	Total	Yap Proper	Outer Islands	Total	Yap Proper	Outer Islands
Total	11,178	6,919	4,259	11,241	7,391	3,850
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Lived in municipality since birth	66.5	57.6	81.0	69.7	59.5	89.2
Previous residence elsewhere	33.5	42.4	19.0	30.3	40.5	10.8

Source: 1994 FSM Census, Table P18; 2000 FSM Census, Table P2-6.

In Table 6.9, the proportion of the population identified in Table 6.8 as having "Previous Residence Elsewhere" were further analyzed to determine where and how long they have lived in their previous place of residence. Thus, of the 34 percent (3,746 persons) with "Previous Residence Elsewhere" in 1994, about 45 percent had continuously resided in their municipality of residence for 5 years or more. Nearly 8 percent had continuously resided in their municipality of residence for less than 1 year. Of the total number of movers, 2,524 (67 percent) previously resided in Yap at the time of the census, and 153 (4 percent) previously resided in the other FSM states (interstate migrants). Migrants who previously resided in Asia and elsewhere made up 12 percent and 16 percent, respectively, of all movers who previously had residences elsewhere.

As seen in Table 6.8, the proportion of the total population that had "Previous Residence Elsewhere" decreased to about 30 percent (3,408 persons) in 2000, of which, about 41 percent had continuously resided in their municipality of residence for 5 years or more. About 11 percent had continuously resided in their municipality of residence for less than a year. Table 6.9 also showed that the majority of these movers, about 69 percent, had previously resided in other municipalities and islands in Yap at the time of the 2000 census. The proportion who had previously resided in other FSM states comprised over 4 percent, while those who previously resided in Asia and elsewhere made up 15 and 12 percent, respectively.

Table 6.9: Movers by Place of Previous Residence, Yap State: 1994 and 2000

		1	994 Census				2	2000 Census		
			In other					In other		
Duration of residence	Total	In this state	FSM state	In Asia	Elsewhere	Total	In this state	FSM state	In Asia	Elsewhere
Total	3,746	2,524	153	451	618	3,408	2,353	140	500	415
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 6 months	20.6	22.7	16.3	14.6	17.3	17.7	15.9	18.6	29.0	13.7
6 months to 1 year	7.8	5.2	11.1	22.0	7.4	11.1	12.7	3.6	5.2	11.6
1 to 2 years	14.5	10.7	9.8	39.5	13.1	10.5	9.5	12.1	15.2	10.1
2 to 5 years	12.5	11.9	12.4	12.0	15.4	19.6	14.1	26.4	41.0	22.7
5 years or more		44.5	49.4 50.3	12.0	46.8	41.1	47.8	39.3	9.6	41.9

Source: 1994 FSM Census, Table P18; 2000 FSM Census, Table P2-6.

Note: Duration of residence refers to continuous residence at the municipality of usual residence.

Residence in 1995 (Five Years Prior to the Census)

More specific time-bound migration information was collected based on usual residence exactly five years before the census. For many purposes, such as in estimating migration levels for population projections, this kind of information is very useful.

Table 6.10 presents data on Yap residents in 1994 and 2000 by place of residence five years earlier in 1989 and 1995, necessarily excluding persons less than 5 years old. Table 6.10 can be interpreted in a similar way to Table 6.3, which dealt with lifetime migration. Thus of the 9,148 persons residing in Yap in 1994, aged 5 years and over, 382 or 4 percent resided in another region in 1989. Since the period covered is shorter than for lifetime migrants, the number of migrants is reduced. Again the attraction of Yap Proper as a destination for migrants is apparent due to its location of the town center. Over 80 percent of internal migrants in the 5 years before the census moved to Yap Proper. The table also provides data on immigration in Yap for the preceding five years before the census. The immigrant population (aged 5 years and above) within this defined period was 554 or about 6 per hundred.

In 2000, the total number of persons residing in Yap State, aged 5 years and over, increased to 9,869, of which over 92 percent (9,114) had resided in the state since 1995. Of this group who have since lived in the state 5 years ago, 60 percent (5,495 persons) resided on Yap proper while the remaining 40 percent (3,619 persons) resided in the Outer Islands. Between Yap Proper and the Outer Islands, 404 persons, or about 4 percent resided in another region in 1995. At the time of the census in 2000, the population parameters shifted a bit to about 64 percent (5,833 persons) on Yap proper and about 36 percent (3,281 persons) in the Outer Islands. By comparing the population sizes between 1994 and 2000 and previous residence 5 years ago from each census date, it became obvious that the internal migration pattern was directed primarily toward Yap Proper, where the state center is located. The table also showed that there were 755 persons (8 percent of the population, aged 5 years and over), living in Yap in 2000, who previously resided outside of the state five years earlier in 1995.

Table 6.10: Residence 5 Years Ago by Usual Residence for Persons Aged 5 Years and Over, Yap State: 1994 and 2000

			Usual Reside	ence		
		1994			2000	
Residence 5 years ago	Total	Yap Proper	Outer Islands	Total	Yap Proper	Outer Islands
Total	9,702	5,777	3,925	9,869	6,557	3,312
In Yap	9,148	5,289	3,859	9,114	5,833	3,281
Yap Proper	5,529	5,218	311	5,495	5,462	33
Outer Islands	3,619	71	3,548	3,619	371	3248
Outside Yap	554	488	66	755	724	31
Other FSM states	80	65	15	80	66	14
Chuuk	31	25	6	19	8	11
Pohnpei	42	33	9	60	58	2
Kosrae	7	7	-	1	0	1
USA	235	200	35	171	160	11
Asia	126	126	-	444	444	0
Elsewhere	113	97	16	60	54	6

Source: 1994 FSM Census, Table P20; 2000 FSM Census, Table P2-8.

Note: 1. USA includes Guam and CNMI

Table 6.11 summarizes the migration presented in Table 6.10 and shows its effects on the state population. In 1994, Yap Proper gained 311 persons from the outer islands but lost 71 persons to yield a net gain of 240 persons. The outer islands experienced net out-migration. The same pattern of migration was also observed in 2000 where Yap proper gained 371 persons from the Outer Islands and 33 persons moved out to the Outer Islands yielding a net gain of 338 persons for Yap Proper. An advantage of specific 5-year migration is that it permits the calculation of an annual migration rate, which measures the impact that migration has on population growth. Between 1989 and 1994, about 1 out of every hundred people migrated to Yap Proper each year. As a result, the Outer Island population decreased by 1.3 per hundred annually due to the net out-migration. Similarly between 1995 and 2000, the annual migration rate from the Outer Islands to Yap proper increased slightly to 1.2 out of every hundred people which evidently resulted in diminishing the Outer Island population by 2 persons per hundred annually due to net out-migration.

Table 6.11: Internal Migration Rate by Municipality, Yap State: 1994 and 2000

		19	994 Census				20	000 Census		
		Rate for p	eriod 1989 t	o 1994			Rate for p	eriod 1996 t	o 2000	
	Non-	In-	Out-	Net-	migration	Non-	In-	Out-	Net-	migration
Region	movers	migrants	migrants	migrants	rate (%)	movers	migrants	migrants	migrants	rate (%)
Total										
Yap Proper	5,218	311	71	240	0.9	5,462	371	33	338	1.2
Outer Islands	3,548	71	311	-240	-1.3	3,248	33	371	-338	-2.0
Males										
Yap Proper	2,510	156	37	119	0.9	2,767	187	16	171	1.2
Outer Islands	1,708	37	156	-119	-1.3	1,515	16	187	-171	-2.1
Females										
Yap Proper	2,708	155	34	121	0.9	2,695	184	17	167	1.2
Outer Islands	1,840	34	155	-121	-1.3	1,733	17	184	-167	-1.8

Source: 1994 FSM Census, Table P120; 2000 FSM Census, Table P2-8.

Note: Annual migration rate is defined as (logeP2/P1)/N, where P2 is the sum of non-movers and in-migrants, P1 is the sum of non-movers and out-migrants, and N is the number of years between the defined period.

Table 6.12 present data on Yap and other FSM residents by place of residences in 1989 and 1995 to show the interstate migration in those 5-year periods prior to the 1994 and 2000 censuses. Similar to the finding using birthplace, the out-migrants in 1994 outnumbered the in-migrants resulting with a net out-flow of 28 persons. Likewise in 2000, the out-migrant again outnumbered the in-migrant resulting with a net out-flow of 66 persons. From the data presented in the table, the annual interstate out-migration for yap was estimated to be around –0.6 per thousand between 1989 and 1994. In 2000, however, the annual interstate out-migration from Yap to the other FSM states rose dramatically to about –1.4 per every thousand persons between 1995 and 2000. This indicated a higher rate of travel among those who traveled outside of the state than those coming in.

Table 6.12: Interstate Migration for the Period 1989 to 1994 and 1995 to 2000 Persons 5 Years and Over, Yap State 1994 and 2000

		1994 Census			2000 Census	
Residence 5 years ago	Total	Yap	Other FSM states	Total	Yap	Other FSM states
Total	87,531	9,228	78,303	90,042	9,194	80,848
Yap	9,256	9,148	108	9,260	9,114	146
Other FSM State	78,275	80	78,195	80,782	80	80,702

Source: 1994 FSM Census, Table P120; 2000 FSM Census, Table P2-8.

Table 6.13 presents the educational attainment of the interstate in-migrants for the 5 year period preceding the two censuses. In both years, 1994 and 2000, the number of in-migrants in the state 5 years prior to each specific census was found to be the same: 80 persons. Nevertheless, their educational attainment was quite different as shown as shown by the results of the 1994 census of about 58 percent who had graduated from high school compared to about 44 percent in 2000. The corresponding percentages for males and females were 64 and 44 percent in 1994, and 65 and 26 percent in 2000. This indicated that male migrants were better educated than female migrants during the past two censuses.

Table 6.13: Educational Attainment of Interstate Migrants by Sex, Yap State: 1994 & 2000

	N	Numbers		Cumul	ative percent	
Educational attainment	Total	Males	Females	Total	Males	Females
1994 Census						
Total	80	53	27			
No education	8	2	6	100.0	100.0	100.0
Elementary	17	10	7	90.0	96.2	77.8
H. school no diploma	9	7	2	68.8	77.4	51.9
H. school graduate	19	15	4	57.5	64.2	44.4
College	27	19	8	33.8	35.8	29.6
2000 Census						
Total	80	37	43			
No education	4	1	3	100.0	100.0	100.0
Elementary	30	9	21	95.0	97.3	93.0
H. school no diploma	11	3	8	57.5	73.0	44.2
H. school graduate	10	7	3	43.8	64.9	25.6
College	25	17	8	31.3	46.0	18.6

Source: 1994 & 2000 FSM Censuses, unpublished data

Table 6.14 presents the labor force participation of interstate migrants by sex in 1994 and 2000. The table shows that in 1994, the proportion of the interstate migrants in the labor force (about 51 percent) surpassed the other proportion not working in the labor force (49 percent) by a very close margin of about 2 percentage points. In 2000, labor force participation of interstate migrants increased to about 78 percent while those not in the labor force decreased to about 22 percent. The overall labor force participation rate for the migrants of about 51 percent in 1994 was almost the same as the state average at 55 percent (see Chapter 9). Similarly in 2000, the interstate migrant labor force participation rate of about 78 percent was about the same as the 72 percent for the state. Unemployment was also high among the migrants in 1994, particularly among the youngest working age group, 15 to 29 years of age. For all migrants in 1994, the unemployment rate was 14 percent, while in 2000, it dropped to about 5 percent. By age groups, the unemployment rate was highest among the 30 to 44 age group in 1994 at over 18 percent. In 2000, only the 30 to 44 age groups had unemployed persons with an unemployment rate of slightly over 13 percent. The unemployment rate would have been much higher if those who said they were not looking for work, but who claimed they were available to work, were included in the labor force. Using this broader definition, the unemployment rate in 1994 and 2000 among migrants 15 years and above increased to 26 percent and 21 percents, respectively. For those 15 to 29 years of age, the unemployment rate in 1994 and 2000 also rose correspondingly to 25 percent and 28 percent, respectively.

Table 6.14: Labor Force Participation of Interstate Migrants by Sex, Yap State 1994 and 2000

			In the	labor force (I	LF)				Not in the labor	or force	
			Emplo	yed	Unemp	loyed		Could have	taken a job	Not availa	able for work
Age group	Total	Total	Number	% in LF	Number	% in LF	Total	Number	% not in LF	Number	% not in LF
1994 CENSUS											
Total	69	35	30	85.7	5	14.3	34	4	11.8	30	88.2
15 to 29 years	41	18	15	83.3	3	16.7	23	2	8.7	21	91.3
30 to 44 years	16	11	9	81.8	2	18.2	5	2	40.0	3	60.0
45 to 59 years	8	5	5	100.0	-	-	3	-	-	3	100.0
60 years & over	4	1	1	100.0	-	-	3	-	-	3	100.0
2000 CENSUS											
Total	55	43	41	95.3	2	4.7	12	7	58.3	5	41.7
15 to 29 years	27	18	18	100.0	-	-	9	7	77.8	2	22.2
30 to 44 years	16	15	13	86.7	2	13.3	1	0	-	1	100.0
45 to 59 years	9	8	8	100.0	-	-	1	-	-	1	100.0
60 years & over	3	2	2	100.0	_	-	1	-	-	1	100.0

Source: 1994 & 2000 FSM Censuses, unpublished data

Conclusion

The data presented in the 1994 and 2000 censuses showed that the population was affected by internal migration, interstate migration, as well as international migration. The two censuses covered internal and interstate migration reasonably well. As for international migration, immigration was covered to some extent.

For internal migration, data from the two censuses show the direction of migration flows was principally towards Yap Proper. As expected, Yap Proper gained migrants while the Outer Islands lost migrants. The annual net-migration rate for the period 1989-1994 for Yap Proper and Outer Islands in 1994 was 0.9 and -1.3 respectively. For the period 1995-to 2000, the annual net migration rates for the two regions were 1.2 and -2.0, respectively.

For interstate migration, the number of Yapese moving out of Yap to other FSM states outnumbered the number moving into Yap, resulting in a net out-migration. This net out-flow is reflected in the annual interstate migration rate of -0.6 per thousand during the period 1989 to 1994, and -1.4 per thousand between 1995 and 2000. Also a vast majority of the interstate migrants (about 58 percent) had at least graduated from high school in 1994 as compared to about 44 percent in 2000. Nevertheless, a large proportion of them (about 49 percent in 1994 and 21 percent in 2000) were not economically active, suggesting that interstate migration may be motivated by other things beside employment, such as education, visiting, or marriage.

For international migration, Asians were the largest group among the non-Yap migrants, accounting for 54 percent in 1994 and 56 percent in 2000 of all foreign-born persons. Over the 6 years before the 2000 census, the non Yapborn population increased by 86 persons possibly as a result of increased hiring at the foreign garment company, King Tex, Inc. The Yap-born population decreased by 23 persons over the same period. Asian was also the dominating group among the non Yap-born immigrants in Yap Proper. In the Outer Islands the dominating group was other FSM states.

CHAPTER 7 RELIGION, ETHNICITY, AND LANGUAGE

Introduction

The questionnaire used in the 2000 FSM census contained several questions on social characteristics population, including ethnic origin, religion, and language. Ethnic origin refers to a person's origin or descent, 'roots', heritage, or place where a person's ancestors came from. Since there is significant internal migration between the Outer Islands of Yap and Yap Proper this question provides data on the movement between islands. The data on religion tell us about what churches people attend, although not their degree of affiliation with those churches. The data on language tell us what language people speak and how many speak English.

Data Description

Religion

The 2000 Census obtained data on religion from responses to questionnaire item 7, asked of all persons despite age and sex. For census purposes, religion was defined as a religious or spiritual belief or preference, regardless of whether or not this belief was represented by an organized group.

Ethnicity

Ethnicity was obtained from questionnaire item 6. The question allowed the respondents the option of reporting their ethnic origin by specifying single or multiple (two) ethnic groups. The question was based on self-identification and was open-ended (respondents were required to provide the answer). In published tabulations, multiple groups are designated in general open-ended categories such as 'Yapese and other', rather than in specific multiple ethnic groups such as 'Yapese-Chuukese'.

Language

The 2000 FSM Census gathered information on languages spoken and language spoken at home from questionnaire item 15a and 15b, respectively. The questions were asked only of persons age 3 years and over. In item 15a the respondent was given the option of listing up to three languages, and in order from most often used to least often used. Language spoken at home was asked in questionnaire item 15b, "what language was spoken at home".

Limitations and Comparability.

In both the 1994 and 2000 FSM censuses, a question on ethnicity was asked of all respondents. However, the definition of ethnic group was difficult to break down in Yap State, especially in the Outer Islands. Examples on the questionnaire were given as "Yapese, Pohnpeian, Mortlockese, Satawalese, Filipino, etc." Many outer islanders chose Yapese as their ethnic origin because it was the first option in the example and the only option that suited their origin. This occurred despite the fact that three ethnic groups - Ulithian, Woleaian, and Satawalese - were provided as options for Outer Islanders. Though most were corrected during the Editing and Coding phase of the census, there might be some that may not have been corrected. Ethnic Origin was not obtained on the 1987 Yap State Census.

The ability to speak a language was not given, thus there were no limits set for qualifying a person to be able to speak a language. Persons could have felt that they needed to fill all three spaces despite their ability in a language. Questions on language were not asked in the 1987 Yap State Census.

Analysis of Religion, Ethnicity, and Language Data

Religion

Tables 7.1 through 7.3 present data on religions. Between 1973 and 2000, Roman Catholic remained constantly the main religious denomination in Yap State. In 2000, slightly over 83 percent of the population reported that they were Roman Catholic; about the same level in 1973 and 1994. Indeed, this showed that the number of Roman Catholics in Yap have remained constantly high during the past three decades. Protestants, on the other hand, have declined slightly from about 4 percent between 1973 and 1994 to slightly over 3 percent in 2000. Members of "other religions" have increased from about 2 percent in 1973 to about 8 percent in 2000. The remaining proportion

of the population who either refused to report their religion or claimed that they had no religion at all declined from about 11 percent in 1973 to slightly below 6 percent in 2000.

Despite a slight downward turn between 1994 and 2000, the proportion of male Roman Catholics had generally been increasing for the past three decades since 1973; from about 81 percent in 1973 to about 84 percent in 2000. During the same period, the proportion of female Roman Catholics declined from about 85 percent in 1973 to about 82 percent in 2000. For Protestants, male membership declined from about 5 percent in 1973 to about 3 percent in 2000 while female members remained at about the same level during the same period. Membership in the "other religion" category increased dramatically for both sexes from about 3 percent to slightly over 7 percent for males and from about 2 percent to about 8 percent for females. Conversely, the proportion for Refused/no religion decreased for both sexes.

Table 7.1: Religion by Sex, Yap State: 1973 to 2000

		1973			1994			2000	
Religion	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	7,870	4,044	3,826	11,178	5,565	5,613	11,241	5,508	5,733
Percent	100.0	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0
Roman Catholic	82.8	81.3	84.5	84.3	85.2	83.5	83.3	84.2	82.4
Protestant	4.1	4.5	3.5	4.1	4.1	4.0	3.4	3.1	3.6
Other religion	2.2	2.6	1.8	5.6	5.0	6.1	7.6	7.3	7.9
Refused/no religion	10.9	11.6	10.2	6.0	5.8	6.3	5.8	5.4	6.1

Source: 1973 (TTPI) Census, Table T11; 1994 FSM Census, Table P22; 2000 FSM Census, Table P2-10.

Table 7.2 shows religion by municipality. In 2000, Roman Catholic was the predominant religion (nearly 75 percent) in Yap Proper and over 99 percent in the Outer Islands. Of all municipalities on Yap proper, Rumung had the highest proportion, about 94 percent, of Roman Catholics among its residents while Dalipebinaw had the lowest at slightly over 31 percent. Indeed, only Dalipebinaw municipality has the proportion of Roman Catholics below 50 percent. This was probably due to the fact that Dalipebinaw had a large group of residents who practiced other religion, (such as the immigrant workers at the Kingtex Garment Factory) refused, or had no religion at all. Maap also had large portions of their population who answered no religion. This might be explained by the more traditional outlook of older persons in this municipality, many of whom believe in local religion and do not consider their beliefs to have any relation to organized and newly introduced religion. Fanif and Rull both have significant Congregationalist populations. In the Outer Islands, Roman Catholics dominated all islands and atolls, with the lowest proportion found on Ngulu at slightly above 96 percent. On Elato and Lamotrek, all residents were found to be Roman Catholics. Small clusters of Congregationalists, Mormons, and Seven Day Adventists (SDA), are found on Woleai, Faraulap, Satawal, and Ulithi.

Table 7.2: Religion by Municipality, Yap State: 1994 and 2000

			_	Congreg-						
Municipality	Total	Percent	Roman Catholic	ational Protestant	Mormon	SDA	Baptist	Other Protestant	Other R relig.	Refused/ no religion
1994 CENSUS	Total	Percent	Cautone	Protestant	MOIIIOII	SDA	Бария	Protestant	reng.	rengion
Total	11,178	100.0	84.3	2.0	1.0	0.3	0.4	2.1	3.8	6.0
Yap Proper	6,919	100.0	75.5	3.0	1.6	0.5	0.7	3.4	6.0	9.2
Rumung	143	100.0	85.3	-	-	-	1.4	-	0.7	12.6
Maap	547	100.0	65.3	13.3	1.1	_	-	_	2.7	17.6
Gagil	716	100.0	87.0	1.8	1.0	0.1	1.0	3.4	1.3	4.5
Tomil	897	100.0	84.1	2.8	3.0	2.1	1.1	1.4	1.6	3.9
Fanif	462	100.0	69.7	8.2	0.4	-	0.6	8.4	7.4	5.2
Weloy	1,188	100.0	77.5	2.5	2.7	0.2	1.7	2.7	5.6	7.2
Rull	1,973	100.0	77.7	1.5	1.9	0.5	0.1	4.7	7.8	5.8
Gilman	204	100.0	84.8	-		2.5	_	-	6.9	5.9
Kanifay	245	100.0	89.4	_	-		_	_	6.1	4.5
Dalipebinaw	544	100.0	36.8	_	-	0.2	0.6	5.9	17.8	38.8
Outer Islands	4,259	100.0	98.7	0.3	-	-	-	-	0.1	0.9
2000 CENSUS										
Total	11,241	100.0	83.3	3.4	1.1	0.7	0.3	-	5.5	5.8
Yap Proper	7,391	100.0	74.9	5.1	1.6	1.1	0.4	-	8.3	8.5
Rumung	126	100.0	93.7	-	-	0.8	-	-	-	5.6
Maap	592	100.0	63.5	4.9	1.4	2.0	0.2	-	15.5	12.5
Gagil	734	100.0	85.4	5.4	1.1	0.5	0.5	-	2.6	4.4
Tomil	1,023	100.0	84.5	1.8	2.5	2.3	0.1	-	5.6	3.2
Fanif	547	100.0	62.7	23.8	1.3	0.2	0.5	-	5.9	5.7
Weloy	1,197	100.0	83.6	3.4	3.3	0.5	0.8	-	3.2	5.2
Rull	2,019	100.0	77.4	5.8	1.5	1.2	0.4	-	7.8	5.9
Gilman	233	100.0	82.4	-	0.4	3.0	-	-	9.9	4.3
Kanifay	275	100.0	92.0	-	-	-	-	-	4.4	3.6
Dalipebinaw	645	100.0	31.2	-	-	-	0.8	-	29.0	39.1
Outer Islands	3,850	100.0	99.4	0.1	-	0.1	-	-	-	0.5

Source: 1994 FSM Census, Table P22; 2000 FSM Census, Table P2-10.

Table 7.3 shows the percentage distribution of religion by age group. In 1994, over 82 percent of the population in each age group was Catholic. By 2000 that figure had dropped to about 79 percent due to the age group 15 to 35. For younger age groups (0-14 years of age), the proportion of Roman Catholics increased slightly by about one percentage point from about 84 percent in 1994 to over 85 percent in 2000, indicating that the majority of children residing in the state were Roman Catholics. Conversely among the 15-35 years age group, the proportion of Roman Catholics declined between the two census years from slightly over 82 percent in 1994 to about 79 percent in 2000, possibly as a result of switching religious affiliation. A Similar downward trend was also observed among persons age 36-64 years probably for the same reason indicated before. For the older age group (65 years and over), Roman Catholic affiliation remained at 90 percent in both census years. The distribution for the remaining religion categories were almost uniform for all age groups, except refusal/no religion category where the distribution was higher for the younger age groups in 1994 but has since dropped during the 2000 census. Interestingly, however, person age 15 to 35 years who refused or had no religious affiliation showed a significant increase from about 3 percent in 1994 compared to about 9 percent in 2000.

Table 7.3: Religion by Age Group, Yap State: 1994 and 2000

		19	94 Census				20	00 Census		
Religion	Total	0-14	15-35	36-64	65+	Total	0-14	15-35	36-64	65+
Total	11,178	4,424	3,870	2,403	481	11,241	4,088	3,903	2,731	519
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Roman Catholic	84.3	83.9	82.2	87.4	90.0	83.3	85.2	78.7	85.7	90.0
Protestant	4.1	4.0	4.0	4.6	2.3	3.4	3.3	3.0	4.2	2.3
Congregational	2.0	1.9	2.0	2.1	1.0	-	-	-	-	-
Other Protestant	2.1	2.1	1.9	2.5	1.2	3.4	3.3	3.0	4.2	2.3
Baptist	0.4	0.4	0.4	0.6	-	0.3	0.2	0.3	0.4	0.4
Seventh Day Adventist (SDA)	0.3	0.2	0.6	0.2	0.4	0.7	0.5	1.1	0.5	1.0
Latter Day Saints (Mormon)	1.0	1.2	1.1	0.9	0.2	1.1	1.1	1.1	1.2	0.6
Other religion	3.8	3.0	4.9	3.6	3.1	5.5	4.4	7.3	4.9	3.7
Refused/no religion	6.0	7.3	6.9	2.7	4.0	5.8	5.4	8.6	3.0	2.1

Source: 1994 FSM Census, table P39; 2000 FSM Census, Table P3-8.

Ethnicity

Table 7.4 shows the ethnic composition of Yap State by region. The results revealed that about 90 percent of the resident population of Yap State in 1994 were Yapese (about 48 percent were Yapese and about 42 percent were Outer Islanders). In 2000, the proportion of all Yapese in the state decreased to about 86 percent with slightly different ethnic distribution (about 49 percent Yapese mainlanders and about 36 percent Outer Islanders). Asians in the state were the third largest ethnic group in the state next to Yapese mainlanders and Outer Islanders. In both census years, they surpassed all other ethnic minorities (4.4 percent in 1994 and 4.8 percent in 2000) including Palauans who in the past ranked third in the state. The high concentration of Asians in the state was probably due to migrant workers working for Ting Hong and King Tex Garment factories. In 2000, however, Ting Hong was no longer operating in the state. Nevertheless, Asian migrant workers and their dependents outnumbered all other ethnic minority groups in the state. The Palauan population in Yap State in 1994 was higher than all Chuukese, Pohnpeian, and Kosraeans (or other FSM states) population combined, maybe because Yap is closer to Palau geographically. By 2000, their population had been surpassed by Chuukese/Mortlockese, whom they mostly live in the Outer Islands. Those falling under "other" ethnic minority groups were made up mainly of persons with multiple ethnic origins, or those whose parental lineages that extends over multiple ethnic groups. As a result, this group included people whose one side of the family included Yapese and Outer Islanders parents while the other side was from different ethnic backgrounds. In 1994, the "other" ethnic minority group made up close to 3 percent of all ethnic groups in the state. This increased to more than 6 percent in 2000, possibly as a result of increasing contacts with other ethnic groups due to the increasing number of people migrating in and out of the state.

Table 7.4: Ethnic Origin of Yap Residents by Region: 1994 and 2000

	Total		Yap Prope	r	Outer Islan	ds
Ethnicity	Number	Percent	Number	Percent	Number	Percent
1994 CENSUS	11,178	100.0	6,919	100.0	4,259	100.0
Yapese	5,379	48.1	5,343	77.2	36	0.8
Yap Outer Islands	4,705	42.1	561	8.1	4,144	97.3
Chuukese/Mortlockese	59	0.5	33	0.5	26	0.6
Pohnpeian	22	0.2	20	0.3	2	-
Kosraean	13	0.1	12	0.2	1	-
Palauans	120	1.1	119	1.7	1	-
Asians	495	4.4	494	7.1	1	-
White	71	0.6	69	1.0	2	-
Others	314	2.8	268	3.9	46	1.1
2000 CENSUS	11,241	100.0	7,391	100.0	3,850	100.0
Yapese	5,515	49.1	5,511	74.6	4	0.1
Yap Outer Islands	4,097	36.4	747	10.1	3,350	87.0
Chuukese/Mortlockese	217	1.9	24	0.3	193	5.0
Pohnpeian	20	0.2	18	0.2	2	0.1
Kosraean	3	0.0	2	0.0	1	0.0
Palauans	105	0.9	105	1.4	-	0.0
Asians	536	4.8	536	7.3	-	0.0
White	67	0.6	66	0.9	1	0.0
Others	681	6.1	382	5.2	299	7.8

Source: 1994 FSM Census, Table P39; 2000 FSM Census, Table P2-9.

Table 7.5 shows ethnicity by place of birth. In 1994, about 97 percent of the total Yapese mainlander population was born in Yap Proper and about 1 percent was born in the Outer Islands. The remaining 2 percent were born elsewhere. For Outer Islanders, the reverse was true where over 4 percent were born on Yap Proper and close to 95 percent were born in the Outer Islands. The remaining 1 percent was born elsewhere. This trend was repeated during the 2000 census where the proportions of Yapese mainlanders and Outer Islanders born on Yap Proper and in the Outer Islands were very much the same. For Asians, nearly 6 percent were born in Yap State in 1994 while the rest were migrants. In 2000, however, the proportion of Asians born in the state was estimated at close to 2 percent while the rest were born elsewhere mainly in Asia.

Table 7.5: Ethnicity by Place of Birth, Yap State: 1994 and 2000

						Place of I	Birth			
Ethnicity	Total	Percent	Yap	Yap O. Is.	Chuuk	Pohnpei	Kosrae	USA	Asia	Others
1994										
Total	11,178	100.0	51.1	41.3	0.5	0.4	-	1.2	4.1	1.5
Yapese	5,501	100.0	97.4	0.8	0.2	0.3	_	0.9	-	0.4
Y. Outer Islands	4,779	100.0	4.5	94.8	0.2	0.1	_	0.3	-	0.1
Yapese/Mortlokese	52	100.0	17.3	26.9	53.8	-	-	1.9	-	-
Pohnpeian	31	100.0	35.5	9.7	-	51.6	-	3.2	-	-
Kosraean	22	100.0	68.2	9.1	-	-	22.7	-	-	-
Asian	514	100.0	5.8	3.7	-	-	-	0.8	88.9	0.8
White	79	100.0	7.6	-	1.3	2.5	-	57.0	2.5	29.1
Others	200	100.0	33.0	2.5	2.5	0.5	-	9.0	-	52.5
2000										
Total	11,241	100.0	52.2	39.5	0.4	0.5	-	0.9	4.7	1.8
Yapese	5,712	100.0	97.6	0.6	-	0.4	-	0.5	-	0.9
Y. Outer Islands	4,452	100.0	4.4	94.6	0.2	0.1	_	0.1	-	0.5
Chuukese/Mortlokese	223	100.0	0.4	83.0	15.2	0.9	_	-	-	0.4
Pohnpeian	33	100.0	39.4	6.1	3.0	48.5	_	-	-	3.0
Kosraean	4	100.0	25.0	25.0	-	-	50.0	-	-	-
Asian	550	100.0	1.5	1.6	0.2	-	-	0.7	95.8	0.2
White	76	100.0	6.6	-	-	5.3	-	77.6	1.3	9.2
Others	191	100.0	34.0	-	-	1.0	-	2.6	-	62.3

Source: 1994 FSM Census, Table P39; 2000 FSM Census, Table P2-9.

Language

The languages and ethnicities in Yap State, in most cases correspond to each other. Comparing Table 7.6 to 7.4, the proportion of persons who spoke English was more than the number of White ethnicity. The main cause was that English is the common language used between Yap Proper and Outer Islands, and among other ethnic groups. Intermarriages greatly affect the language of the family. Due to these effects, the proportion of English speakers in the state increased between 1994 and 2000 from about 2 percent to around 3 percent, respectively. This was especially true in Weloy and Rull Municipalities where the state center (Colonia) is located, while the other languages decreased in proportion. In 1994, about 6 percent of the population in Rull and over 3 percent in Weloy used English as their primary language. By 2000, these figures have increased to 4 percent for Weloy and around 8 percent for Rull.

Table 7.6: Common Languages Spoken at Home by Ethnicity, Yap State: 1994 and 2000

	Language sp									poken at home						
				1994	4							2000)			
Municipality	Total	Percent	Yap Proper	Outer Islands	Other FSM	English		Others	Total	Percent	Yap Proper	Outer Islands	Other FSM	English	Asian	Other
Total	9,702	100.0	48.6	43.1	0.6	2.1	4.4	1.3	9,869	100.0	50.7	40.4	0.3	2.8	3.7	2.1
Yap Proper	6,017	100.0	78.0	8.9	0.9	3.2	7.1	2.0	6,557	100.0	76.0	10.8	0.3	4.2	5.6	3.1
Rumung	114	100.0	96.5	-	-	-	3.5	-	107	100.0	100.0	-	-	-	-	-
Maap	465	100.0	97.6	0.2	-	0.4	-	1.7	517	100.0	97.1	-	-	2.5	0.4	-
Gagil	635	100.0	91.2	2.4	3.9	0.9	0.3	1.3	641	100.0	92.8	1.4	0.5	4.1	-	1.2
Tomil	776	100.0	96.0	0.1	0.1	2.3	0.6	0.8	894	100.0	87.6	6.8	0.4	3.1	0.3	1.7
Fanif	392	100.0	97.4	-	-	2.0	-	0.5	489	100.0	97.1	-	1.4	1.0	-	0.4
Weloy	1,021	100.0	78.2	11.0	0.3	3.5	5.6	1.5	1,074	100.0	77.0	16.1	0.1	4.0	0.3	2.5
Rull	1,716	100.0	59.5	23.8	1.3	6.1	4.6	4.7	1,799	100.0	58.1	25.6	0.2	7.6	0.6	7.9
Gilman	178	100.0	99.4	-	-	0.6	-	-	200	100.0	98.5	0.5	-	1.0	-	-
Kanifay	212	100.0	99.5	-	-	0.5	-	-	225	100.0	98.7	0.4	-	0.9	-	-
Dalipebinaw	508	100.0	42.3	-	-	3.0	54.7	-	611	100.0	38.1	-	0.3	3.3	57.3	1.0
Outer Islands	3,685	100.0	0.8	98.8	0.2	0.2	-	0.1	3,312	100.0	0.6	99.0	0.2	0.1	-	0.1
Ulithi	909	100.0	-	99.9	-	0.1	-	-	670	100.0	0.1	99.0	0.3	0.4	-	0.1
Fais/Sorol	251	100.0	-	99.2	-	0.8	-	-	173	100.0	-	99.4	-	0.6	-	-
Ngulu	33	100.0	81.8	18.2	-	-	-	-	23	100.0	78.3	21.7	-	-	-	-
Woleai	737	100.0	0.1	99.9	-	-	-	-	847	100.0	-	100.0	-	-	-	-
Eauripik	103	100.0	-	98.1	1.0	-	-	1.0	101	100.0	-	100.0	-	-	-	-
Ifalik	560	100.0	-	99.5	0.2	0.2	-	0.2	488	100.0	-	99.4	0.2	-	-	0.4
Faraulap	193	100.0	-	99.5	-	-	-	0.5	182	100.0	-	100.0	-	-	-	-
Elato	104	100.0	-	100.0	-	-	-	-	80	100.0	-	100.0	-	-	-	-
Lamotrek	323	100.0	-	99.7	0.3	-	-	-	288	100.0	-	100.0	-	-	-	-
Satawal	472	100.0	-	98.7	0.6	0.6	-	-	460	100.0	-	99.3	0.7	-	-	-

Source: 1994 FSM Census, Table 57; 2000 FSM Census, Table P4-10.

Table 7.7 presents the languages commonly spoken at home by place of birth. Almost all persons who used Yapese language were born in Yap and the same is true to the Yap Outer Island language. This was true for both the 1994 and 2000 censuses, where over 97 percent of Yapese born on mainland Yap spoke the mainland dialect and over 95 percent of the Outer Islanders born on their respective islands spoke their own language. In all cases, language spoken at home usually corresponded to place of birth except Kosraean and English in 1994 and English in 2000. The highest proportion of English speakers (about 31 percent), were born in Yap in 1994. In 2000, English speakers born on Yap (slightly over 28 percent) corresponds to English speakers born in the United States, Guam, or Northern Marianas. Interestingly, All the Chinese and Taiwanese speakers were migrants in both 1994 and 2000.

Table 7.7: Languages Spoken at Home by Place of Birth, Yap State: 1994 and 2000

		Pla								Place of	Birth								
•					19	94								2	2000				
-								USA									USA		
		Per-		Yap		Pohn-	Kos-	Guam				Per-	Yap		Pohn-	Kos-	Guam		
Language spoken	Total	cent	Yap	O.Is	Chuuk	pei	rae	CNMI	Asia	Others	Total	cent Yap	O.Is.	Chuuk	pei	rae	CNMI	Asia	Others
1994 CENSUS																			
Persons 5+ yrs	9,702	100.0	50.1	41.7	0.6	0.3	0.1	1.0	4.7	1.5	9,869	100.0 52.1	39.2	0.5	0.4	-	1.5	5.0	1.3
Yapese	4,720	100.0	97.4	0.8	0.3	0.2	-	0.5	0.1	0.6	5,005	100.0 97.2	0.7	0.1	0.4	-	1.0	0.1	0.6
Yap Outer Islands	4,178	100.0	3.6	95.2	0.5	-	-	0.3	0.1	0.2	3,986	100.0 3.6	95.4	0.6	0.1	-	0.3	-	0.1
Chuukese ¹	28	100.0	28.6	7.1	60.7	-	-	3.6	-	-	13	100.0 -	15.4	84.6	-	-	-	-	-
Pohnpeian	19	100.0	15.8	10.5	-	68.4	-	5.3	_	-	10	100.0 30.0	10.0	-	60.0	_	-	-	-
Kosraean	10	100.0	40.0	20.0	-	-	40.0	-	-	-	3	100.0 -	-	-	33.3	66.7	-	-	-
English	199	100.0	30.7	6.5	1.5	1.0	-	25.6	16.1	18.6	280	100.0 28.2	7.5	2.1	3.6	_	28.2	14.6	15.7
Filipino	146	100.0	-	4.1	4.1	0.7	-	-	91.1	-	111	100.0 18.9	7.2	-	-	_	-	73.9	_
Chinese ²	276	100.0	-	-	-	-	-	-	100.0	-	351	100.0 -	-	-	-	-	-	100.0	_
Others	126	100.0	28.0	2.4	-	0.8	-	3.2	7.2	58.4	110	100.0 32.7	2.7	-	2.7	-	2.7	13.6	45.5

Source: 1994 FSM Census, Table P74; 2000 FSM Census, Table P5-10.

Notes: 1 Includes Mortlockese; 2 Includes Taiwanese

Table 7.8 shows the frequency of English use in Yap State by municipality in 1994 and 2000, for the population aged 5 years and over. In 1994, the proportion of the English speaking population who spoke English only at home was 0.7 percent and the highest proportion was found in Dalipebinaw Municipality. This is probably due to the large numbers of Asian migrant workers at the Kingtex Garment Factory, located in Dalipebinaw Municipality. A similar trend was also shown in 2000 where Dalipebinaw Municipality reported the highest proportion (9.3 percent) of English only speakers. The census questionnaire allowed up to the 3 most languages used but did not ask for those who didn't speak English at all. It could be that a person could have used English as the fourth language spoken but the questionnaire only asked for the 3 most common languages.

Of the 4,126 (or 69 percent of the population) persons who reported speaking English on Yap Proper in 1994, over 91 percent used English as their second language. By 2000, the proportion of Yapese mainlanders who spoke English had risen to 4,947 (or over 75 percent of the population). However, those who spoke English as their second language had decreased to over 87 percent, although those who spoke English only or use it as their first language had increased to 5.6 and 5.5 percent, respectively. For the Outer Islands, a lower proportion (50 percent) reported using English in 1994. In 2000, English speakers in the Outer Islands had decreased to around 39 percent, probably as a result of out migration as seen by the corresponding decline of persons five years and over between the two census years. For both regions, almost everyone who reported using English used English as their second language. On Yap Proper, 90 percent reported English as their second language while in the the Outer Islands over 99 percent report it as their second language.

Table 7.8: Frequency of English Use by Region, Yap State: 1994 and 2000

				199	94							2000				
	Persons	5 years a	nd over	Distr	ibution of	f Persons	Spoke Eng	lish	Person	is 5 years a	and over	Distribu	tion of F	ersons	Spoke E	nglish
		Spoke l	English		English	as 1st	as 2nd	as 3rd		Spoke I	English		English	as 1st	as 2nd	as 3rd
Region	Total	Number	Percent	Total	only	lang.	lang.	lang.	Total	Number	Percent	Total	only	lang.	lang.	lang.
Total	9,702	5,960	61.4	100.0	0.7	3.2	92.1	4.0	9,869	6,244	63.3	100.0	4.5	4.5	90.0	1.1
Yap Proper	6,017	4,126	68.6	100.0	0.9	4.0	91.4	3.6	6,557	4,947	75.4	100.0	5.6	5.5	87.5	1.4
Rumung	114	65	57.0	100.0	-	-	100.0	-	107	41	38.3	100.0	-	2.4	97.6	-
Maap	465	280	60.2	100.0	0.4	1.4	97.5	0.7	517	372	72.0	100.0	3.5	1.6	94.1	0.8
Gagil	635	463	72.9	100.0	0.4	1.7	95.7	2.2	641	522	81.4	100.0	5.0	4.6	89.1	1.3
Tomil	776	578	74.5	100.0	0.3	4.5	93.1	2.1	894	765	85.6	100.0	3.7	3.8	91.0	1.6
Fanif	392	254	64.8	100.0	1.6	0.4	96.5	1.6	489	378	77.3	100.0	1.3	0.5	97.9	0.3
Weloy	1,021	787	77.1	100.0	0.8	4.6	89.8	4.8	1,074	864	80.4	100.0	5.0	5.6	88.3	1.2
Rull	1,716	1,264	73.7	100.0	1.3	6.9	86.6	5.3	1,799	1,520	84.5	100.0	9.0	9.1	79.7	2.2
Gilman	178	119	66.9	100.0	-	-	94.1	5.9	200	150	75.0	100.0	1.3	2.0	96.0	0.7
Kanifay	212	138	65.1	100.0	-	0.7	94.9	4.3	225	119	52.9	100.0	1.7	9.2	89.1	-
Dalipebinaw	508	178	35.0	100.0	3.4	2.2	92.7	1.7	611	216	35.4	100.0	9.3	5.1	85.2	0.5
Outer Islands	3,685	1,834	49.8	100.0	0.1	1.3	93.7	4.9	3,312	1,297	39.2	100.0	0.3	0.3	99.3	0.1

Source: 1994 FSM Census, Table P74; 2000 FSM Census, Table P5-10.

Table 7.9 presents the population speaking English at home by age group and region. Of the population aged 5 years and above in 1994, 199 (2 percent) used English as their common language at home. In 2000, the proportion of English speakers at home increased slightly to 280 persons, or 2.8 percent of the total population. Most of these individuals were between the ages of 25 and 59, which is not surprising as most American families residing in the state fell within this age range, and intermarriage between persons of different languages often opted to use the English language at home. Additionally, a large proportion, about 97 percent in 1994 and about 99 percent in 2000, of these English speakers at home resided on Yap Proper.

Table 7.9: English Speakers at Home by Age Group, Yap State: 1994 and 2000

			19	94		2000							
					ge Distribut						age Distrib		
		ons 5 years an		English	Speakers at	Home	Perso	ns 5 years and	l over	English	Speakers a	ıt Home	
	E	nglish speakei	s at home		Yap	Outer		inglish speake	rs at home	Total	Yap	Outer	
Age Group	Total	Number	Percent	Total %	Proper	Islands	Total	Number	Percent	%	Proper	Islands	
Total	9,702	199	2.1	100.0	96.5	3.5	9,869	280	2.8	100.0	98.6	1.4	
5 to 9 years	1,457	24	1.6	100.0	100.0	-	1,361	28	2.1	100.0	100.0	-	
10 to 14 years	1,491	27	1.8	100.0	100.0	-	1,355	27	2.0	100.0	96.3	3.7	
15 to 19 years	1,252	11	0.9	100.0	90.9	9.1	1,353	23	1.7	100.0	100.0	-	
20 to 24 years	936	17	1.8	100.0	100.0	-	998	24	2.4	100.0	91.7	8.3	
25 to 29 years	761	21	2.8	100.0	100.0	-	708	32	4.5	100.0	96.9	3.1	
30 to 34 years	768	21	2.7	100.0	95.2	4.8	697	26	3.7	100.0	100.0	-	
35 to 39 years	764	18	2.4	100.0	100.0	-	718	27	3.8	100.0	100.0	-	
40 to 44 years	619	26	4.2	100.0	84.6	15.4	723	23	3.2	100.0	100.0	-	
45 to 49 years	416	12	2.9	100.0	100.0	-	590	26	4.4	100.0	100.0	-	
50 to 54 years	259	12	4.6	100.0	100.0	-	399	16	4.0	100.0	100.0	-	
55 to 59 years	250	6	2.4	100.0	83.3	16.7	227	17	7.5	100.0	100.0	-	
60 to 64 years	248	2	0.8	-	-	-	221	6	2.7	100.0	100.0	-	
65 yrs & over	481	2	0.4	100.0	100.0	-	519	5	1.0	100.0	100.0		

Source: 1994 FSM Census, Table 40; 2000 FSM Census, Table P8-9.

Conclusion

Most persons enumerated in 2000 had a religion. The results of the 1973, 1994, and 2000 censuses showed that Roman Catholic remained the major religion in the State of Yap. Compared to other religion and those who refused/no religion, the proportion of Roman Catholic remained at over 80 percent during the past three decades. Data from the 1994 and 2000 censuses also showed a constantly higher proportion of Roman Catholics in the Outer Islands than on Yap Proper, possibly because of the more diverse ethnic groups and greater degree of exposure to outside influence on mainland Yap than in the Outer Islands.

Ethnic groups in Yap State have always been dominated by Yapese and Outer Islanders. In 1994, about 90 percent of the population was of Yapese ethnicity (48 percent Yapese and 42 percent Outer Islander). This dropped to about 86 percent in 2000, with slightly different ethnic distribution (about 49 percent Yapese mainlanders and about 36 percent Outer Islanders). Other than the local groups, there were foreign ethnic groups that consisted mostly of Asians. The Asians were the largest non-Yapese ethnic group and they consisted mostly of garment workers working for the locally based Garment Factory. In 2000, Asians comprised close to 5 percent of the total population, an increase of about 0.4 percentage points since 1994.

Language patterns in Yap were also similar to that of ethnicities. Yapese and "Outer Islands" were the most common languages in Yap, followed by the English language. Yap Proper had the highest proportion of English speakers during both the 1994 and 2000 censuses, possibly because the urban center's location there.

CHAPTER 8 EDUCATION AND LITERACY

Introduction

A population's level of formal schooling is considered a good indicator of both social conditions and potential for economic success. For Yap State, which is moving from a more traditional economic system to a more Westernized system, data on education serve to provide a means to evaluate cultural change. Moreover, given the important role that education has come to play in various sectors of Yap State economy, results on this subject should provide insights on the direction of development and on the changing economic potential of the nation.

The 2000 FSM census had two items for education: school enrollment and level of educational attainment. The Yap State Department of Education collects statistical data annually to obtain information about school enrollment and to assess needs for special programs in bilingual education and special education. The census allows more indepth analysis of schooling as well as educational attainment of the entire population to compare with the socioeconomic characteristics of the population.

Data Description

School Enrollment and Type of School

The 2000 census obtained data on school enrollment from answers to questionnaire item 12. Persons were classified as enrolled in school if they reported attending a "regular" public or private school or college any time between February 1, 2000 and the date of enumeration. The question included instructions to "include only pre-kindergarten, kindergarten, elementary school, and schooling which would lead to a high school diploma or college degree" as regular school.

Public and Private School

A public school was defined as any school or college controlled and supported by the state or national government. The census defined schools supported and controlled primarily by religious organizations or other private groups as private.

Level of School Enrolled

The 2000 census classified persons enrolled in school at the time of the census as enrolled in pre-primary school, elementary school, high school, or college according to their response to question 13 (years of school completed or highest degree received) in combination with the response to status of school attendance. Persons who were enrolled and reported completing pre-kindergarten school or less were classified as enrolled in pre-primary school, which included kindergarten. Similarly, enrolled persons who had completed at least kindergarten, but not eigth grade, were classified as enrolled in elementary school. Enrolled persons who completed at least the eighth grade, but who were not high school graduates, were classified as enrolled in high school. Enrolled persons who reported completing high school or some college or having received a post-secondary degree were classified as enrolled in college. Enrolled persons who reported completing the twelfth grade but receiving no diploma were classified as enrolled in high school.

Educational Attainment

The 2000 census of the FSM obtained data on educational attainment from answers to questionnaire item 13. Persons were classified according to the highest grade of school completed or the highest degree received. For persons currently enrolled in school, the question included instructions to report the level of the previous grade attended or the highest degree received.

Enumerators were instructed that schooling completed in foreign or un-graded school systems should be reported by an estimated equivalent level of schooling in the regular American system; that vocational certificates or diplomas from vocational, trade, or business schools or colleges were not to be reported unless they were college-level degrees; and that honorary degrees were not to be reported. The instructions excluded "barber school, cosmetology, or other training for a specific trade" from the professional school degree category.

Literacy

The 2000 census of FSM obtained data on literacy - ability to read and write in any language - from responses to questionnaire item 14, asked of persons 3 years old and over. In published reports based on the 2000 data, results generally are shown only for persons 10 years old and over. Respondents were asked if they could read and write a paragraph, in any language. A person was not literate if he or she could read but not write, or if the writing ability was limited to writing the person's own name.

Vocational Training

The 2000 census obtained data on vocational training for all persons aged 15 years and over from responses to questionnaire item 18. "Vocational training" denotes a school program designed to prepare a person for work in a specific occupational field. Persons were counted as having completed vocational training if they completed the requirements for a vocational training program at a trade school, business school, hospital, some other kind of school for occupational training, or place of work.

Vocational training included training in vocational fields such as carpentry, electronics, nursing, or accounting if a bachelor's degree would not be granted for the training. Training at place of work included programs designed to teach new skills. Individual courses for personal enrichment, such as a single typing course, were not considered vocational training. Job Corps training and correspondence courses were included. Also, among trainings not included were college courses applicable toward a bachelor's degree, single courses not part of an organized program, on-the-job training, and Armed Forces basic training.

Limitations and Comparability. School enrollment and educational attainment questions have been included in all censuses conducted in Yap State since 1973, except 1987. The pertinent question in each census referred to the status of school attendance during a specific reference period and to the highest grade completed. All reference periods coincided to schooling seasons, but not to the same months. The age range for which enrollment data were obtained and published also varied between censuses. For 1973 census information on enrollment was recorded for persons aged 4 years and over while for the 1980, 1994 and 2000 censuses it was recorded for persons aged 3 years and over. Because of this and differences in reference period, comparison of school enrollment has to be considered cautiously.

There are no obvious limitations of the school enrollment and educational attainment data collected in the 2000 census of FSM. Information on type of school was collected in FSM only during the 1980, 1994 and 2000 censuses. Also, vocational training questions were asked only in the 1980, 1994 and 2000 censuses. The 1980 census had one additional question on specific type of school while the 1994 and 2000 census provided additional information on whether the training was in the FSM or outside the FSM.

Analysis of Education Data

School Enrollment

School Attendance by Level of Enrollment

As the population of Yap State increased, the number of persons attending school in the state decreased from about 3,686 in 1994 to about 3,361 in 2000 (Table 8.1). The decrease was evident in college enrollment with a percent change of -31.9 followed by elementary attendance of -2.0 percent. The significant drop in college enrollment was probably due to the census being conducted during the spring semester (April), when many college students were still abroad attending school. Those enumerated during the census, however, were probably students attending the Yap branch of the College of Micronesia in the state. Pre-school enrollment also declined by about 1 percent between 1994 and 2000. In part, these contrasting trends were due to expansion in educational services and an increase in the school age population.

Table 8.1: School Attendance for Age 3 Years and Over by Level and Type, Yap State: 1973 to 2000

		Num	ber		Per	cent Change			Perce	ent	
Level and type	1973*	1980	1994	2000	'73*-'80	'80-'94	94-'00	19'73*	1980	1994	2000
Total enrollment	2,256	2,566	3,686	3,361	1.7	2.2	-1.6	100.0	100.0	100.0	100.0
Pre-school/kindergarten	-	179	394	371	-	3.9	-1.0	-	7.0	10.7	11.0
Public	-	137	349	342	-	4.3	-0.3	-	5.3	9.5	10.2
Private	-	42	45	29	-	0.5	-9.2	-	1.6	1.2	0.9
Elementary	1,748	1,736	2,367	2,118	-0.1	1.9	-2.0	77.5	67.7	64.2	63.0
Public	-	1,490	2,037	1,816	-	1.9	-2.0	-	58.1	55.3	54.0
Private	-	246	330	302	-	1.8	-1.5	-	9.6	9.0	9.0
High school	504	583	820	836	1.9	2.1	0.3	22.3	22.7	22.2	24.9
Public	-	571	760	779	-	1.8	0.4	-	22.3	20.6	23.2
Private	-	12	60	57	-	5.7	-0.9	-	0.5	1.6	1.7
College	4	68	105	36	13.4	2.5	-31.9	0.2	2.7	2.8	1.1

Source: 1973 TTPI Census, Table T12A; 1980 TTPI Census, Table T34; 1994 & 2000 FSM Census, Table P24

Note : 1. *No breakdown by type for 1973 and covered ages 4 to 30 years.

This table suggests that despite the decreasing number of students in the school system over the years there is little change in the distribution of the students between public and private schools. Between 1980 and 1973, attendance in the school system was on the rise, especially for those attending college. In 1994, total enrollment in the state was determined to have grown by as much as 2 percent since the past decade. Indeed, the number of students in private schools grew at the same rate that public schools were growing, with the exception of public pre-schools and private high schools. The public pre-school share in 1994 (about 11 percent) was a significant increase. This was mainly due to the opening of several public pre-school and head-start by the federal program during the 14 years span in most of the municipalities and islands throughout Yap. In 1994 there was also a significant increase in the private high school share mainly because of the newly built SDA School for elementary and high school combined. This resulted in an increase in enrollment for the private high school level by 6 folds between 1980 and 1994.

In 2000, the overall decline in school enrollment (-1.6 percent) was reflected in all school levels except for high schools, which showed a slight increase of 0.3 percent. This overall decline was exceptionally high for students attending college, from 105 to 36 (-31.9 percent) between 1994 and 2000. Pre-school/head-start and elementary school also experienced a general decline in enrollment, and was especially high for private pre-schools (-9.2 percent), probably as a result of increased school fees. The only exception, high schools, showed an increase in enrollment due to a slight increase (0.4 percent) in public high school attendance.

Male students slightly out numbered female students in 1994 and 2000, at all levels of education, except for pre-school/kindergarten (see Table 8.2). During both censuses, private pre-schools showed a predominantly female population as compared to public schools. For the upper school levels, the surplus of males over females was least at elementary level but significant at the high school and college level of education.

Table 8.2: School Attendance for Age 3 Years and Over by Level and Type, Yap State: 1994 and 2000

			1994 Cens	us				2000 Censu	us	
		Number		Percent	Sex		Number		Percent	Sex
Level and Type	Total	Males	Females	females	Ratio	Total	Males	Females	females	ratio
Total enrollment	3,686	1,949	1,737	47.1	112.2	3,423	1,796	1,627	47.5	110.4
Pre-sch./kindergarten	394	193	201	51.0	96.0	366	178	188	51.4	94.7
Public	349	175	174	49.9	100.6	337	170	167	49.6	101.8
Private	45	18	27	60.0	66.7	29	8	21	72.4	38.1
Elementary	2,367	1,237	1,130	47.7	109.5	2,167	1,131	1,036	47.8	109.2
Public	2,037	1,063	974	47.8	109.1	1,860	975	885	47.6	110.2
Private	330	174	156	47.3	111.5	307	156	151	49.2	103.3
High school	820	453	367	44.8	123.4	854	466	388	45.4	120.1
Public	760	421	339	44.6	124.2	796	442	354	44.5	124.9
Private	60	32	28	46.7	114.3	58	24	34	58.6	70.6
College	105	66	39	37.1	169.2	36	21	15	41.7	140.0

Source: 1994 & 2000 FSM Census, Table P24

School Attendance by Age and Sex

One way to analyze the coverage of the school system and the extent of dropouts is to look at the proportion enrolled (or enrollment rates) at each age, among the school age populations. The enrollment rate was defined as the number of students enrolled at a given age per 100 population of that age. The analysis of the 1994 and 2000 census data on

age specific enrollment rates of the nation is summarized in Table 8.3 and Figures 8.1 to 8.2b. We can see from the table and figures that enrollment trends for 1994 and 2000 were quite similar, reaching a maximum between the ages of 6 and 14 years, with the peak for enrollment being at the ages of 9 and 13. Enrollment started to decline significantly at the age of 16 years. This was in part due to the large number of dropouts beyond the primary level of education and the lack of access to university education. Even at ages where school attendance was highest, 6 to 7 percent of the school age population remained outside school system. The total enrollment of the school age population was about 66 percent in 1994; an increase of about 6 percentage points compared to about 60 percent in 2000. Age-specific enrollment rates after the age of 17 years were higher for males mainly because of higher male enrollment at colleges (see Tables 8.2, 8.3 and Figure 8.2).

Table 8.3: Age-specific Enrollment Ratio per 100 by Age and Sex, Yap State: 1994 and 2000

			1994 C	ensus					2000 Ce	ensus		
	Enro	ollment by	age	Enr	ollment by	sex	Enro	llment by	age	Enrol	lment by	sex
Age	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females
Total	65.7	70.5	60.9	100.0	53.3	46.7	60.2	63.2	57.1	100.0	52.4	47.6
3	22.5	24.0	20.9	100.0	56.3	43.8	20.4	16.5	25.2	100.0	44.1	55.9
4	48.3	43.4	53.3	100.0	45.0	55.0	52.2	49.7	55.0	100.0	49.3	50.7
5	75.4	76.5	74.3	100.0	50.2	49.8	71.8	68.4	75.6	100.0	50.3	49.7
6	88.9	88.0	89.7	100.0	50.2	49.8	86.6	87.3	85.7	100.0	54.8	45.2
7	91.3	88.8	93.7	100.0	47.2	52.8	91.7	90.8	92.5	100.0	46.2	53.8
8	91.7	87.7	95.9	100.0	48.7	51.3	90.7	90.4	91.0	100.0	50.0	50.0
9	95.0	93.4	96.9	100.0	53.0	47.0	93.1	92.2	94.2	100.0	53.3	46.7
10	93.9	93.1	94.7	100.0	54.2	45.8	87.5	88.0	87.1	100.0	50.4	49.6
11	95.5	94.2	97.0	100.0	52.9	47.1	89.9	91.3	88.1	100.0	56.7	43.3
12	94.1	94.4	93.8	100.0	54.9	45.1	86.6	87.6	85.6	100.0	49.0	51.0
13	95.1	95.7	94.5	100.0	53.2	46.8	93.3	92.0	94.7	100.0	50.4	49.6
14	86.7	88.2	85.1	100.0	52.7	47.3	83.8	87.8	80.1	100.0	50.4	49.6
15	83.6	88.7	78.6	100.0	53.2	46.8	79.7	80.1	79.1	100.0	54.5	45.5
16	78.9	81.1	76.4	100.0	55.1	44.9	74.7	75.2	74.2	100.0	58.2	41.8
17	61.6	69.0	52.5	100.0	61.7	38.3	64.7	70.8	58.7	100.0	54.5	45.5
18	48.1	60.3	33.6	100.0	67.9	32.1	37.9	46.9	30.5	100.0	55.8	44.2
19	28.2	50.0	14.9	100.0	67.2	32.8	15.4	24.3	8.8	100.0	67.5	32.5
20	19.6	26.7	13.7	100.0	61.4	38.6	14.5	21.6	7.9	100.0	71.4	28.6
21	9.5	15.5	6.8	100.0	50.0	50.0	9.8	15.8	5.0	100.0	71.4	28.6
22	7.1	15.1	0.9	100.0	92.9	7.1	6.6	8.8	4.9	100.0	58.3	41.7
23	7.9	9.7	6.8	100.0	46.2	53.8	3.7	6.9	1.9	100.0	66.7	33.3
24	9.4	11.8	7.7	100.0	53.3	46.7	1.5	1.0	2.0	100.0	33.3	66.7

Source: 1994 & 2000 FSM Census, unpublished data

100 2000 - 1994 80 60 Percent 40 20 10 11 12 13 14 15 16 17 18 19 20 21 Age in Years Source: Table 8.3

Figure 8.1 Age-Specific Enrollment Rates, Yap State: 1994 and 2000

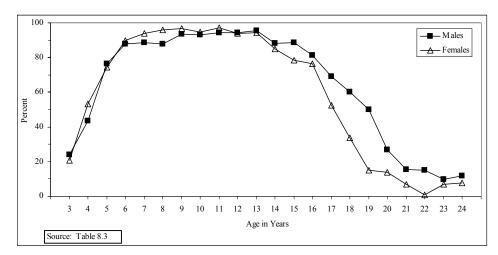
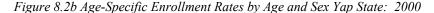
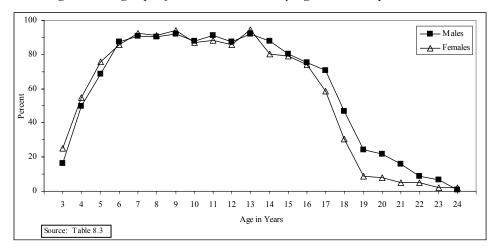


Figure 8.2a Age-Specific Enrollment Rates by Age and Sex Yap State: 1994





Age-specific enrollment rates in Yap Proper and in the Outer Islands followed similar patterns, but slightly different levels (Table 8.4 and Figure 8.3a and 8.3b). Enrollment at age of 3 and 4 years referred to head start and kindergarten. Enrollment commenced a bit earlier and remained slightly higher in 1994 for most ages in the Outer Islands. In 2000, enrollment was also high for the younger ages in the Outer Islands, but drops behind Yap Proper from about ages 10 to 17. Afterwards, it rose again surpassing Yap Proper up to age 23. Enrollment was almost universal for both regions between the ages of 7 to 15 years in 1994, while in 2000, the similarity in enrollment existed only between ages 7 and 9. In both regions during both census years, enrollment started to decline at age 16, with Yap Proper showing a more steeper decline than the Outer Islands.

Table 8.4: Age-specific Enrollment Ratio by Age, Yap State: 1994 and 2000

		1994 Census			2000 Census	
Age	Yap	Yap Proper	Outer Islands	Yap	Yap Proper	Outer Islands
Total	65.7	62.2	70.9	60.2	59.0	62.3
3	22.5	17.6	29.8	20.4	11.5	35.8
4	48.3	39.4	62.3	52.2	42.9	68.2
5	75.4	73.4	78.2	71.8	66.7	79.4
6	88.9	88.2	90.1	86.6	87.8	84.6
7	91.3	92.5	89.7	91.7	92.0	91.3
8	91.7	90.9	92.9	90.7	90.6	90.9
9	95.0	93.3	97.5	93.1	92.9	93.6
10	93.9	95.2	92.2	87.5	89.3	84.9
11	95.5	95.3	96.0	89.9	91.1	88.1
12	94.1	94.8	92.9	86.6	91.8	77.2
13	95.1	96.1	93.8	93.3	95.5	89.0
14	86.7	85.1	89.1	83.8	86.5	80.3
15	83.6	85.1	81.7	79.7	86.8	69.0
16	78.9	76.0	81.9	74.7	78.9	65.9
17	61.6	56.1	67.7	64.7	72.4	51.7
18	48.1	34.0	59.8	37.9	37.4	38.9
19	28.2	19.7	40.6	15.4	13.8	19.7
20	19.6	12.1	34.2	14.5	13.4	17.1
21	9.5	4.0	20.0	9.8	7.5	17.0
22	7.1	2.1	19.3	6.6	5.1	9.2
23	7.9	3.8	15.0	3.7	2.7	5.7
24	9.4	5.2	15.9	1.5	1.6	1.4

Source: 1994 & 2000 FSM Census, unpublished data

Figure 8.3a. Age-Specific Enrollment Rates by Region Yap State: 1994

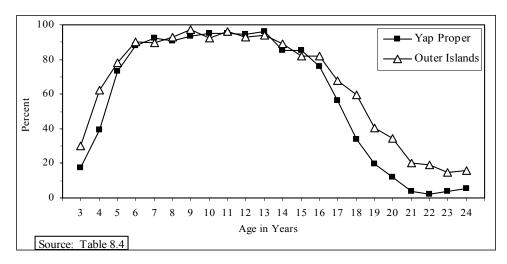
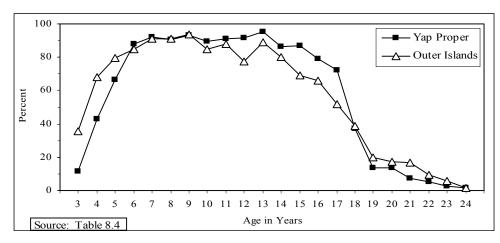


Figure 8.3b. Age-Specific Enrollment Rates by Region Yap State: 2000



One way to measure the progress achieved over the years in regard to proportion of eligible population entering the school system, is to compare (or consider the rate of) enrollment in primary and high schools with corresponding potential primary and high school age population. The result is usually referred to as the "Gross Enrollment Ratio". This approach could also be considered as an indirect method to assess the potential of present educational facilities in the nation.

For Yap, the age-level relationship was established as follows: for elementary level, enrollment in grades 1 to 8 is expected for the population aged 6 to 13 years, and for high school, enrollment in grades 9 to 12 is expected for to the population aged 14 to 17 years. The results for the 1994 and 2000 censuses are summarized in Table 8.5. As can be seen from this table, gross enrollment ratios at primary and secondary level in 1994 were about 93 and 80 percent, respectively. In 2000, enrollment for both primary and secondary schools declined to about 88 and 74 percent, respectively. That is, in Yap State, pupils at primary and secondary level of education constituted 93 and 80 percent of the eligible population in 1994, but their numbers have since dropped such that they comprised 88 and 74 percent in 2000. According to this analysis, the coverage of the school system was better for primary level education than for high school. It can also be seen from the table that the coverage for primary and high school level education was significantly higher for males than females. This shows that males tended to stay in school longer to complete a high level education compared to their female counterparts.

Table 8.5: Gross Enrollment Ratio by Sex, Yap State: 1994 and 2000

	199	4 Census			000 Census	
Level	Total	Males	Females	Total	Males	Females
Elementary	93.2	92.0	94.5	88.0	87.8	88.3
High School	77.9	81.7	73.7	74.4	77.6	70.9

Source: 1994 & 2000 FSM Census, unpublished data

Educational Attainment

Table 8.6 summarizes data on educational attainment for the population aged 25 years and over. Between 1980 and 1994, the proportion of the population completing some level of education increased to about 90 percent from about 76 percent, while the proportion completing no schooling decreased significantly from about 25 to 10 percent. That is, one in every four persons had no schooling in 1980, compared to one in ten in 1994. The educational attainment level in 2000 remained at about the same level as in 1994, with about 89 percent completing some form of education, and about 11 percent with no schooling whatsoever. Interestingly, the proportion of the population completing higher levels of education (high school and higher) has increased dramatically during the past two decades; from about 34 percent in 1980 to about 64 percent in 2000.

In general, educational attainment for males also increased consistently between 1980 and 2000. The proportion of males with no schooling decreased significantly from about 16 percent in 1980 to about 5 percent in 1994. Since then, it had risen slightly to about 6 percent in 2000. The proportion for only elementary level attainment declined significantly while that of the college levels increased significantly. The decline in the proportion of males with only elementary level education between 1980 and 1994 could have possibly resulted from, among other things, the out-migration of working age males during the second half of the 1980's, many of whom emigrated to take jobs as laborers and may not have had higher level education. A similar decline was also evident between 1994 and 2000, although, at a much lower level. For males who had at least attended college, the increase in proportion was quite distinct, from about 17 to about 37 percent between 1980 and 2000.

The improvement in educational attainment for females in the State of Yap was more pronounced in higher education levels. The proportion of females with no school decreased significantly from about 33 percent in 1980 to slightly over 14 percent in 1994, but increased afterwards to about 16 percent in 2000. In other words, in 1980 one woman in every three had no school completed compared to one in seven in 1994 and one in six in 2000. The proportion of females with at least high school education increased from about 14 percent in 1980 to about 28 percent in 1994, and since then had increased further to over 34 percent in 2000. Likewise, the proportion of females with some college level education also increased by 7 percentage points (from 5 to over 12 percent) between 1980 and 1994, and increased further still by about 3 percentage points (from 12 to about 16 percent) in 2000. Although still outnumbered by their male counterparts, more and more females were shown to be pursuing higher education than before.

Table 8.6: Educational Attainment for Persons Aged 25 Years and Over by Sex, Yap State: 1980, 1994 and 2000

		Number			Percent	
Educational attainment	1980	1994	2000	1980	1994	2000
Total	3,162	4,566	4,799	100.0	100.0	100.0
No school	774	443	521	24.5	9.7	10.9
Pre-school/kindergarten		321	10	-	7.0	0.2
Elementary	1,330	1,175	1,193	42.1	25.7	24.9
High school	707	1,569	1,858	22.4	34.4	38.7
College	351	1,058	1,217	11.1	23.2	25.4
Males	1,602	2,250	2,287	100.0	100.0	100.0
No school	254	111	127	15.9	4.9	5.6
Pre-school/kindergarten		93	4	-	4.1	0.2
Elementary	588	349	301	36.7	15.5	13.2
High school	487	921	1,012	30.4	40.9	44.3
College	273	776	843	17.0	34.5	36.9
Females	1,560	2,316	2,512	100.0	100.0	100.0
No School	520	332	394	33.3	14.3	15.7
Pre-School/Kindergarten		228	6	-	9.8	0.2
Elementary	742	826	892	47.6	35.7	35.5
High School	220	648	846	14.1	28.0	33.7
College	78	282	374	5.0	12.2	14.9

Source: 1980 TTPI Census, Table T35; 1994 & 2000 FSM Census, Table P24

Table 8.7 further presents the cumulative percentage distribution of the population aged 25 years and over by the highest grade completed. Cumulative percentage provides the proportion of the population with at least a given level of educational attainment. As can be seen from the table, over 89 percent of the population aged 25 years and over in 2000 had some level of education. This is a slight decrease from about 90 percent shown in 1994. In contrast, the population with at least elementary level education showed improvement from over 63 percent in 1994 to 71 percent in 2000. Likewise, the proportion of the population with high school or higher-level education increased from about 23 percent in 1994 to just over 25 percent in 2000. While the attainment at lower levels of education could be considered satisfactory, higher-level educational attainment in Yap State could be improved.

Furthermore, males tended to have higher education levels than females. The differences were more pronounced at the highest levels of education. In 1994, about 4 in every 5 males attained at least an elementary level of education compared to about 2 in 5 females. This improved a bit in 2000 such that slightly over 4 in every 5 males and close to 3 in every 5 females had at least completed elementary school. The corresponding proportion completing at least a high school level of education in 1994 was 1 in 3 for males and 1 in 10 for females. In 2000, close to 2 in every 5 males and about 1 in every 5 females were shown to have at least a high school level of education. Also in 1994, 16 per 1,000 males aged 25 years and over had a masters or doctorate degree, compared to about 3 per 1,000 females. In 2000, males and females with a masters or doctorate degree increased slightly to about 19 in every 1,000 males and about 8 in every 1,000 females. Due to the unevenness of male and female educational attainment, it might therefore be appropriate to initiate and strengthen policies and programs that facilitate higher education for females in the State of Yap.

Table 8.7: Educational Attainment for Persons Aged 25 Years and Over by Sex, Yap State: 1994 and 2000

			1994 Ce	ensus					2000 Ce	ensus		
		Number			Percent			Number			Percent	
Educational attainment	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females
Total	4,566	2,250	2,316				4,799	2,287	2,512			
No school	443	111	332	100.0	100.0	100.0	521	127	394	100.0	100.0	100.0
Pre-school/kindergarten	321	93	228	90.3	95.1	85.7	10	4	6	89.1	94.4	84.3
Elementary	1,175	349	826	83.3	90.9	75.8	1,193	301	892	88.9	94.3	84.1
Grade one	31	8	23	83.3	90.9	75.8	20	3	17	88.9	94.3	84.1
Grade two	46	10	36	82.6	90.6	74.8	30	6	24	88.5	94.1	83.4
Grade three	152	47	105	81.6	90.1	73.3	136	49	87	87.9	93.9	82.4
Grade four	70	17	53	78.3	88.0	68.7	104	21	83	85.1	91.7	79.0
Grade five	228	93	135	76.7	87.3	66.5	209	65	144	82.9	90.8	75.7
Grade six	274	57	217	71.7	83.2	60.6	282	50	232	78.5	88.0	69.9
Grade seven	104	29	75	65.7	80.6	51.3	79	20	59	72.7	85.8	60.7
Grade eight	270	88	182	63.4	79.3	48.0	333	87	246	71.0	84.9	58.4
High school	1,569	921	648	57.5	75.4	40.2	1,858	1,012	846	64.1	81.1	48.6
Grade nine	167	76	91	57.5	75.4	40.2	155	75	80	64.1	81.1	48.6
Grade ten	130	63	67	53.9	72.0	36.2	142	73	69	60.8	77.8	45.4
Grade eleven	85	38	47	51.0	69.2	33.3	121	54	67	57.9	74.6	42.6
Grade Twelve	1,187	744	443	49.2	67.6	31.3	1,440	810	630	55.4	72.3	40.0
College	1,058	776	282	23.2	34.5	12.2	1,217	843	374	25.4	36.9	14.9
Some college	475	329	146	23.2	34.5	12.2	555	352	203	25.4	36.9	14.9
A.S. or A.A.	354	268	86	12.8	19.9	5.9	433	328	105	13.8	21.5	6.8
B.S. or B.A.	187	144	43	5.0	8.0	2.2	164	119	45	4.8	7.1	2.6
Masters and PhD	42	35	7	0.9	1.6	0.3	65	44	21	1.4	1.9	0.8

Source: 1994 & 2000 FSM Census, unpublished data

Educational attainment of the population aged 25 years and over by municipalities of Yap State is shown in Table 8.8. The cumulative proportion of higher-level educated persons (the population with educational attainment of high school or higher) in 1994 was about 56 percent in Yap Proper and about 55 percent in the Outer Islands, compared to about 62 and 50 percent, respectively, in 2000. The decline among educated Outer Islanders might probably be due to increased out migration in search of better paying jobs. Educational attainment of elementary level was higher for Yap Proper in both census years. Whereas the proportion of Outer Islanders who have attained elementary school level had remained virtually constant over the 6 years between the two censuses, that of Yap Proper had increased by more than 5 percentage points. This was especially true in 2000 when over 83 percent of persons 25 years and over have already completed elementary on Yap Proper, compared to 71 percent (about the same level in 1994) for the Outer Islands. The proportion of college graduates was also higher in Yap Proper during both census years, although the difference was much more pronounced in 2000. Interestingly, college graduates in 2000, when compared to 1994, have declined proportionally only in the Outer Islands, possibly as a result of increased out migration in search of jobs. Besides inter-municipality and international migration, these patterns could have also resulted from differences in getting access to educational facilities and attendance in the past.

Table 8.8: Educational Attainment for Persons Aged 25 Years and Over by Municipality, Yap State: 1994 and 2000

-		1994 Census Some Elem- Some H. school Some Coll								200	00 Census			
		Some	Elem-	Some H	. school	Some	College		Some	Elem-	Some F	I. school	Some	College
Municipality	Total	Elem.	entary	H.S.	grads.	college	grads.	Total	Elem.	entary	H.S.	grads.	college	grads.
Total	3,802	100.0	76.2	69.1	55.6	27.8	15.3	4,268	100.0	79.9	72.0	58.8	28.5	15.5
Yap Proper	2,703	100.0	78.1	71.2	55.8	27.9	16.2	3,078	100.0	83.3	77.0	62.2	29.6	16.8
Rumung	51	100.0	68.6	60.8	47.1	25.5	11.8	46	100.0	63.0	56.5	37.0	15.2	6.5
Maap	210	100.0	70.5	64.8	40.5	18.1	12.9	240	100.0	83.8	76.3	57.1	26.7	17.9
Gagil	279	100.0	81.0	76.7	53.0	31.5	17.2	313	100.0	78.0	71.9	57.2	29.7	17.9
Tomil	363	100.0	74.4	65.6	53.2	21.5	13.5	432	100.0	82.2	76.6	64.4	27.8	13.7
Fanif	199	100.0	77.4	71.9	57.3	29.2	16.6	237	100.0	80.6	73.4	59.1	21.9	16.9
Weloy	491	100.0	82.5	77.0	65.4	34.9	20.8	518	100.0	87.5	79.9	68.5	35.3	18.7
Rull	827	100.0	78.5	70.4	57.5	28.6	15.2	915	100.0	83.7	78.1	61.3	31.3	20.1
Gilman	84	100.0	79.8	66.7	50.0	25.0	15.5	87	100.0	80.5	73.6	59.8	27.6	12.6
Kanifay	60	100.0	66.7	60.0	51.7	16.7	11.7	71	100.0	85.9	76.1	47.9	19.7	8.5
Dalipebinaw	139	100.0	84.9	79.9	55.4	30.2	20.1	219	100.0	88.1	84.0	73.1	31.5	8.2
Outer Islands	1,099	100.0	71.4	63.8	54.9	27.5	13.1	1,190	100.0	71.0	59.2	50.3	25.6	12.2
Ulithi	275	100.0	88.7	85.1	66.6	36.8	12.4	267	100.0	84.3	80.9	65.2	35.6	13.1
Fais/Sorol	44	100.0	77.3	77.3	77.3	25.0	6.8	55	100.0	58.2	52.7	45.5	23.6	7.3
Ngulu	13	100.0	77.0	77.0	46.2	15.4-		9	100.0	55.6	33.3	22.2	22.2	22.2
Woleai	243	100.0	59.7	51.1	46.6	26.0	16.5	275	100.0	71.6	64.4	57.1	31.3	15.6
Eauripik	46	100.0	47.8	47.8	43.5	34.8	17.4	46	100.0	56.5	43.5	41.3	30.4	19.6
Ifalik	130	100.0	75.4	64.6	63.8	30.0	18.5	176	100.0	63.6	35.8	35.2	15.9	8.5
Faraulap	55	100.0	67.2	65.4	58.1	25.4	14.5	69	100.0	56.5	49.3	43.5	15.9	11.6
Elato	31	100.0	58.3	51.8	45.3	25.9	19.4	31	100.0	64.5	54.8	41.9	29.0	6.5
Lamotrek	98	101.0	73.5	53.1	43.9	10.2	9.2	98	100.0	80.6	45.9	40.8	11.2	6.1
Satawal	164	102.0	63.4	54.3	45.8	23.2	7.3	164	100.0	67.1	61.6	46.3	22.0	12.8

Source: 1994 & 2000 FSM Census, Table P24

Educational attainment varied considerably with age (Table 8.9). The proportion of the population with only an elementary level education increased for the older age groups, while that with a high school and some college level of education decreased as age increased, showing an improvement in educational attainment for the younger generations. The percentage of college educated persons reached its peak among the population aged 30 to 44 years old in 1994, and among those aged 35 to 54 in 2000. The aging of college-educated persons was probably influenced by the younger generations being away at school and probably taking longer than in the past to finish schooling. Moreover, the effects of net out migration may influence this pattern as more and more of the younger generation who are college educated remained abroad to seek employment.

Recent emigration of better-educated residents to Guam, the CNMI, and the U.S., could also have led to declining levels of education attainment, particularly among the youngest age groups. For example, migration could explain some of the decline in the proportion of individuals with bachelor's degrees between those aged 30 and 34 years and those aged 25 to 29 years.

Educational attainment for males in Yap in both 1994 and 2000 exceeded the attainment of females at all levels of schooling (see the middle section of Table 8.9) except for elementary and high school levels. The patterns for all persons aged 25 years and over held for males as well. The decline in the proportion of males with bachelor's degrees for age groups 25 to 34 was particularly noticeable.

In contrast, higher-level educational attainment was lower among females aged 25 years and over in Yap State compared to their male counterparts (see bottom panel of Table 8.9). The male and female pattern was similar, but the level was different. Nevertheless, the improvement of female's educational attainment by age was much more pronounced. For example, among females with some educational attainment in 2000, 68 and 93 percent of females in the age group 55-64 and 65 and over had elementary level education while this was true for only about 26 percent among females in the age group 25-29 years. These data confirm that males used to be more privileged for school enrollment than females, but the disparity has improved in recent years.

Table 8.9: Educational Attainment for Persons Aged 25 Years and Over by Age Group and Sex, Yap State: 1994 and 2000

•	1994 Census									20	00 Censu	S		
Educational attainment	Total	25-29	30-34	35-44	45-54	55-64	65+	Total	25-29	30-34	35-44	45-54	55-64	65+
Total	3,802	674	697	1,260	555	334	282	4,268	679	679	1,392	897	337	284
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Elementary School	30.9	18.5	22.1	23.5	33.9	56.6	79.1	28.0	18.3	22.8	24.2	22.7	45.1	77.8
High School, no diploma	13.5	17.4	16.6	11.2	10.3	15.0	11.3	13.2	16.1	16.1	12.9	11.4	13.9	6.0
High School Graduates	27.8	36.2	30.1	32.1	24.9	12.0	6.7	30.3	36.5	34.5	33.3	28.8	18.7	9.5
Some College	12.5	15.7	15.4	13.1	12.8	6.9	1.1	13.0	17.1	14.7	13.2	14.3	7.1	1.1
Associate Degree	9.3	8.6	9.2	13.6	8.6	3.9	-	10.1	9.6	8.7	10.4	14.9	6.8	2.5
Bachelors Degree	4.9	2.5	5.6	5.5	7.9	4.5	1.1	3.8	1.8	2.4	4.5	5.1	5.9	2.8
Higher Degree	1.1	1.0	1.0	1.0	1.6	1.2	0.7	1.5	0.7	0.9	1.4	2.8	2.4	0.4
Males	2,046	321	360	688	333	186	158	2,156	295	291	687	530	188	165
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Elementary School	17.1	6.9	10.0	7.7	14.1	38.7	75.3	14.0	7.8	6.5	8.2	7.9	27.1	66.7
High School, no diploma	12.3	16.5	13.9	8.6	12.0	17.2	11.4	13.0	18.3	19.2	10.2	10.2	16.5	9.1
High School Graduates	32.7	40.2	33.6	37.8	33.6	18.3	8.2	34.0	37.6	39.5	39.0	32.5	22.9	13.9
Some College	16.1	18.7	21.1	17.6	14.7	10.8	1.9	16.3	19.7	16.2	18.5	18.5	10.1	1.8
Associate Degree	13.1	12.5	13.3	18.5	12.6	5.9	-	15.2	13.6	14.1	16.3	20.4	11.2	3.6
Bachelors Degree	7.0	3.4	6.7	8.4	10.5	7.0	1.9	5.5	1.7	3.4	6.1	7.0	9.6	4.2
Higher Degree	1.7	1.9	1.4	1.5	2.4	2.2	1.3	2.0	1.4	1.0	1.7	3.6	2.7	0.6
Females	1,756	353	337	572	222	148	124	2,112	384	388	705	367	149	119
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Elementary School	47.0	29.2	35.0	42.5	63.5	79.1	83.9	42.2	26.3	35.1	39.9	44.1	67.8	93.3
High School, no diploma	14.9	18.1	19.6	14.3	7.7	12.2	11.3	13.4	14.3	13.7	15.6	13.1	10.7	1.7
High School Graduates	22.0	32.6	26.4	25.3	11.7	4.1	4.8	26.6	35.7	30.7	27.8	23.4	13.4	3.4
Some College	8.3	13.0	9.2	7.7	9.9	2.0	-	9.6	15.1	13.7	8.1	8.2	3.4	-
Associate Degree	4.9	5.1	4.7	7.7	2.7	1.4	-	5.0	6.5	4.6	4.7	7.1	1.3	0.8
Bachelors Degree	2.4	1.7	4.5	1.9	4.1	1.4	-	2.1	1.8	1.5	2.8	2.5	1.3	0.8
Higher Degree	0.4	0.3	0.6	0.5	0.5			1.0	0.3	0.8	1.1	1.6	2.0	

Source: 1994 & 2000 FSM Census, Table P101

Educational Attainment by Place of Birth

Another process causing perceived improvement in educational attainment in the nation is the immigration of educated persons. The difference emerges in the comparison of educational attainment of persons born in Yap State and those born elsewhere. Among the populations aged 25 years and over who had attended some school in 1994, nearly 5 in every 10 of the non-FSM born population had college level educational attainment compared to nearly 3 in 10 among the Yap born (See Table 8.10). Similarly, about 30 percent of non-FSM born population had educational attainment of bachelor's degree or above compared to less than 4 percent of the Yap-born. A similar trend was also evident in 2000, where slightly over 5 out of 10 of the non-FSM born population had at least attended college, compared to nearly 3 out of 10 among Yapese born. Again, the non-FSM born population showed a higher proportion of those with a bachelor's degree or higher at slightly over 23 percent compared to about 4 percent for the Yap born population. In general the propensity to migrate is higher for people with some education, resulting in an improved educational attainment for the country of destination.

Table 8.10: Educational Attainment for Persons Aged 25 Years and Over by Place of Birth (POB), Yap State: 1994 and 2000

		Percent by Place of Birth Percent by Educational Lev										20	000			
		cent by P			Percent l	y Edu	cationa	l Level	Perc	ent by P	lace of	Birth	Percent b	y Educ	cational	Level
Educational		Yap	Other	Outside		Yap	Other	Outside		Yap	Other	Outside		Yap	Other	Outside
attainment	Total	born	FSM	FSM	Total	born	FSM	FSM	Total	born	FSM	FSM	Total	born	FSM	FSM
Total	3,802	3,421	44	337	100.0	90.0	1.2	8.9	4,268	3,869	42	357	100.0	90.7	1.0	8.4
Percent	100.0	100.0	100.0	100.0					100.0	100.0	100.0	100.0				
Elementary	30.9	33.2	13.6	10.1	100.0	96.6	0.5	2.9	28.0	30.3	16.7	3.9	100.0	98.2	0.6	1.2
Some	23.8	25.7	11.4	6.2	100.0	97.1	0.6	2.3	20.1	22.0	4.8	2.0	100.0	99.0	0.2	0.8
Graduates	7.1	7.5	2.3	3.9	100.0	94.8	0.4	4.8	7.8	8.3	11.9	2.0	100.0	96.4	1.5	2.1
High school	41.3	41.0	56.8	42.1	100.0	89.4	1.6	9.1	43.5	43.6	33.3	44.0	100.0	90.8	0.8	8.4
Some	13.5	13.7	18.2	11.3	100.0	91.0	1.6	7.4	13.2	13.8	9.5	7.8	100.0	94.3	0.7	5.0
Graduates	27.8	27.3	38.6	30.9	100.0	88.5	1.6	9.8	30.3	29.9	23.8	36.1	100.0	89.3	0.8	10.0
College	27.8	25.8	29.5	47.8	100.0	83.6	1.2	15.2	28.5	26.1	50.0	52.1	100.0	83.0	1.7	15.3
Some credits	12.5	12.7	13.6	10.7	100.0	91.2	1.3	7.6	13.0	12.3	23.8	19.3	100.0	85.8	1.8	12.4
Associate degree	9.3	9.4	13.6	8.3	100.0	90.4	1.7	7.9	10.1	10.1	21.4	9.0	100.0	90.5	2.1	7.4
Occupational	4.0	3.8	9.1	5.0	100.0	86.2	2.6	11.2	4.7	4.7	9.5	3.9	100.0	91.0	2.0	7.0
Academic	5.3	5.5	4.5	3.3	100.0	93.6	1.0	5.4	5.5	5.4	11.9	5.0	100.0	90.1	2.1	7.7
Bachelor degree	4.9	3.2	2.3	22.6	100.0	58.8	0.5	40.6	3.8	2.8	4.8	15.1	100.0	65.9	1.2	32.9
Grads or Prof.	1.1	0.6	-	6.2	100.0	50.0	-	50.0	1.5	0.9	0.0	8.7	100.0	52.3	0.0	47.7

Source: 1994 & 2000 FSM Census, Table P104

Literacy Status by Age and Sex

The proportion of Yap State population who were literate has increased over the years. Over 92 percent of the population aged 10 years and over was reported literate in 2000 (a 1 percent point increase over the 1994 level, and close to 12 percentage point higher than the 1980 level). An inverse relationship existed between literacy and age. The proportion literate decreased as age increased, showing better education for the younger generation. The differential in literacy status between the two sexes was remarkable among the older generations, showing males to be more literate than females. This differential reduced for the younger generation, to the extent that hardly any differential existed in literacy status of males and females, among the populations under the age of 30. This again, suggests an improvement in female education in the recent past (see Table 8.11 and Figure 8.4).

Table 8.11: Literate Population for Aged 10 Years and Over by Age Group and Sex, Yap State: 1980, 1994 and 2000

		1980			1994		2000		
Age groups	Total	Males	Females	Total	Males	Females	Total	Males	Females
Total 10+ yrs	5,684	2,884	2,800	8,245	4,053	4,192	8,508	4,095	4,413
Percent Literate	80.5	86.5	74.3	91.2	94.2	88.3	92.3	95.7	89.2
10 to 14 years	82.7	81.8	83.8	89.5	87.1	92.2	90.6	90.2	90.9
15 to 19 years	92.3	94.5	90.0	97.3	97.1	97.4	98.2	98.5	97.9
20 to 24 years	91.8	95.4	88.7	96.7	97.3	96.3	98.1	99.1	97.3
25 to 29 years	87.4	95.0	80.4	96.6	98.8	94.8	96.5	97.7	95.6
30 to 34 years	85.9	91.1	79.3	97.5	98.9	96.2	97.3	99.3	95.8
35 to 44 years	73.5	87.0	60.9	94.4	98.2	90.3	96.7	98.4	95.1
45 to 54 years	71.9	84.3	59.2	83.7	95.0	70.8	89.1	98.5	77.9
55 to 59 years	66.5	77.2	56.0	79.6	92.4	68.2	74.9	93.2	59.7
60 to 64 years	60.9	74.1	46.2	74.2	86.2	63.6	76.0	91.3	62.4
65 to 74 years	60.8	69.8	51.3	70.7	87.5	56.3	67.1	79.7	55.6
75 yrs & over	54.8	64.5	43.5	61.2	72.9	49.4	65.5	76.4	56.5

Source: 1980 TTPI Census, Table T29; 1994 & 2000 FSM Census, Table P42

Source: Table 8.11

100 - Males 90 80 70 60 50 40 20 10 0 10-4 15-19 20-24 25-29 30-34 35-44 45-54 55-59 60-64 65-74 Age Group

Figure 8.4 Literate Population by Age and Sex Yap State: 2000

Vocational Training

Data on vocational training provide an insight into the potential skilled manpower, trained outside the formal education system and provide a good assessment for the need to conduct job-training programs. Vocational trained persons include those who completed the requirements for vocational training at trade school, business school, or other kind of institution for occupation. Table 8.12 summarizes data on vocational trained persons in Yap State in 1980, 1994 and 2000. As can be seen from the table, in 2000, about 19 percent of all adults aged 15 years and over in Yap had completed vocational training, an increase of about 5 percentage points from about 14 percent in 1994. The peak of vocational training in 1980 and 1994 occurred among those in the age groups 35 to 44 years at about 17 and 22 percent, respectively. In 2000, the peak in vocational training occurred among those in the age group 45 to 54 years, at 29 percent. The late peak shows, among other things, the population in the older age groups had more opportunity to pursue vocational training and skill development through the ages.

Table 8.12: Vocational Training by Age Group, Yap State: 1980, 1994 and 2000

Census year	Total	15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years
1980							
Total 16 to 64 years	4,071	1,353	1,086	637	527	468	
Percent Completed	10.7	5.9	15.3	17.0	12.0	3.6	
1994							
Total 15+ years	6,754	2,188	1,529	1,383	675	498	481
Percent Completed	13.5	4.3	17.9	22.1	19.6	13.5	7.5
2000							
Total 15+ years	7,153	2,354	1,402	1,441	990	447	519
Percent Completed	18.5	9.0	22.2	27.0	28.8	19.5	7.5

Source: 1980 TTPI Census, Table 22; 1994 & 2000 FSM Census, Table P42

Conclusion

School attendance as well as educational attainment in the State of Yap has been improving for sometime. School attendance increased from about 2,260 in 1973 to about 3,690 in 1994 but decreased slightly afterwards to about 3,360 in 2000. Among the population 25 years and over, the proportion of the population with no schooling decreased from about 25 to 10 percent between 1980 and 1994. Since then, it has risen slightly to about 11 percent. This signified an overall improvement in the school system despite the slight increase in 2000. The proportion of the population with at least high school education increased from about 44 to nearly 64 percent between 1980 and 2000. The difference between males and females in educational attainment, though significant for the older generation, became negligible for the younger generations. This indicates that females were getting much better access to the school system as compared to past decades.

Despite the seemingly obvious general improvement in the school system, there is still room for improvements as seen by large proportion of both male and females dropping out of school starting at about the age of 16. This trend was also shown to be true for both Yap Proper and the Outer Islands as well, indicating that there is a real need for the school system to raise the interest and retain students especially those in high school.

CHAPTER 9 ECONOMIC ACTIVITY

Introduction

The potential labor force in Yap State, defined as the population of working age (15 years and above), accounted for 6,754 persons, or 60 percent of the Yap State population, at the time of the census in 1994. In 2000, the potential labor force in Yap State rose to 7,153, or 64 percent of the Yap State population. Many of the potential contributors to the state's production were not in the labor force because they were students, house-workers looking after children, or retired. Almost 6 out of 10 of the working age population were either working or seeking work in the government, the private sector, or the subsistence (traditional) sector (involving mainly agriculture and fishing) in 1994 compared to slightly over 7 out of 10 in 2000.

Definitions

In order to determine the current labor force status in Yap State, the recommendations of the United Nations International Labor Organization (ILO) on labor force was used because of its universality and applicability to the island lifestyles instead of the U.S. Bureau of Census (USBC) definition. As will be discussed later, these two definitions differ in two important ways, particularly regarding who should be included in the labor force. The ILO definition considers persons aged 15 and over and those doing subsistence to be in the labor force, while the USBC definition only includes those aged 16 and over. Those doing subsistence are not included in the labor force. Because subsistence is a major sector in the state economy, it cannot be disregarded as suggested by the USBC definition.

Using the ILO definition, all respondents aged 15 years and over were asked whether they did any 'work' in the week before the census, and whether the work was full-time or part-time. Work included full-time and part-time work in a family farm or business, with or without pay. Work did not include unpaid volunteer work. The series of questions on employment status was designed to identify several types of individuals in Yap State: persons who worked at a job or business or farm at any time during the reference week; persons who did not do such work during the reference week, but who had jobs or businesses from which they were temporarily absent; and persons who did not work during the reference week, but were looking for work during the reference week.

The *labor force* included the employed work force as well as the unemployed.

The total *employed labor force* was made up of a number of constituent groups, including persons who worked fullor part-time at a job or business (*formal work force*), and persons who worked mainly in farming or fishing during the reference week regardless of whether any of their produce was sold or not. The latter group has been classified in *agriculture* and *fishing* and further sub-classified as market oriented and subsistence.

A person was described as a *subsistence* worker if he/she mainly farmed or fished in the week before the census without selling, or intending to sell, any produce. Persons who did only some subsistence, but mainly worked at another job in the week before the census were not included as doing subsistence only. Rather, they were included among those in the formal work force. Persons who farmed or fished and sold their produce were also in the agricultural/fishing group but were categorized as *market oriented*.

Unemployed persons included persons who were looking and available for work in the four weeks preceding the census. The economically inactive working age population, those not in the labor force, were working age persons not classified as being employed or unemployed. A special group of inactive persons were those who were not employed, nor looking for work, but who said they could have taken a job if one had been offered to them. These persons were categorized as "could have taken a job".

Labor force participation rates (LFPR) were calculated by dividing the number of persons in the labor force by the potential labor force of the group. For example a LFPR for women aged 15 to 19 would be calculated by dividing the number of employed and unemployed women by the total number of women aged 15 to 19 and multiplied by 100 to make it a percentage.

On the other hand, *unemployment rates* are calculated by dividing the number of persons defined as unemployed by the number of persons in the labor force, and again multiplying by 100 to make it a percentage.

In the economic chapters we differentiate between the *current work force* and the *experienced formal work force*. The current work force includes both formal workers and agricultural and fishing workers. The formal work force includes all persons at a paid job. Current workers are only those persons who responded about their jobs in the week before the census. Persons sick or temporarily absent from a job were not included in the experienced work force.

The experienced work force included not only the formal current work force (including temporarily absent) but also persons who were not working during the week before the census but did work in the 5 years prior to the census. Those who worked in the 5 years prior to the census were asked questions on industry, occupation, and class of employment of their last job. By collecting data on the experienced work force, manpower specialists are able to estimate the potential work force.

Limitation and comparability. As stated earlier, the above definitions follow the recommendations of the Conference of Labor Statisticians and the global and regional recommendations of the United Nations International Labor Organization (ILO). This definition differs from the U.S. Bureau of Census labor force definition and as such, the two methods would result in different labor force participation rates and unemployment rates. Although the ILO method is presented in this chapter, a table based on the U.S. definition is presented in Appendix A of this report (Table B15).

The 1980 TTPI census asked persons similar questions to the 1994 FSM Census, however the data are not completely comparable because of different definitions. The 1980 census considered persons aged 16 and over in the labor force and excludes subsistence workers from the labor force. In this sense, the 2000 census was highly similar to the 1994 census in that it used the ILO definitions and not the U.S. Bureau of Census definitions. The 2000 census, therefore considered persons aged 15 and over and subsistence workers as part of the labor force.

The 1994 and 2000 censuses also showed slight variation in the year range used in determining the last year of work for persons aged 15 and over. Because of this, results of the two census years were not compatible and only 2000 census results were analyzed for this particular instance. Furthermore, the queston for classifying persons in agriculture and fishing activities into the 'subsistence' and 'market oriented' subgroups differed between 1994 and 2000. The 1994 Census classified persons according to the primary purpose (pure subsistence or market-oriented) of the main type of subsistence activity (fishing, gardening, etc.) allowing for only the main activity to be captured. In 2000, the question allowed for multiple answeres, but did not distinguish between main and secondary activities and classified person who 'sold any' as market oriented. Thus, a subsistence worker mainly engaged in gardening for home consumption who sometimes fished to sell would be classified as a pure subsistence worker according to the 1994 definitions. In 2000, however, he/she should be classified as a maket-oriented worker.

Analysis of Economic Activity Data

Labor Force Participation

Table 9.1 reports that the total population of working age in Yap State in 1994 was 6,754 of whom 3,733 or about 55 percent, were in the labor force. The working age population increased to 7,153 in 2000 of which 5,174 (about 72 percent) were in the labor force. The employed portion of the labor force also increased by 1,599 persons during the 6 years between the two censuses. Within the employed portion of the labor force, about 62 and 52 percent were engaged in formal work in 1994 and 2000, respectively. The remaining 38 percent in 1994 and 48 percent in 2000 of the employed labor were engaged in farming and fishing, the great majority of whom (about 97 percent in 1994 and about 93 percent in 2000) were involved in 'subsistence' activities only, not selling or intending to sell any of their produce. This result illustrates the importance of the subsistence sector in Yap State and the need to include such sector in the definition of the labor force to fully reflect their contribution to the domestic production of the country. On the other hand 'market-oriented' farmers and fisherman constituted less than 3 percent in 1994 and 7 percent in 2000 of the agricultural and fishing sector. Regionally, almost all of them resided on Yap Proper in 1994, while in 2000 close to half of the "market-oriented" farmers resided in the Outer Islands.

The number of unemployed persons was 368 in 1994, which results in an unemployment rate of about 10 percent. In other words, about 10 in every 100 persons ages 15 and over were not working and were actively looking for a job in the week before the 1994 census. In 2000, the unemployment rate dropped to about 4 percent indicating that more and more people were engaged in paid work, or reported doing subsistence. This resulted in a rate of close to 4 out of every 100 persons aged 15 and over who were actively looking for a job.

A group commonly considered when discussing labor force is the *discouraged unemployed*, or those persons who could have worked the week before the census but who were not actually looking for a job. In many of the smaller islands and communities of Yap State the jobs available are widely known among the population, and if these are filled, persons available for work will not actually be looking for work. The category "could have taken a job" included these persons and constituted about 6 percent of the working age population in 1994. In 2000, the proportion of this group among the working age population dropped to 2 percent, indicating that less people reported as not looking for work although they could have taken a job if one was available.

A comparison of work status shows significant variations among the regions in Yap State. Although both Yap Proper and the Outer Islands in 1994 showed about the same proportion (55 percent) of the working age population in the labor force, this changed greatly in 2000 to about 67 and 83 percent for Yap proper and the Outer Islands, respectively. In both instances, Yap Proper had a significantly larger proportion of employed persons doing formal work as apposed to a significant proportion of Outer Islanders doing subsistence. The former was mainly because the capital for the state and the urban/business centers is located in Yap Proper while the latter was due to the domineer of subsistence economy and also due to more females involvement in subsistence in the Outer Islands (see Table B14). In 1994, there were 1,725 persons doing formal work on Yap proper compared to 358 in the Outer Islands. On the other hand, those involved in subsistence activities numbered 1,000 in the Outer Islands compared to 249 on Yap proper. A similar trend was also observed in 2000 where more people doing formal work and less doing subsistence activities were found on Yap proper as compared to the Outer Islands. For those not in the labor force, almost 9 percent of Yap Outer Islander's working age population and about 4 percent for Yap proper in 1994 were not looking for a job the week before the census, but could have taken one if it had been offered. This trend shifted in the opposite direction in 2000 where over 1 percent of the Outer Island's working age population and over 2 percent for Yap proper were not look for a job the week before the census, but could have taken one if it had been offered. Unemployment rates, labor force participation rates and subsistence are compared among the municipalities and the two regions later in this chapter.

Table 9.1: Distribution of Working Age Population for Aged 15 Years and Over by Region, Yap State: 1994 and 2000

			19	94					20	00		
		Number			Percent]	Number			Percent	
		Yap	Outer		Yap	Outer		Yap	Outer	,	Yap	Outer
Labor Force	Total	Proper	Islands	Total	Proper	Islands	Total	Proper	Islands	Total	Proper	Islands
Persons 15+ Years	6,754	4,234	2,520	100.0	100.0	100.0	7,153	4,862	2,291	100.0	100.0	100.0
Total in labor force	3,733	2,335	1,398	55.3	55.1	55.5	5,174	3,275	1,899	72.3	67.4	82.9
Employed	3,365	2,006	1,359	49.8	47.4	53.9	4,964	3,091	1,873	69.4	63.6	81.8
Formal Work	2,083	1,725	358	30.8	40.7	14.2	2,570	2,281	289	35.9	46.9	12.6
Agriculture/Fishing	1,282	281	1,001	19.0	6.6	39.7	2,394	810	1,584	33.5	16.7	69.1
Subsistence	1,249	249	1,000	18.5	5.9	39.7	2,234	725	1,509	31.2	14.9	65.9
Market Oriented	33	32	1	0.5	0.8	0.0	160	85	75	2.2	1.7	3.3
Unemployed	368	329	39	5.4	7.8	1.5	210	184	26	2.9	3.8	1.1
Not in labor force	3,021	1,899	1,122	44.7	44.9	44.5	1,979	1,587	392	27.7	32.6	17.1
Could have taken a job	391	168	223	5.8	4.0	8.8	146	114	32	2.0	2.3	1.4
Not available for work	2,630	1,731	899	38.9	40.9	35.7	1,833	1,473	360	25.6	30.3	15.7

Source: 1994 & 2000 FSM Census, Table P26

Table 9.2 shows the distribution of the labor force by sex for the working age population aged 15 and over. The distribution of females in the labor force differed from the distribution of males in the labor force. Indeed when comparing the 1994 and 2000 censuses, it becomes obvious that besides an overall increase in the working age population of the state, the number of males and females in the labor force also increased. In 1994, almost 63 percent of working age males were in the labor force compared to 48 percent for females. In 2000, the proportions of males and females in the labor force increased significantly to about the same level at 73 and 72 percent, respectively. On the other hand, the proportions of both sexes not involved in the labor force declined considerably from about 37 percent in 1994 to 27 percent in 2000 for males, and from 52 percent to about 28 percent for females. Although data from the two censuses showed greater participation in the 2000 labor force, it should be stressed here

that the improvement was primarily due to increasing number of people who reported doing subsistence in 2000 (31 percent).

The table also shows that among all those in the labor force in 1994, about 50 percent were employed compared to about 5 percent unemployed. In 2000, the employed portion of the labor force increased to over 69 percent, while the unemployed dropped slightly to below 3 percent. (Note: Again, it is important to note that the increase among those employed is basically due to a significant increase among those who reported doing subsistence. These people based on the ILO definition are part of the employed work force.) A majority of those persons unemployed were females during the 1994 census, as apposed to being overly males during the 2000 census.

Among all employed males and females, about 24 and 56 percent, respectively, were working in agriculture and fishing in 1994. In 2000, the proportion of male and females working in agriculture and fisheries increased to about 36 and 59 percent, respectively. Those not in the labor force were mainly female during both censuses: 60 percent in 1994 and 54 percent in 2000.

Table 9.2: Distribution of Working Age Population for Aged 15 Years and Over by Sex, Yap State: 1994 and 2000

	1994									2000				
]	Number			Percent		Percent		Numbe	r		Percent		Percent
Labor force	Total	Males	Females	Total	Males		females	Total	Males	Females	Total	Males	Females	females
Total	6,754	3,254	3,500	100.0	100.0	100.0	51.8	7,153	3,408	3,745	100.0	100.0	100.0	52.4
In Labor force	3,733	2,049	1,684	55.3	63.0	48.1	45.1	5,174	2,493	2,681	72.3	73.2	71.6	51.8
Employed	3,365	1,920	1,445	49.8	59.0	41.3	42.9	4,964	2,359	2,605	69.4	69.2	69.6	52.5
Formal work	2,083	1,449	634	30.8	44.5	18.1	30.4	2,570	1,511	1,059	35.9	44.3	28.3	41.2
Agriculture/fishing	1,282	471	811	19.0	14.5	23.2	63.3	2,394	848	1,546	33.5	24.9	41.3	64.6
Subsistence	1,249	446	803	18.5	13.7	22.9	64.3	2,234	792	1,442	31.2	23.2	38.5	64.5
Market oriented	33	25	8	0.5	0.8	0.2	24.2	160	56	104	2.2	1.6	2.8	65.0
Unemployed	368	129	239	5.4	4.0	6.8	64.9	210	134	76	2.9	3.9	2.0	36.2
Not in labor force	3,021	1,205	1,816	44.7	37.0	51.9	60.1	1,979	915	1,064	27.7	26.8	28.4	53.8
Could have taken a job	391	131	260	5.8	4.0	7.4	66.5	146	72	74	2.0	2.1	2.0	50.7
Not available for work	2,630	1,074	1,556	38.9	33.0	44.5	59.2	1,833	843	990	25.6	24.7	26.4	54.0

Source: 1994 & 2000 FSM Census, Table P26

Table 9.3 portrays the distribution of the labor force by sex across the municipalities and the two regions of Yap State. Reflecting its population size, Yap Proper was responsible for about 63 percent of Yap State's labor force during both 1994 and 2000. The Outer Islands, on the other hand, constituted the remaining 37 percent for the two respective census years. Among the municipalities in 1994, Rull (18 percent) and Weloy (11 percent) in Yap Proper and Woleai (10 percent) in the Outer Island had the largest share of the total labor force in Yap. The same was also true in 2000, where Rull (about 16 percent) and Weloy (about 10 percent) remained with the highest share of the labor force in Yap Proper. In the Outer Islands, Woleai (10 percent) continued to lead with the largest share of the labor force.

By sex, however, about 55 percent of the total labor force were males in 1994 compared to about 48 percent in 2000. Women's largest contribution to the state labor force occurred in Yap Outer Islands where 49 and 58 percents of the work force were females in 1994 and 2000, respectively. This however, supported the fact that involvement in subsistence activities was greater among women in the Outer Islands.

Table 9.3: Labor Force Distribution by Sex and Municipality, Yap State: 1994 and 2000

			199	4					2000	1		
		Percent in	Nun	nber	Pero	cent		Percent in	Num	ber	Perc	ent
Municipality	Number	Labor force	Males	Females	Males	Females	Number	labor force	Males	Females	Males	Females
Total	3,733	100.0	2,049	1,684	54.9	45.1	5,174	100.0	2,493	2,681	48.2	51.8
Yap Proper	2,335	62.6	1,386	949	59.4	40.6	3,275	63.3	1,693	1,582	51.7	48.3
Rumung	34	0.9	27	7	79.4	20.6	49	0.9	26	23	53.1	46.9
Maap	119	3.2	78	41	65.5	34.5	178	3.4	92	86	51.7	48.3
Gagil	244	6.5	146	98	59.8	40.2	385	7.4	197	188	51.2	48.8
Tomil	263	7.0	160	103	60.8	39.2	451	8.7	226	225	50.1	49.9
Fanif	194	5.2	108	86	55.7	44.3	217	4.2	110	107	50.7	49.3
Weloy	409	11.0	265	144	64.8	35.2	508	9.8	296	212	58.3	41.7
Rull	705	18.9	462	243	65.5	34.5	812	15.7	497	315	61.2	38.8
Gilman	64	1.7	39	25	60.9	39.1	89	1.7	43	46	48.3	51.7
Kanifay	64	1.7	46	18	71.9	28.1	98	1.9	58	40	59.2	40.8
Dalipebinaw	239	6.4	55	184	23.0	77.0	488	9.4	148	340	30.3	69.7
Outer Islands	1,398	37.4	592	682	42.3	48.8	1,899	36.7	800	1,099	42.1	57.9
Ulithi	206	5.5	118	88	57.3	42.7	302	5.8	147	155	48.7	51.3
Fais	52	1.4	31	21	59.6	40.4	102	2.0	46	56	45.1	54.9
Ngulu	14	0.4	8	6	57.1	42.9	13	0.3	4	9	30.8	69.2
Woleai	372	10.0	152	220	40.9	59.1	502	9.7	213	289	42.4	57.6
Eauripik	70	1.9	29	41	41.4	58.6	74	1.4	24	50	32.4	67.6
Ifalik	299	8.0	134	165	44.8	55.2	301	5.8	124	177	41.2	58.8
Faraulap	98	2.6	33	65	33.7	66.3	127	2.5	46	81	36.2	63.8
Elato	52	1.4	20	32	38.5	61.5	53	1.0	22	31	41.5	58.5
Lamotrek	111	3.0	67	44	60.4	39.6	188	3.6	73	115	38.8	61.2
Satawal	124	3.3	71	53	57.3	42.7	237	4.6	101	136	42.6	57.4

Source: 1994 & 2000 FSM Census, Table P26

Table 9.4 and Figures 9.1 and 9.2 report labor force participation rates (LFPR) by age and sex. Within the state, the LFPR rose from 55 percent in 1994 to slightly over 72 percent in 2000. Again, this was primarily due to higher reporting of subsistence workers in 2000. Furthermore, LFPR by sex in 1994 showed significantly higher rates for males (63 percent) than for females (48 percent). In 2000, however, the LFPR for the two sexes were about the same: slightly over 73 percent for males and about 72 percent for females. The labor force participation rates also followed a standard pattern for different age groups as seen from Figures 9.1 and 9.2 below. Among the youngest age group (age 15 to 19) who were likely to be at school, the LFPR ranges from a low of about 17 percent for males in 1994 to a high of 55 percent for females in 2000. In both censuses, however, females in this age group have a higher LFPR than males. Data from the two censuses also showed that the highest LFPR for males occurred at ages 25 to 54, while females peaked at ages 25 to 49. The lower LFPR for females at older age was probably due to greater responsibilities in child bearing and other household formations, which often takes place of direct participation in the labor force, as females grew older and the years went by. In any case, the LFPRs for both sexes remained reasonably high until age 60 and then dropped.

Table 9.4: Labor Force Participation Rates (Percent Aged 15 Years and Over in the Labor Force) by Age Group and Sex, Yap State: 1994 and 2000

		1994			2000	
Age groups	Total	Males	Females	Total	Males	Females
Total	55.3	63.0	48.1	72.3	73.2	71.6
15 to 19 years	19.8	16.5	23.1	46.9	38.8	54.9
20 to 24 years	65.2	60.3	68.4	77.1	77.2	77.0
25 to 29 years	60.3	78.2	46.2	83.3	85.4	81.7
30 to 34 years	69.9	80.9	59.3	84.0	88.2	80.9
35 to 39 years	77.2	91.7	62.6	85.8	91.5	80.4
40 to 44 years	76.4	88.2	62.8	85.3	92.3	78.8
45 to 49 years	71.6	81.9	57.9	87.3	92.1	81.8
50 to 54 years	63.3	87.7	41.6	83.0	84.8	80.8
55 to 59 years	58.0	73.7	43.9	77.0	76.5	77.4
60 to 64 years	41.9	50.0	34.8	63.8	67.3	60.7
65 to 69 years	27.1	33.8	20.5	46.4	48.5	44.5
70 to 74 years	24.4	31.3	19.1	42.6	44.6	40.7
75 yrs & over	14.7	16.5	12.9	27.4	23.6	30.6

Source: 1994 & 2000 FSM Census, Table P132

Figure 9.1. Labor Force Participation Rates by Age, Yap State: 1994 and 2000

Figure 9.2a. Labor Force Participation Rates by Age and Sex, Yap State: 1994

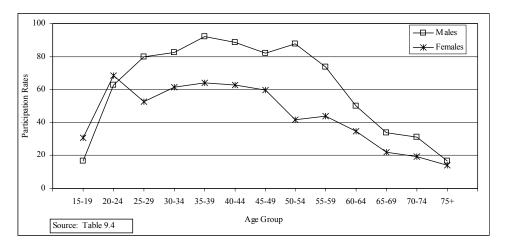
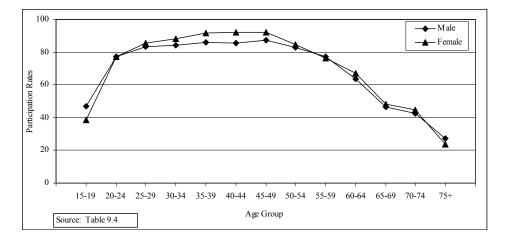


Figure 9.2b. Labor Force Participation Rates by Age and Sex, Yap State: 2000



Yap Proper and Outer Islands patterns of LFPRs also followed the state trends with minor variations (Table 9.5 and Figure 9.3). What is remarkable was the relatively high level of labor force participation in the Outer Islands for all age groups in 2000 and ages 30 and over in 1994, perhaps because of the subsistence activity and a greater participation of women in the Outer Islands. In general, the LFPRs of the Outer Islands were higher than the LFPRs in Yap Proper at all ages in 1994, except at the ages of 20 to 29. In 2000, the LFPRs of the Outer Islands surpassed that of Yap Proper for all age groups ranging from 15 years to 75 and over.

Table 9.5: Labor Force Participation Rates (Percent Aged 15 Years and Over in the Labor Force) by Age Group and Region, Yap State: 1994 and 2000

		1994			2000	
Age groups	Total	Yap Proper	Outer Islands	Total	Yap Proper	Outer Islands
Total	55.3	55.1	55.5	72.3	67.4	82.9
15 to 19 years	19.8	18.1	21.8	46.9	38.9	63.0
20 to 24 years	65.2	70.4	55.1	77.1	73.0	86.0
25 to 29 years	60.3	61.2	58.8	83.3	79.0	93.0
30 to 34 years	69.9	67.0	75.1	84.0	80.3	92.5
35 to 39 years	77.2	74.9	81.9	85.8	81.3	95.6
40 to 44 years	76.4	71.8	84.9	85.3	81.3	94.9
45 to 49 years	71.6	70.0	75.0	87.3	83.0	95.9
50 to 54 years	63.3	62.6	64.6	83.0	78.8	91.2
55 to 59 years	58.0	56.9	60.2	77.0	71.7	86.4
60 to 64 years	41.9	30.5	59.8	63.8	58.3	75.7
65 to 69 years	27.1	19.0	41.8	46.4	35.7	68.7
70 to 74 years	24.4	14.6	43.4	42.6	36.8	51.1
75 yrs & over	14.7	12.2	18.1	27.4	20.6	40.9

Source: 1994 & 2000 FSM Census, Table P132

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Solve Table 9.5

App Proper

Couter Islands

Age Groups

Yap Proper

Outer Islands

Age Groups

Figure 9.3. Labor Force Participation Rates by Age and Region Yap State: 2000

Unemployment

Rates of unemployment by age and sex are reported in Table 9.6. According to the 2000 Census, the state's unemployment rate was about 4.1 percent; a significant drop from the 10 percent unemployment rate shown for 1994. The state female unemployment rate was higher than that of males in 1994, but changed to being higher for males in 2000. The problem of youth (ages 15 and 19 and 20 to 24 age groups) unemployment in Yap State was confirmed in both 1994 and 2000: youths aged 20 to 24 had the highest rates, in excess of 13 percent unemployed for males, and 45 percent for females in 1994. In 2000, unemployment for youths of the same age groups were much lower, but still higher than the rest of the age groups, as shown by 12 and 5 percent, respectively, for males and females.

Table 9.6: Unemployment Rates (Percent of Labor Force Unemployed) by Age Group and Sex, Yap State: 1994 and 2000

	1994			2000		
Age groups	Total	Males	Females	Total	Males	Females
Total	9.9	6.3	14.2	4.1	5.4	2.8
15 to 19 years	13.7	15.4	12.5	6.3	10.0	3.8
20 to 24 years	33.3	12.8	45.3	8.0	12.1	4.7
25 to 29 years	7.8	9.5	5.6	4.6	4.7	4.6
30 to 34 years	5.2	5.9	4.3	2.9	4.6	1.5
35 to 39 years	4.4	5.4	2.9	2.3	1.9	2.7
40 to 44 years	2.5	1.0	5.0	2.9	4.0	1.7
45 to 49 years	3.7	4.1	2.9	2.9	3.8	1.8
50 to 54 years	3.7	3.7	3.5	3.0	3.2	2.8
55 to 59 years	4.1	3.4	5.2	2.9	5.1	1.0
60 to 64 years	4.8	5.2	4.3	0.7	1.4	-
65 to 69 years	2.4	3.8	-	1.0	2.1	-
70 yrs & over	-	-	-	-	-	-

Source: 1994 & 2000 FSM Census, Table P132

Table 9.7 illustrates the differences in unemployment rates between the two regions in Yap State; Yap Proper having consistently higher unemployment rate than the Outer Islands. In 1994, the unemployment rate for Yap Proper was 14.1 compared to 2.8 for the Outer Islands. In 2000, the unemployment rate for Yap Proper dropped to 5.6 percent, although still higher than the Outer Islands rate of 1.4 percent. This was mainly because of the higher participation in subsistence activities, particularly among women in the Outer Islands.

Table 9.7: Unemployment Rates (Percent of Labor Force Unemployed) by Age Group and Region, Yap State: 1994 and 2000

		1994			2000		
Age groups	Total	Yap Proper	Outer Islands	Total	Yap Proper	Outer Islands	
Total	9.9	14.1	2.8	4.1	5.6	1.4	
15 to 19 years	13.7	23.1	4.7	6.3	10.2	1.4	
20 to 24 years	33.3	45.5	3.4	8.0	10.9	2.6	
25 to 29 years	7.8	9.1	5.6	4.6	5.5	3.0	
30 to 34 years	5.2	7.0	2.4	2.9	3.6	1.5	
35 to 39 years	4.4	4.7	3.8	2.3	3.0	0.9	
40 to 44 years	2.5	4.2	-	2.9	3.9	1.0	
45 to 49 years	3.7	5.1	1.0	2.9	4.6	-	
50 to 54 years	3.7	4.9	1.6	3.0	3.8	1.6	
55 to 59 years	4.1	5.3	2.0	2.9	4.8	-	
60 to 64 years	4.8	6.5	3.4	0.7	1.1	-	
65 to 69 years	2.4	5.3	-	1.0	2.0	-	
70 yrs & over	-	-	-	-	-	-	

Source: 1994 & 2000 FSM Census, Table P132

Persons who have been unemployed for a year or more are sometimes referred to as the long-term unemployed. They often find jobs especially difficult as their work-skills depreciated making them less likely to find new work. Of course, it is not appropriate to label all of these persons as the long-term unemployed, since, although they are currently unemployed, we do not know for how much of the time since they last worked they have been seeking work.

Table 9.8 reports on the previous work experience of unemployed persons in Yap State during 1994 and 2000, according to their age and sex. In 1994, there were 368 unemployed persons in the state compared to 210 in 2000. These respondents were asked for the year in which they last worked at a job, business or farm, even for a few days. Over 21 percent of the unemployed had not previously worked in 1994, while in 2000 that proportion of the unemployed rose to about 56 percent. No pattern was noticeable by age; however, in general the female unemployed were more likely to have no work experience.

Table 9.8: Unemployed Persons by Age Group and Previous Work Experience, Yap State: 1994 and 2000

		Unemploy	ad		ortion who w			Proportion who have never worked		
A co Crown	Total			Total			Total		Females	
Age Group 1994	Total	Males	Females	1 Otal	Males	Females	Total	Males	remaies	
Total	368	129	239	78.8	69.0	84.1	21.2	31.0	15.9	
15 to 19 years	34	16	18	44.1	56.3	33.3	55.9	43.8	66.7	
20 to 24 years	203	29	174	92.6	69.0	96.6	33.9 7.4	31.0	3.4	
2	36	25	174	61.1	68.0	45.5	38.9	32.0	54.5	
25 to 29 years										
30 to 34 years	28	18	10	64.3	66.7	60.0	35.7	33.3	40.0	
35 to 39 years	26	19	7	69.2	78.9	42.9	30.8	21.1	57.1	
40 to 44 years	12	3	9	75.0	100.0	66.7	25.0	-	33.3	
45 to 49 years	11	8	3	72.7	62.5	100.0	27.3	37.5		
50 to 54 years	6	4	2	83.3	100.0	50.0	16.7	-	50.0	
55 to 59 years	6	3	3	100.0	100.0	100.0	-	-		
60 to 64 years	5	3	2	20.0	33.3	-	80.0	66.7	100.0	
65 to 69 years	1	1	-	-	-	-	100.0	100.0	-	
70 yrs & over	-	-	-	-	-	-	-	-		
2000										
Total	210	134	76	43.8	47.8	36.8	56.2	52.2	63.2	
15 to 19 years	40	26	14	10.0	15.4	-	90.0	84.6	100.0	
20 to 24 years	62	42	20	29.0	31.0	25.0	71.0	69.0	75.0	
25 to 29 years	27	12	15	44.4	50.0	40.0	55.6	50.0	60.0	
30 to 34 years	17	12	5	47.1	58.3	20.0	52.9	41.7	80.0	
35 to 39 years	14	6	8	64.3	66.7	62.5	35.7	33.3	37.5	
40 to 44 years	18	13	5	77.8	76.9	80.0	22.2	23.1	20.0	
45 to 49 years	15	11	4	86.7	90.9	75.0	13.3	9.1	25.0	
50 to 54 years	10	6	4	70.0	66.7	75.0	30.0	33.3	25.0	
55 to 59 years	5	4	1	100.0	100.0	100.0	_	_		
60 to 64 years	1	1	-	100.0	100.0	-	_	_		
65 to 69 years	1	1	-	100.0	100.0	_	_	_	-	
70 yrs & over	-	-	_			_	_	_	_	

Source: 2000 FSM Census, unpublished data

Under-employment

Table 9.9 gives a more comprehensive indication of the extent of underemployment in the FSM beyond the ILO definitions. As well as the 210 persons unemployed, a further 180 persons working in agriculture and fishing were actively looking for work. The total number of persons looking for work declined between 1994 and 2000. Additionally a further 656 could have taken a job if one were available. About 75 percent of these were working in subsistence or market oriented agriculture and fishing while the remaining 25 percent were not in the labor force. The 'could have taken a job' group had reduced since 1994, perhaps suggesting that people are less likely to be actively looking for work than previously.

Table 9.9. Underemployment by Region, Yap State: 1994 and 2000

		1994		2000			
Economic status	Total	Yap Proper	Outer Islands	Total	Yap Proper	Outer Islands	
Persons 15+ years	6,754	4,234	2,520	7,153	4,862	2,291	
In formal work	2,083	1,725	358	2,570	2,281	289	
Looking for work	499	388	111	390	282	108	
Unemployed	368	329	39	210	184	26	
Subsistence agriculture and fishing	122	50	72	179	97	82	
Market Orientated agriculture and fishing	9	9	-	1	1	-	
Could have taken a job	896	594	969	656	193	463	
Subsistence agriculture and fishing	502	79	423	452	66	386	
Market Orientated agriculture and fishing	3	3	_	57	12	45	
Not in the labour force	391	168	223	147	115	32	
Total available for work	3,478	2,707	1,438	3,616	2,756	860	
Not in labour force and not available for work	3,276	1,871	1,405	3,537	2,106	1,431	

Source: 1994 and 2000 FSM census, Unpublished data

Labor Force Status by Citizenship

Table 9.10 examines the distribution of the working age population by labor force status and citizenship. In 1994, non-Yapese numbered 590 in the state's labor force, comprising nearly 9 percent of the total working age populations. In 2000, non-Yapese numbered 618 in the state's potential work force, accounting for about 9 percent of the working age population. Non-Yapese males and females in 1994 comprised about 4 and 5 percent of the total

working age populations and about 8 and 10 percent of the corresponding Yapese male and female potential workforce. Similarly in 2000, non-Yapese males and females made up about 3 and 5 percent of the total working age population and 7 and 11 percent of potential Yapese male and female workforce. The largest group of foreign workers hailed from Asian countries (about 75 and 66 percent for 1994 and 2000, respectively), particularly the Philippines and China, followed by the U.S. (about 8 and 11 percent for the two censuses). In both censuses, a smaller portion of the non-Yapese population was outside the labor force than Yap State population. In fact, in 1994, about 34 percent of non-Yapese among the working age population were not involved in the labor force compared to about 46 percent for Yapese citizens. This was again repeated in the 2000 census where non-Yapese citizens comprised about 9 percent of those not in the labor force, compared to slightly over 29 percent for Yapese citizens. The unemployment rate for non-Yapese citizens in 2000 was significantly lower than the state average, and almost all the unemployed non-Yapese citizens were women who probably arrived in Yap State with their husbands. (The unusually high unemployment rate for non-Yapese citizens in 1994 was mainly due to Chinese immigrant workers working at the Kingtex factory who claimed to be unemployed despite having formal jobs at the factory.)

Table 9.10: Labor Force Status for Age 15 Years and Over by Citizenship, Yap State: 1994 and 2000

			In labor force (LF)					Not	in
	Persons		Total	Em	nployed	Unem	ployed	LI	7
Citizenship	15+ years	Percent	In LF	Number	% of LF	Number	% of LF	Number	Percent
1994									
Total	6,754	57.0	3,853	3,639	94.4	214	5.6	2,901	43.0
Yap	6,164	54.3	3,345	3,139	93.8	206	6.2	2,819	45.7
Males	2,996	62.1	1,862	1,737	93.3	125	6.7	1,134	37.9
Females	3,168	46.8	1,483	1,402	94.5	81	5.5	1,685	53.2
Non - Yap	590	86.1	508	500	98.4	8	1.6	82	13.9
Males	258	82.2	212	208	98.1	4	1.9	46	17.8
USA	24	87.5	21	20	95.2	1	4.8	3	12.5
Asia	166	95.8	159	158	99.4	1	0.6	7	4.2
Elsewhere	68	47.1	32	30	93.8	2	6.3	36	52.9
Females	332	89.2	296	292	98.6	4	1.4	36	10.8
USA	18	61.1	11	11	100.0	-	-	7	38.9
Asia	278	96.8	269	268	99.6	1	0.4	9	3.2
Elsewhere	36	44.4	16	13	81.3	3	18.8	20	55.6
2000									
Total	7,153	72.3	5,174	4,964	95.9	210	4.1	1,979	27.7
Yap	6,502	70.5	4,585	4,380	95.5	205	4.5	1,917	29.5
Males	3,142	71.8	2,256	2,124	94.1	132	5.9	886	28.2
Females	3,360	69.3	2,329	2,256	96.9	73	3.1	1,031	30.7
Non - Yap	651	90.5	589	584	99.2	5	0.8	62	9.5
Males	266	89.1	237	235	99.2	2	0.8	29	10.9
USA	40	80.0	32	31	96.9	1	3.1	8	20.0
Asia	191	95.3	182	181	99.5	1	0.5	9	4.7
Elsewhere	35	65.7	23	23	100.0	0	0.0	12	34.3
Females	385	91.4	352	349	99.1	3	0.9	33	8.6
USA	31	83.9	26	25	96.2	1	3.8	5	16.1
Asia	315	96.5	304	303	99.7	1	0.3	11	3.5
Elsewhere	39	56.4	22	21	95.5	1	4.5	17	43.6

Source: 1994 & 2000 FSM Census, Table P95

Labor Force Status by English Language Ability

English is the language commonly used in the public as well as much of the private sector, making it an important skill for employment. The results for the 1994 census showed people who spoke English only or with other language as having a larger proportion in the labor force than those who spoke no English at all (Table 9.11). The disparity among those employed, however, was much narrower indicating that the large difference among those in the labor force was probably due to the large number of Chinese immigrant workers who spoke no English and claimed to be unemployed when in fact they held formal jobs at the Kingtex factory. In actuality, the proportions of English speakers and those without English skills were much closer than what the data indicated. In fact in 2000, the disparity between those with English skills and those who didn't showed no significant variation in employment status. The proportion of the population in the "not in labor force" category for those with no English skills was over 52 percent for 1994; a significantly higher proportions than those with English skills (20 percent). In 2000, the proportion for those with no English skills and "not in the labor force" decreased to about 27 percent while those with English skills remained at about the same level of 20 percent.

Table 9.11: Labor Force Status for Age 15 Years & Over by Language Ability, Yap State: 1994 and 2000

	Persons			In labor f	orce (LF)			Not	in
	15 years			Emplo	yed	Unemp	oloyed	labor	force
Language ability	and over	Number	Percent	Number	% of LF	Number	% of LF	Number	Percent
1994									
Total	6,754	3,733	55.3	3,365	90.1	368	9.9	3,021	44.7
English only	30	24	80.0	22	91.7	2	8.3	6	20.0
English with others	4,720	2,752	58.3	2,575	93.6	177	6.4	1,968	41.7
English as first	137	84	61.3	78	92.9	6	7.1	53	38.7
English as second	4,376	2,545	58.2	2,379	93.5	166	6.5	1831	41.8
English as third	207	123	59.4	118	95.9	5	4.1	84	40.6
No English	2,004	957	47.8	768	80.3	189	19.7	1,047	52.2
2000									
Total	7,153	5,174	72.3	4,964	95.9	210	4.1	1,979	27.7
English only	49	39	79.6	38	97.4	1	2.6	10	20.4
English with others	5,094	3,672	72.1	3,511	95.6	161	4.4	1,422	27.9
English as first	209	160	76.6	152	95.0	8	5.0	49	23.4
English as second	4,605	3,289	71.4	3,147	95.7	142	4.3	1,316	28.6
English as third	280	223	79.6	212	95.1	11	4.9	57	20.4
No English	2,010	1,463	72.8	1,415	96.7	48	3.3	547	27.2

Source: 1994 & 2000 FSM Census, Table P139

Note: The number of unemployed as a percent of the labor force is also the unemployed rate.

Labor Force Status by Educational Attainment

Table 9.12 examines the significance of educational attainment in determining labor force status in Yap State. Those with high school education or higher had a greater probability of being in the labor force and employed. Persons with high school or higher education had less than average unemployment rates, especially college graduates who reported over 2 percent unemployment rate in 1994. In 2000, the same trends were observed from the census results with college graduates having less than 2 percent unemployment rate, indicating that unemployment rates among the well educated were also below the state average. This was especially true among those with bachelors or higher degree. Some evidence also exists of an emerging unemployment problem among high school level educated persons as high school non-graduates reported above average levels of unemployment: about 22 and 7 percents in 1994 and 2000, respectively. This was especially true for male drop-outs. Male and female education levels showed similar trends but at different levels. At almost every education level women had higher unemployment rates than males.

Table 9.12a: Educational Attainment for Aged 15 Years & Over by Labor Force Status, Yap State: 1994 and 2000

				In the	labor force (L	F)		Not in	LF
	Persons		Persons	Empl	oyed	Unemp	oloyed		
Educational attainment	15+ years	Percent	in LF	Number	% of LF	Number	% of LF	Number	Percent
1994									
Total	6,754	55.3	3,733	3,365	90.1	368	9.9	3,021	44.7
No school completed	1,101	45.8	504	437	86.7	67	13.3	597	54.2
Elementary school	1,620	43.8	709	668	94.2	41	5.8	911	56.2
High school	1,326	36.3	481	375	78.0	106	22.0	845	63.7
High school graduates	1,438	72.8	1,047	939	89.7	108	10.3	391	27.2
Some college	632	71.2	450	418	92.9	32	7.1	182	28.8
A.S. occupational	175	85.1	149	144	96.6	5	3.4	26	14.9
A.S. academic	223	89.2	199	196	98.5	3	1.5	24	10.8
Bachelor degree	196	80.6	158	152	96.2	6	3.8	38	19.4
Higher degree	43	83.7	36	36	100.0	-	-	7	16.3
2000									
Total	7,153	72.3	5,174	4,964	95.9	210	4.1	1,979	27.7
No school completed	573	58.6	336	330	98.2	6	1.8	237	41.4
Elementary school	1,821	67.2	1,224	1,175	96.0	49	4.0	597	32.8
High school	1,438	51.8	745	696	93.4	49	6.6	693	48.2
High school graduates	1,912	85.2	1,629	1,558	95.6	71	4.4	283	14.8
Some college	706	85.0	600	577	96.2	23	3.8	106	15.0
A.S. occupational	218	91.7	200	195	97.5	5	2.5	18	8.3
A.S. academic	249	91.6	228	224	98.2	4	1.8	21	8.4
Bachelor degree	171	90.1	154	151	98.1	3	1.9	17	9.9
Higher degree	65	89.2	58	58	100.0	-	-	7	10.8

Source: 1994 & 2000 FSM Census, Table P140

Note: The number of unemployed as a percent of the labor force is also the unemployed rate.

Table 9.12b Educational Attainment for Aged 15 Years & Over by Labor Force Status and Sex, Yap State: 1994 and 2000

	Persons		Persons	In the Empl	labor force (Ll oyed	F) Unemp	loyed	Not in	Not in LF	
Educational attainment	15+ years	Percent	in LF	Number	% of LF	Number	% of LF	Number	Percent	
1994	2.254	62.0	2 0 40	1.020	02.7	100		1.005	27.0	
MALES	3,254	63.0	2,049	1,920	93.7	129	6.3	1,205	37.0	
No school completed	340	38.5	131	125	95.4	6	4.6	209	61.5	
Elementary school	538	44.8	241	225	93.4	16	6.6	297	55.2	
High school	653	40.7	266	231	86.8	35	13.2	387	59.3	
High school graduates	820	80.7	662	624	94.3	38	5.7	158	19.3	
Some college	421	75.3	317	296	93.4	21	6.6	104	24.7	
A.S. occupational	135	91.9	124	119	96.0	5	4.0	11	8.1	
A.S. academic	161	92.5	149	146	98.0	3	2.0	12	7.5	
Bachelor degree	150	85.3	128	123	96.1	5	3.9	22	14.7	
Higher degree	36	86.1	31	31	100.0	-	-	5	13.9	
FEMALES	3,500	48.1	1,684	1,445	85.8	239	14.2	1,816	51.9	
No school completed	761	49.0	373	312	83.6	61	16.4	388	51.0	
Elementary school	1,082	43.3	468	443	94.7	25	5.3	614	56.7	
High school	673	31.9	215	144	67.0	71	33.0	458	68.1	
High school graduates	618	62.3	385	315	81.8	70	18.2	233	37.7	
Some college	211	63.0	133	122	91.7	11	8.3	78	37.0	
A.S. occupational	40	62.5	25	25	100.0	-	-	15	37.5	
A.S. academic	62	80.6	50	50	100.0	-	-	12	19.4	
Bachelor degree	46	65.2	30	29	96.7	1	3.3	16	34.8	
Higher degree	7	71.4	5	5	100.0	-	-	2	28.6	
2000										
MALES	3,408	73.2	2,493	2,359	94.6	134	5.4	915	26.8	
No school completed	152	52.6	80	77	96.3	3	3.8	72	47.4	
Elementary school	607	56.8	345	312	90.4	33	9.6	262	43.2	
High school	761	52.0	396	361	91.2	35	8.8	365	48.0	
High school graduates	959	87.4	838	795	94.9	43	5.1	121	12.6	
Some college	414	87.0	360	348	96.7	12	3.3	54	13.0	
A.S. occupational	176	93.8	165	161	97.6	4	2.4	11	6.3	
A.S. academic	174	90.8	158	156	98.7	2	1.3	16	9.2	
Bachelor degree	121	90.9	110	108	98.2	2	1.8	11	9.1	
Higher degree	44	93.2	41	41	100.0	-	-	3	6.8	
FEMALES	3,745	71.6	2,681	2,605	97.2	76	2.8	1,064	28.4	
No school completed	421	60.8	256	253	98.8	3	1.2	165	39.2	
Elementary school	1,214	72.4	879	863	98.2	16	1.8	335	27.6	
High school	677	51.6	349	335	96.0	14	4.0	328	48.4	
High school graduates	953	83.0	791	763	96.5	28	3.5	162	17.0	
Some college	292	82.2	240	229	95.4	11	4.6	52	17.8	
A.S. occupational	42	83.3	35	34	97.1	1	2.9	7	16.7	
A.S. academic	75	93.3	70	68	97.1	2	2.9	5	6.7	
Bachelor degree	50	88.0	44	43	97.7	1	2.3	6	12.0	
Higher degree	21	81.0	17	17	100.0	-	-	4	19.0	
Source: 1994 & 2000 FSM Censu	- T-L1- D140									

Source: 1994 & 2000 FSM Census, Table P140

Note: The number of unemployed as a percent of the labor force is also the unemployment rate.

Work Experience

Table 9.13 provides information on work experience of those persons not in the formal work force and not currently in the labor force in 2000. Only 2000 data are reported here due to differences in year sequences used which rendered the 1994 data incomparable to the 2000 census results. The 2000 census result showed that about 23 percent of the working age population who were not currently in the work force had never previously worked in the formal sector. For males, 21 percent had never previously worked, while for females about 25 percent had never previously worked. About 5 percent of the working age not currently in the formal labor force worked in the 5 years prior to the census.

Table 9.13: Year of Last Work for Aged 15 Years and Over Not in the Labor Force, Yap State: 2000

		Number			Percent	
Year of last work	Total	Males	Females	Total	Males	Females
Total	7,153	3,408	3,745	100.0	100.0	100.0
Worked in 5 yrs prior to census	345	204	141	4.8	6.0	3.8
2000	35	20	15	0.5	0.6	0.4
1999	85	55	30	1.2	1.6	0.8
1995 to 1998	86	51	35	1.2	1.5	0.9
1990 to 1994	139	78	61	1.9	2.3	1.6
Never previously worked	1,634	711	923	22.8	20.9	24.6
Currently in the labor force	5,174	2,493	2,681	72.3	73.2	71.6

Source: 1994 & 2000 FSM Census, unpublished data.

Subsistence Activities

Subsistence workers describes persons whose sole economic work is to provide food for their own family, sometimes giving away food to friends or relatives free, but not to sell. The following section provides a more focused look at the group of persons engaged in subsistence activities in Yap State.

The subsistence economy of Yap State showed interesting variations between the two regions. Data from the 1994 census revealed that labor force population of the Outer Islands of Yap had a higher proportion working in subsistence (about 40 percent of the working age population) with females more likely to have been engaged in subsistence activities than males (Table 9.14). Similarly, in 2000, Outer Islanders engaged in subsistence activities outnumbered their Yap Proper counterparts, thus, accounting for about 66 percent of the potential work force in the Outer Islands. Yap Proper, on the other hand, showed less subsistence activity (about 6 percent in 1994 and close to 15 percent in 2000), possibly as a result of the state center being located there and the fact that very few people on Yap Proper still engaged solely in subsistence activities as their main source of providing basic needs for their families. The table also revealed that there was hardly any market oriented subsistence activity in the Outer Islands, while there were a few cases for Yap Proper in 1994. In 2000, market oriented subsistence activities in both regions increased significantly, accounting for about 3 percent for the Outer Islands and 2 percent for Yap Proper.

Table 9.14: Percent of Population in Subsistence Work by Municipality, Yap: 1994 and 2000

		1994		2000				
	Population	Subsistence	:	Population	Subsistence	:		
Municipality	15+ years	Number	Percent	15+ years	Number	Percent		
Total	6,754	1,249	18.5	7,153	2,234	31.2		
Yap Proper	4,234	249	5.9	4,862	725	14.9		
Rumung	69	14	20.3	63	19	30.2		
Maap	295	15	5.1	358	66	18.4		
Gagil	432	74	17.1	475	198	41.7		
Tomil	528	22	4.2	660	141	21.4		
Fanif	280	58	20.7	339	69	20.4		
Weloy	710	14	2.0	788	57	7.2		
Rull	1,223	30	2.5	1,345	128	9.5		
Gilman	115	11	9.6	137	6	4.4		
Kanifay	142	6	4.2	163	4	2.5		
Dalipebinaw	440	5	1.1	534	37	6.9		
Outer Islands	2,520	1,000	39.7	2,291	1,509	65.9		
Ulithi	675	80	11.9	473	177	37.4		
Fais/Sorol	170	27	15.9	109	85	78.0		
Ngulu	27	6	22.2	15	11	73.3		
Woleai	491	302	61.5	618	422	68.3		
Eauripik	77	53	68.8	77	62	80.5		
Ifalik	365	250	68.5	330	277	83.9		
Faraulap	130	71	54.6	130	109	83.8		
Elato	68	36	52.9	55	46	83.6		
Lamotrek	210	81	38.6	189	171	90.5		
Satawal	307	94	30.6	295	149	50.5		

Source: 1994 FSM Census, Table P146; 2000 FSM Census, Table P2-14.

Figure 9.3 and Table 9.15 show the relation of age to subsistence work. In general the peak ages of subsistence activity in 1994 occurred for males at over the age of 60 to 64 years and females at ages 35 to 44, although there was little fluctuation by age group overall. In 2000, the peak ages of subsistence activities for males remained at about the same level as in 1994 at over 59 years of age, while that of females rose to about 45 to 64 years of age. The Outer Islands in 1994 had the largest difference between male and female participating in subsistence activities with 28 percent of males and over 50 percent of females in subsistence. This was repeated again in 2000 with Outer Island females accounting for nearly 76 percent compared to about 53 percent for males.

In 1994, over 50 percent of women in Yap Outer Islands were subsistence worker, unlike Yap Proper where only 6 percent of the women reported being subsistence worker. A similar pattern was also observed in 2000, where only 19 percent of the women on Yap Proper reported being subsistence workers while those in the Outer Islands reported close to 76 percent. The differences suggest a need for independent economic and agricultural planning policies for the two regions. Subsistence activities for males, however, were low, but still showed a noticeable increase between the two censuses for both Yap Proper and the Outer Islands.

Table 9.15: Percent of Population in Subsistence Work by Age Group, Sex and Region, Yap State: 1994 and 2000

Total							Females		
Age groups	Total	Yap Proper	Outer Islands	Total	Yap Proper	Outer Islands	Total	Yap Proper	Outer Islands
1994	18.5	5.9	39.7	13.7	5.7	27.8	22.9	6.1	50.2
15 to 19 years	10.5	2.4	19.7	5.7	1.8	9.9	15.2	2.9	30.5
20 to 24 years	18.2	4.2	44.9	15.5	5.3	30.7	20.0	3.6	57.3
25 to 29 years	18.5	5.1	42.3	14.6	5.3	34.3	21.6	5.0	47.6
30 to 34 years	20.6	5.1	48.0	15.9	5.8	34.3	25.1	4.4	60.8
35 to 39 years	21.7	8.4	48.4	13.5	8.1	27.0	30.0	8.9	65.0
40 to 44 years	22.5	6.5	51.6	12.7	4.4	30.5	33.7	9.2	71.1
45 to 49 years	19.2	4.3	50.0	14.3	4.3	35.5	25.8	4.2	68.3
50 to 54 years	22.8	10.4	43.8	16.4	7.1	37.8	28.5	14.1	47.5
55 to 59 years	22.4	10.2	47.0	17.8	8.5	38.9	26.5	11.8	53.2
60 to 64 years	25.8	9.9	50.5	25.0	8.3	52.3	26.5	11.4	49.1
65 to 69 years	18.1	6.0	40.0	19.5	5.5	54.5	16.7	6.7	30.3
70 yrs & over	17.5	10.4	28.8	19.7	12.6	31.6	15.5	8.5	26.5
2000	31.2	14.9	65.9	23.2	10.7	53.2	38.5	19.0	75.8
15 to 19 years	27.5	11.6	59.6	26.7	11.6	54.0	28.2	11.6	66.2
20 to 24 years	32.6	11.8	78.1	27.5	9.6	73.2	36.7	13.7	81.4
25 to 29 years	31.1	10.7	77.2	22.5	6.4	64.3	37.6	14.2	85.5
30 to 34 years	32.2	12.9	76.5	19.5	5.2	67.6	41.6	19.7	80.7
35 to 39 years	32.5	17.2	65.8	21.4	10.7	45.4	43.1	23.6	84.6
40 to 44 years	30.4	15.6	65.6	19.9	10.7	46.7	40.3	20.6	79.2
45 to 49 years	29.3	14.4	59.5	15.9	7.9	36.4	44.7	23.2	78.5
50 to 54 years	31.8	18.2	58.1	18.4	11.0	35.3	48.6	28.4	80.9
55 to 59 years	38.9	24.8	64.2	22.5	13.3	48.1	52.4	37.1	72.2
60 to 64 years	43.4	33.1	65.7	37.5	31.6	56.0	48.7	34.7	71.1
65 to 69 years	32.9	21.4	56.7	32.0	17.2	60.6	33.6	25.0	52.9
70 yrs & over	27.9	19.6	42.5	23.4	16.3	38.3	31.7	22.8	45.5

Source: 1994 & 2000 FSM Census, Table P146

The following graphs (Figure 9.3, 9.4, and 9.5) display the percent of the population doing subsistence work by age groups, sex, and region. Figure 9.3 shows that in Yap females did more subsistence work than males. Figure 9.4 and 9.5 show that more males and females in the Outer Islands of Yap participated in subsistence work than those on Yap Proper.

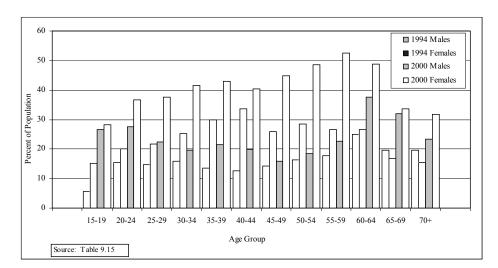


Figure 9.4 Subsistence Workers by Sex Yap State: 1994 and 2000

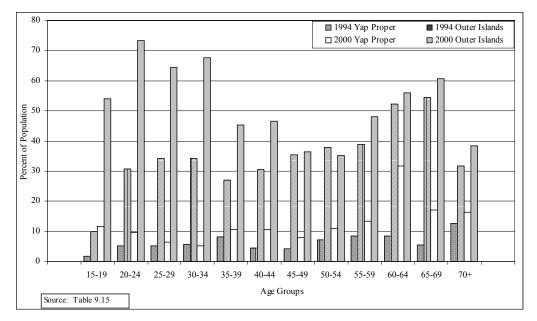
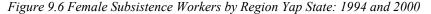


Figure 9.5 Male Subsistence Workers by Region Yap State: 1994 and 2000



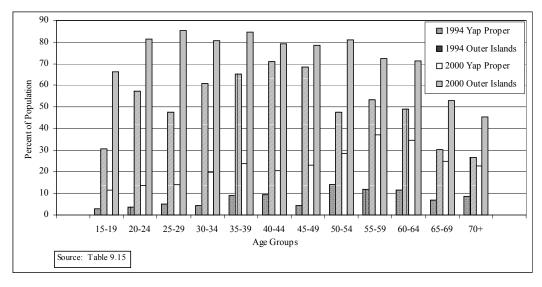


Table 9.16 shows the educational attainment for those engaged primarily in subsistence activities. In 1994, about 54 percent of the subsistence workers had educational attainment at or below the elementary level. This dropped to about 53 percent in 2000. A small portion of college-educated persons was in the subsistence labor force. In 1994, 28 persons (about 2 percent) in subsistence had occupational or academic qualifications and about 18 percent of subsistence workers were at least high school graduates. In 2000, there were 77 persons (over 3 percent) doing subsistence activities who have had at least a two-year college degree. Those doing subsistence activities with at least a high school diploma comprised about 20 percent of all subsistence workers.

Table 9.16: Subsistence Activities for Aged 15 Years and Over by Educational Attainment, Yap State: 1994 and 2000

	1994 Census							2000 Census						
]	Number			Percent			Number				Percent		
Educational Attainment	Total	Males		Total	Males	Females		Total	Males	Females	Total	Males	Females	
Total	1,249	446	803	100.0	100.0	100.0		2,234	792	1,442	100.0	100.0	100.0	
Not school	356	73	283	28.5	16.4	35.2		851	160	691	38.1	20.2	47.9	
Elementary	318	61	257	25.5	13.7	32.0		325	76	249	14.5	9.6	17.3	
High school	257	92	165	20.6	20.6	20.5		420	188	232	18.8	23.7	16.1	
High school graduates	218	142	76	17.5	31.8	9.5		442	233	209	19.8	29.4	14.5	
Some college	72	54	18	5.8	12.1	2.2		119	76	43	5.3	9.6	3.0	
A. A. occupational	11	9	2	0.9	2.0	0.2		32	27	5	1.4	3.4	0.3	
A.S. academic	10	9	1	0.8	2.0	0.1		35	25	10	1.6	3.2	0.7	
Bachelor degree	6	5	1	0.5	1.1	0.1		8	5	3	0.4	0.6	0.2	
Professional degree	1	1	-	0.1	0.2	-		2	2	-	0.1	0.3	-	

Source: 1994 & 2000 FSM Census, Table P113

Of those persons in subsistence, about 10 and 8 percent in 1994 and 2000, respectively, were searching for alternative or additional work during the 4 weeks prior to the census (Table 9.17). From this figure we can assume that at least 10 percent in 1994 and 8 percent in 2000 of the subsistence workers would have liked cash employment instead of or in addition to their subsistence work and were therefore under-employed. However, the state of the job market was a strong factor in whether an individual was looking for a job. If no jobs were available people would not be likely to respond that they were looking, especially in small communities where the job market is limited. To this extent, true under-employment might be considered higher. Fully 50 percent of the subsistence workers in 1994 said they could have taken a job if it was offered. This suggested that people are working at lower capacity than they would prefer. In 2000, however, the proportion of subsistence workers willing to take a job decreased to about 28 percent, indicating that people were working at a slightly higher capacity than before.

Table 9.17: Subsistence Activities by Search for Cash Employment, Yap State: 1994 and 2000

	1994 Cen	sus	2000 Cen	2000 Census		
		Percent of		Percent of		
Employment status	Number	total subsistence	Number	total subsistence		
Total	1,249	100.0	2,234	100.0		
Looking for work	122	9.8	179	8.0		
Not looking	1,127	90.2	2,055	92.0		
Could have taken a job	624	50.0	631	28.2		
Could not have taken a job	625	50.0	1,603	71.8		
Already has job	34	2.7	4	0.2		
Temporarily ill	65	5.2	164	7.3		
Other reason	526	42.1	1,435	64.2		

Source: 1994 & 2000 FSM Census, unpublished data

Market Oriented Subsistence Activities

Market-oriented workers are persons engaged in home-production activities who occasionally or regularly sell their produce for cash. The next two tables provide a more focused look at this group of persons in the Yap. In 2000, 160 people in the potential labor force were market-oriented subsistence workers, an increase of over 100 people since 1994. Both regions experienced increase in market-oriented participation, suggesting a growing importance of such activities in Yap households. In 2000, majority of persons engaged in market-oriented activities in the Outer Islands were from Ulithi and Satawal.

Table 9.18. Percent of Population in Market-oriented Work by Municipality, Yap State: 1994 and 2000

		1994			2000	
	Persons	Market-orie	nted	Persons	Market-orie	nted
Municipality	15+ years	Number	Percent	15+ years	Number	Percent
Total	6,754	33	0.5	7,153	160	2.2
Yap Proper	4,234	32	0.8	4,862	85	1.7
Rumung	69	8	11.6	63	18	28.6
Maap	295	2	0.7	358	-	-
Gagil	432	1	0.2	475	3	0.6
Tomil	528	6	1.1	660	12	1.8
Fanif	280	-	-	339	-	-
Weloy	710	9	1.3	788	8	1.0
Rull	1,223	3	0.2	1,345	2	0.1
Gilman	115	-	-	137	14	10.2
Kanifay	142	3	2.1	163	26	16.0
Dalipebinaw	440	-	-	534	2	0.4
Outer Islands	2,520	1	•••	2,291	75	3.3

Source: 1994 FSM Census, Table P26; 2000 FSM Census, Table P2-14.

Other Labor Force Characteristics

Commuting

The 1994 and 2000 Censuses collected information on commuting (travel time, car-pooling, type of transport and hour of commute) (See appendix Table B18). The average (mean) duration of commute to work was about 14 minutes in 1994 and about 13 minutes in 2000. The Outer Islands had a shorter average commute time of 8 minutes than the 15 minutes for Yap Proper in 1994. In 2000, the commute time for Yap Proper dropped to about 13 minutes while that of the Outer Islands remained at about 8 minutes.

Most people in the Outer Islands worked in the same municipality and same village as where they lived (Table 9.18). In Yap proper in 1994, however, the majority worked in a different municipality and different village, except for Weloy and Rumung. This was mainly due to the fact that Weloy was the urban center where most of the national and state offices were located, and Rumung is isolated. In 2000, the majority of workers working in their municipality were shown to be from Dalipebinaw (83 percent) and Weloy (76 percent), partly because of the migrant workers at the Kingtex Garment Factory in Dalipebinaw and the urban center in Weloy.

Table 9.19: Location of Work Last Week by Municipality, Yap State: 1994 and 2000

		1994 Census			2000 Census	
	Total in	Percent working	Percent working	Total in	Percent working	Percent working
Municipality	formal work force	in same municipality	in same village	formal work force	in same municipality	in same village
Total	2,083	47.3	25.5	2,570	52.0	37.6
Yap Proper	1,725	39.8	17.3	2,281	46.8	31.6
Rumung	12	83.3	33.3	8	75.0	12.5
Maap	92	25.0	9.8	108	25.9	11.1
Gagil	150	19.3	5.3	176	14.2	6.8
Tomil	205	17.6	7.8	280	25.4	17.5
Fanif	131	20.6	14.5	140	20.0	15.7
Weloy	352	78.7	36.9	389	75.6	42.9
Rull	612	40.4	16.2	628	35.5	14.0
Gilman	45	35.6	4.4	58	27.6	10.3
Kanifay	49	12.2	10.2	52	11.5	9.6
Dalipebinaw	77	20.8	9.1	442	83.9	81.0
Outer Islands	358	83.5	64.8	289	92.7	85.1
Ulithi	114	87.7	78.9	104	97.1	89.4
Fais/Sorol	24	95.8	0.0	16	62.5	62.5
Ngulu	1	100.0	100.0	1	-	-
Woleai	69	97.1	79.7	75	96.0	85.3
Eauripik	16	87.5	50.0	11	81.8	81.8
Ifalik	49	49.0	36.7	24	95.8	75.0
Faraulap	23	82.6	60.9	17	94.1	88.2
Elato	16	75.0	75.0	7	85.7	85.7
Lamotrek	22	81.8	81.8	17	94.1	94.1
Satawal	24	87.5	66.7	17	88.2	88.2

Source: 1994 & 2000 FSM Census, Table B15

Armed Forces

Only 2 persons claimed to be on active duty during the 1994 census and 16 persons were previously on duty for the U.S. armed forces (See Appendix Table B13). The number of armed forces dependent was 32. In 2000, 28 persons in the state claimed to be on active duty while 25 were previously on active duty in the past for the U.S. armed forces. The number of armed forces dependent increased to 66 persons.

Conclusion

In 1994, the labor force participation rate was about 55 percent, about 19 percentage point of which was due to the inclusion of subsistence workers in the labor force. This increased to about 72 percent in 2000 with subsistence workers making up slightly over 31 percent of the total labor force. In 1994, Yap State had an unemployment rate of 10 percent, or 368 persons who were looking for and available to take a job. Furthermore, an additional 391 persons who were not actively seeking a job the week before the census were available to take a job. By 2000, the unemployment rate had dropped to about 4 percent (210 persons). The *discouraged unemployed*, or those not looking but could take a job if one is offered, accounted for about 2 percent (146 persons) of the potential workforce in the state.

Furthermore, about 21 and 56 percent of unemployed persons in 1994 and 2000, respectively, had no previous work experience, suggesting that unemployment was a long-term difficulty for many persons. Persons with higher education were more likely to be employed and in the labor force than with little or no schooling.

Subsistence activities were very common in Yap. In 1994, almost 19 percent of the working age population engaged mostly in farming and fishing for own use. This increased significantly to about 31 percent in 2000. By regions, however, subsistence activities were shown to be much more common in the Outer Islands than on Yap Proper, where in both 1994 and 2000, close to 40 and 66 percent of the potential work force in the Outer Islands and as low as 6 and 15 percent for Yap Proper were engaged in subsistence activities. The substantial differences between the two regions suggest the need for independent planning for each region. Fully 50 percent of the subsistence workers in 1994 said they could have taken a formal job if it was offered, suggesting that these people were working at lower capacity than they would prefer. This dropped to about 28 percent in 2000, indicating that people were working at slightly higher capacity than before.

CHAPTER 10 INDUSTRY AND OCCUPATION

Introduction

Industry and occupation data provide information on the changes occurring in the economy and serve as a good indicator on the extent of economic development in Yap state by comparing changes in employment patterns among the various industries over the years. In addition, this chapter presents data on different occupational groups, which when classified against other characteristics show the relevancy of each occupational group in the state. Only persons in the formal work force (that is, excluding subsistence agriculture or fishing) who were currently working are considered in this chapter. Not included were the experienced work force or those who worked in the 5 years previous to the census. Also reviewed in this chapter is the difference in employment between the private and public sectors.

In the 2000 FSM Census, questions 28 for industry and question 29 for occupation were completed for all individuals aged 15 years and over and who were working at a job or business (current formal work force) or had worked at a job or business at any time since 1995 (experienced formal work force). The same questions were also asked in 1994 census except that the reference dates for the current work force referred to 1994 and that for the experienced work force referred to 1990. The type of business or industry was asked along with the name of the employer in order to check the information. Industry refers to the activity of the establishment in which an economically active person worked during the reference period established for data on economic characteristics (or last worked, if unemployed). The activity of the establishment refers to the kinds of goods or services produced. Occupation refers to the kind of work done during the reference period irrespective of the industry or the status (employer/employee). The occupation groups were derived from the level of skill and experience needed for the position. Examples include manager, sales person, typist, or factory worker.

The 2000 and 1994 Censuses use classifications defined by the International Labor Organization (ILO), which differed from the U.S. standard classifications. The differences are minor. The ILO classifications are used by a majority of Pacific Island nations.

Data Description

Industry

Industries within the State of Yap have been broken down into 14 categories by the Yap State census office and are based on the International Labor Organization's International Standard Industrial Classification (ISIC). Some of the categories have been grouped together in order to accommodate the different economic activities of Yap State.

The first group contains agriculture, forestry, fishing, and mining (quarrying) enterprises. This group includes all commercial agricultural production, fishing, mining, and quarrying.

Construction enterprises contain all enterprises relating to heavy construction and special building trade contractors. Construction includes additions, alterations, reconstruction, installations, and repairs.

Transportation, communication, electric, gas and sanitation services all fall in one category in the ILO breakdown; however, for Yap State this group has been broken into two groups, one group for transportation and communication and one group for electricity, gas and sanitation services. The transportation and communication group includes all establishments, which provide the general public with passenger or freight transportation services and post and telecommunication services. The other group contains the major utilities of electricity, gas, and water supply.

Manufacturing of durable and non-durable goods is the third category. Manufacturing is the mechanical or chemical transformation of materials or substances into new products. The category ranges in industries from fish packaging to publishing.

Wholesale and retail trades are combined in one group. Both groups encompass establishments involved with selling of merchandise. Wholesale implies trade of other businesses, while retail implies merchandise for personal or household consumption.

Financial intermediation includes establishments such as depository institutions, credit institutions, investment companies, commodity brokers, and insurance agents and brokers.

Hotels, restaurants and bars include enterprises that provide lodging, food, and beverages. This group contains establishments that provide short-term accommodations as well as bars, canteens, and restaurants.

Business, computer activities and real estate include the renting of machinery and equipment, research and development, legal activities, architect and engineering services, computer activities, and other business related activities. Real estate includes owners, lessors, lessees, buyers, sellers, agents, and developers.

Health and social work industries include hospitals, medical and dental facilities, veterinary activities and social work facilities.

Education contains all establishments which provide educational opportunities for the population.

Public administration consists of all government agencies and organizations, local, state, national, and international. It also includes defense establishments and compulsory social security.

Other community and social services includes sewage and refuse disposal, membership organizations, recreational activities, libraries, and other service activities. Private household services are also included in this final category.

Occupation

The International Standard Classification of Occupations (ISCO) breaks occupations into 10 basic categories. ISCO further aggregates occupations into 3 additional levels of detail. Responses on occupation in the 1994 FSM Census were classified down to three digits in the ISCO categories. The major groups are organized by the degree of skill and experience necessary for the occupation.

The ten major groups are broken down as follows:

Executives and managers: this group contains occupations whose main tasks include formulating government policy, laws, and regulations, planning directing coordinating and activities of enterprises or organizations. Examples are judges, government department chiefs, traditional chiefs, legislators, and senior management of organizations.

Professionals: this group includes occupations whose tasks require a high level of professional knowledge and experience. Tasks include increasing knowledge, applying scientific and artistic concepts and theories to the solution of problem, and teaching about the foregoing in a systematic manner. Examples include mathematicians, statisticians, geologists, computer programmers, architects, engineers, nurses, doctors, teachers for secondary level and above, accountants, lawyers, judges, and economists.

Technicians and associate professionals: this group requires technical knowledge and experience and conducts tasks carrying out technical work connected with the application of concepts and operational methods. This group includes teachers at primary level, computer troubleshooters, ships' engineer, air traffic controller, building inspectors, medical health assistants, nutritionists, and business service agents.

Administrative support: also called clerks, this group includes occupations whose tasks are to organize, store, compute, and retrieve information. This group includes office clerks (such as secretaries and word processors, transport clerks, filing clerks) and customer service clerks (such as tellers, cashiers, client information, travel agents).

Service workers: this group includes occupations with tasks of provide services related to travel, housekeeping, catering, personal care, protection, maintaining law and order, selling goods at shops or markets. This group includes travel steward, waiters, cooks, child-care workers, barbers, police officers, fire fighters and stall or market sales persons.

Agriculture and fishing workers: these occupations include skilled workers who grow crops, breed or hunt animals, catch or cultivate fish and conserve or exploit forests.

Craft and related trades: tasks include extracting raw materials, constructing building, and other structures and making various products and handicraft goods.

Machine operators: includes tasks, which require the knowledge and experience necessary to operate and monitor large-scale industrial machinery and equipment.

Elementary occupations and laborers: includes persons doing simple and routine tasks involving the use of handheld tools and physical effort. Examples are selling goods in the street, door-keeping, cleaning, working as laborers.

The final group is *armed forces*: includes persons currently serving or had served in the past in the armed forces of the United States.

Class of Worker. Question 30 of the 1994 and 2000 FSM Censuses asked for information on class of worker for every individual over 15 who had worked in the 5 years prior to the census. Class of worker refers to the type of ownership of the employing organization and is based on the U.S. Bureau of Census definitions. The private sector was classified into private for-profit employer, non-profit employer, self-employed, and working without pay for a family business or farm. Likewise, the public sector was classified into municipal government, state government, national government, and foreign or federal government (federal government refers to the U.S. federal government).

Limitation and Comparability. Although both the 1994 and 2000 Censuses used classifications defined by the International Labor Organization (ILO), major changes were made in this chapter to consider only the current formal work force and not the experienced formal work force as well. In the 1994 Yap State Census Report, both current and experienced formal work forces were considered. Furthermore, real estate was included with financial intermediation in the 1994 census report but was changed in the 2000 report to include with the business and computer activities category.

Analysis of Industry and Occupation Data

Industry

Table 10.1 displays the breakdown of selected industries for Yap State in 1994 and 2000. The number of employed persons 15 years and over who were currently in the formal work force climbed from 2,083 to 2,570 between 1994 and 2000; a 23 percent change increase.

The distribution of employment changed during the 6-year time span between 1994 and 2000. In 1994 the largest portions of the economically active persons worked in education (over 20 percent), followed by public administration (over 17 percent), other services (about 10 percent), and agriculture, forestry, fishing, and mining (about 9 percent). A significant increase occurred in the proportion of persons employed in manufacturing, from slightly over 4 percent in 1994 to 17 percent in 2000. Public administration, however, declined to about 8 percent along with other service activities (over 5 percent) and agriculture and fishing (about 3 percent). This is due in part to the government's Early Retirement Program (ERP) which took effect in 1997, and the closing of the Ting Hong Fishing company, thereby causing the decline in public administration employees and which subsequently lowered the number of employees in the agriculture, forestry, and fishing industry. Another significant change in 2000 occurred in the hotel, restaurant, and bar category, which showed an increase in employment from about 5 percent in 1994 to slightly over 7 percent in 2000. This increase was attributed to several newly built hotels, restaurants, and bars since 1994. The largest portions of the economically active persons in 2000 worked in education (over 20 percent), followed by manufacturing (about 17 percent), wholesale and retail trade (about 12 percent), and public administration (about 8 percent).

Table 10.1: Industry for Employment for Aged 15 Years and Over, Yap State: 1994 and 2000

	Number		Percent Change	Percent	
Industry	1994	2000	1994-2000	1994	2000
Current formal work force 15+ years	2,083	2,570	23.4	100.0	100.0
Agriculture, forestry, fishing and quarrying	184	68	(63.0)	8.8	2.6
Construction	143	185	29.4	6.9	7.2
Gas, electricity and water supply	79	94	19.0	3.8	3.7
Transportation and communication	109	141	29.4	5.2	5.5
Manufacturing	86	438	409.3	4.1	17.0
Wholesale and retail trade	152	311	104.6	7.3	12.1
Hotels, restaurants, and bars	103	186	80.6	4.9	7.2
Financial intermediation	44	22	(50.0)	2.1	0.9
Real estate, business and computer activities	46	129	180.4	2.2	5.0
Health	141	128	(9.2)	6.8	5.0
Education	423	524	23.9	20.3	20.4
Public administration	363	204	(43.8)	17.4	7.9
Other service activities	210	140	(33.3)	10.1	5.4

Source: 1994 FSM Census, Table P29; 2000 FSM Census, Table P10-17

Table 10.2 gives a more detailed breakdown of industries in Yap State. Of the 2,083 persons employed in the formal work force in 1994, about 70 percent were males. In 2000, about 59 percent of the formal work force were males. With about the same proportion of employed persons in 1994 and 2000, the field of education was the largest industry. Within the field of education, the category for 'primary education' constituted about 90 and 93 percent in 1994 and 2000. This was due to persons whose level or field of education was not defined and were added to this category. Public administration, which was second largest industries in 1994, became the fourth while manufacturing became the second largest in 2000. The fishing industry constituted 110 persons of the employed population in 1994 and 89 percent of whom were males. In 2000, employees in the fishing industry diminished significantly to about 37 persons, of whom 78 percent were males. Women, however, dominated in the manufacturing industry especially for the manufacturing of durables as seen in 2000 with 322 female out of 437 total employees.

Table 10.2: Detailed Breakdown of Industry by Sex, Yap State: 1994 and 2000

				19	994					20	000		
		Nι	umber			Percent			Number			Percent	
Industry	Tot		Male F	emale	Total	Male	Female	Total		Female	Total		Female
Current formal work force, 15+ years	2,08	33	1,449	634	100.0	69.6		2,570	1,511	1,059	100.0	58.8	41.2
Agriculture, forestry, fishing and quarrying	18	34	160	24	100.0	87.0	13.0	68	52	16	100.0	76.5	23.5
Agriculture and livestock	72	60	12		100.0	83.3	16.7	19		4	100.0	78.9	21.1
Forestry		-	-	-	-	-	-	3	2	1	100.0	66.7	33.3
Fishing	1	0	98	12	100.0	89.1	10.9	37	29	8	100.0	78.4	21.6
Mining		2	2	-	100.0	100.0	-	9	6	3	100.0	66.7	33.3
Quarrying		-	-	-	-	-	-	-	-	-	-	-	
Manufacturing	8	36	45	41	100.0	52.3	47.7	438	115	323	100.0	26.3	73.7
Manufacturing of non-durables	18	13	5		100.0	72.2	27.8	1	- :	1	100.0		100.0
Manufacturing of durables	(68	32	36	100.0	47.1	52.9	437	115	322	100.0	26.3	73.7
Electricity, gas and water supply	-	79	73	6	100.0	92.4	7.6	94	88	6	100.0	93.6	6.4
Construction	14	13	137	6	100.0	95.8	4.2	185	177	8	100.0	95.7	4.3
Wholesale and retail trade	1:	52	96	56	100.0	63.2	36.8	311	168	143	100.0	54.0	46.0
Wholesale trade	12	9	3		100.0	75.0	25.0	8	5 3	3	100.0	52.5	37.5
Retail trade	-	79	40	39	100.0	50.6	49.4	155	56	99	100.0	36.1	63.9
Trade relating to automotives	(51	47	14	100.0	77.0	23.0	148	107	41	100.0	72.3	27.7
Hotels, restaurants, and bars	10)3	54	49	100.0	52.4	47.6	186	109	77	100.0	58.6	41.4
Transportation and communication)9	81	28	100.0	74.3		141	114	27	100.0	80.9	19.1
Land transport	36	29				80.6	19.4			5			14.7
Water transport		22	17	5	100.0	77.3		53	49	4	100.0	92.5	7.5
Air transport		21	15	6	100.0	71.4		22	16	6	100.0	72.7	27.3
Other transport activities	•	8	6	2	100.0	75.0		3	3	-	100.0	100.0	-/
Post and telecommunications	,	22	14	8	100.0	63.6		29	17	12	100.0	58.6	41.4
Financial intermediation		14	21	23	100.0	47.7		22	6	16	100.0	27.3	72.7
Financial intermediation	27	13				48.1	51.9		-	15			78.9
Insurance and pensions	21	4	1	3	100.0	25.0		1	1	-	100.0	100.0	70.7
Other financial activities		13	7	6	100.0	53.8		2	1	1	100.0	50.0	50.0
		16	33	13	100.0	71.7		129	74	55	100.0	57.4	42.6
Real estate, business & computer activities Real estate	2	1	33 1	13	100.0	100.0		2	2	-	100.0	100.0	42.0
		4	4	-	100.0	100.0		9	3	6	100.0	33.3	66.7
Renting		12	9	3	100.0	75.0		16	8	8	100.0	50.0	50.0
Computer activities		3	3	-	100.0	100.0		9	8	8	100.0	88.9	11.1
Research and development	,												
Other business activities		26	16	10	100.0	61.5		93	53	40	100.0	57.0	43.0
Public administration	30		278	85	100.0	76.6		204	154	50	100.0	75.5	24.5
Education	42		272	151	100.0	64.3		524	314	210	100.0	59.9	40.1
Primary education	379	24				54.1	35.9			198			40.7
Secondary education		15	12	3	100.0	80.0		25	16	9	100.0	64.0	36.0
Higher education		17	8	9	100.0	47.1		4	3	1	100.0	75.0	25.0
Adult and other education		12	9	3	100.0	75.0		8	6	2	100.0	75.0	25.0
Health and social work	14		77	64	100.0	54.6		128	60	68	100.0	46.9	53.1
Other service activities		10	122	88	100.0	58.1		140	80	60	100.0	57.1	42.9
Sewage and refuse disposal	5	3	2			60.0	40.0			15			39.5
Activities of membership organization		95	53	42	100.0	55.8		4		1	100.0	75.0	25.0
Community service activities		16	10	6	100.0	62.5		88	50	38	100.0	56.8	43.2
Private household activities	9	94	56	38	100.0	59.6	40.4	6	2	4	100.0	33.3	66.7
Other establishments		-	-		-		<u>-</u>	4	2	2	100.0	50.0	50.0

Source: 1994 & 2000 FSM Census, unpublished data.

Table 10.3 shows different educational backgrounds of people currently employed in different industries. For definitions of vocational and school education, see Chapter 8 on Education. In 2000 about 83 percent of employed persons 15 years and over had high school diplomas compared to about 78 percent in 1994. In health, education and financial intermediation, more than 85 percent of the personnel were high school graduates in 1994. This changed significantly in 2000 to include manufacturing and public administration, with the highest proportion (96 percent) in financial intermediation. The percent of high school graduates in different industries was not uniform for males or females. In 1994, only gas, electricity and water supply industries had over 10 percentage points more females with high school diplomas than percentage males with high school diplomas, as compared to construction and gas, electricity and water supply in 2000.

An average of 29 percent of currently employed persons had some vocational training in 1994 compared to 38 percent in 2000, an increase of 9 percentage points over the 6-year period. Vocational training varied by sector. For

example, in 1994 two sectors (about 52 percent of business and computer and about 45 percent in health) showed high percentage of the employed persons who had vocational training, compared to only 16 percent in other service activities. In 2000, the two former sectors were replaced with financial intermediation (about 59 percent) and agriculture, forestry, fishing and quarrying (about 68 percent), while only little over 24 percent of those in the wholesale and retail trade industry had vocational training. Data on high school graduates in 1994 showed financial intermediation and education as having the highest portion of employees with high school diplomas and the manufacturing industry the lowest. In 2000, financial intermediation remained with the highest proportion of high school graduates with manufacturing being second, a significant turn around since 1994. Wholesale and retail, however, showed the lowest proportion of high school graduates at about 70 percent. The two censuses also revealed that males were more likely to receive vocational training than females in all industries except for public administration in 1994 and construction, gas, electricity, and water supply, and manufacturing in 2000.

Table 10.3: Industry by Percent of Persons with High School Diploma and Vocational Training, Yap State: 1994 and 2000.

			1994	Census					2000	Census		
	H.S. g	raduates &	above	Voca	ational trai	ning	H.S. g	raduates &	à above	Voc	ational tra	ining
			Fem-			Fem-			Fem-			Fem-
Industry	Total	Males	ales	Total	Males	ales	Total	Males	ales	Total	Males	Ales
Current formal work force 15+ years	77.5	79.2	73.6	29.4	32.4	22.6	82.5	82.1	83.0	37.7	41.8	31.9
Agriculture, hunting & forestry	68.1	69.5	60.0	36.1	40.0	16.7	72.7	82.4	40.0	68.2	76.5	40.0
Fishing and quarrying	68.9	70.3	58.3	20.5	22.0	8.3	76.1	74.3	81.8	50.0	48.6	54.5
Construction	70.3	70.5	66.7	31.5	32.8	-	71.8	70.4	100.0	35.1	34.5	50.0
Electricity, gas and water supply	79.7	77.9	100.0	31.6	34.2	-	77.8	76.2	100.0	46.8	46.6	50.0
Transport, storage & communication	81.9	80.8	85.2	34.9	42.0	14.3	82.6	82.1	84.6	45.4	47.4	37.0
Manufacturing	55.7	61.4	48.6	22.1	31.1	12.2	91.0	87.7	92.2	33.3	28.7	35.0
Wholesale & retail trade	66.4	72.3	56.4	28.3	37.5	12.5	69.9	73.8	65.2	23.8	31.5	14.7
Hotels and restaurants	68.6	73.6	63.3	18.4	24.1	12.2	76.2	79.6	71.4	36.6	41.3	29.9
Financial Intermediation	93.2	95.2	91.3	34.1	42.9	26.1	95.5	100.0	93.8	59.1	83.3	50.0
Real estate, business & computer active.	81.8	78.8	90.9	52.2	60.6	30.8	74.4	71.6	78.2	39.5	44.6	32.7
Health and social work	85.6	94.7	75.0	44.7	50.6	37.5	89.8	95.0	85.3	52.3	66.7	39.7
Education	91.3	95.5	83.4	29.8	29.8	29.8	91.7	94.8	86.8	37.4	41.1	31.9
Public administration	80.1	78.1	86.6	31.1	29.9	35.3	87.1	85.6	91.8	48.5	50.6	42.0
Other personal service activities	65.3	67.5	62.2	15.7	19.7	10.2	70.3	72.2	67.8	31.4	36.3	25.0

Source: 1994 FSM Census, unpublished data; 2000 FSM Census, Table P10-12.

Certain industries naturally have certain occupations such as the agriculture industry, which has a majority of agriculture and fishing workers. The construction and utilities industries had the highest portion of craft, machine operators and laborers in 1994 compared to manufacturing and construction in 2000 (Table 10.4). More than three-fifths of the employees in the financial intermediation industry was comprised of technicians, associate professionals, and administrative support in both censuses, while more than 50 percent of the health industry in 1994 and close to 44 percent of the education industry in 2000 were comprised of managers, executives and professionals.

Table 10.4: Industry by Occupation, Yap State: 1994 and 2000

				199	4							200)			
				Tech.			Craft.					Tech.			Craft.	
			Exec.,	assoc.			repair				Exec.,	assoc.			repair	
			mngr,	prof.		Agric.	oper-				mngr.,	prof.	Serv-	Agric.	oper-	
			and	admin.	Serv-	and	ators,	Oth-			and a	admin.	Serv-	and	ators,	Oth-
Industry	Total	Percent	prof.	sup.	ices	fish.	laborers	ers*	Total	Percent	prof	sup.	ices	fish.	laborers	ers*
Current formal work force 15+ years	2,083	100.0	19.3	35.5	11.6	4.6	28.9	-	2,570	100.0	18.5	31.1	6.7	1.8	41.9	-
Agriculture, forestry, fishing and quarrying	184	100.0	9.2	21.7	5.4	41.8	21.2	0.5	68	100.0	14.7	19.1	2.9	50.0	11.8	1.5
Construction	143	100.0	5.6	10.5	-	-	83.9	-	185	100.0	4.3	7.0	-	-	88.6	-
Gas, electricity and water supply	79	100.0	15.2	11.4	5.1	2.5	65.8	-	94	100.0	7.4	21.3	7.4	-	63.8	-
Transportation and communication	109	100.0	10.1	27.5	11.9	1.8	48.6	-	141	100.0	8.5	34.0	5.0	0.7	51.8	-
Manufacturing	86	100.0	8.1	17.4	36.0	1.2	37.2	-	438	100.0	0.9	0.7	0.7	-	97.7	-
Wholesale and retail trade	152	100.0	7.9	34.9	9.2	-	48.0	-	311	100.0	10.0	48.9	7.7	0.3	33.1	-
Hotels, restaurants, and bars	103	100.0	15.5	13.6	47.6	-	23.3	-	186	100.0	12.4	16.1	35.5	0.5	35.5	-
Financial intermediation	44	100.0	18.2	70.5	4.5	-	6.8	-	22	100.0	27.3	68.2	-	-	4.5	-
Real estate, business & computer activities	46	100.0	39.1	30.4	4.3	4.3	21.7	-	129	100.0	14.7	37.2	6.2	1.6	40.3	-
Health	141	100.0	54.6	34.0	4.3	-	7.1	-	128	100.0	26.6	66.4	0.8	-	6.3	-
Education	423	100.0	20.1	67.4	8.5	0.2	3.8	-	524	100.0	43.5	47.9	2.3	0.2	6.1	-
Public administration	363	100.0	26.7	33.6	12.4	2.2	25.1	-	204	100.0	31.4	41.2	9.8	2.5	15.2	-
Other service activities	210	100.0	16.2	30.0	14.3	1.4	38.1	-	140	100.0	21.4	25.7	16.4	0.7	35.7	

Source: 1994 FSM Census, Table P1129: 2000 FSM Census, Table P8-17

Note: *Others include persons in the U.S. armed forces

Occupation

Table 10.5 provides the breakdown of occupations over the 6 years prior to the census and the change in proportions of the working population in the occupation groups. The largest occupation category of persons currently employed in 1994 was technical and associate professionals (22 percent). In 2000, the occupation with the largest proportion of currently employed persons shifted to crafts and related workers (about 25 percent.

The percentage change in number of persons in each occupation group shows that on average, the occupation group increased by about 23 percent, with the largest increase occurring among crafts and related workers, followed by elementary occupations. Agriculture and fishery occupations showed the largest decrease of close to 52 percent.

Table 10.5: Occupations of Current Work Force, Yap State: 1994 and 2000

	Number		Percent Change	Percent	
Occupation	1994	2000	1994-2000	1994	2000
Current formal work force 15+ years	2,083	2,570	23.4	100.0	100.0
Executive and managers	186	162	(12.9)	8.9	6.3
Professionals	216	314	45.4	10.4	12.2
Technical and associate professionals	459	439	(4.4)	22.0	17.1
Administrative support	280	359	28.2	13.4	14.0
Service workers	242	173	(28.5)	11.6	6.7
Agriculture and fishery workers	96	46	(52.1)	4.6	1.8
Craft and related workers	307	629	104.9	14.7	24.5
Machine operators	116	152	31.0	5.6	5.9
Elementary occupations and laborers	180	295	63.9	8.6	11.5
Armed Forces	1	1	-		

Source: 1994 FSM Census, Table P28; 2000 FSM Census, Table P2-16

Of all currently employed persons who responded to the occupation question in 2000, about 59 percent were males and 41 percent were female; declining from about 70 percent for males and 30 percent for females in 1994 (Table 10.6). In 1994, the only occupation that was female-dominant was the administrative support group, at about 74 percent. In 2000, administrative support and craft and related workers were the only occupations with mostly female workers.

Table 10.6: Occupations of Experienced Work Force for Aged 15 Years and Over Who Worked in 5 Years Previous to Census by Sex, Yap State: 1994 and 2000

				1994						2000		
		Nu	mber		Percent			Number			Percent	
Occupation	Total	Male	Female	Total	Male	Female	Total	Males	Female	Total	Male	Female
Current formal workforce												
15+ years	2,083	1,449	634	100.0	69.6	30.4	2,570	1,511	1,059	100.0	58.8	41.2
Executive and managers	186	157	29	100.0	84.4	15.6	162	132	30	100.0	81.5	18.5
Professionals	216	161	55	100.0	74.5	25.5	314	205	109	100.0	65.3	34.7
Technical & associate prof.	459	313	146	100.0	68.2	31.8	439	271	168	100.0	61.7	38.3
Administrative support	280	72	208	100.0	25.7	74.3	359	90	269	100.0	25.1	74.9
Service workers	242	123	119	100.0	50.8	49.2	173	99	74	100.0	57.2	42.8
Agric. and fishing workers	96	87	9	100.0	90.6	9.4	46	42	4	100.0	91.3	8.7
Craft and related workers	307	276	31	100.0	89.9	10.1	629	270	359	100.0	42.9	57.1
Machine operators	116	101	15	100.0	87.1	12.9	152	142	10	100.0	93.4	6.6
Elementary occup.& laborer	180	158	22	100.0	87.8	12.2	295	259	36	100.0	87.8	12.2
Armed Forces	1	1	-	100.0	100.0	-	1	1	-	100.0	100.0	-

Source: 1994 FSM Census, unpublished data; 2000 FSM Census, Table P2-16

The three occupations with the highest skill levels (executives and managers, professionals, and technical and associate professionals) had the highest proportion of individuals in the 35 to 44-age category while the other occupations all had the largest proportions in the 15 to 34 age groups (Table 10.7). Less than 10 percent of all executives, managers and professionals were under the age of 24 in both years. This corresponds with the requirement for more experience and perhaps education in the executives and managers and professional occupations. In the administrative support category, there was an under-representation of 45 to 64 years old persons, while persons aged 25 to 34 were over-represented.

Table 10.7: Occupations of Current Formal Work Force by Age Group, Yap State: 1994 and 2000

				1994						2	.000			
Occupation	Total	Percent	15-24	25-34	35-44	45-64	65+	Total	Percent	15-24	25-34	35-44	45-64	65+
Current formal work force 15+ yrs.	2,083	100.0	15.1	30.1	34.1	19.9	0.8	2,570	100.0	22.5	25.4	27.8	23.5	0.9
Executive and managers	186	100.0	4.8	23.7	36.6	30.1	4.8	162	100.0	1.9	13.0	29.0	51.9	4.3
Professionals	216	100.0	5.1	27.3	42.1	25.0	0.5	314	100.0	8.9	19.4	35.4	34.7	1.6
Technical and associate professionals	459	100.0	9.8	27.9	39.4	22.7	0.2	439	100.0	7.5	25.3	33.5	33.5	0.2
Administrative support	280	100.0	29.6	36.8	23.6	10.0	-	359	100.0	22.6	32.9	30.6	13.6	0.3
Service workers	242	100.0	23.6	26.9	30.2	19.0	0.4	173	100.0	24.9	26.0	30.1	19.1	-
Agric. and fishing workers	96	100.0	31.3	29.2	30.2	8.3	1.0	46	100.0	6.5	32.6	32.6	28.3	-
Craft and related workers	307	100.0	14.7	34.2	31.9	18.9	0.3	629	100.0	48.3	26.2	14.3	10.8	0.3
Machine operators	116	100.0	9.5	36.2	37.9	15.5	0.9	152	100.0	14.5	30.3	33.6	21.7	-
Elementary occupations and laborers	180	100.0	13.3	28.9	33.3	23.3	1.1	295	100.0	20.3	24.1	30.8	22.7	2.0
Armed Forces	1	100.0	-	100.0	-	-	-	1	100.0	-	100.0	-	-	

Source: 1994 FSM Census, Table P45; 2000 FSM Census, Table P8-1.

Table 10.8 presents occupation by age. In 2000, of the persons aged 15 to 24 years and 25 to 34 years, the greatest portions worked in craft and related occupations category (about 53 and 25 percent, respectively); a shift from the administrative support workers (about 26 percent for the 15 to 24 years age group) and technical and associate professionals (about 24 percent for the 25 to 34 years age group) in 1994. In both years, persons 35 to 44 and 45 to 64 years made up the largest portion among the technicians and associate professionals occupation group. In 2000, more than 31 percent of the 65 years and over age group were in the executive and manager's occupations; a decrease of about 21 percentage points since 1994.

Table 10.8: Occupations of Current Formal Work Force for Aged 15 Years by Age Groups, Yap State: 1994 and 2000

		1994								2000)		
Occupation	Total	15-24	25-34	35-44	45-64	65+		Total	15-24	25-34	35-44	45-64	65+
Current formal work force 15+ years	2,083	315	627	710	414	17		2,570	577	654	714	603	22
Percent	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0
Executive and managers	8.9	2.9	7.0	9.6	13.5	52.9		6.3	0.5	3.2	6.6	13.9	31.8
Professionals	10.4	3.5	9.4	12.8	13.0	5.9		12.2	4.9	9.3	15.5	18.1	22.7
Technical and associate professionals	22.0	14.3	20.4	25.5	25.1	5.9		17.1	5.7	17.0	20.6	24.4	4.5
Administrative support	13.4	26.3	16.4	9.3	6.8	-		14.0	14.0	18.0	15.4	8.1	4.5
Service workers	11.6	18.1	10.4	10.3	11.1	5.9		6.7	7.5	6.9	7.3	5.5	-
Agric. and fishing workers	4.6	9.5	4.5	4.1	1.9	5.9		1.8	0.5	2.3	2.1	2.2	-
Craft and related workers	14.7	14.3	16.7	13.8	14.0	5.9		24.5	52.7	25.2	12.6	11.3	9.1
Machine operators	5.6	3.5	6.7	6.2	4.3	5.9		5.9	3.8	7.0	7.1	5.5	-
Elementary occupations and laborers	8.6	7.6	8.3	8.5	10.1	11.8		11.5	10.4	10.9	12.7	11.1	27.3
Armed Forces	-	-	0.2	-	-	-		-	-	0.2	-	-	-

 $Source: 1994 \ FSM \ Census, \ Table \ P45; \ 2000 \ FSM \ Census, \ Table \ P8-1.$

Occupation varied between persons born in Yap State and those persons born elsewhere. Table 10.9 presents the breakdown of these two groups by occupation. In 1994, largest differences occurred among the technical and associate professionals and craft and related workers occupations, while in 2000, the largest differences were found among the craft and related workers occupations. In both years Yap-born persons had the largest portions of their employed personnel in the technical and associate professionals occupation in 1994, as opposed to craft and related workers occupation for the non-Yap born persons. The large number of non-Yap born personnel working for crafts and related occupation was largely due to the large numbers of Chinese working at the Kingtex textile factory operating in Yap State.

Table 10.9: Occupations of Current Formal Work Force Aged 15 Years and Over by Place of Birth, Yap State: 1994 and 2000

		1994 Cen	sus			2000 Ce	ensus	
	Yap-bo	rn	Foreign	born	Yap-bo	orn	Foreign	born
Occupation	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Current formal work force 15+ years	1,786	100.0	297	100.0	1,932	100.0	638	100.0
Executive and managers	163	9.1	23	7.7	138	7.1	24	3.8
Professionals	185	10.4	31	10.4	260	13.5	54	8.5
Technical and associate professionals	412	23.1	47	15.8	395	20.4	44	6.9
Administrative support	249	13.9	31	10.4	329	17.0	30	4.7
Service workers	205	11.5	37	12.5	147	7.6	26	4.1
Agric. and fishing workers	90	5.0	6	2.0	42	2.2	4	0.6
Craft and related workers	237	13.3	70	23.6	233	12.1	396	62.1
Machine operators	113	6.3	3	1.0	146	7.6	6	0.9
Elementary occupations and laborers	131	7.3	49	16.5	241	12.5	54	8.5
Armed Forces	1	-	-	-	1	0.1	-	

Source: 1994 FSM Census, Table P79; 2000 FSM Census, Table P8-5.

Table 10.10 further examines occupations in Yap Proper and in the Outer Islands of Yap State. Technicians and associate professionals were the most common occupations in both Yap Proper and the Outer Islands in 1994. Since then, Yap Proper had shown an increase in the number of crafts and related workers (about 27 percent) while technical and associate professionals remained as the major form of occupation for the Outer Island. The most common occupations in Yap Proper in 1994 were technical and associate professionals, followed by craft and related workers, and finally administrative supports. In 2000, crafts and related workers occupation constituted the largest proportion, followed by technical support and administrative support.

Table 10.10: Occupation of Current Formal Work Force Aged 15 Years and Over by Region, Yap State: 1994 and 2000

		1994 Census		2	2000 Census	
Occupation	Total	Yap Proper	Outer Islands	Total	Yap Proper	Outer Islands
Current formal work force 15+ years	2,083	1,725	358	2,570	2,281	289
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Executive and managers	8.9	10.1	3.4	6.3	6.9	1.7
Professionals	10.4	9.2	15.9	12.2	9.2	36.0
Technical and associate professionals	22.0	17.3	44.7	17.1	14.3	38.8
Administrative support	13.4	15.7	2.5	14.0	15.2	4.5
Service workers	11.6	12.2	8.9	6.7	7.0	4.5
Agric. and fishing workers	4.6	4.1	7.3	1.8	1.8	1.7
Craft and related workers	14.7	16.2	7.8	24.5	26.8	6.2
Machine operators	5.6	6.1	3.1	5.9	6.2	3.8
Elementary occupations and laborers	8.6	9.1	6.4	11.5	12.6	2.8
Armed Forces	-	0.1	-	-	-	-

Source: 1994 FSM Census, Table P28; 2000 FSM Census, Table P2-16.

Nearly 79 percent of the current formal work force ages 25 years and over in 1994 were at least high school graduates. This increased to about 82 percent in 2000. Persons with at least a bachelor's degree constituted about 10 percent in both 1994 and 2000. In 2000, 18 percent had not completed high school compared to about 21 percent in 1994 (Table 10.11).

Levels of educational attainment varied among occupations. For instance, about 92 and 94 percent of individuals with managerial and professional occupations, respectively, had at least a high school education in 2000 compared to about 84 and 94 percent in 1994. Also, about 18 percent of those in executive and managerial occupations in 1994 had at least a bachelor's degree or even higher education while in 2000, it increased to over 29 percent. Most employees in Yap State in all occupation categories had a high school level education, with the lowest proportion found among machine operators, laborers and others.

Educational attainment of employed males tended to have similar patterns to that of females. Nevertheless, for most of the occupation categories, employed males were more likely to have either a high school education or a bachelor's degree. For example, in both 1994 and 2000 more males in managerial, professional, and technical, and administrative support categories had bachelor's degrees and above, compared to the total current formal work force aged 25 years and over.

In 2000, the proportion of high school graduates was higher for females only in the executive and managerial service occupations compared to 1994 where females showed higher proportions in both executive and managerial and professional occupations. For all occupations, only agriculture and fishery occupations in 1994 and service workers occupations in 2000 showed more college-educated females than males.

Table 10.11: Educational Attainment of the Current Work Force for Aged 25 Years and Over by Occupation and Sex (Cumulative Percent), Yap: 1994 & 2000

		Execs.		Tech.,		Agric.	Craft	Machine
		and		sales,		and	and	Operators,
		mana-	Profes-	admin.	Ser-	fish.	related	laborers,
Educational attainment	Total	gerial	sional	support	vices	workers	workers	& others
1994 CENSUS								
Current formal work force 25+ years	1,706	174	202	596	176	62	249	247
Below H. school grads.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
H.S. grads & some coll.	78.7	83.9	94.1	88.3	64.8	69.4	66.7	64.0
BA/BS degree & above	10.3	17.8	27.7	9.6	5.1	3.2	2.4	5.7
Males	1,224	150	150	335	88	56	226	219
Below H. school grads.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
H.S. grads & some coll.	81.3	83.3	94.0	94.0	85.2	69.6	69.5	65.3
BA/BS degree & above	11.8	20.0	31.3	11.3	9.1	1.8	2.7	6.4
Females	482	24	52	261	88	6	23	28
Below H. school grads.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
H.S. grads & some coll.	72.2	87.5	94.2	80.8	44.3	66.7	39.1	53.6
BA/BS degree & above	6.4	4.2	17.3	7.3	1.1	16.7	-	-
2000 CENSUS								
Current formal work force 25+ years	1,963	158	281	679	130	42	320	353
Below H. school grads.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
H.S. grads & some coll.	81.6	91.8	93.6	89.7	73.1	69.0	75.3	62.0
BA/BS degree & above	9.8	29.1	26.0	8.4	4.6	2.4	1.6	1.4
Males	1,263	129	186	333	75	39	184	317
Below H. school grads.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
H.S. grads & some coll.	83.6	90.7	96.2	94.6	84.0	74.4	78.8	65.6
BA/BS degree & above	11.1	29.5	26.3	11.7	4.0	2.6	2.7	1.6
Females	700	29	95	346	55	3	136	36
Below H. school grads.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
H.S. grads & some coll.	77.9	96.6	88.4	85.0	58.2	-	70.6	30.6
BA/BS degree & above	7.6	27.6	25.3	5.2	5.5	-	_	-

Source: 1994 FSM Census, Table P125; 2000 FSM Census, Table P8-12 Note: This table excludes persons with no formal educational attainment.

Class of Worker

Table 10.12 presents data for class of worker. In 1994, the number of persons in Yap State working for the private sector (about 43 percent) was lower than the number of persons working in the public sector (about 58 percent). In 2000 the private sector proportion increased to 61 percent of all persons in the current formal work force. The public sector, on the other hand, declined to 39 percent. The largest portion in the private sector was for-profit organizations (37 percent and 54 percent for 1994 and 2000, respectively). In the public sector the largest employer was the state government (49 percent and 32 percent for 1994 and 2000, respectively). These figures showed the large dependency Yap State has on government employment. Nevertheless, the 2000 data also indicated a significant decline in state government employment possibly as a result of the impact of the Early Retirement Program (ERP). National government and foreign/federal employees constituted about 4 percent each to the public sector in 1994 and remained at about a similar level in 2000.

Yap Proper in 1994 had over 48 percent private sector and 52 percent public sector compared to 67 and 33 in 2000, while the Outer Islands had significantly higher portions of public sector than private in both censuses. In both Yap Proper and Outer Islands the vast majority of the private sector was for-profit organizations. The public sector for both Yap Proper and the Outer Islands was mostly state government. In addition, foreign/federal government employment showed significantly higher proportions of employment in the Outer Islands than Yap Proper during both censuses.

The patterns between the regions and within the sectors were very similar for males and females. In the private sector, both males and females showed significantly higher proportions working for private-for-profit organizations, much like the employment pattern shown for the total current formal work force. This was uniform between the Yap Proper and the Outer Islands and occurred during the two censuses as well. In the public sector, state government showed the largest proportion of both sexes, indicating yet another clear similarity to the employment pattern of the total current formal work force. Interestingly, there was no female employee at the municipal government in Yap State in 1994. This changed slightly in 2000 when Yap Proper showed a small proportion (0.1 percent) working in the municipal government.

Table 10.12: Type Work for the Current Formal Work Force for Aged 15 Years and Over by Region and Sex, Yap State: 1994 and 2000

		Total			Males			Females	
	Total Y	ap Proper	Outer Islands	Total	Yap Proper	Outer Islands	Total	Yap Proper	Outer Islands
1994 Census									
Current formal work force 15+ yrs.	2,083	1,725	358	1,449	1,136	313	634	589	45
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Private	42.5	48.4	14.2	39.8	47.1	13.1	48.9	50.9	22.2
For profit	37.4	43.0	10.6	35.2	42.1	10.2	42.6	44.8	13.3
Non-profit	3.4	3.8	1.7	2.8	3.3	1.3	4.7	4.8	4.4
Self employed	1.6	1.6	1.7	1.7	1.7	1.6	1.4	1.4	2.2
Work no pay	0.1	0.1	0.3	0.1	0.1	-	0.2	-	2
Public	57.5	51.6	85.8	60.2	52.9	86.9	51.1	49.1	77.8
Municipal government	0.4	0.3	1.1	0.6	0.4	1.3	-	-	-
State government	49.2	43.6	76.3	52.5	45.7	77.3	41.6	39.6	68.9
National government	3.8	4.3	1.4	4.0	4.7	1.6	3.5	3.7	-
Foreign/Federal	4.0	3.4	7.0	3.1	2.1	6.7	6.0	5.8	8.9
2000 Census									
Current formal work force 15+ yrs	2,570	2,281	289	1,511	1,286	225	1,059	995	64
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Private	60.8	66.6	14.9	55.9	63.6	11.6	67.9	70.6	26.6
For profit	54.4	59.7	12.5	50.0	57.2	8.9	60.6	62.9	25.0
Non-profit	3.5	3.7	1.7	2.7	2.9	1.8	4.6	4.8	1.6
Self employed	2.5	2.7	0.7	2.9	3.3	0.9	1.9	2.0	-
Work no pay	0.4	0.5	-	0.2	0.2	-	0.8	0.8	-
Public	39.2	33.4	85.1	44.1	36.4	88.4	32.1	29.4	73.4
Municipal government	0.2	0.2	0.7	0.3	0.3	0.4	0.1	-	1.6
State government	31.8	26.7	72.3	37.1	30.5	75.1	24.2	21.7	62.5
National government	3.2	3.3	2.4	3.6	3.9	2.2	2.6	2.6	3.1
Foreign/Federal	3.9	3.2	9.7	3.0	1.7	10.7	5.2	5.1	6.3

Source: 1994 FSM Census, Table P30; 2000 FSM Census, Table P2-18.

In 1994, the largest portion of private sector workers was between the ages 25 to 34 while the largest portion of public sector worker was between ages 35 and 44 respectively (Table 10.13). In 2000, the largest proportion of private sector worker was among the 15 to 24 years age group (about 33 percent), whereas the largest proportion of public sector works were in the age group 35 to 44 years. Over two-fifths of the national foreign/federal government workers were between the ages 35 and 44 during both censuses. Additionally, about one-third of all private-for-profit workers were between the ages of 25 and 34 in 1994 and those aged 15 and 24 in 2000.

Table 10.13: Class of Work for the Current Work Force Aged 15 Years and Over by Age Groups, Yap State: 1994 and 2000

				1994							2000			
Class of work	Total	Percent	15-24	25-34	35-44	45-64	65+	Total	Percent	15-24	25-34	35-44	45-64	65+
Current formal work force 15+ yrs.	2,083	100.0	15.1	30.1	34.1	19.9	0.8	2,570	100.0	22.5	25.4	27.8	23.5	0.9
Private	886	100.0	21.7	33.1	27.7	16.8	0.8	1,563	100.0	32.7	27.4	22.6	16.4	0.8
For profit	780	100.0	23.6	32.4	27.7	16.0	0.3	1,398	100.0	34.9	28.5	21.5	14.6	0.5
Non-profit	71	100.0	8.5	36.6	32.4	22.5	-	90	100.0	20.0	21.1	30.0	27.8	1.1
Self employed	33	100.0	6.1	42.4	15.2	24.2	12.1	64	100.0	4.7	14.1	40.6	37.5	3.1
Work no pay	2	100.0	-	-	50.0	-	50.0	11	100.0	18.2	18.2	9.1	36.4	18.2
Public	1,197	100.0	10.3	27.9	38.8	22.1	0.8	1,007	100.0	6.6	22.3	35.7	34.4	1.0
Municipal government	9	100.0	11.1	11.1	44.4	22.2	11.1	6	100.0	16.7	-	33.3	33.3	16.7
State government	1,025	100.0	10.7	27.4	38.5	22.5	0.8	817	100.0	7.1	22.0	35.0	34.9	1.0
National government	80	100.0	6.3	32.5	37.5	22.5	1.3	83	100.0	6.0	26.5	32.5	33.7	1.2
Foreign/Federal	83	100.0	8.4	31.3	43.4	16.9	-	101	100.0	2.0	22.8	44.6	30.7	

Source: 1994 FSM Census, Table P47; 2000 FSM Census, Table P3-16.

Table 10.14 shows data on educational attainment by class of workers. In both 1994 and 2000, government or public employees other than municipality employees were more likely to be high school and college graduates than private sector employees (Table 10.14). The largest proportion of government employees with less than a high school education was found among municipal government employees at about 20 percent during both censuses, while for private employees, the largest proportion was found among those who work without pay in a family business or farm.

Gender differences in educational attainment by class of work were also apparent in Yap State. In both census years, the gender differentials were most noticeable among high school graduates and above with men being better educated than females. Proportion of females with high school diploma and above only exceeded their male counterparts in the non-profit organizations category. On the other hand, for those who held a bachelor or higher degree in the non-profit category, males showed a much greater proportion than females. In the public sector, men were also more likely to have a high school diploma or higher than females.

Table 10.14: Educational Attainment by Class of Worker, Yap State: 1994 and 2000

			Priva	te		Public				
		For	Non-	Self-	Work	Muni-	State	Nat-	Foreign/	
Educational attainment	Total	profit	profit	employed	no pay	cipal	govt.	ional	Federal	
1994 CENSUS				-						
Current formal workforce 25+ years	1,706	575	62	30	2	5	887	73	72	
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Below H. school grads.	21.3	32.0	27.4	36.7	50.0	20.0	14.5	13.7	13.9	
H.S. grads & some coll.	68.5	61.7	56.5	46.7	50.0	60.0	74.0	71.2	72.2	
BA/BS degree & above	10.3	6.3	16.1	16.7	-	20.0	11.5	15.1	13.9	
Males	482	179	24	8	1	-	220	19	31	
Percent	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	
Below H. school grads.	27.8	40.8	25.0	37.5	-	-	18.2	26.3	22.6	
H.S. grads & some coll.	65.8	56.4	66.7	50.0	100.0	-	74.1	63.2	64.5	
BA/BS degree & above	6.4	2.8	8.3	12.5	-	-	7.7	10.5	12.9	
Females	1,224	396	38	22	1	5	667	54	41	
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Below H. school grads.	18.7	28.0	28.9	36.4	100.0	20.0	13.3	9.3	7.3	
H.S. grads & some coll.	69.5	64.1	50.0	45.5	-	60.0	73.9	74.1	78.0	
BA/BS degree & above	11.8	7.8	21.1	18.2	-	20.0	12.7	16.7	14.6	
2000 CENSUS										
Current formal workforce 25+ years	1,963	894	71	61	8	5	749	77	98	
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Below H. school grads.	18.4	27.3	21.1	27.9	37.5	20.0	8.8	3.9	13.3	
H.S. grads & some coll.	71.7	68.5	56.3	60.7	25.0	80.0	77.2	75.3	78.6	
BA/BS degree & above	9.8	4.3	22.5	11.5	37.5	-	14.0	20.8	8.2	
Males	1,263	554	30	42	3	5	530	53	46	
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Below H. school grads.	16.4	24.9	23.3	26.2	-	20.0	8.1	1.9	13.0	
H.S. grads & some coll.	72.5	70.8	46.7	61.9	33.3	80.0	76.4	71.7	78.3	
BA/BS degree & above	11.1	4.3	30.0	11.9	66.7	-	15.5	26.4	8.7	
Females	700	340	41	19	5	-	219	24	52	
Percent	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	
Below H. school grads.	22.1	31.2	19.5	31.6	60.0	-	10.5	8.3	13.5	
H.S. grads & some coll.	70.3	64.7	63.4	57.9	20.0	-	79.0	83.3	78.8	
BA/BS degree & above	7.6	4.1	17.1	10.5	20.0	-	10.5	8.3	7.7	

Source: 1994 FSM Census, unpublished data; 2000 FSM Census, Table P7-17.

Conclusion

In 1994 and 2000, education was the largest employment industry with about 20 percent each of all employees in Yap State. Public administration and manufacturing followed education during the respective census years with about 17 percent each. In 1994, about 58 percent of the employed population worked in the public sector compared to about 39 percent in 2000. The most common occupations in 1994 were technicians and associate professionals, craft and related workers, and administrative support and service workers. In 2000, crafts and related workers replaced technicians and associate professionals as being the most common. These occupations were mostly filled by the younger population. A large part of economic activity in Yap State was government related.

Between 1994 and 2000, employees in the occupation groups increased by about 23 percent, with the largest increase occurring craft and related workers (an increase of 105 percent). Agriculture and fishery workers, however, experienced a decline by about 52 percent over the 6 year period, which was largely due to the closing down of the

Ting Hong Fishing industry. Agriculture and fishing being the most important sectors in Yap State, the significant decline in these sectors should of concern, especially in an effort of establishing sustainable development. The percentage share of the professional occupations increased by over 45 percent while the executive and managerial occupations decline by close to 13 percent.

Women played a large role in the manufacturing industry, accounting for 48 percent of the industry's employees in 1994. This proportion had further increased to about 74 percent in 2000. There were more female workers in financial intermediation occupations in 1994 and 2000, while there were more males in all other occupations.

CHAPTER 11 INCOME

Introduction

The 2000 FSM Census asked for cash income earned in 1999 from all persons 15 years and older. Cash income provides a measure of how cash resources are distributed as well as an insight into the source of cash in Yap. Cash income is the amount of money received during a fixed period of time. For the 2000 FSM Census, the time period referred to was calendar year 1999. Cash income includes wages or salaries, cash income from or non-farm business, interest on dividends or net, rentals, estates or trusts, social security or retirement, and remittances.

Income was tabulated by household, by family, and by individual. Household income included all cash income earned by each member living in a housing unit who was aged 15 years and over. Family income included the cash income from those members of a household with two or more related members. Individual income was based on what an individual earned during 1999. Household and family income did not include those persons enumerated in group quarters on census day. However, individual income did include those persons living in group-quarters.

About 46 percent of the population aged 15 years and over reported receiving cash income in 1999. These 3,254 income recipients represented about 46 percent of the 7,153 income recipients. The only persons used in the measures of income are those who reported an income for 1999. Thus measures of income were considered only for those persons who received money through salaries, wages social security or other sources. About 54 percent reported no income.

Definitions

Wage or salary income is the total amount of money earned by a person working as an employee for a private enterprise (business or farm) or a branch of government. Wage or salary income includes take-home pay plus all deductions for withholding tax, social security, etc. Also included are commissions, tips, bonuses, and sick leave pay. Own business income includes money receipts as well as business expenses. Interest and dividends are money earned form saving or shares. Social security and government benefits include payments from retirement, or disability payments. Remittances include money received from relatives outside the FSM and inside the FSM who are not living within the same household.

In analyzing income, two statistics were used: *median* and *mean*. The median income is that income value that divides income recipients into two equal halves. The mean income is the sum of all income in a region or characteristic divided by the number of income recipients. (The aggregate of all incomes in a region can be found by multiplying the mean by the number of persons earning income.) The median is a better estimate of average income because it places less emphasis on extreme values and is less susceptible to the effects of misreporting and processing errors. In this chapter both median and mean are used in most tables.

Limitations and Comparability. Income is a self-reported number and is easily misreported due to self- inflation or deflation or to poor recollection. In the case of the FSM 2000 Census, the income was received at least 4 months prior to the time of reporting, making it easier to forget small or irregular income amounts. Other errors occurred because of misunderstanding such as reporting net rather than gross earnings. The 1994 FSM census collected similar information on income and those data are used here with an inflation factor to compare against 2000 Census data. Furthermore, the data collected during both 1994 and 2000 censuses refer to cash income only.

Income data may not fully explain the economy in Yap because of the significant share of subsistence activities in the economy. It does, however, give an indicator of the access of the Yap population to material possession and changes in the cash economy.

Analysis of Income Data

Cash Income

Income in Yap varied among the municipalities. Table 11.1 compares income statistics for 1993 and 1999 for the income earning population of the municipalities as well as the state. Median household income in Yap in 1993 was \$5,998, while the mean household income was higher at \$8,298. In 2000, both household median and mean incomes had increased to \$6,489 and \$10,344, respectively. However, if the 1993 median and mean household incomes were to be adjusted for inflation, the increase would be less significant. Both household median and mean incomes in 1993 would rise to \$6,457 and \$8,933, respectively. Regardless, the mean income was higher than the median due to a few large incomes, which raised the sum of the incomes. A median of \$6,489 in 1999 means that of the 1,578 household income recipients, half of the households had incomes below \$6,489 and half of the households had income above this level. The median income in 1993 was less by \$491 at about \$5,998. It is important to note that the median and mean incomes were calculated only to include those persons who reported income; about 38 percent of the potential labor force in 1994 and 46 percent of those in 2000 Evidently, this showed the income earning population in Yap State increasing in proportion by as much as 8 percentage points in the past 6 years prior to 2000.

The regions had large variations in their median household incomes. In 1999, Yap Proper had the higher median household income \$7,299 compared to \$4,242 for the Outer Islands. This trend was also observed in 1993, with a higher median household of \$6,665 in Yap Proper compared to \$3,841 for the Outer Islands. Mean household incomes also showed similar trends but at a higher level. Median and mean family incomes in 1993 were slightly less than corresponding values for household incomes in both regions. This finding was expected because households of unrelated persons were likely to be persons of working age, and thus more likely to be earning income. With few exceptions, the municipalities displayed higher median family income compared to median household income. The higher median household income in Weloy and Dalipebinaw may be an indication of more household of unrelated persons.

The median individual income for Yap in 1999 was \$3,368, less than the \$3,509 median individual income in 1993. Similarly, median individual income in Yap Proper in 1999 was lower than the Outer Islands, indicating that even though more persons were earning an income in 1999, a large proportion were earning at a lower level compared to 1993. This was especially true for Yap Proper, which in turn caused the individual median income for the state to drop as well. Mean individual income however increased from \$4,809 in 1993 to \$5,016 in 1999. The largest gap between median and mean occurred in Yap Proper, suggesting that some very large incomes skewed the data.

Table 11.1: Household, Family and Individual Income in U.S. Dollars (\$) in 1993 and 2000 by Region, Yap State: 1994 and 2000

			Iousehold					Family					ndividua		
		Number					Number					Number			
D :	70 . 1		w/ cash			m . 1	w/ cash				m . 1		w/ cash		
Region	Total	income	ıncome	Median	Mean	Total	ıncome	income	Median	Mean	Total	ıncome	income	Median	Meai
1994 CENSUS															
Total	1,925	1,426	74.1	\$5,998	\$8,298	1,761	1,285	73.0	\$5,810	\$7,924	6,754	2,557	37.9	\$3,509	\$4,809
Yap Proper	1,291	1,145	88.7	\$6,665	\$9,166	1,161	1,038	89.4	\$6,389	\$8,812	4,234	2,176		\$3,580	-
Rumung	27	21	77.8	\$3,583	\$4,302	23	19	82.6	\$3,750	\$4,500	69	30	43.5	\$2,889	\$3,01
Maap	114	84	73.7	\$5,147	\$6,702	101	74	73.3	\$5,156	\$6,595	295	131	44.4	\$2,919	\$4,29
Gagil	136	118	86.8	\$6,912	\$9,327	121	110	90.9	\$6,563	\$9,103	432	227	52.5	\$3,239	\$5,19
Tomil	168	144	85.7	\$5,769	\$7,843	158	139	88.0	\$5,721	\$7,470	528	266	50.4	\$3,308	-
Fanif	96	91	94.8	\$5,438	\$7,322	83	80	96.4	\$5,313	\$7,371	280	170	60.7	\$2,907	\$3,92
Weloy	219	200	91.3	\$8,276	\$10,779	199	180	90.5	\$7,708	\$10,119	710	421	59.3	\$3,767	\$5,36
Rull	382	352	92.1	\$7,357	\$9,915	344	314	91.3	\$6,815	\$9,539	1223	674	55.1	\$4,056	\$5,55
Gilman	41	38	92.7	\$8,500	\$9,823	38	36	94.7	\$6,875	\$9,311	115	77	67.0	\$3,156	\$4,84
Kanifay	46	40	87.0	\$5,556	\$7,715	40	35	87.5	\$5,795	\$6,583	142	72	50.7	\$3,000	\$4,28
Dalipebinaw	62	57	91.9	\$6,250	\$10,829	54	51	94.4	\$7,083	\$11,020	440	108	24.5	\$3,667	\$5,71
Outer Islands	634	281	44.3	\$3,841	\$4,761	600	247	41.2	\$3,819	\$4,188	2,520	381	15.1	\$3,085	\$3,51
Ulithi	156	93	59.6	\$3,654	\$4,545	140	83	59.3	\$3,650	\$4,391	675	129	19.1	\$2,603	\$3,27
Fais/Sorol	45	10	22.2	\$3,600	\$3,387	45	10	22.2	\$3,600	\$3,387	170	10	5.9	\$3,600	\$3,38
Ngulu	11	6	54.5	\$1,333	\$1,528	9	3	33.3	\$1,250	\$1,208	27	6	22.2	\$1,333	\$1,52
Woleai	101	60	59.4	\$4,000	\$5,561	97	50	51.5	\$5,000	\$4,551	491	95	19.3	\$3,321	\$3,51
Eauripik	24	12	50.0	\$667	\$710	23	12	52.2	\$667	\$710	77	14	18.2	\$636	\$60
Ifalik	75	34	45.3	\$5,893	\$6,291	74	29	39.2	\$5,481	\$5,254	365	46	12.6	\$5,200	\$4,65
Faraulap	41	23	56.1	\$3,625	\$3,307	40	21	52.5	\$3,625	\$3,146	130	27	20.8	. ,	. ,
Elato	17	10	58.8	\$4,000	\$4,696	17	10	58.8	\$300	\$4,216	68	16		\$2,250	-
Lamotrek	57	19	33.3	\$4,750	\$4,878	57	19	33.3	\$4,750	\$4,608	210	21	10.0	. ,	. ,
Satawal	107	14	13.1	\$5,625	\$7,157	98	10	10.2	\$5,000	\$4,831	307	17		\$4,750	. ,
2000 CENSUS															
Total	2,030	1,578	77.7	\$6.489	\$10,344	1,846	1,428	77.4	\$6,553	\$9,713	7,153	3,254	45.5	\$3,368	\$5.010
Yap Proper	1,413	1,309	92.6	. ,	\$11,462	1,257	1,165	92.7	. ,	\$10,796	4,862	2,914	59.9		
Rumung	26	26	100.0	\$2,333	\$3,225	23	23	100.0	\$2,750		63	46		\$1,125	-
Maap	115	105	91.3	\$5,083	\$7,173	106	99	93.4	\$5,417	\$7,409	358	219		\$2,300	-
Gagil	158	133	84.2	-	\$11,336	143	122	85.3	. ,	\$11,243	475	251		\$3,824	-
Tomil	194	173	89.2	-	\$10,491	178	160	89.9	. ,	\$10,716	660	357		\$3,389	
Fanif	101	96	95.0	-	\$9,225	88	86	97.7	\$7,750	\$9,815	339	207		\$2,972	-
Weloy	231	224	97.0	-	\$14,270	199	193	97.0	. ,	\$12,665	788	476		\$3,807	-
Rull	407	374	91.9	-	\$12,836	359	330	91.9	-	\$12,280	1345	762		\$3,985	-
Gilman	53	52	98.1	\$6,071	\$9,354	43	43	100.0	. ,	\$10,071	137	88		\$3,632	
Kanifay	57	45	78.9	\$3,643	\$4,753	50	41	82.0	\$3,643	\$4,752	163	66	40.5	-	-
Dalipebinaw	71	81	114.1	-	\$15,535	68	68	100.0	-	\$10,426	534	442	82.8		-
Outer Islands	617	269	43.6	\$4,242	\$4,900	589	263	44.7	\$4,210	\$4,917	2,291	340		\$3,687	
Ulithi	149	89	59.7	\$4,063	\$5,170	132	84	63.6	\$4,000	\$5,252	473	117		\$3,750	-
Fais/Sorol	44	14	31.8	\$3,667	\$4,272	42	14	33.3	\$3,667	\$4,272	109	15		\$3,730	-
	6	3	50.0	\$2,500	\$1,861	6	3	50.0	\$2,500	\$1,861		6	40.0	\$750	\$93,98
Ngulu				. ,	. ,				. ,		15				
Woleai	119	62	52.1	\$3,455	\$4,161	118	62	52.5	\$3,455	\$4,161	618	86		\$3,150	-
Eauripik	12	12	100.0	\$5,000	\$5,732	12	12	100.0	\$5,000	\$5,732	77	23		\$2,500	
Ifalik	82	25	30.5	\$5,446	\$5,104	81	25	30.9	\$5,446	\$5,104	330	25		\$5,446	
Faraulap	42	19	45.2	\$4,917	\$4,711	39	19	48.7	\$4,917	\$4,711	130	19	14.6	\$4,917	
Elato	14	6	42.9	\$4,000	\$4,990	14	6	42.9	\$4,000	\$4,990	55	7		\$3,750	
Lamotrek	55	16	29.1	\$4,500	\$4,650	54	15	27.8	\$4,375	\$4,559	189	17	9.0	\$4,375	
Satawal	94 Census Table	23	24.5	\$4,375	\$6,274	91	23	25.3	\$4,375	\$6,274	295	25	8.5	\$4,125	\$5,77

Source: 1994 FSM Census, Table P31; 2000 FSM Census, Table P2-19.

A comparison of the median income between 1994 and 2000 in Table 11.2 shows the change in household income over 6 years preceding the latest census. In 2000, an inflation factor of 1.0765 was used to raise the 1994 dollars to the equivalent in 2000 dollars. This factor takes into account the inflation that occurred over the 6 years prior to the 2000 Census. The median household income had increased by only 0.5 percent over the 6 years.

Table 11.2: Median Household Income Change, Yap State: 1994 and 2000

			Median adjusted	
Census year	Number of household	Median	to 2000 dollars	Percent change
1994	1,426	\$5,998	\$6,457	
2000	1,578	\$6,489	·	0.5

Source: 1994 FSM Census, Table P31; 2000 FSM Census, Table P2-19.

Note: The 1994 dollars were multiplied by a factor of 1.0765 to estimate the 2000 equivalent purchasing power.

This was based on the U.S. inflation rate from 1994 to 1997 and the Pohnpei inflation rate from 1997 to 2000.

Table 11.3 contains the percent breakdown of individual incomes by region and income range. A comparison of the individual incomes by region between 1994 and 2000 showed similar trend. In both census years, income for Yap Proper peaked at the \$2,000 to \$2,999 range, whereas for the Outer Islands, income peaked at the \$5,000 to \$7,999 range (see also Figure 11.1). The high individual median income in the Outer Islands in 2000 may be due to the small numbers involved.

Table 11.3: Percent Distribution of Individual Income in 1993 and 1999 by Region, Yap State: 1994 and 2000

		1994 Census			2000 Census				
Annual income	Total	Yap Proper	Outer Islands	Total	Yap Proper	Outer Islands			
Persons with income	2,557	2,176	381	3,254	2,914	340			
Percent	100.0	100.0	100.0	100.0	100.0	100.0			
Less than \$ 1,000	11.8	10.7	18.1	14.2	14.0	16.2			
\$ 1,000 to \$ 1,999	11.9	11.6	13.6	10.1	10.4	7.4			
\$ 2,000 to \$ 2,999	19.0	19.3	17.1	19.9	20.7	12.9			
\$ 3,000 to \$ 3,999	14.5	14.6	13.9	15.8	15.3	19.7			
\$ 4,000 to \$ 4,999	9.1	9.7	5.5	8.6	8.3	11.2			
\$ 5,000 to \$ 7,999	17.2	15.5	26.5	17.2	15.9	28.2			
\$ 8,000 to \$ 9,999	5.5	6.0	2.6	3.1	3.2	2.4			
\$10,000 to \$12,499	5.0	5.7	1.6	4.3	4.7	0.9			
\$12,500 to \$14,999	1.4	1.6	-	1.5	1.6	0.3			
\$15,000 to \$19,999	2.6	3.0	0.5	2.2	2.4	0.6			
\$20,000 to \$24,999	1.0	1.1	0.3	1.2	1.4	-			
\$25,000 to \$34,999	0.7	0.8	0.3	1.2	1.3	-			
\$35,000 to \$49,999	0.2	0.3	-	0.4	0.5	-			
\$50,000 or more	0.2	0.2	-	0.3	0.3	0.3			
Median (dollars)	\$3,509	\$3,580	\$3,085	\$3,368	\$3,320	\$3,687			
Mean (dollars)	\$4,809	\$5,036	\$3,511	\$5,016	\$5,149	\$3,877			

Source: 1994 FSM Census, Table P31; 2000 FSM Census, Table P2-19.

1994 2000 30 ☐ Yap Proper □YapProper ■ Outer Is lands ■ Outer Is lands 25 25 3.0-5.0-7 5- 10.0- 12.5- 15.0- 20.0- 25.0- 35.0- 50.0+ 1.0-2.0- 3.0-4.0-5.0-7.5- 10.0- 12.5- 15.0- 20.0- 25.0- 35.0- 50.0+ 4.9 7.4 99 12.4 14.9 19.9 24.9 34.9 49.9 2.9 3.9 4.9 7.4 9.9 12.4 14.9 19.9 24.9 34.9 49.9 Incom e range (000) Incomerange (000) Source: Preceding Table 113

Figure 11.1. Individual Income by Region Yap State: 1994 and 2000

The median income for individuals in Yap in 1999 increased steadily up to the age of 54 after which income level began to decrease (Table 11.4). In 1993, the decline was earlier, beginning after the age at 49 years. Both males and females tended to follow the same pattern mentioned above, although males in general tended to have higher individual incomes than females.

Table 11.4: Individual Income in 1993 and 1999 by Age Group and Sex, Yap State: 1994 and 2000

		Total			Males		Females			
Age group	Total	Median	Mean	Total	Median	Mean	Total	Median	Mean	
1994 CENSUS										
Persons with income	2,557	\$3,509	\$4,809	1,713	\$3,941	\$5,465	844	\$2,776	\$3,478	
15 to 19 years	109	\$893	\$1,268	67	\$1,045	\$1,444	42	\$750	\$988	
20 to 24 years	257	\$2,628	\$2,941	142	\$2,605	\$3,176	115	\$2,661	\$2,651	
25 to 29 years	317	\$3,257	\$3,916	203	\$3,457	\$4,243	114	\$2,886	\$3,332	
30 to 34 years	372	\$3,855	\$4,748	246	\$3,949	\$4,910	126	\$3,696	\$4,432	
35 to 39 years	416	\$4,452	\$5,523	292	\$5,032	\$6,128	124	\$3,176	\$4,097	
40 to 44 years	345	\$5,070	\$6,522	251	\$5,625	\$7,404	94	\$3,733	\$4,167	
45 to 49 years	224	\$5,720	\$6,755	165	\$6,197	\$7,296	59	\$3,864	\$5,319	
50 to 54 years	121	\$5,054	\$7,317	89	\$5,987	\$8,358	32	\$2,750	\$4,420	
55 to 59 years	118	\$3,533	\$5,185	79	\$4,313	\$5,943	39	\$2,458	\$3,649	
60 to 64 years	103	\$2,711	\$4,080	63	\$3,850	\$5,511	40	\$1,615	\$1,828	
65 yrs & over	175	\$1,755	\$2,353	116	\$2,143	\$2,860	59	\$1,205	\$1,357	
2000 CENSUS										
Persons with income	3,254	\$3,368	\$5,016	1,873	\$3,989	\$6,008	1,381	\$2,675	\$3,670	
15 to 19 years	227	\$1,125	\$1,398	70	\$854	\$1,499	157	\$1,375	\$1,352	
20 to 24 years	408	\$2,535	\$2,739	207	\$2,658	\$2,927	201	\$2,445	\$2,546	
25 to 29 years	361	\$3,074	\$3,769	189	\$3,207	\$3,928	172	\$2,946	\$3,595	
30 to 34 years	379	\$3,638	\$4,698	210	\$3,938	\$5,389	169	\$3,269	\$3,839	
35 to 39 years	408	\$4,208	\$6,252	258	\$4,794	\$7,059	150	\$3,393	\$4,863	
40 to 44 years	413	\$4,434	\$6,032	257	\$5,222	\$6,763	156	\$3,364	\$4,826	
45 to 49 years	370	\$5,150	\$7,659	247	\$5,839	\$9,141	123	\$3,630	\$4,685	
50 to 54 years	234	\$5,647	\$6,747	161	\$6,484	\$7,597	73	\$3,269	\$4,872	
55 to 59 years	113	\$4,722	\$9,213	65	\$6,563	\$9,551	48	\$2,857	\$8,756	
60 to 64 years	109	\$3,559	\$5,290	73	\$4,192	\$6,656	36	\$1,778	\$2,518	
65 yrs & over	232	\$2,095	\$2,904	136	\$2,963	\$3,837	96	\$1,353	\$1,583	

Source: 1994 FSM Census, Table P173; 2000 FSM Census, Table P11-1.

Individual incomes differed between males and females. Table 11.5 provides the percentage of males and females in each income range. In 2000, about 42 percent of the income earners were remales, increasing from 33 percent in 1994. The percentage of males, on the other hand, had declined. In 1994, males were over-represented in all income categories, with virtually no females at incomes levels of \$35,000 or more. The situation has improved slightly in 2000, with more females representation in all categories, including the highest income categories.

If income distribution was equal in Yap, the percent of females at each income level would be similar to the representation of females who recorded an income. Thus, we would expect to see the proportion of women at each income range similar to the distribution of all income earners. Instead, we find that women were over-represented at the lowest income levels and in the higher ranges they were under represented.

Given the median yearly income for female earners of \$2,675 in 2000, the average monthly income in 2000 would be about \$223, slightly lower than the estimated \$231 in 1994. For males, however, with a median yearly income of \$3,989, the average monthly income would be \$332 per month, a slight increase from \$328 in 1994. In both censuses, there is a difference of about \$100 per month in income between the sexes.

Table 11.5: Individual Income in 1993 and 1999 by Sex, Yap State: 1994 and 2000

	1994								2	000		
		Number			Percent		N	umber		Pe	rcent	
Annual income	Total	Males	Females	Total	Males	Females						
Persons 15+ years	6,754	3,254	3,500	100.0	48.2	51.8	7,153	3,408	3,745	100.0	47.6	52.4
Persons with income	2,557	1,713	844	100.0	67.0	33.0	3,254	1,873	1,381	100.0	57.6	42.4
Less than \$ 1,000	301	160	141	100.0	53.2	46.8	463	185	278	100.0	40.0	60.0
\$ 1,000 to \$ 1,999	304	172	132	100.0	56.6	43.4	329	154	175	100.0	46.8	53.2
\$ 2,000 to \$ 2,999	485	293	192	100.0	60.4	39.6	646	294	352	100.0	45.5	54.5
\$ 3,000 to \$ 3,999	370	246	124	100.0	66.5	33.5	514	307	207	100.0	59.7	40.3
\$ 4,000 to \$ 4,999	233	157	76	100.0	67.4	32.6	281	190	91	100.0	67.6	32.4
\$ 5,000 to \$ 7,499	439	340	99	100.0	77.4	22.6	519	366	153	100.0	70.5	29.5
\$ 5,500 to \$ 9,999	140	102	38	100.0	72.9	27.1	140	96	44	100.0	68.6	31.4
\$10,000 to \$12,499	129	107	22	100.0	82.9	17.1	140	105	35	100.0	75.0	25.0
\$12,500 to \$14,999	35	27	8	100.0	77.1	22.9	49	39	10	100.0	79.6	20.4
\$15,000 to \$19,999	67	58	9	100.0	86.6	13.4	71	52	19	100.0	73.2	26.8
\$20,000 to \$24,999	26	25	1	100.0	96.2	3.8	40	35	5	100.0	87.5	12.5
\$25,000 to \$34,999	18	16	2	100.0	88.9	11.1	38	30	8	100.0	78.9	21.1
\$35,000 to \$49,999	6	6	-	100.0	100.0	-	14	12	2	100.0	85.7	14.3
\$50,000 or more	4	4	-	100.0	100.0	-	10	8	2	100.0	80.0	20.0
Median (dollars)	\$3,509	\$3,941	\$2,776				\$3,368	\$3,989	\$2,675	-	-	-
Mean (dollars)	\$4,809	\$5,465	\$3,478				\$5,016	\$6,008	\$3,670	-	-	

Source: 1994 FSM Census, Table P173; 2000 FSM Census, Table P11-1

Table 11.6 compares income levels of female-headed families (no husband present) to married-couple families and to all families. In both Yap Proper and the Outer Islands, the gap in median income between female-headed familes and married-couple families has narrowed considerably between the two censuses. Indeed, on Yap Proper, the difference between median incomes for female-headed families and married couple families in 2000 was estimated at \$1,095, a considerable decline from \$3,109 in 1994. The largest disparities on Yap Proper were in Fanif, Dalipebinaw and Gilman. In the Outer Islands, the disparity between female headed families and married couple families also showed similar decrease from about \$1,417 in 1994 to \$640 in 2000, with largest disparities found on Eauripik and Faraulap where there were no female-headed families. The unusually high median income for female-headed householders in some selected municipalities was due in part to the small number of households involved, thus skewing the data.

Table 11.6: Median Income in 1993 and 1999 by Type of Family and Region, Yap State: 1994 and 2000

			1994				2000						
	Nu	mber of fan	nilies	М	edian incor	ne	Num	ber of fami	lies	Median income			
			Female hhldr, no			Female hhldr, no			Female hhldr, no			Female hhldr, no	
ъ :	m . 1	Married	husband	m . 1	Married	husband	T . 1	Married	husband	70 · 1	Married	husband	
Region	Total	couple	present	Total	couple	present	Total	couple	present	Total	couple	present	
Total	1,285	997	183	\$5,810	\$6,352	\$3,614	1,428	1,018	101	\$6,860	\$6,928	\$6,250	
Yap Proper	1,038	804	148	\$6,389	\$7,047	\$3,938	1,165	837	78	\$7,895	\$8,007	\$6,912	
Rumung	19	16	2	\$3,750	\$3,800	\$3,500	23	18	1	\$3,125	\$3,250	\$2,500	
Maap	74	56	13	\$5,156	\$6,250	\$2,917	99	59	9	\$6,667	\$6,806	\$6,250	
Gagil	110	86	13	\$6,563	\$6,833	\$1,900	122	90	13	\$8,375	\$8,500	\$7,083	
Tomil	139	106	16	\$5,721	\$6,053	\$5,000	160	116	15	\$7,321	\$7,794	\$5,750	
Fanif	80	58	11	\$5,313	\$5,750	\$2,500	86	58	7	\$8,036	\$7,500	\$22,500	
Weloy	180	135	32	\$7,708	\$8,618	\$5,000	193	135	9	\$8,250	\$8,125	\$9,375	
Rull	314	260	37	\$6,815	\$7,463	\$3,300	330	250	15	\$9,441	\$9,583	\$7,188	
Gilman	36	25	7	\$6,875	\$9,375	\$5,625	43	26	3	\$8,125	\$10,000	\$2,500	
Kanifay	35	25	6	\$5,795	\$5,536	\$7,500	41	36	1	\$3,786	\$3,857	\$1,500	
Dalipebinaw	51	37	11	\$7,083	\$9,583	\$5,938	68	49	5	\$8,214	\$7,708	\$11,250	
Outer Islands	247	193	35	\$3,819	\$4,042	\$2,625	263	181	23	\$4,481	\$4,540	\$3,900	
Ulithi	83	65	11	\$3,650	\$3,929	\$2,833	84	58	8	\$4,143	\$4,000	\$6,250	
Fais/Sorol	10	10	-	\$3,600	\$3,600	· -	14	11	2	\$3,833	\$4,500	\$3,000	
Ngulu	3	1	1	\$1,250	\$1,500	\$1,500	3	2	1	\$2,500	\$2,000	\$2,500	
Woleai	50	35	9	\$5,000	\$5,268	\$3,500	62	39	6	\$3,750	\$3,700	\$4,500	
Eauripik	12	9	3	\$667	\$643	\$750	12	2		\$6,000	\$6,000		
Ifalik [*]	29	22	3	\$5,481	\$5,250	\$6,250	25	23	2	\$5,446	\$5,481	\$4,500	
Faraulap	21	17	4	\$3,625	\$3,875	\$667	19	17		\$5,156	\$5,156		
Elato	10	8	2	\$300	\$4,000	\$500	6	4	1	\$4,500	\$5,000	\$3,500	
Lamotrek	19	18	1	\$4,750	\$5,000	\$3,500	15	10	1	\$4,375	\$4,333	\$4,500	
Satawal	10	8	1	\$5,000	\$5,833	\$4,500	23	15	2	\$4,833	\$4,833	\$4,000	

Source: 1994 & 2000 FSM Censuses, unpublished data

As would be expected, income increased with educational attainment (Table 11.7). Median income for persons who attended college was almost double the median income of persons who stopped studying after high school. In 2000, high school graduates had a median income of \$3,797 and persons with some college or a college degree had a

median income of \$6,047, a slight increase when compared to their corresponding values in 1994. In both census years, median income of persons with bachelor's degree was more than twice of those with only a high school diploma. Persons with only an elementary education had considerably lower median income than persons who graduated high school, and median income of persons with no education was considerably lowere than persons with attained elementary.

At every educational level median income for women was less than that of men. This was true for both census years. The most significant disparity was among those with Bachelor's, Masters or higher degree. The median income for males with Bachelor's, Masters or higher degree attainment was about \$5,000 to \$10,000 higher than their female counterparts.

Table 11.7: Individual Income in 1993 and 1999 by Educational Attainment, Yap State: 1994 and 2000

		Total			Males	•	Females			
Educational attainment	Total	Median	Mean	Total	Median	Mean	Total	Median	Mean	
1994 CENSUS										
Persons with										
income 15+ years	2,505	\$3,549	\$4,857	1,684	\$3,971	\$5,500	821	\$2,817	\$3,539	
No education	85	\$2,327	\$2,959	51	\$2,675	\$3,720	34	\$1,375	\$1,817	
Elementary										
1-3 grades	73	\$1,405	\$1,610	32	\$1,875	\$2,195	41	\$1,115	\$1,153	
4-7 grades	244	\$2,310	\$2,763	148	\$2,606	\$3,193	96	\$1,929	\$2,100	
Elem. grads.	129	\$2,234	\$2,711	78	\$2,550	\$3,176	51	\$1,767	\$1,999	
High school										
9-11 grades	256	\$2,532	\$3,048	177	\$2,782	\$3,397	79	\$2,109	\$2,267	
12, no diploma	93	\$2,938	\$3,457	58	\$3,667	\$4,011	35	\$2,500	\$2,539	
HS graduates	768	\$3,412	\$4,327	510	\$3,708	\$4,771	258	\$2,973	\$3,451	
College	857	\$5,947	\$7,408	630	\$6,145	\$7,959	227	\$5,327	\$5,881	
Some, no degree	359	\$4,797	\$5,695	245	\$5,019	\$5,973	114	\$4,467	\$5,097	
Assoc. academic	137	\$4,938	\$5,697	110	\$4,952	\$5,824	27	\$4,833	\$5,182	
Assoc. vocational	183	\$6,286	\$6,471	134	\$6,389	\$6,766	49	\$5,924	\$5,666	
Bachelors	143	\$9,922	\$12,051	112	\$10,625	\$12,984	31	\$7,708	\$8,682	
Masters or higher	35	\$16,500	\$17,608	29	\$18,500	\$18,932	6	\$8,750	\$11,210	
2000 CENSUS										
Persons with										
income 15+ years	2,619	\$3,817	\$5,684	1,596	\$4,540	\$6,606	1,023	\$3,009	\$4,247	
No education	106	\$1,667	\$2,149	41	\$3,056	\$3,532	65	\$956	\$1,276	
Elementary					. ,	. ,				
1-3 grades	70	\$2,231	\$2,751	32	\$3,000	\$3,843	38	\$1,250	\$1,831	
4-7 grades	226	\$2,262	\$2,629	95	\$2,659	\$3,278	131	\$2,038	\$2,158	
Elem. grads.	104	\$2,345	\$2,386	52	\$2,750	\$2,875	52	\$2,059	\$1,898	
High school										
9-11 grades	210	\$2,700	\$3,568	136	\$2,939	\$4,157	74	\$2,235	\$2,487	
12, no diploma	98	\$2,839	\$3,252	62	\$2,882	\$3,460	36	\$2,786	\$2,894	
HS graduates	818	\$3,797	\$5,090	484	\$4,247	\$5,478	334	\$3,329	\$4,526	
College	987	\$6,047	\$8,504	694	\$6,311	\$9,197	293	\$5,364	\$6,861	
Some, no degree	423	\$4,670	\$6,290	267	\$5,165	\$7,129	156	\$3,818	\$4,855	
Assoc. academic	162	\$5,319	\$6,789	136	\$5,385	\$7,138	26	\$5,000	\$4,965	
Assoc. vocational	195	\$6,360	\$7,618	140	\$6,306	\$7,380	55	\$6,510	\$8,225	
Bachelors	149	\$9,438	\$12,575	110	\$10,357	\$13,491	39	\$7,969	\$9,994	
Masters or higher	58	\$19,167	\$21,950	41	\$20,833	\$24,182	17	\$13,750	\$16,566	

Source: 1994 FSM Census, Table P183; 2000 FSM Census, Table P11-12.

A person's economic activity naturally has a bearing on their income. Table 11.8 shows the median income of each of the economic activity categories by sex. Although the data on income refer to a different time period than economic status, for a majority of these persons economic status did not change. In both years persons employed in the formal work force reported the highest median income, about \$4,300 in 1994 and \$3,800 in 2000). In 1994, persons who could have taken a job had the lowest median income at \$1,469. In 2000, the market-oriented workers had the lowest median income at \$1,273. Persons who were not available for work reportedly had higher median incomes than persons involved in market-oriented agriculture or fishing activities. Females had consistently lower median incomes than males at every economic status.

In 2000, about 15 percent of the subsistence workers and 20 percent of persons not in the labor force were receiving income other a source other than wages and salary. These proportions were slightly higher those reported in 1994.

Table 11.8: Individual Median Income in U.S. Dollars (\$) in 1993 and 1999 by Economic Status the Week Before the Censuses, Yap State: 1994 and 2000

			1994			2000					
	Percent of wo		M	edian incom	e	Percent of we		Median income			
Economic status	Number	Percent	Total	Males	Females	Number	Percent	Total	Males	Females	
Persons 15+ years											
with income	2,557	37.9	\$3,509	\$3,941	\$2,776	3,254	45.5	\$3,368	\$3,989	\$2,675	
In labor force	2,057	55.1	\$3,944	\$4,436	\$3,259	2,868	55.4	\$3,534	\$4,222	\$2,795	
Employed	1,972	58.6	\$4,029	\$4,543	\$3,320	2,810	56.6	\$3,563	\$4,290	\$2,806	
Formal work	1,806	86.7	\$4,299	\$4,770	\$3,556	2,426	94.4	\$3,810	\$4,560	\$3,068	
Agriculture/fishing	166	12.9	\$1,615	\$1,926	\$969	384	16.0	\$1,629	\$2,603	\$962	
Subsistence	147	11.8	\$1,603	\$1,896	\$966	326	14.6	\$1,706	\$2,648	\$917	
Market oriented	19	57.6	\$1,700	\$2,250	\$1,000	58	36.3	\$1,273	\$2,000	\$1,111	
Unemployed	85	23.1	\$2,361	\$2,625	\$1,417	58	27.6	\$2,182	\$2,444	\$1,500	
Not in labor force	500	16.6	\$1,955	\$2,336	\$1,608	386	19.5	\$2,088	\$2,650	\$1,500	
Could have taken a job	77	19.7	\$1,469	\$1,929	\$1,111	41	28.1	\$2,500	\$2,500	\$2,500	
Not available for work	423	16.1	\$2,039	\$2,396	\$1,696	345	18.8	\$2,033	\$2,671	\$1,419	

Source: 1994 FSM Census, Table P185; 2000 FSM Census, Table 11-14.

Table 11.9 shows median income of the current formal work force for different occupations. Not all persons who had income reported an occupation. Some persons with income were not working during the respective censuses. As was explained in the chapter on occupations, the occupations categories are according to how much skill and experience are needed for a job. Thus, the higher the skill and experience required, the higher the compensation. Executives and managers were the highest paid occupations with median incomes in both years (\$9,219 in 1993 and \$12,879 in 1999). Professionals, technicians and associate professionals also had higher than average median income. Similar to findings on education and income, women had lower median income in every occupation group than men in 2000, and the largest difference occurred in the executive and managerial occupations.

Table 11.9: Median Individual Income in 1993 and 1999 by Occupation, Yap State: 1994 and 2000

	1994							2000							
	To	tal	Ma	les	Females		Total		Males		Females				
Occupation	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median			
Current formal work															
force 15+ years	1,806	\$4,464	1,276	\$4,820	530	\$3,789	2,426	\$4,135	1,444	\$4,680	982	\$3,389			
Executive and managers	175	\$9,219	149	\$9,688	26	\$7,083	158	\$12,879	129	\$13,482	29	\$9,583			
Professionals	196	\$5,909	146	\$6,438	50	\$4,659	307	\$5,757	200	\$6,136	107	\$4,781			
Technicians and assoc. prof.	401	\$5,028	273	\$5,498	128	\$4,104	426	\$5,258	265	\$5,866	161	\$4,366			
Administrative support	240	\$4,282	66	\$5,588	174	\$3,958	342	\$4,288	87	\$4,583	255	\$4,211			
Service workers	194	\$3,313	99	\$4,077	95	\$2,530	166	\$3,590	98	\$4,115	68	\$2,750			
Agriculture & fishing workers	44	\$3,500	40	\$3,556	4	\$3,000	31	\$3,500	30	\$3,500	1	\$3,500			
Subsistence workers	29	\$3,250	28	\$3,500	1	\$1,500	9	\$3,250	8	\$3,500	1	\$2,500			
Craft and related workers	268	\$3,569	243	\$3,607	25	\$3,125	574	\$2,511	255	\$3,452	319	\$2,036			
Machine operators	105	\$3,838	92	\$3,798	13	\$4,250	142	\$4,007	133	\$4,049	9	\$3,542			
Elementary occup. & labor	153	\$3,975	139	\$4,250	14	\$2,071	270	\$3,665	238	\$3,855	32	\$2,200			
Armed Forces	1	\$3,750	1	\$3,750	-	-	1	\$6,250	1	\$6,250	-	-			

Source: 1994 FSM Census, Table P187; 2000 FSM Census, Table 11-16.

Note: Occupation refers to the most recent job, while the income data refers to 1993 & 1999 income.

With few exceptions, income levels in the public sector were higher than those in the private sector (Table 11.10). The high median income for the unpaid family workers in 2000 may be due to the small number of individuals involved. Between 1993 and 1999, the median income decline in the private sector and while it increased in the public sector. The decline in the private sector may suggest that the newly-entered workers to private sector to be entering low paying job. Furthermore, all classes (except for private-for-profit workers and municipal government workers) had median incomes higher than the overall income unpaid family workers during both censuses. National government incomes had a median of \$10,556 in 2000 which was about three times the median income in the private sector. Once again, female median incomes were lower in every category than their male counterparts. In 2000, the greatest income difference in the private sector was among municipal and unpaid family workers, and among the national employees in the public sector.

Table 11.10: Individual Income in 1993 and 1999 by Class of Work, Yap State: 1994 and 2000

	Total				Males		Females			
Class of work	Number	Median	Mean	Number	Median	Mean	Number	Median	Mean	
1994 CENSUS										
Current formal work force 15+ years	1,806	\$4,299	\$5,646	1,276	\$4,770	\$6,192	530	\$3,556	\$4,331	
Private wage/salary:										
For profit	661	\$3,530	\$4,648	446	\$3,831	\$5,169	215	\$2,978	\$3,566	
Not for profit	63	\$4,900	\$7,569	34	\$6,667	\$9,544	29	\$3,700	\$5,254	
Government:										
Municipal govt.	9	\$2,500	\$3,977	9	\$2,500	\$3,977	-	-	-	
State	913	\$4,867	\$5,823	685	\$5,306	\$6,291	228	\$3,884	\$4,416	
National	67	\$8,068	\$8,992	47	\$9,844	\$10,668	20	\$4,667	\$5,054	
Federal/foreign	71	\$4,917	\$7,205	38	\$5,833	\$7,848	33	\$4,125	\$6,465	
Self-employed	21	\$8,750	\$8,417	16	\$7,500	\$7,590	5	\$11,250	\$11,064	
Unpaid family worker	1	\$4,500	\$4,752	1	\$4,500	\$4,752	-	-	-	
2000 CENSUS										
Current formal work force 15+ years	2,426	\$4,135	\$5,794	1,444	\$4,680	\$6,744	982	\$3,389	\$4,398	
Private wage/salary:										
For profit	1,283	\$3,379	\$4,490	704	\$3,951	\$5,606	579	\$2,629	\$3,132	
Not for profit	86	\$4,167	\$9,287	38	\$4,500	\$9,570	48	\$3,889	\$9,063	
Government:										
Municipal govt.	6	\$5,000	\$5,068	5	\$5,625	\$5,678	1	\$1,750	\$2,016	
State	805	\$5,218	\$6,640	555	\$5,576	\$7,149	250	\$4,519	\$5,510	
National	80	\$10,769	\$12,537	53	\$11,625	\$13,598	27	\$8,438	\$10,455	
Federal/foreign	100	\$4,679	\$6,631	45	\$5,156	\$7,704	55	\$4,345	\$5,752	
Self-employed	62	\$4,375	\$6,955	42	\$5,000	\$8,247	20	\$3,571	\$4,241	
Unpaid family worker	4	\$6,250	\$6,429	2	\$8,750	\$9,018	2	\$3,750	\$3,840	

Source: 1994 FSM Census, Table P189; 2000 FSM Census, Table 11-18.

Table 11.11 presents median income by source and region. The majority of persons who reported income in both 1993 and 1999 received their income from wages or salaries. Many of these individuals also received income from other sources, giving them multiple income sources. Wages and salaries made the largest contribution to income with the largest number of recipients and the highest median amount (\$3,665) slightly less than the 1994 median of \$3,844. Social security also made up a significant portion of incomes with 318 persons receiving some form of government assistance contributing to a median income of \$2,082, a large increase compared to the 1994 median of \$1,685.

In 2000, the median income from wages and salaries was higher in the Outer Islands (\$3,879) than on Yap Proper (\$3,630); a reversal of the 1994 situation when Yap Proper reported a higher median income than the Outer Islands. This was probably due to the small number of wage and salary earners in the outer islands, which may have pulled up the median income especially if most of them earned higher salaries. Social security was the second most important source of income in both Yap Proper and the Outer Islands. In Yap Proper about 10 percent of the income recipients received was from social security and little over 9 percent in the Outer Islands. The median income for those who received social security, pensions, and/or other retirement funds appeared to be concentrated on Yap Proper, where 90 percent of all eligible recipients resided. In the Outer Islands, the median income for those who received social security benefits and other forms of governmental assistance appeared to have dropped from a high of \$1,714 in 1994, to a low of \$738 in 2000. This was perhaps due to a slightly lower income level reported in 2000 as apposed to 1994.

Remittances from outside of the FSM were slightly higher than remittances from within FSM. However, more persons received remittances from inside the FSM than from outside the FSM. The median incomes of persons receiving both or either of these categories of remittances appeared to have dropped slightly in 2000, compared to the 1994 census. In 1994, persons receiving income from within the FSM had a median income of \$630, while those receiving remittances from outside the FSM showed a median income of \$789. By 2000, the median incomes for those receiving remittances from within and outside the FSM were calculated at \$562 and \$586, respectively. The "other" category, which includes veterans payments, child support, alimony, and so forth also constituted a large number of income recipients in 1994 (2,204 persons) but had since dropped to only 45 persons in 2000.

Table 11.11: Median Income by Source and Region, Yap State: 1994 and 2000

	19	994 Census		2000 Census				
		Yap	Outer		Yap	Outer		
Source of income	Total	Proper	Islands	Total	Proper	Islands		
Persons earning income	2,557	2,176	381	3,254	2,914	340		
Median total income	\$3,509	\$3,580	\$3,085	\$3,368	\$3,320	\$3,687		
Wages and salary	2,174	1,848	326	2,674	2,372	302		
Median	\$3,844	\$3,895	\$3,532	\$3,665	\$3,630	\$3,879		
Profit from business or farm	195	186	9	354	341	13		
Median	\$879	\$903	\$563	\$823	\$832	\$650		
Interest, dividends, trusts, royalty	89	58	31	152	137	15		
Median	\$685	\$806	\$535	\$628	\$635	\$577		
Social security, pension, retirement	255	227	28	318	287	31		
Median	\$1,685	\$1,682	\$1,714	\$2,082	\$2,225	\$738		
Remittances from within FSM	68	46	22	73	57	16		
Median	\$630	\$677	\$550	\$562	\$570	\$534		
Remittances from outside FSM	41	33	8	41	35	6		
Median	\$789	\$825	\$667	\$586	\$584	\$600		
Others	2,204	2,204	-	45	44	1		
Median	\$734	\$734	=	\$776	\$786	\$501		

Source: 1994 and 2000 FSM Censuses, unpublished data.

In Table 11.12 compares gender differentials of sources of income. The median wage or salary in 2000 was \$3,989 for males and \$2,675 for females. Compared to 1994, males showed a slight increase in median wage or salary while the female showed a slight decrease. Social security, pension and retirement was also the second largest income contributor. For every source of income, males had higher median income.

Table 11.12: Income Source in 1993 and 1999 by Sex, Yap State: 1994 and 2000

			19	994		2000						
_	Number of recipients			Median income			Number of recipients			Median income		
Source of income	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females
Persons 15+ years with income	2,557	1,713	844	\$3,509	\$3,941	\$2,776	3,254	1,873	1,381	\$3,368	\$3,989	\$2,675
Wages and salary	2,174	1,505	669	\$3,844	\$4,277	\$3,196	2,674	1,601	1,073	\$3,665	\$4,255	\$2,963
Profit from business or farm	195	138	57	\$879	\$933	\$771	354	190	164	\$823	\$960	\$707
Interest, dividends, trusts, royalty	89	74	15	\$685	\$686	\$682	152	98	54	\$628	\$663	\$575
Social security, pension, retirement	255	143	112	\$1,685	\$2,048	\$1,378	318	172	146	\$2,082	\$2,531	\$1,692
Remittances from within FSM	68	29	39	\$630	\$725	\$574	73	25	48	\$562	\$544	\$572
Remittances from outside FSM	41	15	26	\$789	\$938	\$723	41	15	26	\$586	\$682	\$542
Other income	22	11	11	\$734	\$612	\$917	45	21	24	\$776	\$875	\$706

Source: 1994 & 2000 FSM Census, unpublished data

Note: The sum of recipients does not equal the total because some individuals had more than one source of income.

Conclusion

The median income for individuals in Yap was \$3,368 in 1999, and median household income was \$6,489, a slight decrease for individual income from \$3,509 and a moderate increase for household income from \$5,998 since 1994. In 2000, the median household income, after inflation adjustments, showed only a 0.5 percent increase since 1994. Yap Proper had lower individual median income compared to the Outer Islands in 2000.

Income levels in Yap showed definite patterns. Higher educated persons had higher incomes, government employees had higher incomes than private sector employees, two-parent families had higher incomes than female headed families, and males had higher incomes than females. A majority of this income came from wages and salaries while income from remittances and social security also contributed. As Yap becomes more reliant on the cash economy instead of subsistence for its well-being, income levels will increasingly become a measuring stick for the quality of life and the distribution of resources.

CHAPTER 12 HOUSING CHARACTERISTICS

Introduction

Because everyone must live somewhere, the topic of housing characteristics is universal, enabling comparisons between populations. Moreover, studying various aspects of housing provides important insights to development, often illuminating the interface between a traditional cultural system and modernization that has affected most of the Pacific during the late twentieth century. The 2000 FSM census implicitly acknowledges the important role played by housing, collecting and presenting a vast array of data on various aspects of the state housing stock.

Before beginning an examination of housing in Yap, a brief note is in order and particularly to readers unfamiliar with data from housing censuses. Housing data typically are complex, usually organized and presented in several special categories such as total units, occupied units, owner-occupied units, and so on. Moreover, housing categories often are not consistent across census years, making comparisons difficult. Also, housing on Yap does not follow the Western model - houses are less technologically complex. Because of these differences, detailed definitions pertaining to housing and its various characteristics are provided in this report.

The housing characteristics in the State of Yap have been organized in this chapter into four major sections; (1) general housing characteristics, (2) structural characteristics, (3) utilities, and (4) equipment. Some tables in this chapter include data from the 1980 census to examine the change in housing in Yap over time.

Data Description

General Housing Characteristics

A housing unit is a house, apartment, mobile home or trailer, or group of rooms or single room occupied as separate living quarters or, if vacant, intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants live and eat apart from other persons in the building and which have direct access only from outside the building or through a common hall. Housing units built not for household occupancy but for a group of unrelated persons are defined as a group quarter. Group quarters include institutionalized and non-institutionalized quarters such as prisons/local jails, hospitals, school/college dormitories, etc.

The 2000 FSM Census included both occupied and vacant housing units as part of the housing inventory. Recreational boats, tents, etc, were also included in the questionnaire to enumerate people using them as their usual residence. The census classified a housing unit as occupied if it was the usual residence of the person or group of persons inhabiting it at the time of enumeration or if the occupants were only temporarily absent.

A vacant housing unit was one, which contained no residents at the time of enumeration, unless its occupants were only temporarily absent. The census also considered vacant units that were temporarily occupied at the time of enumeration by persons who usually resided elsewhere. A new unit not yet occupied was classified as vacant if construction had reached the point where all exterior windows and doors, and final usable floors, were in place. The census did not consider unoccupied units open to the elements as vacant. Also excluded from vacant units were quarters used entirely for non-residential purposes, such as store, office, or storage facility.

The 2000 census distinguished between owner-occupied and renter-occupied housing units, a characteristic referred to as tenure. Ouestionnaire item H22, asked to all occupied housing units, dealt with tenure.

The census classified a housing unit as owner-occupied if the owner or co-owner resided in the unit during the census reference period, even if the unit was mortgaged or not fully paid for. The remaining occupied housing units were classified as renter-occupied, regardless of whether cash or some other means of remittance was used. The census recorded a housing unit as "rented for cash" if any money rent was paid or contracted for; this rent could come from individuals either living in the unit or elsewhere, or from an organization. Rental units classified under "occupied without payment of cash rent" generally were those provided free by friends or relatives, or in exchange for services such as those provided by a resident manager or tenant worker.

Structural Characteristics

Questionnaire item H6 concerned the year a structure was built. Data on the year a structure was built referred to when the building was first constructed, not when it was remodeled, added to, or converted. Recently built structures that met the housing unit definition requirements (all exterior windows, doors, and final usable floors installed) were assigned to the "1999-2000" category.

The 2000 census obtained information on the number of housing units in a structure from questionnaire item H1, which it recorded for all housing units. A structure comprised a separate building that either had open space on all four sides or was separated from other structures by dividing walls that extended from ground to roof. The statistics presented in this report refer to the number of housing units in separate structures of specified type and size. The following categories applied;

- One-unit, detached -- a single-unit structure detached from any other structure (except a shed or garage). A
 one-family house (including those which may contain a business) was considered detached as long as the
 building had open space on all four sides.
- One-unit, attached -- a one-unit structure that had one or more walls extending from ground to roof separating it from adjoining structures. For houses attached to non-residential structures, each housing unit was an individual attached structure if the dividing or common wall extended from ground or roof.
- Two or more units -- housing units in structures containing two or more housing units, further categorized as units in structures with 2, 3 or 4, 5 to 9, 10 to 19, 20 or more units.
- Other -- any housing unit that did not fit the previous categories, such as abandoned cars, campers, vans, and shacks.

The 2000 census obtained information on the number of rooms per housing unit from questionnaire item H7, obtained for both for occupied and vacant housing units. The intent of this question was to count the number of whole rooms used for living purposes. For each unit, whole rooms included living rooms, dining rooms, kitchens, bedrooms, finished recreation rooms, enclosed porches suitable for year-round use, and lodger's rooms. Excluded were kitchenettes, bathrooms, open porches, balconies, halls for foyers, utility rooms, unfinished attics or basements, and other unfinished space used for storage.

Data on bedrooms were obtained from questionnaire item H8, obtained for both occupied and vacant housing units. The number of bedrooms refers to the count of rooms designed to be used as bedrooms and the number of rooms that one would count as bedrooms when listing a housing unit for sale or for rent. Also included were rooms intended for use as bedrooms even if residents were using them for some other purpose on census day. Housing units comprising a single room, such as an efficiency apartment, by definition were classified as having no bedroom.

Data on material used for the outside walls of housing units was obtained from questionnaire item H3, for both occupied and vacant housing units. The census classified each unit according to the type of material used most in the construction of its outside walls. The categories include: "Poured concrete", "Concrete blocks", "Metal/tin", "Plywood", "Thatch", "Local wood or bamboo", "Other", and "No walls".

The census collected data on the material used for the roofs of housing units with questionnaire item H4, asked of both occupied and vacant housing units. The census classified each housing unit according to the type of material used most in the construction of its roof. The material categories employed were "Poured concrete", "Metal/Tin", "Wood", "Thatch", "Bamboo", and "Other".

The 2000 census collected data on type of material used for the foundation of housing units with questionnaire item H5, both for occupied and vacant housing units. Census personnel classified each housing unit according to the type of material used most in its foundation. The categories employed were "Concrete", "Wood pier or piling", "Coral", "Stone", and "Other" for those other than the first four categories.

Utilities

The 2000 census collected data on electric power with questionnaire items H10, recorded for both occupied and vacant housing units. Even if the power had been shut off for some reason, the census considered the unit to have electric power.

The census data on source of water were obtained from questionnaire item H15, obtained for both occupied and vacant housing units. Categories 1 to 9 on question H15 dealt with the sources of drinking water to the household.

"A public (government) system only" refer to when there is running water that comes through water pipes from any common source supplying 5 or more houses or apartments and it is the only source of water for the entire household or apartment.

"A community water system only" refer to when there is running water that comes through water pipes supplied by a village or community water system or it may be obtained from a well that is maintained by the community.

"A public and catchment" refer to when there is running water from a public system and there is also catchment in which rainwater is collected.

"An individual well" refer to when the water comes from a well on the property or on neighboring property. Well water hand drawn, wind drawn, or engine drawn whether piped or not piped and stored in tanks or used directly from the well were included.

"A catchment, tanks, or drums only" refer to when the source of water is a catchment, tanks, or drums in which rainwater is collected. Such sources usually serves only one structure.

"A public standpipe or street hydrant" refer to when there is an elevated tank or vertical storage cylinder connected to a public system from which nearby residents draw water.

"Purchased bottled water" refer to when the household depended only on water purchased from businesses.

"Some other sources such as a spring, river, creek, etc," were being used by the household as the main source of drinking water.

Data on water supply, also referred to as "Piped water" related to the source of water, were obtained from questionnaire items H9a to H9d, recorded for both occupied and vacant housing units. Piped water signified a housing unit where water was available at a sink, washbasin, bathtub, or shower. The piped water may have been located within a housing unit, in a hallway associated with the unit, or in a room used by several other households in the building containing the unit (even if occupants had to go outdoors to reach that part of the building). If both hot and cold water were available, the census recorded the type of energy used by the water heater; "Electricity", "Gas", "Solar Power", or "Other fuels".

Data on sewage disposal was obtained by questionnaire item H16, recorded both for occupied and vacant housing units. Housing units were classified as connected to a "Public sewer", or a "Septic tank or cesspool", or disposing of sewage by "other means". In the FSM a public sewer system may be operated by a government or semi-government body or by a private organization where sewer pipe were connected to a processing plant. The septic tank or cesspool is an underground tank or pit for sewage disposal and limited to one or two toilets. The "other" category included housing units, which disposed of sewage in any manner not covered by the other specific categories.

Equipment

The 2000 Census obtained information on plumbing facilities from questionnaire items H9a, H9c, and H9d for occupied and vacant housing units. Based on the U.S. Census Bureau definition, a unit was considered to have complete plumbing facilities when it had piped water, a flush toilet, and a bathtub or shower, regardless of whether these facilities were located in the unit being enumerated or inside the building that contained that unit.

Data on sinks with piped water were obtained from questionnaire item H17e, recorded for both occupied and vacant housing units. For classification as a housing unit possessing a sink with piped water, such a sink must be in the unit itself or inside the building containing the housing unit enumerated.

Questionnaire items H9d and H16 addressed the type of toilet facilities and sewage disposal facilities associated with them both in occupied and vacant housing units. A flush toilet consisted of any toilet, regardless of whether it's inside or outside the unit, connected to piped water and emptied into a public sewer, septic tank or cesspool. If the unit did not have a flush toilet, the category "no", was used.

The 2000 census collected data on bathtub and shower with questionnaire item H9c both for occupied and vacant housing units. A bathtub or shower was counted only if connected permanently to piped running water, thus excluding equipment such as portable bathtubs.

Questionnaire items H17a and H17b concerned cooking facilities and were asked at both occupied and vacant housing units. Main cooking facilities were those used most often for the preparation of meals, located either outside or inside the housing unit enumerated or in the building containing that housing unit. The 2000 census classified units with cooking facilities according to the energy used to power them, although the present study does not consider this information. A housing unit with "No cooking facilities" comprised a unit with no cooking facilities available inside or outside the building.

Questionnaire items H18 and H19 asked for the number of vehicles used for land transportation as well as boats used by the household for water transportation.

Finally, the census collected data on household appliances such as refrigerator, deep freezer, air-conditioning, television and VCR, telephone or CB radio, and any other battery operated radio.

Analysis of Housing Data

The following analysis provides a brief description of the data on housing units as compiled from the 2000 FSM Population and Housing Census. The 1980 and 1994 census results are used for comparative purposes. The 1980 census results, however, are included here only as a means of comparing aggregate statistics since it differed from the latest two censuses in certain housing concepts and definitions.

General Housing Characteristics

Table 12.1 presents the total number of housing units in Yap by status of occupancy. Between 1980 and 2000, the total number of housing units increased from 1,906 to 1,980 in 1994 (about 4 percent), and increased further still to 2,246 (about 13 percent) in 2000. Thus, over the past two decades, the total housing units in the state increased by over 17 percent. During 1980, about 84 percent of all housing units in Yap were reported occupied, which increased to about 97 percent in 1994 but decreased thereafter to 90 percent. In actuality, however, there were more housing units in 2000 (2,030) than either during 1994 (1,925) or 1980 (1,608). The proportional decline of occupied housing in 2000 was due to the large number of vacant housing reported quite possibly as a result of the differences in definitions used for vacancy during 1980 and the last two censuses. Of the 2,246 housing units enumerated in Yap during the 2000 FSM census, 216 or 9.6 percent were vacant.

Table 12.1: Total Housing Units, Occupied Housing Units, and Others, Yap State: 1980, 1994 and 2000

		Number		Percent cl			Percent	
Tenure	1980	1994	2000	1980-1994	1994-2000	1980	1994	2000
Total Housing Units	1,906	1,980	2,246	3.9	13.4	100.0	100.0	100.0
Occupied Housing Units	1,608	1,925	2,030	19.7	5.5	84.4	97.2	90.4
Vacant	298	55	216	-81.5	292.7	15.6	2.8	9.6

Source: 1980 TTPI Census; 1994 & 2000 FSM Censuses, Table H02

Government and planning agencies use information on renter occupied units in combination with income and other characteristics to develop housing programs designed to meet the housing needs of people at different economic levels. Table 12.2 shows that in 2000 about 86 percent of the occupied housing units in Yap were owner-occupied compared to about 75 percent in 1994. In addition, about 14 percent were renter-occupied, a significant decline from about 25 percent in 1994. Most housing units in Yap in both censuses were located on Yap Proper,

particularly in Weloy and Rull. The distributions of housing unit occupancy and tenure status also showed slight variation between the regions. In 2000, the proportion for owner-occupied units in Yap Proper was lower (84 percent) than the Outer Islands (92 percent). In 1994, the proportion of owner-occupied units in the Outer Islands was much lower at about 60 percent. The proportion of renter-occupied no-cash housing units was relatively low in both Yap Proper and the Outer Islands (about 8 percent each) compared to the 1994 census when both regions reported relatively high proportions at 13 percent and 39 percent, respectively. The large proportion of renter-no cash housing units in the Outer Islands in 1994 could be houses that were abandoned by owners migrating to the state center or vice versa and left to be looked after by relatives.

Table 12.2: Total Housing Units, Occupied Housing Units and Tenure by Municipality, Yap State: 1994 and 2000

			C	Occupied]	Percent		
	Total			Rente	r				Rente	er	
	housing				No					No	
Municipality	units	Total	Owner	Cash	cash	Others	Total	Owner	Cash	cash	Others
1994 Census											
Total	1,980	1,925	1,442	29	412	42	100.0	74.9	1.5	21.4	2.2
Yap Proper	1,292	1,291	1,065	28	162	36	100.0	82.5	2.2	12.5	2.8
Rumung	27	27	24	-	2	1	100.0	88.9	-	7.4	3.7
Maap	114	114	97	1	16	-	100.0	85.1	0.9	14.0	-
Gagil	136	136	130	1	5	-	100.0	95.6	0.7	3.7	-
Tomil	168	168	157	-	11	-	100.0	93.5	-	6.5	-
Fanif	96	96	87	2	7	-	100.0	90.6	2.1	7.3	-
Weloy	219	219	174	7	32	6	100.0	79.5	3.2	14.6	2.7
Rull	383	382	274	17	62	29	100.0	71.7	4.5	16.2	7.6
Gilman	41	41	41	-	-	-	100.0	100.0	-	-	-
Kanifay	46	46	43	-	3	-	100.0	93.5	-	6.5	_
Dalipebinaw	62	62	38	-	24	-	100.0	61.3	-	38.7	-
Outer Islands	688	634	377	1	250	6	100.0	59.5	0.2	39.4	0.9
Ulithi	178	156	127	-	24	5	100.0	81.4	-	15.4	3.2
Fais/Sorol	45	45	_	-	45	-	100.0	-	-	100.0	-
Ngulu	11	11	10	_	1	_	100.0	90.9	_	9.1	_
Woleai	101	101	8	_	93	_	100.0	7.9	_	92.1	_
Eauripik	35	24	3	_	21	_	100.0	12.5	_	87.5	_
Ifalik	75	75	72	1	2	_	100.0	96.0	1.3	2.7	_
Faraulap	61	41	37	-	4	_	100.0	90.2	_	9.8	_
Elato	18	17	17	_	-	_	100.0	100.0	_	-	_
Lamotrek	57	57	57	_	_	_	100.0	100.0	_	_	_
Satawal	107	107	46	-	60	1	100.0	43.0	-	56.1	0.9
2000 G											
2000 Census	2.246	2.020	1.750	120	160		100.0	96.3	5.0	7.0	
Total	2,246	2,030	1,750	120	160	-	100.0	86.2	5.9	7.9	-
Yap Proper	1,541	1,413	1,183	120	110	-	100.0	83.7	8.5	7.8	-
Rumung	43	26	25	-	1	-	100.0	96.2	-	3.8	-
Maap	115	115	113	-	2	-	100.0	98.3	-	1.7	-
Gagil	177	158	150	3	5	-	100.0	94.9	1.9	3.2	-
Tomil	223	194	173	6	15	-	100.0	89.2	3.1	7.7	-
Fanif	105	101	93	1	7	-	100.0	92.1	1.0	6.9	-
Weloy	256	231	197	24	10	-	100.0	85.3	10.4	4.3	-
Rull	430	407	257	84	66	-	100.0	63.1	20.6	16.2	-
Gilman	53	53	51	1	1	-	100.0	96.2	1.9	1.9	-
Kanifay	60	57	56	-	1	-	100.0	98.2	-	1.8	-
Dalipebinaw	79	71	68	1	2	-	100.0	95.8	1.4	2.8	-
Outer Islands	705	617	567	-	50	-	100.0	91.9	-	8.1	-
Ulithi	176	149	127	-	22	-	100.0	85.2	-	14.8	-
Fais/Sorol	48	44	29	-	15	-	100.0	65.9	-	34.1	-
Ngulu	6	6	6	-	-	-	100.0	100.0	-	-	-
Woleai	119	119	111	-	8	-	100.0	93.3	-	6.7	-
Eauripik	14	12	12	-	-	-	100.0	100.0	-	-	-
Ifalik	82	82	82	-	-	-	100.0	100.0	-	-	-
Faraulap	66	42	42	-	-	-	100.0	100.0	-	-	-
Elato	18	14	14	-	-	-	100.0	100.0	-	-	-
Lamotrek	64	55	55	-	-	-	100.0	100.0	-	-	-
Satawal	112	94	89	-	5	-	100.0	94.7	-	5.3	-

Source: 1994 and 2000 FSM Censuses, Table H06 Note: In 2000, the "others" category was imputed.

The year of construction provides the age of housing units in Yap. Table 12.3 shows that 17 percent (about 2 out of every 12) of the housing units in Yap were constructed in the 5 years preceding the 2000 census. Another 28 percent were constructed between 1988 and 1995.

The distributions for years of construction for Yap Proper and Outer Islands were similar. That is, slightly less than half of the housing units were constructed in recent years. On Yap Proper, Rull and Tomil had the most recently constructed, after 1994. For the Outer Islands, Faraulap and Fais had the most houses constructed after 1994. Sorol, Ngulu, Eauripik and Elato, on the other hand, had no houses constructed during this period. Because housing unit construction is relatively easy on Yap, particularly in the outlying areas of Yap Proper and in the Outer Islands, where construction materials are often made primarily from thatch, or plywood and metal, houses can be easily built and replaced when needed.

Table 12.3: Year of Construction of All Housing Units by Municipality, Yap State: 2000

					Numl	ber									Perc	ent				
		1999-	1995-	1990-	1985-	1980-	1970-	1960-	Before	Don't		1999-	1995-	1990-	1985-	1980-	1970-	1960-	Before	Don't
Municipality	Total	2000	1998	1994	1989	1984	1979	1969	1960	Know	Total	2000	1998	1994	1989	1984	1979	1969	1960	Know
Total	2,246	102	283	305	315	465	294	107	96	279	100.0	4.5	12.6	13.6	14.0	20.7	13.1	4.8	4.3	12.4
Yap Proper	1,541	79	227	201	212	346	188	69	46	173	100.0	5.1	14.7	13.0	13.8	22.5	12.2	4.5	3.0	11.2
Rumung	43	5	8	11	7	6	1	1	1	3	100.0	11.6	18.6	25.6	16.3	14.0	2.3	2.3	2.3	7.0
Maap	115	6	17	17	23	32	13	-	1	6	100.0	5.2	14.8	14.8	20.0	27.8	11.3	-	0.9	5.2
Gagil	177	15	26	33	20	45	26	8	1	3	100.0	8.5	14.7	18.6	11.3	25.4	14.7	4.5	0.6	1.7
Tomil	223	15	41	25	29	57	28	4	6	18	100.0	6.7	18.4	11.2	13.0	25.6	12.6	1.8	2.7	8.1
Fanif	105	6	14	10	22	23	12	5	6	7	100.0	5.7	13.3	9.5	21.0	21.9	11.4	4.8	5.7	6.7
Weloy	256	8	30	34	30	58	35	9	10	42	100.0	3.1	11.7	13.3	11.7	22.7	13.7	3.5	3.9	16.4
Rull	430	8	47	48	62	83	57	26	15	84	100.0	1.9	10.9	11.2	14.4	19.3	13.3	6.0	3.5	19.5
Gilman	53	5	4	4	11	17	4	5	-	3	100.0	9.4	7.5	7.5	20.8	32.1	7.5	9.4	-	5.7
Kanifay	60	7	17	5	3	5	7	6	4	6	100.0	11.7	28.3	8.3	5.0	8.3	11.7	10.0	6.7	10.0
Dalipebinaw	79	4	23	14	5	20	5	5	2	1	100.0	5.1	29.1	17.7	6.3	25.3	6.3	6.3	2.5	1.3
Outer Islands	705	23	56	104	103	119	106	38	50	106	100.0	3.3	7.9	14.8	14.6	16.9	15.0	5.4	7.1	15.0
Ulithi	176	5	7	11	16	45	31	5	5	51	100.0	2.8	4.0	6.3	9.1	25.6	17.6	2.8	2.8	29.0
Fais/Sorol	48	4	14	3	5	10	-	-	1	11	100.0	8.3	29.2	6.3	10.4	20.8	-	-	2.1	22.9
Ngulu	6	-	-	-	-	-	1	-	3	2	100.0	-	-	-	-	-	16.7	-	50.0	33.3
Woleai	119	5	3	9	11	17	22	13	12	27	100.0	4.2	2.5	7.6	9.2	14.3	18.5	10.9	10.1	22.7
Eauripik	14	-	-	-	-	-	2	1	8	3	100.0	-	-	-	-	-	14.3	7.1	57.1	21.4
Ifalik	82	2	2	11	2	22	30	9	-	4	100.0	2.4	2.4	13.4	2.4	26.8	36.6	11.0	-	4.9
Faraulap	66	2	18	17	6	2	3	5	8	5	100.0	3.0	27.3	25.8	9.1	3.0	4.5	7.6	12.1	7.6
Elato	18	-	-	13	1	-	2	-	2	-	100.0	-	-	72.2	5.6	-	11.1	-	11.1	-
Lamotrek	64	2	2	35	8	3	6	2	6	-	100.0	3.1	3.1	54.7	12.5	4.7	9.4	3.1	9.4	-
Satawal	112	3	10	5	54	20	9	3	5	3	100.0	2.7	8.9	4.5	48.2	17.9	8.0	2.7	4.5	2.7

Source: 2000 FSM Census, Table H01

Structural Characteristics

Description of buildings indicates structural characteristics of single-family homes and of small or large apartment buildings. The data collected could be used as an aid in planning for extension of utility lines, schools and playgrounds, and other environmental needs.

Table 12.4 presents occupied housing units by type of the housing unit in the structure (that is, whether the housing unit is detached from other housing units or not). About 87 percent of all housing unit in Yap in 2000 were single detached structures compared to about 92 percent in 1994. The proportion for housing units attached to one or more housing units was higher in 2000 at about 8 percent. Furthermore, the data also showed an increase in all apartment units from about 2 percent in 1994 to about 5 percent in 2000.

Table 12.4: Occupied Housing Units by Number of Units per Structure, Yap State: 1994 and 2000

	1994 Ce	nsus	2000	Census
Units in structure	Number	Percent	Number	Percent
Occupied Housing Units	1,925	100.0	2,030	100.0
One detached	1,761	91.5	1,770	87.2
1 or more attached	117	6.1	156	7.7
Building with 2 apartments.	18	0.9	10	0.5
Building with 3 or 4 apartments	11	0.6	36	1.8
Building with 5 or more apartments	13	0.7	44	2.2
Others	5	0.3	14	0.7

Source: 1994 & 2000 FSM Censuses, Table H01 and unpublished data.

The distribution of occupied housing by number of units in a structure for the municipalities is presented in Table 12.5. The most common type of unit structure in both Yap and Outer Islands was the one unit structure. About 86 percent of the housing units on Yap Proper in 2000 were one-detached housing structures, whereas in the Outer Islands it was about 91 percent. This pattern of occupied housing unit distribution was similar to 1994 when one-detached housing unit comprised about 88 percent of all on housing units on Yap Proper and about 97 percent in the

Outer Islands. This is not surprising as multiple-unit structures (i.e., apartment buildings) were most likely to be located on Yap Proper.

Table 12.5: Occupied Housing Units by Number of Units per Structure and Municipality, Yap State: 1994 and 2000

_	1994 Census									2000 (Census			
-	Occupied		One	Bldg.	Bldg.	Bldg.		Occupied		One	Bldg.	Bldg.	Bldg.	
	housing	One	or more	with	with 3	with 5		housing	One,	or more	with	with 3	with 5	
Municipality	units	detached	attached	2 apt.	or 4 apt.	or more	Others	units	detached	attached	2 apt.	or 4 apt.	or more	Others
Total	1,925	1,761	117	18	11	13	5	2,030	1,770	156	10	36	44	14
Yap Proper	1,291	1,147	112	15	9	6	2	1,413	1,210	114	8	32	38	11
Rumung	27	27	-	-	-	-	-	26	26	-	-	-	-	-
Maap	114	105	6	1	1	-	1	115	110	4	-	-	-	1
Gagil	136	133	1	-	1	1	-	158	136	21	-	-	1	-
Tomil	168	164	3	1	-	-	-	194	166	13	2	2	11	-
Fanif	96	88	8	-	-	-	-	101	98	3	-	-	-	-
Weloy	219	197	14	5	1	1	1	231	179	36	-	12	2	2
Rull	382	299	67	7	5	4	-	407	321	30	6	18	24	8
Gilman	41	41	-	-	-	-	-	53	47	6	-	-	-	-
Kanifay	46	31	13	1	1	-	-	57	57	-	-	-	-	-
Dalipebinaw	62	62	-	-	-	-	-	71	70	1	-	-	-	-
Outer Islands	634	614	5	3	2	7	3	617	560	42	2	4	6	3

Source: 1994 & 2000 FSM Censuses, Table H01 and unpublished data.

The number of rooms provides the basis for estimating the amount of living and sleeping space in a housing unit. Table 12.6 presents the distribution of occupied housing units by number of rooms in a structure for the 1980, 1994 and 2000 censuses. The number housing units with one and two-room decreased slightly over the census years observed, whereas housing units with 3 or more rooms increased. The increase in the number of larger housing units may imply a better living standard in recent years. The availability housing loan packages provided by federal and local housing programs may have also enabled more people to build bigger and multiple-room houses. The median number of rooms per unit increased from 1.7 in 1980 to 2.8 in 2000.

Table 12.6: Rooms per Occupied Housing Units, Yap State: 1980, 1994 and 2000

	N	Number		Percent char	nge	I	Percent	
Rooms	1980	1994	2000	1980-1994	1994-2000	1980	1994	2000
Occupied Housing Units	1,608	1,925	2,030	19.7	5.5	100.0	100.0	100.0
1 room	694	681	690	-1.9	1.3	43.2	35.4	34.0
2 rooms	431	421	410	-2.3	-2.6	26.8	21.9	20.2
3 rooms	301	377	400	25.2	6.1	18.7	19.6	19.7
4 rooms	117	213	263	82.1	23.5	7.3	11.1	13.0
5 rooms	44	140	184	218.2	31.4	2.7	7.3	9.1
6 rooms	13	61	51	369.2	-16.4	0.8	3.2	2.5
7 rooms	1	20	16	1,900.0	-20.0	0.1	1.0	0.8
8+ rooms	7	12	16	71.4	33.3	0.4	0.6	0.8
Median	1.7	2.7	2.8					

Source: 1980 TTPI Census; 1994 & 2000 FSM Censuses, Table H02 and unpublished data.

Table 12.7 compares number of rooms in occupied housing units between the regions. The housing units on Yap Proper were more likely to have more rooms than the Outer Islands. The average rooms per unit on Yap Proper in 2000 were 3.5, compared to 1.6 in the Outer Islands; about the same proportions as in 1994. Housing units with the most rooms and the highest medians are most likely to be located in the municipalities composing Colonia (Rull and Weloy).

Table 12.7: Number of Rooms per Occupied Housing Unit by Region, Yap State: 1994 and 2000

					1994	Census	;								200	0				
Municipality	Total	1	2	3	4	5	6	7	8+	Median	Total	1	2	3	4	5	6	7	8+	Median
Total	1,925	681	421	377	213	140	61	20	12	2.7	2,030	690	410	400	263	184	51	16	16	2.8
Yap Proper	1,291	189	337	339	201	135	60	18	12	3.4	1,413	181	339	386	252	175	51	14	15	3.5
Rumung	27	14	7	4	1	1	-	-	-	2.0	26	9	11	3	1	2	-	-	-	2.4
Maap	114	25	43	28	9	7	1	1	-	2.7	115	23	38	31	13	9	-	1	-	2.9
Gagil	136	32	29	38	16	13	6	1	1	3.2	158	23	43	50	17	18	5	-	2	3.3
Tomil	168	30	50	48	20	10	7	1	2	3.1	194	36	48	55	28	16	5	3	3	3.2
Fanif	96	6	19	23	19	12	10	6	1	4.0	101	9	14	29	23	14	7	3	2	3.9
Weloy	219	22	55	60	47	26	7	-	2	3.5	231	13	60	59	49	31	12	3	4	3.7
Rull	382	46	80	103	66	55	21	8	3	3.6	407	44	71	110	94	63	17	4	4	3.8
Gilman	41	1	6	11	12	5	5	-	1	4.2	53	8	8	14	8	12	3	-	-	3.8
Kanifay	46	7	20	9	5	3	-	-	2	2.8	57	9	26	11	7	3	1	-	-	2.8
Dalipebinaw	62	6	28	15	6	3	3	1	-	2.9	71	7	20	24	12	7	1	-	-	3.4
Outer Islands	634	492	84	38	12	5	1	2	-	1.6	617	509	71	14	11	9	-	2	1	1.6

Source: 1994 & 2000 FSM Censuses, Table H02 and unpublished data.

The number of bedrooms was used in combination with number of occupants to provide a measure of crowding. Builders and planners use this information to find out how much additional housing is needed to relieve crowded housing conditions.

Table 12.8 compares the number of bedrooms in occupied housing units enumerated during the 1980, 1994 and 2000 censuses and the percentage change over the observed period. A similar pattern using number of rooms was found using number of bedrooms. Between 1980 and 2000, both the number and proportion of housing units with 3 or more rooms had generally increased. This reflects the improvements in living standards in the state in recent years. The number of housing units with 1 or 2 rooms also increased in number but declined in proportion. The median number of bedrooms was about 2 in all the census years.

Table 12.8: Number of Bedrooms per Housing Units of All Units, Yap State: 1980, 1994 and 2000

]	Number		Percent of	change		Percent	
Bedrooms	1980	1994	2000	1980-1994	1994-2000	1980	1994	2000
Total Housing Units	1,906	1,980	2,246	3.7	11.8	100.0	100.0	100.0
1 bedroom	918	864	973	-6.3	11.2	48.2	43.6	43.3
2 bedrooms	524	620	689	15.5	10.0	27.5	31.3	30.7
3 bedrooms	327	352	413	7.1	14.8	17.2	17.8	18.4
4 bedrooms	100	109	125	8.3	12.8	5.2	5.5	5.6
5+ bedrooms	37	35	46	-5.7	23.9	1.9	1.8	2.0
Median	1.7	2.2	2.2			•••		

Source: 1980 TTPI Census; 1994 & 2000 FSM Censuses, Table H02

Table 12.9 further shows the distribution of bedrooms in housing units in the regions for the 1994 and 2000 censuses. While most of the housing units on Yap Proper had two or three bedrooms (about 66 percent during the two censuses), the housing units in the Outer islands were most likely to be one-bedroom units (81 and 88 percent in 1994 and 2000, respectively). This showed that multiple-bedroom units were more common on Yap Proper than in the Outer islands.

Table 12.9: Number of Bedrooms of All Housing Units by Municipality, Yap State: 1994 and 2000

			1994					20	00			
Municipality	Total	1	2	3	4	5+	Total	1	2	3	4	5+
Number	1,980	864	620	352	109	35	2,246	973	689	413	125	46
Yap Proper	1,292	308	528	320	101	35	1,541	356	621	403	117	44
Rumung	27	14	7	4	2	-	43	22	15	4	1	1
Maap	114	33	54	23	4	-	115	27	49	32	5	2
Gagil	136	38	48	35	9	6	177	40	65	51	16	5
Tomil	168	40	62	47	13	6	223	63	86	53	12	9
Fanif	96	10	29	33	14	10	105	13	35	31	18	8
Weloy	219	48	94	61	14	2	256	51	108	70	20	7
Rull	383	105	150	94	29	5	430	93	173	118	35	11
Gilman	41	2	20	10	7	2	53	10	20	17	5	1
Kanifay	46	10	24	7	3	2	60	18	29	10	3	-
Dalipebinaw	62	8	40	6	6	2	79	19	41	17	2	-
Outer Islands	688	556	92	32	8	-	705	617	68	10	8	2
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Yap Proper	65.3	35.6	85.2	90.9	92.7	100.0	68.6	36.6	90.1	97.6	93.6	95.7
Rumung	1.4	1.6	1.1	1.1	1.8	0.0	1.9	2.3	2.2	1.0	0.8	2.2
Maap	5.8	3.8	8.7	6.5	3.7	0.0	5.1	2.8	7.1	7.7	4.0	4.3
Gagil	6.9	4.4	7.7	9.9	8.3	17.1	7.9	4.1	9.4	12.3	12.8	10.9
Tomil	8.5	4.6	10.0	13.4	11.9	17.1	9.9	6.5	12.5	12.8	9.6	19.6
Fanif	4.8	1.2	4.7	9.4	12.8	28.6	4.7	1.3	5.1	7.5	14.4	17.4
Weloy	11.1	5.6	15.2	17.3	12.8	5.7	11.4	5.2	15.7	16.9	16.0	15.2
Rull	19.3	12.2	24.2	26.7	26.6	14.3	19.1	9.6	25.1	28.6	28.0	23.9
Gilman	2.1	0.2	3.2	2.8	6.4	5.7	2.4	1.0	2.9	4.1	4.0	2.2
Kanifay	2.3	1.2	3.9	2.0	2.8	5.7	2.7	1.8	4.2	2.4	2.4	0.0
Dalipebinaw	3.1	0.9	6.5	1.7	5.5	5.7	3.5	2.0	6.0	4.1	1.6	0.0
Outer Islands	34.7	64.4	14.8	9.1	7.3	0.0	31.4	63.4	9.9	2.4	6.4	4.3

Source: 1994 and 2000 FSM Censuses, Table H02.

Type of materials used for roofs, walls, and foundation are used to determine the structural composition of housing and as indicators of housing conditions, including those that might endanger the health and safety of the occupants. Table 12.10 describes the material used for roofing in housing units from 1980 to 2000 censuses. The number and proportion of housing units with concrete and metal roof increased while those units with wood, thatch and other declined, suggesting the people are more likely to build safer and more permanent housing units in recent years. In all census years, roofing for houses was mainly made of corrugated iron or metal and thatch.

Table 12.10: Material Used for Roof of All Housing Units, Yap State: 1980, 1994 and 2000

		Number		Percent cha	ange		Percent	
Type of materials	1980	1994	2000	1980-1994	1994-2000	1980	1994	2000
Housing units	1,906	1,980	2,246	3.9	13.4	100.0	100.0	100.0
Poured concrete	48	101	109	110.4	7.9	2.5	5.1	4.9
Metal	1,148	1,427	1,643	24.3	15.1	60.2	72.1	73.2
Wood	34	8	13	-76.5	62.5	1.8	0.4	0.6
Thatch	635	429	470	-32.4	9.6	33.3	21.7	20.9
Others	41	15	11	-63.4	-26.7	2.2	0.8	0.5

Source: 1980 TTPI Census; 1994 & 2000 FSM Censuses, Table H01

Table 12.11 further compares materials used for roofing in housing units by municipality in the 1994 and 2000 censuses. Roofing of housing units differ between the regions. Similar to the overall pattern, the most used type of roofing in Yap Proper was metal, at over 86 percent in both years. Also, the proportion of housing units with concrete roofing had increased while those with other materials such as wood and thatch declined. For the Outer Islands, housing units were more likely to have roofing of other materials (wood, thatch, etc). Only a small proportion, over 6 percent, of housing units had concrete roof in both years.

Table 12.11: Materials Used for Roof of All Housing Units by Region, Yap State: 1994 and 2000

											20	00			
	Num	ber							Nur	nber			Pero	cent	
	Poured				Poured				Poured				Poured		
Total c	oncrete	Metal	Others	Total	concrete	Metal	Others	Total	concrete	Metal	Others	Total o	oncrete	Metal	Others
1,980	101	1,427	452	100.0	5.1	72.1	22.8	2,246	109	1,643	494	100.0	4.9	73.2	22.0
1,292	31	1,142	119	100.0	2.4	88.4	9.2	1,541	64	1,338	139	100.0	4.2	86.8	9.0
27	-	22	5	100.0	-	81.5	18.5	43	1	32	10	100.0	2.3	74.4	23.3
114	2	85	27	100.0	1.8	74.6	23.7	115	1	98	16	100.0	0.9	85.2	13.9
136	3	122	11	100.0	2.2	89.7	8.1	177	5	158	14	100.0	2.8	89.3	7.9
168	2	148	18	100.0	1.2	88.1	10.7	223	4	195	24	100.0	1.8	87.4	10.8
96	6	79	11	100.0	6.3	82.3	11.5	105	4	93	8	100.0	3.8	88.6	7.6
219	8	202	9	100.0	3.7	92.2	4.1	256	15	222	19	100.0	5.9	86.7	7.4
383	7	352	24	100.0	1.8	91.9	6.3	430	29	379	22	100.0	6.7	88.1	5.1
41	2	38	1	100.0	4.9	92.7	2.4	53	2	43	8	100.0	3.8	81.1	15.1
46	-	37	9	100.0	-	80.4	19.6	60	1	47	12	100.0	1.7	78.3	20.0
62	1	57	4	100.0	1.6	91.9	6.5	79	2	71	6	100.0	2.5	89.9	7.6
688	49	285	354	100.0	6.9	41.4	51.6	705	45	305	355	100.0	6.4	43.3	50.4
	Total c 1,980 1,292 27 114 136 168 96 219 383 41 46 62	Num Poured Total concrete 1,980 101 1,292 31 27 - 114 2 136 3 168 3 296 6 219 8 383 7 41 2 46 - 62 1	Number Poured	Number Poured Total concrete Metal Others 1,980 101 1,427 452 1,292 31 1,142 119 27 -	Number Poured Total concrete Metal Others Total 1,980 101 1,427 452 100.0 1,292 31 1,142 119 100.0 27 -	Number Perce Poured Poured Total concrete 1,980 101 1,427 452 100.0 5.1 1,292 31 1,142 119 100.0 2.4 27 - 22 5 100.0 - 114 2 85 27 100.0 1.8 136 3 122 11 100.0 2.2 168 2 148 18 100.0 1.2 96 6 79 11 100.0 6.3 219 8 202 9 100.0 3.7 383 7 352 24 100.0 1.8 41 2 38 1 100.0 4.9 46 - 37 9 100.0 - 62 1 57 4 100.0 1.6	Number Percent Poured Total concrete Metal Others Total concrete Metal 1,980 101 1,427 452 100.0 5.1 72.1 1,292 31 1,142 119 100.0 2.4 88.4 27 - 22 5 100.0 - 81.5 114 2 85 27 100.0 1.8 74.6 136 3 122 11 100.0 2.2 89.7 168 2 148 18 100.0 1.2 88.1 96 6 79 11 100.0 6.3 82.3 219 8 202 9 100.0 3.7 92.2 383 7 352 24 100.0 1.8 91.9 41 2 38 1 100.0 4.9 92.7 46 - 37	Number Percent Poured Poured Total concrete Metal Others 1,980 101 1,427 452 100.0 5.1 72.1 22.8 1,292 31 1,142 119 100.0 2.4 88.4 9.2 27 - 22 5 100.0 - 81.5 18.5 114 2 85 27 100.0 1.8 74.6 23.7 136 3 122 11 100.0 2.2 89.7 8.1 168 2 148 18 100.0 1.2 88.1 10.7 96 6 79 11 100.0 6.3 82.3 11.5 219 8 202 9 100.0 3.7 92.2 4.1 383 7 352 24 100.0 1.8 91.9 6.3 41 <td< td=""><td>Number Percent Poured Poured Total concrete Metal Others Total concrete Metal Others Total 1,980 101 1,427 452 100.0 5.1 72.1 22.8 2,246 1,292 31 1,142 119 100.0 2.4 88.4 9.2 1,541 27 - 22 5 100.0 - 81.5 18.5 43 114 2 85 27 100.0 1.8 74.6 23.7 115 136 3 122 11 100.0 2.2 89.7 8.1 177 168 2 148 18 100.0 1.2 88.1 10.7 223 96 6 79 11 100.0 6.3 82.3 11.5 105 219 8 202 9 100.0 3.7 92.2 4.1<td> Number</td><td>Number Percent Number Poured Metal Others Total concrete Metal 1,643 1,643 1,643 1,643 1,643 1,643 </td></td></td<>	Number Percent Poured Poured Total concrete Metal Others Total concrete Metal Others Total 1,980 101 1,427 452 100.0 5.1 72.1 22.8 2,246 1,292 31 1,142 119 100.0 2.4 88.4 9.2 1,541 27 - 22 5 100.0 - 81.5 18.5 43 114 2 85 27 100.0 1.8 74.6 23.7 115 136 3 122 11 100.0 2.2 89.7 8.1 177 168 2 148 18 100.0 1.2 88.1 10.7 223 96 6 79 11 100.0 6.3 82.3 11.5 105 219 8 202 9 100.0 3.7 92.2 4.1 <td> Number</td> <td>Number Percent Number Poured Metal Others Total concrete Metal 1,643 1,643 1,643 1,643 1,643 1,643 </td>	Number	Number Percent Number Poured Metal Others Total concrete Metal 1,643 1,643 1,643 1,643 1,643 1,643				

Source: 1994 and 2000 FSM Censuses, Table H01

Table 12.12 presents materials used for walls in housing units in 1980, 1994 and 2000. In 1994 and 2000 less than 1 percent of the housing units in Yap had no walls compared to 11 percent in 1980. On the other hand, the proportion for housing units with concrete walls increased from 22 percent in 1994 to 26 percent in 2000, suggesting improvement in housing conditions over recent years.

Table 12.12: Materials Used for Walls of All Housing Units, Yap State: 1980, 1994 and 2000

		Number		Percent cha	ange		Percent	
Type of materials	1980	1994	2000	1980-1994	1994-2000	1980	1994	2000
Housing units	1,906	1,980	2,246	3.9	13.4	100.0	100.0	100.0
Concrete	161	428	579	165.8	35.3	8.4	21.6	25.8
Poured concrete	68	197	267	189.7	35.5	3.6	9.9	11.9
Concrete blocks	93	231	312	148.4	35.1	4.9	11.7	13.9
Metal	882	950	1,037	7.7	9.2	46.3	48.0	46.2
Wood	610	498	398	-18.4	-20.1	32.0	25.2	17.7
No walls	213	5	5	-97.7	-	11.2	0.3	0.2
Others	40	99	227	147.5	129.3	2.1	5.0	10.1

Source: 1980 TTPI Census; 1994 & 2000 FSM Censuses, Table H01

Table 12.13 further compares materials used for walls in housing units between the regions in 1994 and 2000. In both years, majority of housing units in all the municipalities on Yap Proper had metal/tin walls. In 2000, at least 53 percent housing units in the municipalities on Yap Proper had metal/tin walls. For the Outer Islands municipalities (except Ulithi and Fais) most housing units had walls made of other materials such as wood, bamboo, thatch, etc. About 65 percent of the housing units in the Outer Islands had wall materials of wood and other materials comprised. However, housing units with concrete walls had increase in both number and proportion in both regions.

Table 12.13: Materials Used for Walls of All Housing Units by Municipality, Yap State: 1994 and 2000

				199)4							2	000			
		Num	ber			Percer	nt			Num	ber			Perce	nt	
	Total			Wood	Total			Wood	Total			Wood	Total			Wood
	housing	Con-		&	housing	Con-		&	housing	Con-		&	housing	Con-		&
Municipality	units	crete	Metal	others	units	crete	Metal	others	units		Metal		units	crete		
Total	1,980	428	950	602	100.0	21.6	48.0	30.4	2,246	579	1,037	630	100.0	25.8	46.2	28.0
Yap Proper	1,292	289	871	132	100.0	22.4	67.4	10.2	1,541	424	947	170	100.0	27.5	61.5	11.0
Rumung	27	2	21	4	100.0	7.4	77.8	14.8	43	5	33	5	100.0	11.6	76.7	11.6
Maap	114	17	73	24	100.0	14.9	64.0	21.1	115	21	78	16	100.0	18.3	67.8	13.9
Gagil	136	39	84	13	100.0	28.7	61.8	9.6	177	52	108	17	100.0	29.4	61.0	9.6
Tomil	168	21	133	14	100.0	12.5	79.2	8.3	223	56	137	30	100.0	25.1	61.4	13.5
Fanif	96	28	58	10	100.0	29.2	60.4	10.4	105	35	63	7	100.0	33.3	60.0	6.7
Weloy	219	33	162	24	100.0	15.1	74.0	11.0	256	56	163	37	100.0	21.9	63.7	14.5
Rull	383	118	231	34	100.0	30.8	60.3	8.9	430	154	228	48	100.0	35.8	53.0	11.2
Gilman	41	12	29	-	100.0	29.3	70.7	-	53	13	36	4	100.0	24.5	67.9	7.5
Kanifay	46	10	34	2	100.0	21.7	73.9	4.3	60	19	38	3	100.0	31.7	63.3	5.0
Dalipebinaw	62	9	46	7	100.0	14.5	74.2	11.3	79	13	63	3	100.0	16.5	79.7	3.8
Outer Islands	688	118	79	491	100.0	17.2	11.5	71.4	705	155	90	460	100.0	22.0	12.8	65.2
Ulithi	178	74	46	58	100.0	41.6	25.8	32.6	176	83	43	50	100.0	47.2	24.4	28.4
Fais/Sorol	45	10	18	17	100.0	22.2	40.0	37.8	48	17	17	14	100.0	35.4	35.4	29.2
Ngulu	11	1	1	9	100.0	9.1	9.1	81.8	6	-	1	5	-	-	16.7	83.3
Woleai	101	9	4	88	100.0	8.9	4.0	87.1	119	19	15	85	100.0	16.0	12.6	71.4
Eauripik	35	1	3	31	100.0	2.9	8.6	88.6	14	-	-	14	-	-	-	100.0
Ifalik	75	4	1	70	100.0	5.3	1.3	93.3	82	6	-	76	-	7.3	-	92.7
Faraulap	61	1	1	59	100.0	3.3	1.6	95.1	66	2	5	59	100.0	3.0	7.6	89.4
Elato	18	2	-	16	100.0	11.1	-	88.9	18	2	1	15	100.0	11.1	5.6	83.3
Lamotrek	57	9	3	45	100.0	15.8	5.3	78.9	64	9	3	52	100.0	14.1	4.7	81.3
Satawal	107	7	2	98	100.0	6.5	1.9	91.6	112	17	5	90	100.0	15.2	4.5	80.4

Source: 2000 FSM Censuses, Table H01

Table 12.14 presents type of materials used for foundation of housing units in 1994 and 2000. Around 9 out of every 10 houses of all housing units in Yap in 2000 (89 percent) had foundations made of concrete or wood/pier/piling compared to about 8 out of every 10 in 1994 (83 percent). Units with stone or coral foundation accounted for the remaining 12 percent of the housing units in 2000 and about 17 percent in 1994. Likewise, most housing units on Yap Proper had and the Outer Islands had concrete or wood/pier/piling in both years.

Table 12.14: Materials Used for Foundation of All Housing Units by Municipality, Yap State: 1994 and 2000

				199	94								20	000			
		Nui	mber			Perc	ent				Num	ber			Per	cent	
	Total		Wood/		Total		Wood/			Total		Wood/		Total		Wood/	
	housing	Con-	pier/	Stone/	housing	Con-	pier/	Stone/	ŀ	housing	Con-	pier/	Stone/	housing	Con-	pier/	Stone/
Municipality	units	crete	piling	coral	units	crete	piling	coral		units	crete	piling	coral	units	crete	piling	coral
Total	1,980	863	778	339	100.0	43.6	39.3	17.1		2,246	1,151	827	268	100.0	51.2	36.8	11.9
Yap Proper	1,292	588	629	75	100.0	45.5	48.7	5.8		1,541	837	626	78	100.0	54.3	40.6	5.1
Rumung	27	7	16	4	100.0	25.9	59.3	14.8		43	13	24	6	100.0	30.2	55.8	14.0
Maap	114	43	60	11	100.0	37.7	52.6	9.6		115	54	40	21	100.0	47.0	34.8	18.3
Gagil	136	67	60	9	100.0	49.3	44.1	6.6		177	96	71	10	100.0	54.2	40.1	5.6
Tomil	168	57	99	12	100.0	33.9	58.9	7.1		223	128	86	9	100.0	57.4	38.6	4.0
Fanif	96	52	28	16	100.0	54.2	`	16.7		105	68	33	4	100.0	64.8	31.4	3.8
Weloy	219	89	124	6	100.0	40.6	56.6	2.7		256	121	130	5	100.0	47.3	50.8	2.0
Rull	383	199	176	8	100.0	52.0	46.0	2.1		430	250	164	16	100.0	58.1	38.1	3.7
Gilman	41	35	5	1	100.0	85.4	12.2	2.4		53	39	13	1	100.0	73.6	24.5	1.9
Kanifay	46	19	20	7	100.0	41.3	43.5	15.2		60	32	26	2	100.0	53.3	43.3	3.3
Dalipebinaw	62	20	41	1	100.0	32.3	66.1	1.6		79	36	39	4	100.0	45.6	49.4	5.1
Outer Islands	688	275	149	264	100.0	40.0	21.7	38.4		705	314	201	190	100.0	44.5	28.5	27.0
Ulithi	178	99	57	22	100.0	55.6	32.0	12.4		176	115	46	15	100.0	65.3	26.1	8.5
Fais/Sorol	45	20	18	7	100.0	44.4	40.0	15.6		48	23	25	-	-	47.9	52.1	-
Ngulu	11	1	2	8	100.0	9.1	18.2	72.7		6	1	-	5		16.7		83.3
Woleai	101	14	6	81	100.0	13.9	5.9	80.2		119	41	23	55	100.0	34.5	19.3	46.2
Eauripik	35	-	8	27	100.0	-	22.9	77.1		14	-	-	14	-	-	-	100.0
Ifalik	75	7	3	65	100.0	9.3	4.0	86.7		82	8	40	34	100.0	9.8	48.8	41.5
Faraulap	61	27	18	16	100.0	44.3	29.5	26.2		66	8	28	30	100.0	12.1	42.4	45.5
Elato	18	10	-	8	100.0	55.6	-	44.4		18	12	4	2	100.0	66.7	22.2	11.1
Lamotrek	57	39	2	16	100.0	68.4	3.5	28.1		64	43	-	21	-	67.2	_	32.8
Satawal	107	58	35	14	100.0	54.2	32.7	13.1		112	63	35	14	100.0	56.3	31.3	12.5

Source: 1994 and 2000 FSM Censuses, Table H01

Utilities

Data on electric power and air conditioning are useful in planning and assessing power consumption, living conditions, and housing quality. Such data are also useful in planning rural electrification programs and seeking alternative economical power sources.

Table 12.15 presents distribution of housing units by availability of electric power in the unit, during the 1980, 1994 and 2000 censuses. In general, electrical distribution improved significantly in the state between 1980 and 2000. The proportion of housing unit with electric power increased from 41 percent in 1980 to 57 percent in 2000. In other words, close to 6 out of every 10 houses in the state had electrical power in 2000 compared to about 4 out of every 10 in 1994. Among the houses with electricity in 1980, about 35 percent of the electric power was provided by public utility. The corresponding share for public utility increased to about 53 percent in 1994 then further increased to 57 percent in 2000, an increase of about 55 percent between 1980 and 1994 and about 22 percent between 1994 and 2000. The proportion of housing units with no electricity, on the other hand, decreased by more than 17 percentage points during this period, from about 59 percent in 1980 to about 42 percent in 2000.

Table 12.15: Electric Power Source of All Housing Units, Yap State: 1980, 1994 and 2000

		Number		Percent c	hange		Percent	
Electric power	1980	1994	2000	1980-1994	1994-2000	1980	1994	2000
Housing units	1,906	1,980	2,246	3.9	13.4	100.0	99.5	98.5
With electricity	780	1,048	1,281	34.4	22.2	40.9	52.9	57.0
Public utility	674	1,043	1,273	54.7	22.1	35.4	52.7	56.7
Generator	106	5	8	-95.3	60.0	5.6	0.3	0.4
Solar power	-	10	34	-	240.0	_	0.5	1.5
No electricity	1,126	922	931	-18.1	1.0	59.1	46.6	41.5

Source: 1980 TTPI Census; 1994 & 2000 FSM Censuses, Table H04

Table 12.16 compares the availability of electricity and air conditioners in the regions. In 2000, about 75 percent of all housing units on Yap Proper had electricity in 2000, increasing from 70 percent in 1994. Similarly, the proportion of housing units with electricity declined slightly from 20 percent to 18 percent over the same period. The number of units with air conditioning also increased between 1994 and 2000 in both regions. The number of units with air-conditioning more than doubled while it remained about the same in the Outer Islands. The few air-conditioned housing units in the Outer Islands were mostly located in Ulithi. These observed differences between the regions may suggest that living standards in Yap Proper had improved in recent years, at least in terms of modern amenities.

Table 12.16: Electricity and Air Condition of All Housing Units by Municipality, Yap State: 1994 and 2000

			1994 Census					2000 Census		
		Number		P	ercent		Number		P	ercent
	Total	Elect-	Air	Elect-	Air	Total	Elect-	Air	Elect-	Air
Municipality	housing units	tricity	conditioning	tricity	conditioning	housing units	tricity	conditioning	tricity	conditioning
Total	1,980	1,048	76	52.9	3.8	2,246	1,281	176	57.0	7.8
Yap Proper	1,292	909	71	70.4	5.5	1,541	1,151	170	74.7	11.0
Rumung	27	-	-	-	_	43	4	-	9.3	-
Maap	114	45	2	39.5	1.8	115	68	3	59.1	2.6
Gagil	136	91	4	66.9	2.9	177	118	12	66.7	6.8
Tomil	168	94	5	56.0	3.0	223	161	16	72.2	7.2
Fanif	96	70	2	72.9	2.1	105	82	5	78.1	4.8
Weloy	219	164	12	74.9	5.5	256	200	37	78.1	14.5
Rull	383	338	40	88.3	10.4	430	380	83	88.4	19.3
Gilman	41	36	-	87.8	-	53	43	5	81.1	9.4
Kanifay	46	31	1	67.4	2.2	60	36	3	60.0	5.0
Dalipebinaw	62	40	5	64.5	8.1	79	59	6	74.7	7.6
Outer Islands	688	139	5	20.2	0.7	705	130	6	18.4	0.9

Source: 1994 & 2000 FSM Censuses, Table H04

Table 12.17 summarizes the availability of piped water in all housing units between 1980 and 2000. The number and proportion of housing units with piped water increased significantly over the two decades before 2000. In 1980, only 5 percent of all housing units had piped water, compared to 53 percent in 2000. Much of this increase was due to the increase in units with "cold water only". Even though more and more housing unit had better access to water

recently, close to half (47 percent) of the housing units did not have piped water; thus suggesting water improvement is still a priority for future sanitary development plans.

Table 12.17: Piped Water of All Housing Units, Yap State: 1980, 1994 and 2000

		Number		Percent cl	hange		Percent	
Piped water	1980	1994	2000	1980-1994	1994-2000	1980	1994	2000
Total housing units	1,906	1,980	2,246	3.9	13.4	100.0	100.0	100.0
Piped water	103	1,007	1,192	877.7	18.6	5.4	50.9	53.2
Hot & cold piped water	62	53	101	-14.5	90.6	3.3	2.7	4.5
Cold water only	41	954	1,093	2226.8	14.6	2.2	48.2	48.7
No piped water	1,803	973	1,052	-46.0	8.1	94.6	49.1	46.8

Source: 1980 TTPI Census; 1994 & 2000 FSM Censuses, Table H03

Table 12.18 further examines availability of water supply by municipality as well as the two regions in 1994 and 2000. The proportion of housing units with piped water supply varied significantly among the regions. In 2000, about 9 out of every 10 housing units in the Outer Islands had no piped water, compared to about 3 in every 10 for Yap Proper. Similar proportions between the two regions were also found in 1994. Housing units with hot and cold, and cold water only were mainly found on Yap Proper, with the largest proportions found in Rull and Weloy municipalities, perhaps because of their locations in the Colonia area.

Table 12.18: Water Supply of All Housing Units by Municipality, Yap State: 1994 and 2000

				199	94							2000)			
		Nun	ıber			Perc	ent			Nu	mber			Perce	nt	
	Total	Hot		No	Total	Hot		No	Total	Hot		No	Total	Hot		No
	housing	and	Cold	piped	housing	and	Cold	piped	housing	and	Cold	piped	housing	and	Cold	piped
Municipality	units	cold	only	water	units	cold	only	water	units	cold	only	water	units	cold	only	water
Total	1,980	53	954	973	100.0	2.7	48.2	49.1	2,246	101	1,093	1,052	100.0	4.5	48.7	46.8
Yap Proper	1,292	50	896	346	100.0	3.9	69.3	26.8	1,541	97	1,049	395	100.0	6.3	68.1	25.6
Rumung	27	-	4	23	100.0	-	14.8	85.2	43	-	13	30	100.0	-	30.2	69.8
Maap	114	1	83	30	100.0	0.9	72.8	26.3	115	4	92	19	100.0	3.5	80.0	16.5
Gagil	136	1	92	43	100.0	0.7	67.6	31.6	177	4	124	49	100.0	2.3	70.1	27.7
Tomil	168	1	120	47	100.0	0.6	71.4	28.0	223	15	143	65	100.0	6.7	64.1	29.1
Fanif	96	2	35	59	100.0	2.1	36.5	61.5	105	1	47	57	100.0	1.0	44.8	54.3
Weloy	219	11	137	71	100.0	5.0	62.6	32.4	256	21	156	79	100.0	8.2	60.9	30.9
Rull	383	33	303	47	100.0	8.6	79.1	12.3	430	51	316	63	100.0	11.9	73.5	14.7
Gilman	41	-	38	3	100.0	-	92.7	7.3	53	1	50	2	100.0	1.9	94.3	3.8
Kanifay	46	-	45	1	100.0	-	97.8	2.2	60	-	57	3	100.0	-	95.0	5.0
Dalipebinaw	62	1	39	22	100.0	1.6	62.9	35.5	79	-	51	28	100.0	-	64.6	35.4
Outer Islands	688	3	58	627	100.0	0.4	8.4	91.1	705	4	44	657	100.0	0.6	6.2	93.2
Ulithi	178	1	56	121	100.0	0.6	31.5	68.0	176	2	40	134	100.0	1.1	22.7	76.1
Fais/Sorol	45	-	-	45	100.0	-	-	100.0	48	1	-	47	100.0	2.1	-	97.9
Ngulu	11	-	-	11	100.0	-	-	100.0	6	-	-	6	100.0	-	-	100.0
Woleai	103	2	-	101	100.0	1.9	-	98.1	119	-	2	117	100.0	-	-	100.0
Eauripik	33	-	-	33	100.0	-	-	100.0	14	-	-	14	100.0	-	12.5	87.5
Ifalik	75	-	1	74	100.0	-	1.3	98.7	82	-	-	81	100.0	-	-	100.0
Faraulap	61	-	-	61	100.0	-	-	100.0	66	1	-	66	100.0	1.5	-	98.5
Elato	18	-	-	18	100.0	-	-	100.0	18	-	-	18	100.0	-	-	100.0
Lamotrek	57	-	-	57	100.0	-	-	100.0	64	-	-	64	100.0	-	-	100.0
Satawal	107	-	1	106	100.0	-	0.9	99.1	112	-	2	110	100.0	-	1.8	98.2

Source: 1994 & 2000 FSM Censuses, Table H03

Table 12.19 presents the distribution of housing units in 1980, 1994 and 2000 by source of drinking water. Comparison of the data from the three censuses should be considered with caution because they differ in the level of aggregation, especially in regards to the 1980 census.

With the exception of public & community systems, the proportions of all drinking water sources decreased over the two decades before the 2000 census. Despite the increase in the proportion of public & community systems, it was not the principle source of drinking water in either of the census years. In 1980, the principle source of drinking water was water catchment, tank, and drums accounting, for about 74 percent. Since then, it had remained the principle source of drinking water, although on a declining trend, accounting for 61 and 58 percent in 1994 and 2000, respectively. This was primarily because water catchment, tank, and drums were the only source of water in most of the outlying areas and in the Outer Islands.

Table 12.19: Source of Drinking Water of All Housing Units, Yap State: 1980, 1994 and 2000

	ľ	Number		Percent ch	ange		Percent	
Source of drinking water	1980	1994	2000	1980-1994	1994-2000	1980	1994	2000
Total	1,906	1,980	2,246	3.9	13.4	100.0	100.0	100.0
Public & community systems	284	727	882	156.0	21.3	14.9	36.7	39.3
Individual well	85	25	16	-70.6	-36.0	4.5	1.3	0.7
Catchment, tank, drums	1,409	1,202	1,312	-14.7	9.2	73.9	60.7	58.4
Public stand pipe	82	-	9	-100.0	-	4.3	-	0.4
Others	46	26	27	-43.5	3.8	2.4	1.3	1.2

Source: 1980 TTPI Census; 1994 & 2000 FSM Censuses, Table H03

Table 12.20 further examines the source of drinking water in 1994 and 2000 by region. In both years, the main source of drinking water in both areas was catchment, tank, and drums. The proportion of housing units that obtained their drinking water from this source was higher on Yap Proper than the Outer Islands in both years. In 2000, Dalipebinaw reported the largest proportion at close to 90 percent while in 1994 the largest proportion was reported in Rumung. The proportion of units obtaining drinking water from public system increased between 1994 and 2000 on Yap Proper, indicating it to be another major source.

Table 12.20: Source of Drinking Water of All Housing Units by Municipality, Yap State: 1994 and 2000

					Sou	ce of drinkir	ng water				
			Pub. Sys.	Comm. sys.	Pub. sys. &			Catchment,	Public	Purchased	
Municipality	Total	Percent	only	only	catch.	& catch.	well	tanks &drums	stand-pipe	bottled water	Others
1994 Census											
Total	1,980	100.0	4.0	21.8	5.1	5.8		60.7	-	0.5	0.9
Yap Proper	1,292	100.0	4.6	32.3	6.5			48.8	-	0.7	1.3
Rumung	27	100.0	-	7.4	-	3.7	-	88.9	-	-	-
Maap	114	100.0	-	37.7	-	24.6	0.9	35.1	_	0.9	0.9
Gagil	136	100.0	0.7	68.4	-	5.1	0.7	20.6	-	-	4.4
Tomil	168	100.0	2.4	72.0	-	3.6	3.0	18.5	-	-	0.6
Fanif	96	100.0	-	1.0	2.1	10.4	-	85.4	-	1.0	-
Weloy	219	100.0	4.6	0.5	16.9	1.8	0.9	72.6	_	-	2.7
Rull	383	100.0	10.7	19.6	11.7	1.0	-	54.8	-	1.8	0.3
Gilman	41	100.0	-	87.8	-	4.9	-	7.3	-	-	-
Kanifay	46	100.0	-	93.5	-	2.2		2.2	-	-	-
Dalipebinaw	62	100.0	4.8	3.2	-	3.2	-	85.5	-	-	3.2
Outer Islands	688	100.0	3.1	2.0	2.5	7.3	2.2	83.0	-	-	-
2000 Census											
Total	2,246	100.0	12.0	17.9	2.8	6.5	0.7	58.4	0.4	0.4	0.8
Yap Proper	1,541	100.0	17.3	25.6	3.2	7.0	0.8	43.9	0.4	0.5	1.2
Rumung	43	100.0	-	25.6	-	9.3	_	65.1	-	-	-
Maap	115	100.0	0.9	48.7	1.7	20.0	-	27.8	_	-	0.9
Gagil	177	100.0	43.5	30.5	3.4	1.7	-	19.2	-	-	1.7
Tomil	223	100.0	19.7	45.7	1.8	12.1	-	17.5	-	-	3.1
Fanif	105	100.0	-	1.9	1.0	5.7	2.9	86.7	1.9	-	-
Weloy	256	100.0	8.2	5.1	2.3	5.1	0.4	75.0	1.2	1.6	1.2
Rull	430	100.0	27.2	12.8	7.2	5.6	1.6	43.5	0.2	0.9	0.9
Gilman	53	100.0	3.8	92.5	-	1.9	-	1.9	-	-	-
Kanifay	60	100.0	6.7	83.3	-	6.7		3.3	-	-	-
Dalipebinaw	79	100.0	-	3.8	-	3.8	1.3	89.9	-	-	1.3
Outer Islands	705	100.0	0.6	0.9	2.0	5.5	0.6	90.1	0.4	-	-

Source: 1994 & 2000 FSM Censuses, Table

H03

Equipment

Data on availability of hygienic and sanitary related facilities are useful for health, environmental and related planning. They also provide further insight into the overall housing conditions.

Table 12.21 presents housing units in 1980, 1994 and 2000 by the type of sewage disposals. The data showed significant improvements in sewage disposal facilities in the state. In 1980, the proportion of housing units with public sewer was about 7 percent. Over the next two decades, the corresponding proportion increased to about 9 percent in 1994, then further increased to 12 percent in 2000. Similarly, the proportion of housing units with septic tank or cesspool pool disposal facilities increased from over 2 percent in 1980 to nearly 12 percent in 2000. The overall improvement in the sewage disposal could be accounted for by recent improvements and extension of the public sewer system and the recent addition of two new water systems (the Gagil-Tomil Water Authority and the Southern Yap Water System), which enabled households to build septic tanks/cesspool in rural areas. Despite this

betterment of the sewage disposal system, a vast proportion (76 percent) of the housing units still used other means, such as pits, benios, etc. in 2000.

Table 12.21: Sewage disposal of All Housing Units, Yap State: 1980, 1994 and 2000

		Number		Percent ch	ange]	Percent	
Sewage disposal	1980	1994	2000	1980-1994	1994-2000	1980	1994	2000
Total housing units	1,906	1,980	2,246	3.9	13.4	100.0	100.0	100.0
Public sewer	128	185	273	44.5	47.6	6.7	9.3	12.2
Septic tank - cesspool	43	113	261	162.8	131.0	2.3	5.7	11.6
Others	1,735	1,682	1,712	-3.1	1.8	91.0	84.9	76.2

Source: 1980 TTPI Census; 1994 & 2000 FSM Censuses, Table H03

Table 12.22 further examines the availability of sewage disposal facilities by region. In 2000, over 17 percent of the housing units on Yap Proper used public sewer facilities, increasing from 14 percent in 1994, suggesting some sanitary improvement. Most of these units were in the Colonia area. However, majority of the housing units in both Yap Proper and the Outer Islands reported using other means of sewage disposal (i.e., benjo, pit, bushes, shore, and so forth) during both census years.

Table 12.22: Sewage Disposal of All Housing Units by Municipality, Yap State: 1994 and 2000

					1994							20	000			
		Nu	mber			Per	cent			Nu	mber			Pe	rcent	
			Septic				Septic				Septic				Septic	
		Public	tank or			Public	tank or			Public	tank or			Public	tank or	
Municipality	Total	sewer	cesspool	Others												
Total	1,980	185	113	1,682	100.0	9.3	5.7	84.9	2,246	273	261	1,712	100.0	12.2	11.6	76.2
Yap Proper	1,292	176	74	1,042	100.0	13.6	5.7	80.7	1,541	264	242	1,035	100.0	17.1	15.7	67.2
Rumung	27	-	2	25	100.0	-	7.4	92.6	43	-	-	43	100.0	-	-	100.0
Maap	114	-	2	112	100.0	-	1.8	98.2	115	-	29	86	100.0	-	25.2	74.8
Gagil	136	-	6	130	100.0	-	4.4	95.6	177	-	38	139	100.0	-	21.5	78.5
Tomil	168	-	23	145	100.0	-	13.7	86.3	223	1	54	168	100.0	0.4	24.2	75.3
Fanif	96	1	3	92	100.0	1.0	3.1	95.8	105	-	13	92	100.0	-	12.4	87.6
Weloy	219	54	9	156	100.0	24.7	4.1	71.2	256	78	20	158	100.0	30.5	7.8	61.7
Rull	383	118	16	249	100.0	30.8	4.2	65.0	430	179	48	203	100.0	41.6	11.2	47.2
Gilman	41	-	10	31	100.0	-	24.4	75.6	53	-	17	36	100.0	-	32.1	67.9
Kanifay	46	-	2	44	100.0	-	4.3	95.7	60	2	3	55	100.0	3.3	5.0	91.7
Dalipebinaw	62	3	1	58	100.0	4.8	1.6	93.5	79	4	20	55	100.0	5.1	25.3	69.6
Outer Islands	688	-	48	640	100.0	-	7.0	93.0	705	9	19	677	100.0	1.3	2.7	96.0

Source: 1994 & 2000 FSM Censuses, Table H03

Housing units with complete plumbing had increased over the 2 decades before the 2000 Census (Table 12.23). A unit has complete plumbing facilities when piped water (either hot or cold), a flush toilet, and a bathtub or showers are located in the unit. In 1980, about 95 percent of all housing units lacked complete plumbing. This proportion declined to about 92 percent then further to about 86 percent in 2000. Much of this increase came from housing units with cold water only.

Table 12.23: Plumbing Facilities of All Housing Units, Yap State: 1980, 1994 and 2000

		Number		Percent c	hange		Percent	
Plumbing facilities	1980	1994	2000	1980-1994	1994-2000	1980	1994	2000
Total housing units	1,906	1,980	2,246	3.9	13.4	100.0	100.0	100.0
With complete plumbing	103	161	308	56.3	91.3	5.4	8.1	13.7
with hot & cold water	62	39	90	-37.1	130.8	3.3	2.0	4.0
with cold only	41	122	218	197.6	78.7	2.2	6.2	9.7
Lack of complete plumbing	1,803	1,819	1,938	0.9	6.5	94.6	91.9	86.3

Source: 1980 TTPI Census; 1994 & 2000 FSM Censuses, Table H03.

Note: 1994 data differed slightly from data presented in National Census Report (NCR) due to correction being made after the NCR went to print.

Table 12.24 further compares the availability of plumbing facilities in the regions. In 2000, over 97 percent of housing units with complete plumbing were located on Yap Proper, increasing from 93 percent in the previous census. Most of these housing units were in Rull and Weloy. In both years, most of the housing units lacking complete plumbing were also found on Yap Proper, but at a lower level (64 percent in 2000 and 63 percent in 1994). In the Outer Islands, the percentage of housing units lacking complete plumbing was much higher at over 98 in both 1994 and 2000.

Table 12.24: Plumbing Facilities of Occupied Housing Units by Municipality, Yap State: 1994 and 2000

		199	4 Census				20	000 Census		
		Compl	ete plumbing				Com	plete plumbing		
	Total		Hot &		Lacking	Total		Hot &		Lacking
	housing		cold	Cold	complete	housing		cold	Cold	complete
Municipality	units	Total	water	water	plumbing	units	Total	water	water	plumbing
Total	1,980	161	39	122	1,819	2,246	308	90	218	1,938
Yap Proper	1,292	150	38	112	1,142	1,541	300	90	210	1,241
Rumung	27	-	-	-	27	43	0	-	-	43
Maap	114	4	1	3	110	115	9	3	6	106
Gagil	136	5	1	4	131	177	19	4	15	158
Tomil	168	4	-	4	164	223	27	13	14	196
Fanif	96	2	1	1	94	105	4	1	3	101
Weloy	219	37	6	31	182	256	65	18	47	191
Rull	383	90	29	61	293	430	149	50	99	281
Gilman	41	5	-	5	36	53	11	1	10	42
Kanifay	46	-	-	-	46	60	4	-	4	56
Dalipebinaw	62	3	-	3	59	79	12	-	12	67
Outer Islands	688	11	1	10	677	705	8	-	8	697

Source: 1994 & 2000 FSM Censuses, Table H03

Table 12.25 presents data on toilet facilities in all housing units in 1980, 1994 and 2000. The data indicated a significant improvement in the hygienic conditions of housing units in the state of Yap. The proportion for housing units with flush toilet increased from 12 percent in 1980 to 29 percent in 2000. A flush toilet may have a water tank attached for flushing (American type) or not have a tank attached but may be manually flushed with water obtained from another source. In all census years observed, the majority of flush toilet facilities were located inside the housing unit. Housing units with "other and none" (which includes outhouse or privy) accounted for 71 percent of all units 2000, an increase of 17 percentage points since 1980. However, although the increase in number of units with flush toilet suggested improvement in sanitation development programs, a significant number of recent housing units still lack proper sanitary facilities.

Table 12.25: Toilet Facilities of All Housing Units, Yap State: 1980, 1994 and 2000

		Number		Percent	change		Percent	
Toilet facilities	1980	1994	2000	1980-1994	1994-2000	1980	1994	2000
Total housing units	1,906	1,980	2,246	3.9	13.4	100.0	100.0	100.0
Flush toilet inside	123	263	378	113.8	43.7	6.5	13.3	16.8
Flush toilet outside	107	100	271	-6.5	171.0	5.6	5.1	12.1
Others or none	1,676	1,617	1,597	-3.5	-1.2	87.9	81.7	71.1

Source: 1980 TTPI Census, H2; 1994 & 2000 FSM Censuses, Table H03.

Table 12.26 further examines data on flush toilet facilities in all housing units in 1994 and 2000 by municipality as well as regions. Housing units with flush toilet facility in 2000 was about 39 percent on Yap Proper and 8 percent in the Outer Islands, compared to about 21 percent and 14 percent respectively in 1994. This trend showed the relatively improved sanitary facilities in both areas over the years. Similar to plumbing facilities, a vast proportion (about 97 percent in 2000 and 74 percent in 1994) of the housing units with flush toilets were reported to be on Yap Proper, particularly in the center areas such as Rull and Weloy.

Table 12.26: Toilet Facilities of All Housing Units by Region, Yap State: 1994 and 2000

				199	94								2000			
•		N	umber			P	ercent			Νι	umber				ercent	
•	Total	Flush	toilet	No flush	Total	Flusł	toilet	No flush	Total	Flı	ısh toilet	No flush	Total	Flu	sh toilet	No flush
Municipality	HUs	Inside	Outside	toilet	HUs	Inside	Outside	toilet	HUs	Inside	Outside	toilet	HUs	Inside	Outside	toilet
Total	1,980	263	100	1,617	100.0	13.3	5.1	81.7	2,246	378	271	1,597	100.0	16.8	12.1	71.1
Yap Proper	1,292	207	63	1,022	100.0	16.0	4.9	79.1	1,541	360	234	947	100.0	23.4	15.2	61.5
Rumung	27	-	-	27	100.0	-	-	100.0	43	-	-	43	100.0	-	-	100.0
Maap	114	5	10	99	100.0	4.4	8.8	86.8	115	10	23	82	100.0	8.7	20.0	71.3
Gagil	136	8	3	125	100.0	5.9	2.2	91.9	177	25	21	131	100.0	14.1	11.9	74.0
Tomil	168	15	7	146	100.0	8.9	4.2	86.9	223	36	35	152	100.0	16.1	15.7	68.2
Fanif	96	3	-	93	100.0	3.1	-	96.9	105	6	11	88	100.0	5.7	10.5	83.8
Weloy	219	51	20	148	100.0	23.3	9.1	67.6	256	76	36	144	100.0	29.7	14.1	56.3
Rull	383	112	21	250	100.0	29.2	5.5	65.3	430	172	89	169	100.0	40.0	20.7	39.3
Gilman	41	7	-	34	100.0	17.1	-	82.9	53	15	3	35	100.0	28.3	5.7	66.0
Kanifay	46	1	1	44	100.0	2.2	2.2	95.7	60	6	5	49	100.0	10.0	8.3	81.7
Dalipebinaw	62	5	1	56	100.0	8.1	1.6	90.3	79	14	11	54	100.0	17.7	13.9	68.4
Outer Islands	688	35	37	616	100.0	5.1	5.4	89.5	705	18	37	650	100.0	2.6	5.2	92.2

Source: 1994 & 2000 FSM Censuses, Table H03

Table 12.27 presents data on the availability of modern bathtubs or shower facilities in 1980, 1994 and 2000. The proportion of housing units with bathtub or shower facilities was as low as about 7 percent in 1980. Since then, housing units with bathtubs or shower facilities had increased significantly to about 49 percent in 1994 and further to 53 percent in 2000. The improvement in bathing facilities was due to the recent availability of the Rural Housing and Yap CAP loan and grants packages by which many houses were able to have piped water and an appropriate sewerage system installed to their housing unit.

Table 12.27: Bathtub or Shower Facilities of All Housing Units, Yap State: 1980, 1994 and 2000

		Number		Percent of	change		Percent	
Bathtub or shower	1980	1994	2000	1980-1994	1994-2000	1980	1994	2000
Total housing units	1,906	1,980	2,246	3.9	13.4	100.0	100.0	100.0
Bathtub or shower	128	973	1,183	660.2	21.6	6.7	49.1	52.7
No bathtub or shower	1,778	1,007	1,063	-43.4	5.6	93.3	50.9	47.3

Source: 1980 TTPI Census; 1994 & 2000 FSM Censuses, Table H03

Table 12.28 further presents the bathtub or shower facilities in 1994 and 2000 in each municipality as well as the regions. In both censuses, most housing units on Yap Proper had bathtubs or shower facilities located outside the housing units, whereas in the Outer Islands, most units had no bathtub or shower. In 2000, housing units with no bathtub or shower comprised of about 28 percent and about 90 percent of the total housing units in Yap Proper and Outer Islands, respectively. This patter was also true in 1994, although the levels were slightly higher.

Table 12.28: Bath or Shower Facilities of All Housing Units by Municipality, Yap State: 1994 and 2000

				19	994							20	000			
		Num	ber			Per	cent			Nur	nber			Pei	rcent	
	Total	Batl	n/Shower		Total	Batl	h/Shower		Total				Total			
Municipality	HUs	Inside	Outside	None	HUs	Inside	Outside	None	HUs	Inside	Outside	None	HUs	Inside	Outside	None
Total	1,980	159	814	1,007	100.0	8.0	41.1	50.9	2,246	363	820	1,063	100.0	16.2	36.5	47.3
Yap Proper	1,292	150	743	399	100.0	11.6	57.5	30.9	1,541	346	765	430	100.0	22.5	49.6	27.9
Rumung	27	-	1	26	100.0	-	3.7	96.3	43	-	9	34	100.0	-	20.9	79.1
Maap	114	4	69	41	100.0	3.5	60.5	36.0	115	10	56	49	100.0	8.7	48.7	42.6
Gagil	136	5	75	56	100.0	3.7	55.1	41.2	177	27	108	42	100.0	15.3	61.0	23.7
Tomil	168	4	120	44	100.0	2.4	71.4	26.2	223	40	109	74	100.0	17.9	48.9	33.2
Fanif	96	2	20	74	100.0	2.1	20.8	77.1	105	5	59	41	100.0	4.8	56.2	39.0
Weloy	219	37	107	75	100.0	16.9	48.9	34.2	256	72	112	72	100.0	28.1	43.8	28.1
Rull	383	90	233	60	100.0	23.5	60.8	15.7	430	160	184	86	100.0	37.2	42.8	20.0
Gilman	41	5	35	1	100.0	12.2	85.4	2.4	53	12	40	1	100.0	22.6	75.5	1.9
Kanifay	46	-	37	9	100.0	-	80.4	19.6	60	5	50	5	100.0	8.3	83.3	8.3
Dalipebinaw	62	3	46	13	100.0	4.8	74.2	21.0	79	15	38	26	100.0	19.0	48.1	32.9
Outer Islands	688	9	71	608	100.0	1.3	10.3	88.4	705	17	55	633	100.0	2.4	7.8	89.8

Source: 1994 & 2000 FSM Censuses, Table H03

Type of cooking facilities measures the standard of living and determines the adequacy of household facilities. Table 12.29 presents the availability of appliances and type of cooking facilities inside the housing units in 1994 and 2000. Fully 25 percent of the housing units had inside cooking facilities, about the same as in 1994. The main types of cooking facilities in both years were kerosene stove and electric range, accounting for 84 percent of the units. Few housing units were reported to have wood stove or microwave oven as main cooking facilities. The distribution was similar for the Outer Islands, which also reported kerosene stove as their main cooking facility.

Table 12.29: Cooking Facilities Inside of Occupied Housing Units by Region, Yap State: 1994 and 2000

	Occupi	ed housing u	nits									
		With coo facility in				Dist	ibution of perc	ent with coo	king facilities ins	ide		
Municipality	Total	Number Pe		Percent	Elec.range	Kero. stove	Gas stove Mi		Port. elec. stove	od stove	Open fire	Others
1994 CENSUS												
Total	1,925	470	24.4	100.0	23.6	62.8	2.8	0.6	6.4	0.4	2.8	0.6
Yap Proper	1,291	462	35.8	100.0	23.6	63.2	2.8	0.6	6.1	0.4	2.8	0.4
Rumung	27	3	11.1	100.0	-	66.7	-	-	-	-	33.3	-
Maap	114	15	13.2	100.0	13.3	73.3	6.7	-	-	-	6.7	-
Gagil	136	20	14.7	100.0	50.0	45.0	-	-	-	-	5.0	-
Tomil	168	44	26.2	100.0	15.9	61.4	4.5	-	2.3	-	15.9	-
Fanif	96	22	22.9	100.0	9.1	77.3	4.5	-	-	9.1	-	-
Weloy	219	105	47.9	100.0	30.5	59.0	1.9	1.0	5.7	-	1.0	1.0
Rull	382	202	52.9	100.0	24.3	62.9	2.5	1.0	8.4	-	0.5	0.5
Gilman	41	18	43.9	100.0	5.6	77.8	5.6	-	11.1	-	-	-
Kanifay	46	7	15.2	100.0	14.3	85.7	-	-	-	-	-	-
Dalipebinaw	62	26	41.9	100.0	19.2	65.4	3.8	-	7.7	-	3.8	-
Outer Islands	634	8	1.3	100.0	25.0	37.5	-	-	25.0	-	-	12.5
2000 CENSUS												
Total	2,030	507	25.0	100.0	29.6	56.2	10.1	0.2	1.8	-	0.8	1.4
Yap Proper	1,413	498	35.2	100.0	29.7	56.6	10.2	0.2	1.8	-	0.6	0.8
Rumung	26	3	11.5	100.0	-	100.0	-	-	-	-	-	-
Maap	115	16	13.9	100.0	37.5	37.5	18.8	-	6.3	-	-	-
Gagil	158	26	16.5	100.0	26.9	50.0	19.2	-	-	-	3.8	-
Tomil	194	40	20.6	100.0	27.5	60.0	10.0	-	2.5	-	-	-
Fanif	101	22	21.8	100.0	18.2	59.1	9.1	-	9.1	-	4.5	-
Weloy	231	119	51.5	100.0	29.4	62.2	7.6	-	0.8	-	-	-
Rull	407	214	52.6	100.0	34.6	51.4	10.3	-	1.4	-	0.5	1.9
Gilman	53	15	28.3	100.0	33.3	46.7	20.0	-	-	-	-	-
Kanifay	57	13	22.8	100.0	15.4	76.9	-	7.7	-	-	-	-
Dalipebinaw	71	30	42.3	100.0	13.3	73.3	10.0	-	3.3	-	-	-
Outer Islands	617	9	1.5	100.0	22.2	33.3	-	-	-	-	11.1	33.3

Source: 1994 & 2000 FSM Census, Table H04

Table 12.30 further examines the availability of appliances and type of cooking facilities outside the housing units in 1994 and 2000. Most housing units reported open fire as their main cooking facility outside (about 61 percent), a notable decrease from about 78 percent in 1994. The second most common method of cooking facility outside was kerosene stove, at about 34 percent, an increase from about 19 percent in 1994. More housing units reported cooking facilities outside the unit as compared to appliances inside the unit.

Table 12.30: Cooking Facilities Outside of Occupied Housing Units by Region, Yap State: 1994 and 2000

		Total	Percent									
		HUs w/	Hus w/			P	ercent mai	n cooking fa	cilities out	side unit		
	Occupied	cooking	cooking						Port.			
	housing	facil.	facil.		Elec.	Kero.	Gas	Micro.	elec.	Wood	Open	
Municipality	units	outside	Outside	Percent	range	stove	stove	oven	stove	stove	fire	Others
1994 CENSUS												
Total	1,925	1,424	74.0	100.0	0.7	18.5	0.4	0.1	0.3	2.2	77.7	0.1
Yap Proper	1,291	813	63.0	100.0	1.2	32.1	0.5	0.1	0.5	3.4	62.0	0.1
Rumung	27	23	85.2	100.0	_	4.3	-	_	_	-	95.7	-
Maap	114	98	86.0	100.0	1.0	19.4	-	1.0	-	1.0	77.6	-
Gagil	136	111	81.6	100.0	0.9	16.2	-	-	0.9	1.8	79.3	0.9
Tomil	168	122	72.6	100.0	-	32.0	0.8	_	0.8	2.5	63.9	-
Fanif	96	74	77.1	100.0	1.4	50.0	-	-	-	20.3	28.4	-
Weloy	219	114	52.1	100.0	5.3	24.6	-	_	0.9	0.9	68.4	-
Rull	382	174	45.5	100.0	0.6	43.1	1.7	_	0.6	1.7	52.3	-
Gilman	41	23	56.1	100.0	-	47.8	-	-	-	8.7	43.5	-
Kanifay	46	39	84.8	100.0	-	64.1	-	-	-	-	35.9	-
Dalipebinaw	62	35	56.5	100.0	-	22.9	-	-	-	2.9	74.3	-
Outer Islands	634	611	96.4	100.0	-	0.5	0.3	0.0	-	0.5	98.5	0.2
2000 CENSUS												
Total	2,030	1,506	74.2	100.0	0.8	33.9	1.4	0.2	0.1	2.2	61.4	-
Yap Proper	1,413	915	64.8	100.0	1.3	54.3	2.3	0.2	0.2	3.2	38.5	-
Rumung	26	23	88.5	100.0	-	26.1	-	_	-	47.8	26.1	-
Maap	115	99	86.1	100.0	1.0	41.4	4.0	1.0	-	2.0	50.5	-
Gagil	158	132	83.5	100.0	0.8	28.0	0.8	-	1.5	0.8	68.2	-
Tomil	194	154	79.4	100.0	1.3	48.7	2.6	-	-	-	47.4	-
Fanif	101	79	78.2	100.0	1.3	54.4	1.3	1.3	-	7.6	34.2	-
Weloy	231	112	48.5	100.0	1.8	67.9	1.8	-	-	5.4	23.2	-
Rull	407	193	47.4	100.0	2.1	67.4	2.6	-	-	1.0	26.9	-
Gilman	53	38	71.7	100.0	2.6	39.5	5.3	-	-	-	52.6	-
Kanifay	57	44	77.2	100.0	-	95.5	-	-	-	-	4.5	-
Dalipebinaw	71	41	57.7	100.0	-	78.0	4.9	-	-	2.4	14.6	-
Outer Islands	617	591	95.8	100.0	-	2.4	-	0.2	-	0.7	96.8	-

Source: 1994 & 2000 FSM Censuses, Table H04

Information on the number of vehicles and boats regularly used is helpful to officials who plan parking/porting facilities, expansion of roads, etc. Between 1994 and 2000, the number of housing units possessing vehicles and boats increases (Table 12.31). In 2000, about 38 percent of occupied housing units had at least a vehicle (increasing from 27 percent in 1994) and 25 percent had at least a boat (increasing from 21 percent in 1994). Out of the 762 units with vehicle, 193 had two or more vehicles. Also, about 97 units out of the 504 occupied housing units with boats had two or more boats. According to the 2000 Census results, more housing units were able to afford more than one vehicle or boat, suggesting higher living standards in current years, at least in modern amenities.

Similar to the overall pattern, the number of housing units with vehicles and boats increased on Yap Proper. In 2000, more than half (about 53 percent) of the housing units had at least a vehicle. Among those with vehicle, 25 percent had 2 or more vehicles (compared to about 40 percent in 1994). Also, 83 percent of all occupied housing units in 2000 had no boat. For the Outer Islands, more housing units reported having a boat (43 percent) than a vehicle (about 2 percent). These differences between suggested the difference in the common mode of transportation used in each region.

Table 12.31: Vehicles and Boats Owned by Municipality, Yap State: 1994 and 2000

Census year	Total	Yap Proper	Rumung	Maap	Gagil	Tomil	Fanif	Welov	Rull	Gilman	Kani- fay	Dalipe- binaw	Outer Islands
1994 Census	10141	Troper	rtumung	тицр	ougn		1 (1111	werey	11411	O.IIII.	14.5	oma,,	Islands
Occupied housing units	1,925	1,291	27	114	136	168	96	219	382	41	46	62	634
Total with vehicle	528	510	_	37	54	57	29	77	196	20	17	23	18
Percent	27.4	39.5	-	32.5	39.7	33.9	30.2	35.2	51.3	48.8	37.0	37.1	2.8
1 vehicle	82.2	82.4	-	81.1	90.7	84.2	96.6	88.3	77.6	80.0	58.8	82.6	77.8
2 or more vehicles	17.8	17.6	-	18.9	9.3	15.8	3.4	11.7	22.4	20.0	41.2	17.4	22.2
Total with boat	406	224	17	22	28	34	17	49	50	_	3	4	182
Percent	21.1	17.4	63.0	19.3	20.6	20.2	17.7	22.4	13.1	-	6.5	6.5	28.7
1 boat	82.8	93.8	100.0	95.5	96.4	97.1	100.0	83.7	94.0	-	100.0	100.0	69.2
2 or more boats	17.2	6.3	-	4.5	3.6	2.9	-	16.3	6.0	-	-	-	30.8
2000 Census													
Occupied housing units	2,030	1,413	26	115	158	194	101	231	407	53	57	71	617
Total with vehicle	762	753	_	60	70	96	51	126	249	31	30	40	9
Percent	37.5	53.3	_	52.2	44.3	49.5	50.5	54.5	61.2	58.5	52.6	56.3	1.5
1 vehicle	74.7	74.8	_	68.3	67.1	74.0	86.3	77.8	73.1	74.2	83.3	80.0	66.7
2 or more vehicles	25.3	25.2	-	31.7	32.9	26.0	13.7	22.2	26.9	25.8	16.7	20.0	33.3
Total with boat	504	238	12	30	24	33	16	48	57	4	5	9	266
Percent	24.8	16.8	46.2	26.1	15.2	17.0	15.8	20.8	14.0	7.5	8.8	12.7	43.1
1 boat	80.8	96.2	100.0	100.0	91.7	100.0	100.0	89.6	96.5	100.0	100.0	100.0	66.9
2 or more boats	19.2	3.8	-	-	8.3	-	-	10.4	3.5	-	-	-	33.1

Source: 1994 & 2000 FSM Censuses, Table H05.

Out of 2,030 occupied housing units in 2000, 58 percent (1,169) had electricity. In comparison, 871 occupied housing units (52 percent) out of 1,291 in 1994 had electricity. In 2000, majority of these housing units paid 10 to 39 dollars per month for electricity cost. On the other hand, most housing units in 1994 paid 1 to 29 dollars per month. This increase was due in part to the increased rate between 1994 and 2000. Housing units with monthly expenditure of more than 50 dollars accounted for 23 percent in 2000, an increase of about 6 percentage points since 1994.

Similar to state average, most (59 percent) of the housing units on Yap Proper in 2000 were paying 10 to 39 dollars for their monthly electricity. For the Outer Islands, most units (about 74 percent) paid spent 1 to 29 dollars per month on electricity, reflecting the lower usage of electricity in the Outer Islands than Yap Proper. The absence of housing units with electricity in Rumung in both censuses observed was due to the fact that the power lines have not been extended there yet.

Table 12.32: Monthly Cost of Electricity by Municipality, Yap State: 1994 and 2000

	·	Yap	Rum-		·	·	·			·	·	Dalibe-	Outer
Electricity cost	Total	Proper	ung	Maap	Gagil	Tomil	Fanif	Weloy	Rull	Gilman	Kanifay	binaw	Islands
1994 Census													
Occupied housing units	1,925	1,291	27	114	136	168	96	219	382	41	46	62	634
Number with electricity	1,004	871	-	43	87	93	66	152	325	36	31	38	133
Percent	52.2	67.5	-	37.7	64.0	55.4	68.8	69.4	85.1	87.8	67.4	61.3	21.0
Total	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
\$1 to \$9	12.1	7.7	-	11.6	9.2	9.7	10.6	9.9	4.0	13.9	9.7	5.3	40.6
\$10 to \$19	23.5	22.5	-	30.2	31.0	24.7	33.3	9.9	20.9	30.6	32.3	18.4	30.1
\$20 to \$29	23.3	24.9	-	25.6	32.2	25.8	24.2	19.7	22.5	30.6	45.2	26.3	12.8
\$30 to \$39	14.3	14.9	-	25.6	12.6	16.1	13.6	18.4	13.8	13.9	-	15.8	10.5
\$40 to \$49	9.5	10.4	-	2.3	4.6	8.6	7.6	15.1	12.0	8.3	9.7	13.2	3.0
\$50+	17.3	19.5	-	4.7	10.3	15.1	10.6	27.0	26.8	2.8	3.2	21.1	3.0
2000 Census													
Occupied housing units	2,030	1,413	26	115	158	194	101	231	407	53	57	71	617
Number with electricity	1,143	1,028	-	68	98	132	79	176	346	42	34	53	115
Percent	56.3	72.8	-	59.1	62.0	68.0	78.2	76.2	85.0	79.2	59.6	74.6	18.6
Total	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
\$1 to \$9	7.3	6.3	-	5.9	13.3	7.6	3.8	5.1	5.2	9.5	2.9	5.7	15.7
\$10 to \$19	19.4	17.9	-	30.9	11.2	31.1	20.3	16.5	10.4	28.6	20.6	20.8	33.0
\$20 to \$29	22.5	22.1	-	20.6	26.5	21.2	30.4	18.8	18.5	19.0	47.1	26.4	26.1
\$30 to \$39	17.3	18.6	-	17.6	22.4	10.6	19.0	15.9	21.1	28.6	11.8	20.8	6.1
\$40 to \$49	10.3	10.9	-	7.4	10.2	8.3	15.2	13.6	11.8	-	8.8	11.3	5.2
\$50+	23.2	24.2	_	17.6	16.3	21.2	11.4	30.1	32.9	14.3	8.8	15.1	13.9

Source: 1994 & 2000 FSM Censuses, Table H05.

Table 12.33 presents data on the monthly cost of kerosene by region. Out of 2,030 occupied housing units in 2000, 1,460 (72 percent) reported expenditure on kerosene. This a slight decrease from about 78 percent in 1994 where 1,506 out of 1,925 housing units reported using kerosene. Among those housing units that used kerosene, about 58 percent had kerosene costs less than 10 dollars per month, a significant drop from about 73 percent in 1994. About 30 percent in 2000 compared to 19 percent in 1994 reported a monthly kerosene cost of 10 to 19 dollars a month. The situation was also similar for the regions, though the levels differed.

Table 12.33: Monthly Cost of Kerosene by Region, Yap State: 1994 and 2000

		Yap										Dalibe-	Outer
Electricity cost	Total	Proper	Rumung	Maap	Gagil	Tomil	Fanif	Weloy	Rull	Gilman	Kanifay	binaw	Islands
1994 Census													
Occupied housing units	1,925	1,291	27	114	136	168	96	219	382	41	46	62	634
Number using kerosene	1,506	1,028	27	96	91	147	82	172	279	35	42	57	478
Percent	78.2	79.6	100.0	84.2	66.9	87.5	85.4	78.5	73.0	85.4	91.3	91.9	75.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
\$1 to \$9	73.2	69.9	48.1	81.3	86.8	83.0	73.2	61.6	60.2	40.0	73.8	84.2	80.3
\$10 to \$19	19.2	21.8	29.6	14.6	9.9	14.3	20.7	25.0	33.7	5.7	23.8	10.5	13.6
\$20 to \$29	5.8	6.3	18.5	3.1	3.3	2.7	4.9	8.1	4.7	42.9	2.4	5.3	4.8
\$30 to \$39	1.1	1.3	3.7	-	-	-	1.2	3.5	0.4	11.4	-	-	0.6
\$40 to \$49	0.3	0.3	-	-	-	-	-	-	1.1	-	-	-	0.4
\$50+	0.3	0.4	-	1.0	-	-	-	1.7	-	-	-	-	0.2
2000 Census													
Occupied housing units	2,030	1,413	26	115	158	194	101	231	407	53	57	71	617
Number using kerosene	1,460	1,043	22	91	115	154	75	165	267	39	54	61	417
Percent	71.9	73.8	84.6	79.1	72.8	79.4	74.3	71.4	65.6	73.6	94.7	85.9	67.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
\$1 to \$9	57.9	60.2	63.6	67.0	82.6	78.6	46.7	52.1	46.1	82.1	48.1	57.4	52.3
\$10 to \$19	30.1	31.0	27.3	18.7	16.5	20.1	36.0	35.2	43.4	15.4	48.1	27.9	28.1
\$20 to \$29	7.5	6.9	4.5	8.8	0.9	1.3	13.3	9.7	8.6	2.6	3.7	13.1	8.9
\$30 to \$39	1.4	1.2	-	4.4	-	-	2.7	3.0	0.4	-	-	1.6	1.7
\$40 to \$49	0.5	0.2	-	-	-	-	-	-	0.7	-	-	-	1.2
\$50+	2.6	0.5	4.5	1.1	-	-	1.3	-	0.7	-	-	-	7.9

Source: 1994 & 2000 FSM Censuses, Table H05.

Table 12.34 presents data on the monthly cost of water by region and municipality. About 33 percent of the units in 2000 reported expenditures on water, declining slightly from 39 percent in 1994. The highest decline was experience in Rull and Weloy. Additionally, more housing units reported higher expenditure in 2000 than in 1994. For example, in 1994, at least 77 percent of households in each region paid less than \$10 per month on water. By 2000, this proportion had declined to at least 41 percent on Yap Proper and only 18 percent in the Outer Islands. In 2000, about 3 percent of household on Yap Proper spent \$50 or more on water, increasing from 1 percent in 1994.

Table 12.34: Monthly Cost of Water by Region, Yap State: 1994 and 2000

		Yap										Dalibe-	Outer
Water cost	Total	Proper	Rumung	Maap	Gagil	Tomil	Fanif	Weloy	Rull	Gilman	Kanifay	binaw	Islands
1994 Census													
Occupied housing units	1,925	1,291	27	114	136	168	96	219	382	41	46	62	634
Number paying water	757	713	-	33	87	118	-	118	274	38	40	5	44
Percent	39.3	55.2	-	28.9	64.0	70.2	-	53.9	71.7	92.7	87.0	8.1	6.9
Total	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	100.0
\$1 to \$9	79.5	79.7	-	100.0	78.2	69.5	-	83.1	77.0	84.2	100.0	80.0	77.3
\$10 to \$19	14.5	14.2	-	-	14.9	21.2	-	9.3	16.4	15.8	-	20.0	20.5
\$20 to \$29	3.2	3.2	-	-	5.7	3.4	-	3.4	3.6	-	-	-	2.3
\$30 to \$39	1.1	1.1	_	-	1.1	3.4	_	-	1.1	-	_	-	-
\$40 to \$49	0.7	0.7	-	-	-	2.5	-	-	0.7	-	-	-	-
\$50+	1.1	1.1	-	-	-	-	-	4.2	1.1	-	-	-	-
2000 Census													
Occupied housing units	2,030	1,413	26	115	158	194	101	231	407	53	57	71	617
Number paying water	667	656	-	4	110	115	-	84	239	49	50	5	11
Percent	32.9	46.4	-	3.5	69.6	59.3	-	36.4	58.7	92.5	87.7	7.0	1.8
Total	100.0	100.0	_	100.0	100.0	100.0	_	100.0	100.0	100.0	100.0	100.0	100.0
\$1 to \$9	55.8	56.4	_	100.0	80.0	52.2	_	41.7	42.7	81.6	76.0	60.0	18.2
\$10 to \$19	28.0	27.6	_	_	18.2	33.9	_	35.7	30.5	14.3	20.0	40.0	54.5
\$20 to \$29	8.8	8.5	_	_	0.9	6.1	_	9.5	15.5	2.0	4.0	_	27.3
\$30 to \$39	3.1	3.2	_	-	0.9	1.7	_	3.6	5.9	2.0	_	-	-
\$40 to \$49	1.3	1.4	_	_	_	1.7	_	1.2	2.5	_	_	_	-
\$50+	2.8	2.9	_	-	_	4.3	_	8.3	2.9	_	_	_	_

Source: 1994 & 2000 FSM Censuses, Table H05.

In 2000, about 52 percent of the total occupied housing units reported expenditures on other fuel such as wood, gas, oil, etc., compared to 7 percent in 1994 (Table 12.35). Among these housing units, about 34 percent in 1994 and 2000 reportedly paid 50 dollars or more on monthly expenditures on other fuels, much higher than expenditure on other utility costs considered in previous tables. In 2000, about 25 percent of the total occupied housing units reported monthly cost expenditures of 30 to 49 dollars per month, an increase of 2 percentage points from 1994.

The pattern differed when comparing the regions. On Yap Proper, the majority (38 percent) of housing units paying other fuel paid 40 dollars or more a month. About 94 percent of the housing units in the Outer Islands were paying other fuels, a major increase of more than 85 percentage points from 6 percent in 1994. Similar to Yap Proper, close to half of the housing units in the Outer Islands have monthly expenditure of more than 40 dollars, and majority of these housing units were on Ifalik (see Appendix A: Table H05).

Table 12.35: Monthly Cost of Other Fuel by Region, Yap State: 1994 and 2000

		Yap										Dalibe-	Outer
Other fuel cost	Total	Proper	Rumung	Maap	Gagil	Tomil	Fanif	Weloy	Rull	Gilman	Kanifay	binaw	Islands
1994 Census													
Occupied housing units	1,925	1,291	27	114	136	168	96	219	382	41	46	62	634
Number paying other fuel	137	102	1	13	6	19	18	28	14	2	-	1	35
Percent	7.1	7.9	3.7	11.4	4.4	11.3	18.8	12.8	3.7	4.9	-	1.6	5.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0
\$1 to \$9	18.2	20.6	-	-	50.0	42.1	5.6	7.1	35.7	50.0	-	100.0	11.4
\$10 to \$19	12.4	13.7	-	23.1	16.7	5.3	11.1	17.9	14.3	-	-	-	8.6
\$20 to \$29	11.7	10.8	100.0	-	33.3	10.5	22.2	7.1	-	-	-	-	14.3
\$30 to \$39	11.7	11.8	-	15.4	-	10.5	11.1	7.1	21.4	50.0	-	-	11.4
\$40 to \$49	11.7	12.7	-	15.4	-	5.3	22.2	14.3	14.3	-	-	-	8.6
\$50+	34.3	30.4	-	46.2	-	26.3	27.8	46.4	14.3	-	-	-	45.7
2000 Census													
Occupied housing units	2,030	1,413	26	115	158	194	101	231	407	53	57	71	617
Number paying other fuel	1,055	474	17	60	100	83	39	45	90	25	2	13	581
Percent	52.0	33.5	65.4	52.2	63.3	42.8	38.6	19.5	22.1	47.2	3.5	18.3	94.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
\$1 to \$9	6.1	12.9	-	20.0	10.0	28.9	20.5	13.3	1.1	-	-	-	0.5
\$10 to \$19	14.2	15.2	-	28.3	17.0	21.7	2.6	4.4	15.6	4.0	-	15.4	13.4
\$20 to \$29	20.3	25.1	35.3	30.0	21.0	16.9	12.8	35.6	23.3	72.0	-	-	16.4
\$30 to \$39	15.7	8.9	11.8	6.7	10.0	7.2	5.1	6.7	11.1	8.0	-	23.1	21.3
\$40 to \$49	10.1	21.9	29.4	1.7	30.0	21.7	25.6	15.6	28.9	4.0	50.0	38.5	0.5
\$50+	33.6	16.0	23.5	13.3	12.0	3.6	33.3	24.4	20.0	12.0	50.0	23.1	47.8

Source: 1994 & 2000 FSM Censuses, Table H05.

Table 12.36 presents data on the value of housing units by region in 1994 and 2000. In 1994, about 76 percent or 1,453 of the 1,925 occupied housing units reported value of their houses, compared to 86 percent (1,750) units in 2000. Among these housing units, the highest proportion, about 33 percent, were valued at less than \$2,500 in both years. The second largest group was in the \$5,000 to \$9,999 category, accounting for about 18 percent and over 21 percent in 1994 and 2000, respectively. Few housing units (6 percent in 1994 and 11 percent in 2000) were valued at \$20,000 or more.

The median value of the housing units on Yap Proper and the Outer Islands was about the same in 1994, between \$4,000 and \$4,500. However, in 2000 the median value of housing unit on Yap Proper increased to \$6,300 while it decreased in the Outer Islands to about \$3,000. The decline in the Outer Islands may be due in part to the small number involved, which may have skewed the data.

Table 12.36: Value of House by Region, Yap State: 1994 and 2000

	Occup	pied housing	units					Value of ho	use		
		With repo	rted value		Less	\$2,500	\$5,000-	\$10,000-	\$15,000-		
Municipality	Total	Number	Percent	Total	\$2,500	\$4,999	\$9,999	\$14,999	\$19,999	\$20,000+	Median
1994 Census											
Total	1,925	1,453	75.5	100.0	32.2	23.3	23.9	8.1	4.6	7.9	\$4,412
Yap Proper	1,291	1,065	82.5	100.0	29.0	26.9	24.9	7.1	4.7	7.4	\$4,454
Rumung	27	24	88.9	100.0	54.2	33.3	12.5	-	-	-	\$2,308
Maap	114	97	85.1	100.0	43.3	28.9	16.5	2.1	6.2	3.1	\$3,080
Gagil	136	130	95.6	100.0	32.3	20.8	22.3	10.8	6.2	7.7	\$4,630
Tomil	168	157	93.5	100.0	29.9	33.1	22.9	3.8	3.2	7.0	\$4,014
Fanif	96	87	90.6	100.0	32.2	14.9	24.1	9.2	8.0	11.5	\$5,595
Weloy	219	174	79.5	100.0	27.0	33.3	21.8	5.7	5.2	6.9	\$4,224
Rull	382	274	71.7	100.0	20.4	28.5	27.7	10.6	3.6	9.1	\$5,197
Gilman	41	41	100.0	100.0	7.3	14.6	65.9	-	4.9	7.3	\$7,130
Kanifay	46	43	93.5	100.0	37.2	32.6	11.6	14.0	4.7	-	\$3,482
Dalipebinaw	62	38	61.3	100.0	39.5	5.3	36.8	2.6	2.6	13.2	\$5,714
Outer Islands	634	388	61.2	100.0	41.0	13.4	21.1	10.8	4.4	9.3	\$4,183
2000 CENSUS											
Total	2,030	1,750	86.2	100.0	32.8	14.6	24.6	8.9	6.0	13.1	\$5,534
Yap Proper	1,413	1,183	83.7	100.0	25.4	17.7	26.5	8.9	6.9	14.7	\$6,318
Rumung	26	25	96.2	100.0	48.0	24.0	24.0	_	4.0	-	\$2,708
Maap	115	113	98.3	100.0	33.6	14.2	31.9	5.3	4.4	10.6	\$5,347
Gagil	158	150	94.9	100.0	31.3	12.0	24.7	9.3	8.0	14.7	\$6,351
Tomil	194	173	89.2	100.0	29.5	20.2	19.7	9.2	7.5	13.9	\$5,074
Fanif	101	93	92.1	100.0	20.4	24.7	30.1	6.5	5.4	12.9	\$5,804
Weloy	231	197	85.3	100.0	22.8	20.8	26.9	9.1	5.6	14.7	\$6,179
Rull	407	257	63.1	100.0	12.1	17.9	27.2	11.7	9.7	21.4	\$8,679
Gilman	53	51	96.2	100.0	15.7	9.8	33.3	13.7	9.8	17.6	\$8,676
Kanifay	57	56	98.2	100.0	50.0	12.5	21.4	8.9	1.8	5.4	\$2,500
Dalipebinaw	71	68	95.8	100.0	30.9	17.6	29.4	4.4	5.9	11.8	\$5,250
Outer Islands	617	567	91.9	100.0	48.3	8.1	20.8	9.0	4.1	9.7	\$3,016

Source: 1994 & 2000 FSM Censuses, Table H06.

Conclusion

Housing conditions in Yap improved over the 20 years before the 2000 census in 1994. This was evident from the improvement in housing unit facilities like electricity, piped water, and the increased number of rooms per housing unit. More units in recent years had concrete walls and tin roofs.

The total number of housing units increased from about 1,900 in 1980 to 2,246 in 2000. About a third (31 percent) of all housing units was built between 1990 and 2000. In 2000, about 57 percent of the housing units had electricity compared to 53 percent in 1994. Of all housing units in 2000, over 53 percent had bathtub or shower, and 29 percent with flush toilet. More than half (53 percent) of all housing units had piped water as compared to about 51 percent in 1994.

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APPENDIX A BASIC TABLES

Table B01. Age by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

	-	- ¦				 Yap	Prop	 er				
		+ !				 : :						Dalip-
Age	Total	Total								Gilman		
All persons	11,241	7 , 391	126	592	734	1,023	547	1 , 197	2,019	233	275	645
Less than 5 years		834	19	75	93	129	58	123	220	33	50	34
5 to 9 years		864	27	72	78	117	81	156	235	30	28	40
10 to 14 years		831	17	87	88	117	69	130	219	33	34	37
15 to 19 years	1,350	904	4	70	82	123	61	134	207	26	33	164
20 to 24 years	1,004	689	8 9	36 31	63 45	88	36	110 79	166 135	15 15	22	145 72
25 to 29 years	701 701	486 488	4	47	35	53 74	31 30	73	144	10	16 18	53
35 to 39 years	718	493	8	40	55	60	32	84	153	15	20	26
40 to 44 years	723	508	9	39	47	75	28	84	172	20	14	20
45 to 49 years	590	395	3	26	45	50	37	77	122	12	11	12
50 to 54 years	400	264	4	18	30	40	26	50	80	5	4	7
55 to 59 years	226	145	1	11	21	18	10	26	40	1	4	13
60 to 64 years	221	151	3	7	14	29	18	22	43	1	6	8
65 to 69 years	207	140	6	8	11	17	15	21	40	7	8	7
70 to 74 years	115	68	2	4	12	9	4	15	17	1	3	1
75 to 79 years	97	74	2	6	8	18	7	8	17	4	2	2
80 to 84 years	47	29	-	9	5	5	-	-	4	1	2	3
85+ years	53	28	1 5 0	10 4	2	1	4	5	5	4	100	1
Median	20.9	21.9	15.0	19.4	22.1	21.4	20.6	22.5	23.9	18.9	18.9	21.6
Males		3,696	58	310	384	524	285		1,019	110	152	225
Less than 5 years	713	448	8	37	52	84	36	67	102	17	27	18
5 to 9 years	700	430	11	42	43	52	39	75	112	17	22	17
10 to 14 years	687	414	10	46	45	60	36	62	111	13	15	16
15 to 19 years	670 451	431 324	1	39 22	37 36	68 37	31 16	77 62	114 81	10 7	21 14	33 46
20 to 24 years	302	218	3	11	23	33	14	37	68	5	5	19
30 to 34 years	297	229	2	21	14	34	16	38	69	5	11	19
35 to 39 years	351	243	5	19	23	22	17	50	74	8	8	17
40 to 44 years	351	261	5	25	25	38	11	44	84	12	7	10
45 to 49 years	315	227	_	17	22	29	24	40	72	6	9	8
50 to 54 years	223	155	3	9	21	23	16	29	45	3	2	4
55 to 59 years	102	75	-	3	14	8	3	14	25	-	3	5
60 to 64 years	104	79	3	3	10	12	9	14	22	1	1	4
65 to 69 years	97	64	2	2	3	9	9	8	21	2	4	4
70 to 74 years	56	36	1	3	7	5	2	7	9	-	1	1
75 to 79 years	38	29	1	3	4	7	4	2	4	2	1	1
80 to 84 years	19 32	14 19	_	3 5	4	2	2	3	2	2	1	2
85+ years	19.9	21.9	15.0		22.1	19.9	20.2	22.7	24.4	19.0	17.9	23.1
nedian											17.5	
Females		3,695	68	282	350	499	262		1,000	123	123	420
Less than 5 years	659	386	11	38	41	45	22	56	118	16	23	16
5 to 9 years	661 668	434 417	16 7	30 41	35 43	65 57	42 33	81 68	123 108	13 20	6 19	23 21
10 to 14 years	680	417	3	31	43	57	33	57	93	16	19	131
15 to 19 years	553	365	5	14	27	55 51	20	48	93 85	1.0	12	99
25 to 29 years	399	268	6	20	22	20	17	42	67	10	11	53
30 to 34 years	404	259	2	26	21	40	14	35	75	5	7	34
35 to 39 years	367	250	3	21	32	38	15	34	79	7	12	9
40 to 44 years	372	247	4	14	22	37	17	40	88	8	7	10
45 to 49 years	275	168	3	9	23	21	13	37	50	6	2	4
50 to 54 years	177	109	1	9	9	17	10	21	35	2	2	3
55 to 59 years	124	70	1	8	7	10	7	12	15	1	1	8
60 to 64 years	117	72	-	4	4	17	9	8	21	-	5	4
65 to 69 years	110	76	4	6	8	8	6	13	19	5	4	3
70 to 74 years	59 59	32	1	1	5 4	4	2	8	8 13	1 2	2	- 1
75 to 79 years	59 28	45 15	1	3 6	1	11 3	3	6	13	1	1	1 1
80 to 84 years	28	15	_	1	1	3	2	2	1	2	_	_
Median	21.8	21.9	15.0		22.0	22.7	21.0	22.3	23.4	18.9	20.9	21.0

Table B01. Age by Municipality of Usual Residence, Yap: 2000 $\,$ - continued [For definitions of terms and meanings of symbols, see text]

				Y	ap Oute	r Isla	nds				
			Fais/¦			Eaur-¦		Farau-		Lamo-¦	
Age	Total	Ulithi	Sorol;	Ngulu¦	Woleai;	ipik¦	Ifalik¦	lap	Elato	trek	Satawal
All persons	3,850	773	215	26	975	113	561	221	96	339	531
Less than 5 years	538		42	3	128	12	73	39	16	51	71
5 to 9 years	497		35	4	112	13	76	25	16	54	78
10 to 14 years	524		29	4	117	11	82	27	9	45	87
15 to 19 years	446		18	1	127	5	69	23	8	37	59
20 to 24 years	315		17	-	88	8	47	17	9	19	33
25 to 29 years	215		11	3	50	12	31	11	8	22	28
30 to 34 years	213		21	1	45	11	30	12	5	16	30
35 to 39 years	225		13	2	52	8	38	8	8 5	21	27 25
40 to 44 years	215 195		4 8	_	59 56	8 6	28 22	18 16	5	20 17	26
45 to 49 years	136		8	1	40	4	26	9	2	9	19
50 to 54 years	81		1	2	25	7	11	4	1	3	5
60 to 64 years	70		1	_	18	1	5	3	3	11	14
65 to 69 years	67		2	1	12	2	10	7	1	6	13
70 to 74 years	47		1	2	9	3	11	1	_	4	9
75 to 79 years	23		_	1	12	1	2	_	_	1	3
80 to 84 years	18		_	1	13	_	_	_	_	2	2
85+ years	25		4	_	12	1	-	1	_	1	2
Median	19.1		15.4	26.7	20.2	28.1	18.6	19.2	19.4	17.6	17.5
Males	1,812	405	103	10	452	42	261	98	42	152	247
Less than 5 years	265		21	1	65	5	33	18	9	26	38
5 to 9 years	270		21	1	57	8	43	14	6	30	41
10 to 14 years	273		12	4	61	5	45	18	4	23	44
15 to 19 years	239		10	-	69	1	34	13	3	17	30
20 to 24 years	127		9	-	31	3	18	7	5	5	11
25 to 29 years	84		5	1	17	5	8	2	4	7	12
30 to 34 years	68		7	-	20	5	10	2	2	4	6
35 to 39 years	108		7	-	20	4	20	4	3 2	11	11
40 to 44 years	90 88		2	1	26 23	1 2	9 11	8	1	4 11	13 13
45 to 49 years	68		4	1	18	1	12	5	2	2	8
55 to 59 years	27		_	_	10	_	4	_	_	1	3
60 to 64 years	25		_	_	9	_	2	_	_	4	5
65 to 69 years	33		_	_	6	2	6	1	1	4	6
70 to 74 years	20		1	_	3	-	6	_	_	3	3
75 to 79 years	9	1	-	1	6	-	-	-	-	-	1
80 to 84 years	5	-	-	-	4	-	-	-	-	-	1
85+ years	13	3	2	-	7	-	-	-	-	-	1
Median	17.1	18.8	14.0	13.8	18.1	23.3	16.4	14.7	18.3	14.3	15.1
Females	2,038		112	16	523	71	300	123	54	187	284
Less than 5 years	273		21	2	63	7	40	21	7	25	33
5 to 9 years	227		14	3	55	5	33	11	10	24	37
10 to 14 years	251		17	- 1	56	6	37	9	5	22	43
15 to 19 years	207		8	1	58 57	4 5	35 29	10 10	5 4	20 14	29
20 to 24 years	188 131			2	33	5 7	29	10	4	14 15	22
25 to 29 years	131		6 14	1	33 25	6	23	10	3	15	16 24
30 to 34 years	145		14	_	32	4	18	4	5	10	16
35 to 39 years	125		2	1	32	7	18	10	3	16	10
45 to 49 years	107		6	_	33	4	11	10	4	6	13
50 to 54 years	68		4	_	22	3	14	4	-	7	11
55 to 59 years	54		1	2	15	7	7	4	1	2	2
60 to 64 years	45		1	_	9	1	3	3	3	7	9
65 to 69 years	34		2	1	6	_	4	6	-	2	7
70 to 74 years	27		_	2	6	3	5	1	_	1	6
			_	_	6	1	2	_	_	1	2
75 to 79 years	14										
75 to 79 years	13		-	1	9	_	_	_	-	2	1
75 to 79 years		-						- 1	-		

Table B02. Household and Family Characteristics by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

Household Type Relationship		¦ +					Prope					
Relationship Family Type by Presence of Own Children	 Total	 Total	 Rumung	 Maap¦	 Gagil	Tomil:	 Fanif	Weloy	Rull¦0	 Gilman¦K	 anifay	Dalip- ebinaw
HOUSEHOLD TYPE AND RELATIONSHI												
All persons	.10,832	6,982	126	592	734	1,023 1,023 140 38 12	547	1,134	2,019 1,992 281 78 32	233 233 29 14 6 4		54 14
Family nouseholder: Male. Female. Nonfamily householder: Male Female Spouse. Child Parent. Other relatives Nonrelatives. In group quarters In correctional institutions	. 1,304 . 4,416 . 71 . 2,877	936 2,775 52 1,726 80	18 54 2 26	73 231 14 152 7	104 319 2 146 5	125 394 2 284 24	68 212 5 158 3	156 442 10 278 17	278 770 14 499 24	26 111 - 43	38 119 1 60	
Noninstitutionalized persons School dormitories Workers' quarters	383 . – . 350	383 - 350	-	- - - -	- - -	- - -	- - - -	37 - 8	27 - 23	- - - -	- - - -	319 - 319 - 319
Other noninstitutional	. 5.5	5.2	4.8	5.1	4.6 5.0	5.3 5.6	5.4 6.1	5.2 5.5	5.0 5.4	4.4 5.2	4.8 5.4	9.1 4.8
Persons under 18 years . Living with both parents Householder or spouse Own child With female hhlder, no husb Other relatives	. 4,868 . 3,333 . 10 . 4,000 . 810 . 591 . 23	3,029 2,163 6 2,508 402 376 8	66 45	282 181 2	313 239	439 335 -	253 154 - 191 17 48	494 332 1 418 59 59	804 600 1 692 97 89	113 93 - 103 27 7	130 86 2 94 15 29	135 98 -
Persons 65+ years Family householder: Male Female Spouse	. 153 . 112 . 72 . 40 . 88 . 3 . 25 . 20	99 67 48 34 41 2 23 19	3	9	5	3	4	-	19 16 9 8 16 2 6	-	15 6 2 3 - 1 - 1 2	14 6 3 1 2 2 - -
FAMILY TYPE BY PRESENCE OF OWN	CHILDR	EN										
Families	1,409	960 563	16 12	106 78 45	143 115 61	178 134 86	88 66 41	199 156 89	359 281 159	43 35 22	50 35 23	68 44 25
Married-couple families. With own children under 18 yrs With own children under 6 yrs	1,048	936 741 448	18 14 11	73 58 36	104 90 47	125 96 67	68 51 36	156 129 73	278 220 125	26 23 16	38 27 18	50 33 19
Female hhlder, no husb . With own children under 18 yrs With own children under 6 yrs	. 279 . 182	168 90	2	16 7		15	13 10 2		28	14 11 6	9 6 3	13 8 5

Table BO2. Household and Family Characteristics by Municipality of Usual Residence, Yap: 2000 - continued [For definitions of terms and meanings of symbols, see text]

Household Type				Y	ap Oute	er Isla	ands				
Family Type by Presence		1	Fais/	: :		Eaur-	1	Farau-	1 1	Lamo-	
HOUSEHOLD TYPE AND RELATIONSHIP											
All persons	3.850	773	215	26	975	113	561	221	96	339	531
In households					975	113	561	221			531
Family householder: Male					70	2					
Female	206		12	2	48	10	17	14	6	25	37
Nonfamily householder: Male	23	16	1	-	1	-	1	2	-	1	1
Female .	5	1		-	-	-	-	1			2
Spouse					74	-	51	24 99	9		
Child											
Parent			2				_	1			-
Other relatives				12	436			52		67	
Nonrelatives		34	1	-	10		-			-	5
In group quarters	-	-	-	-	-	-	-	-	-	-	-
In correctional institutions	-	-	-	_	_	-	_	-	-	_	-
Noninstitutionalized persons		_	_	_	_	_	_	_	-	_	-
School dormitories	_	_	_	_	_	_	_	_		_	_
Other noninstitutional	_	_	_		_	_	_	_		_	_
other hominotitutionar											
Persons per household	6.2	5.2	4.9	4.3	8.2	9.4	6.8	5.3	6.9	6.2	5.6
Persons per family	6.4	5.6	5.1	4.3	8.3	9.4	6.9	5.6	6.9	6.3	5.8
Persons under 18 years	1,839	363	117	12	430	40	274	103	46	175	279
Living with both parents	1,170	216	76	6	272	32	205	78	25	108	152
Householder or spouse			1	-	-	-	-	-	-	-	2
Own child	1,492	264	99	4	355	37	218	96	37	158	224
With female hhlder, no husb	408	52	23	-	113	28	47			48	54
Other relatives	215				41			4		11	
Nonrelatives	15				3		-		-	-	-
Persons in group quarters	-	-	-	-	-	-	-	-	-	-	_
Persons 65+ years	180	27	7	5	58	7	23	9	1	14	29
Family householder: Male	54		3	1	14	1		1	1	5	9
Female	45		_		15	3		4		6	5
Spouse					7	2			-	2	4
Parent	6		-	-	1		_		-	-	1
Other relatives	47				20			2		1	10
Nonrelatives	1			-	1		-	-		-	-
Nonfamily householder: Male				-	-	-	-	-		-	-
Female Persons in group quarters	1	-	-	-	_	-	-	1		-	_
FAMILY TYPE BY PRESENCE OF OWN CH	ILDREN										
Families	589				118	12	81	39		54	91
With own children under 18 yrs	449	98			101		61	36		34	
With own children under 6 yrs	341	66	28	1	83	8	45	27	9	29	45
Married-couple families	368	90	28	2	74	3	51	24	9	31	56
With own children under 18 yrs	307	73	23	1	68	3	40	22	7	25	45
With own children under 6 yrs	228	49	20	-	54	2	29	15	6	20	33
Female hhlder, no husb	166	28	11	2	36	9	17	14	4	19	26
With own children under 18 yrs	111				27	8	12	13		8	17
With own children under 6 yrs	92	11	7	-	24	6	10	12	3	8	11

Table B03. Household Size and Fertility by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

[For definitions of terms and m												
							Prope					
	 Total	¦ ¦Total	¦ ¦Rumung	 Maap	 Gagil	Tomil	Fanif	 Weloy	Rull	 Gilman Ka	 anifay	Dalip- ebinaw
HOUSEHOLD SIZE												
Households	168 180 239	143 151 186	26 3 4 4	9 14 15	158 15 18 23	194 11 16 22	101 12 9 8	231 28 21 39	407 45 40 54	53 10 7 4	57 7 10 4 7	71 3 12 13
4 persons 5 persons 6 persons 7 persons 8 persons 9 persons 10 persons 11 persons 12 or more persons	301 255 174 137 84 86 40 64	162 108 82 44 51 20 34	2 -	12 7 12 4 4 3 3	10 4 5 1	31 28 33 20 11 10 5 4	13 14 11 12 7 4 5 2	20 6 8 5 6	78 61 41 29 15 11 15 3	8 4 1 1 4 -	8 7 5 3 1 3 1	12 10 4 - 2 - 1
Median	5.4	5.0	4.7	5.3	5.1	5.6	5.6	4.7	4.8	4.9	5.1	4.6
Women 15 to 19 years Children ever born	680 55 55 21	473 46 46 16	3 - -	31 9 9 2	45 1 1	55 7 7 3	30 1 1 -	57 8 8 5	93 6 6 2	4	12 2 2 -	131 8 8 1
Women 20 to 24 years Children ever born Children still alive Children born in last 12 months	464	365 271 262 53	5 9 9 2	14 13 11 2	27 26 25 7	51 43 43 9	20 20 18 3	48 46 45 9	85 69 66 15	8 15 15 2	8 19 19 2	99 11 11 2
Women 25 to 29 years Children ever born Children still alive Children born in last 12 months	690 672	268 429 415 34	6 11 9 2	20 52 51 4	22 49 49 3	20 34 31 2	17 29 27 1	42 80 79 7	67 97 94 8	10 26 25 2	11 24 23 2	53 27 27 3
Women 30 to 34 years Children ever born Children still alive Children born in last 12 months	1,076 1,020	259 653 611 32	2 7 7 -	26 85 80 4	21 73 54 4	40 87 83 5	14 40 39 2	35 109 103 5	75 171 165 8	5 15 15 1	7 21 21 1	34 45 44 2
Women 35 to 39 years Children ever born Children still alive Children born in last 12 months	1,300 1,266	250 862 842 18	3 13 13 -	21 78 77 3	32 115 112 2	38 124 123 3	15 69 68 2	34 123 120 1	79 227 220 6	7 25 23 1	12 57 55 -	9 31 31 -
Women 40 to 44 years Children ever born Children still alive Children born in last 12 months	1,648 1,552	1,074	4 24 23 -	14 47 45	22 114 108	37 157 148 1	17 88 84 -	40 169 165 2	88 361 331 3	8 41 41 -	7 39 39 1	10 34 34 -
Women 45 to 49 years Children ever born Children still alive Children born in last 12 months	1,340 1,258		3 15 14 -	9 47 44 -	23 97 88 -	21 107 102 -	13 66 59 -	37 165 154 -	50 266 244 -	6 38 36 -	2 6 6	4 17 16 -
LAST CHILD BORN ALIVE												
Women 15 to 49 years with Last Birth		632 627 563 549 160 87 87	4 2 2 2	51 48 48 15 9 9	128 72 72 56 53 17 7 7	163 102 100 61 61 23 15 15	83 46 45 37 35 8 6 6 2	103 103 107 105 29 15 15	352 173 172 179 175 42 21 21 21	24 24 22 20 8 5 5	41 23 22 18 18 6 4 4 2	52 26 26 26 25 8 3 3

Table B03. Household Size and Fertility by Municipality of Usual Residence, Yap: 2000 - continued [For definitions of terms and meanings of symbols, see text]

	:				ap Oute						
Household Size Fertility	¦ ¦ Total	 Ulithi	Fais/ Sorol	 Ngulu	 Woleai	Eaur-;	 Ifalik	Farau- lap	 Elato	Lamo- trek	¦ ¦Satawal
HOUSEHOLD SIZE											
Households	617	149	44		119	12	82	42		55	94
1 person	25	14	2		1	-	1	3		1	3
2 persons	29 53	9 18	1 9		3	-	2	1 4		7	5 10
3 persons	78	15	13		10	_	10	5		6	18
5 persons	93		6		12	_	13	9		5	12
6 persons	93	19	3	2	15	2	11	11	2	9	19
7 persons	66		3		16	1	10	2		6	9
8 persons	55	7	5		12	2	7	5		7	6
9 persons	40 35	8	1		6 10	2	11 6	1		5 6	6 3
11 persons	20		_		10	1	3	_		-	2
12 or more persons	30	1	1	_	20	2	4	-		1	1
Median	6.3	5.6	4.8	5.0	7.9	9.5	7.0	5.9	7.5	6.7	5.9
FERTILITY											
Women 15 to 19 years	207	37	8		58	4	35	10		20	29
Children ever born	9		-	-	2	-	3	-	-	-	1
Children still alive Children born in last 12 months	5	-	_	_	2	_	3	_	_	_	1 -
Women 20 to 24 years	188	39	8	_	57	5	29	10	4	14	22
Children ever born	204	42	12		50	1	33	20		23	14
Children still alive	202	41	11	-	50	1	33	20	9	23	14
Children born in last 12 months	37	10	2	-	10	-	2	3	-	5	5
Women 25 to 29 years	131	16	6		33	7	23	9		15	16
Children ever born	261 257	29	21 21		49	5	59	24		42 41	19
Children still alive Children born in last 12 months	41	29 7	1		49 5	5 1	58 12	22 2		8	19 3
Women 30 to 34 years	145	30	14	1	25	6	20	10	3	12	24
Children ever born	423	106	52	2	48	13	65	21	9	37	70
Children still alive	409		51		48	12	59	21		35	68
Children born in last 12 months	27	3	4	-	3	-	3	2	2	5	5
Women 35 to 39 years	117	22	6		32	4	18	4		10	16
Children ever born	438 424	77 71	27 27	_	104 103	8	72 72	11 11		42 39	84 80
Children born in last 12 months.	14	3	1		4	-	3	1		-	1
Women 40 to 44 years	125	22	2	1	33	7	19	10	3	16	12
Children ever born	574	92	11		130	13	94	47		95	82
Children still alive	534	88	11		122	11	88	42		90	72
Children born in last 12 months	11	1	-	-	3	-	1	-	-	4	2
Women 45 to 49 years	107	20	6		33	4	11	10		6	13
Children ever born	516	97	39		114	5	63	40		42	88
Children still alive Children born in last 12 months	495 2	95	34	-	114	5 -	63 1	36 1		40	84
LAST CHILD BORN ALIVE											
Women 15 to 49 years	693		39		164	19	117	52		71	76
Male	340 336	57 56	20 19		81 80	7 7	65 65	27 27		33 33	41 40
Female	353	74	19		83	12	52	25		38	35
Still alive	351	73	19		83	12	51	25		38	35
Born in last year	137	27	8		27	1	22	9		22	16
Male	57	9	5		13	-	9	2		8	9
Still alive	57 80	9 18	5 3		13 14	- 1	9 13	2		8 14	9 7
Still alive	79		3		14	1	13	7		14	7
Still dilve											

Table B03A. Fertility by Age of Mother and Sex of Child by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

		1				Yap	Prope					
Fertility by Sex of Child	Tot	i	1	1	: :		: :			 Gilman Ka		
MALE CHILDREN												
Women 15 to 19 years		80 47		31		55		57	93	16	12	
Male Children ever born Male Children still alive		31 2' 31 2'		4	1 1	5 5	1	6 6	4	1 1	1	4
Women 20 to 24 years	5	53 36	5 5	14	27	51	20	48	85	8	8	99
Male Children ever born		45 13				28	8	18	35	7	14	
Male Children still alive		39 13				28	8	17	33	7	14	5
Women 25 to 29 years		99 268				20	17	42	67	10	11	53
Male Children ever born		60 21				19	14	38	50	10	14	16
Male Children still alive	. 3	53 212	2 6	23	27	17	14	38	48	10	13	16
Women 30 to 34 years		04 25				40	14	35	75	5	7	
Male Children ever born Male Children still alive		53 333 13 302				51 49	18 17	52 48	82 79	8	8	22 22
maie Children Still alive												
Women 35 to 39 years		67 250				38	15	34	79	7	12	9
Male Children ever born Male Children still alive		90 450 71 440				67 66	37 37	72 71	108 105	12 11	36 35	14 14
												14
Women 40 to 44 years		72 24				37	17	40	88	8	7	10
Male Children ever born Male Children still alive		61 55 05 51			61 56	84 76	39 38	76 75	195 174	21 21	26 26	19 19
Women 45 to 49 years		75 168			23	21	13	37	50	6	2	4
Male Children ever born Male Children still alive		86 408 49 38				56 51	32 28	81 80	128 123	17 16	2	9 9
FEMALE CHILDREN												
Women 15 to 19 years	. 6	80 47:	3 3	31	45	55	30	57	93	16	12	131
Female Children ever born		24 1	9 -	5	_	2	-	2	2	3	1	4
Female Children still alive .		24 1	9 –	5	-	2	-	2	2	3	1	4
Women 20 to 24 years	. 5	53 36			27	51	20	48	85	8	8	99
Female Children ever born		30 132			11	15	12	28	34	8	5	6
Female Children still alive .	. 2	25 12	7 5	7	10	15	10	28	33	8	5	6
Women 25 to 29 years		99 268 30 210		20 29		20 15	17 15	42 42	67 47	10 16	11 10	53 11
Female Children ever born Female Children still alive .		19 20:				14	13	42	4 /	15	10	11
Women 30 to 34 years	1	04 25	9 2	26	21	40	14	35	75	5	7	34
Female Children ever born		23 320				36	22	57	89	7	13	23
Female Children still alive .		07 30				34	22	55	86	7	13	22
Women 35 to 39 years	. 3	67 250) 3	21	32	38	15	34	79	7	12	9
Female Children ever born	. 6	10 40		31		57	32	51	119	13	21	17
Female Children still alive .	. 5	95 39	6 9	30	56	57	31	49	115	12	20	17
Women 40 to 44 years		72 24				37	17	40	88	8	7	10
Female Children ever born		87 518				73	49	93	166	20	13	15
Female Children still alive .	. 7	47 500	0 13	22	52	72	46	90	157	20	13	15
Women 45 to 49 years		75 168				21		37	50	6	2	4
Female Children ever born Female Children still alive .		54 416 09 375		18 17		51 51		84 74	138 121	21 20	4	8 7
remare chiruren still alive .	. 6	09 3/	> 8	Τ/	40	21	31	/4	121	20	4	/

Table B03A. Fertility by Age of Mother and Sex of Child by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

					ap Oute						
			Fais/	: :	1	Eaur-	1	Farau-	1	Lamo-	
MALE CHILDREN											
Women 15 to 19 years	207	37	8	1	58	4	35	10	5	20	29
Male Children ever born Male Children still alive		1	-	-	-	_	2 2	-	_	-	1 1
Women 20 to 24 years	188	39	8	_	57	5	29	10	4	14	22
Male Children ever born Male Children still alive	106 104	21 20	6 5	-	22 22	-	20 20	10 10		14 14	
Women 25 to 29 years Male Children ever born	131 141	16 17	6 11	2 2	33 29	7 2	23 30	9 15	_		
Male Children still alive	141	17	11	2	29	2	30	15			
Women 30 to 34 years Male Children ever born	145 220	30 50	14 29	1	25 21	6	20 32	10 15			
Male Children still alive	211	50	28	1	21	8	28	15	-		
Women 35 to 39 years Male Children ever born	117 234	22 43	6 14	-	32 53	4 5	18 36	4		10 19	
Male Children still alive	225	40	14	-	52	5	36	7			45
Women 40 to 44 years Male Children ever born	125 305	22 40	2	1	33 70	7 5	19 59	10 26			
Male Children still alive	287	38	9	-	66	4	56	23			41
Women 45 to 49 years Male Children ever born	107 278	20 48	6 19	-	33 59	4	11 40	10 27		6 18	
Male Children still alive	265	46	17	-	59	3	40	23	13	18	46
FEMALE CHILDREN											
Women 15 to 19 years Female Children ever born	207 5	37 2	8	1 -	58 2	4	35 1	10	-	-	29
Female Children still alive	5	2	-	-	2	-	1	-	-	-	-
Women 20 to 24 years Female Children ever born	188 98	39 21	8	-	57 28	5 1	29 13	10 10		14 9	
Female Children still alive	98	21	6	-	28	1	13	10	5	9	5
Women 25 to 29 years Female Children ever born	131 120	16 12	6 10	2 5	33 20	7 3	23 29	9	_		
Female Children still alive	116	12	10	5	20	3	28	7			
Women 30 to 34 years Female Children ever born	145 203	30 56	14 23	1	25 27	6 5	20 33	10 6		12 15	
Female Children still alive	198	54	23	1	27	4	31	6		15	
Women 35 to 39 years Female Children ever born	117 204	22 34	6 13	-	32 51	4	18 36	4			
Female Children still alive	199	31	13	-	51	3	36	4	4	22	
Women 40 to 44 years Female Children ever born	125 269	22 52	2	1 -	33 60	7 8	19 35	10 21	-		
Female Children still alive	247	50	2	-	56	7	32	19			
Women 45 to 49 years Female Children ever born	107 238	20 49	6 20	_	33 55	4 2	11 23	10 13		6 24	
Female Children still alive	230	49	17	-	55	2	23	13		22	

Table B04. Single Years of Age by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

		 !				Yaj	p Prop	er				
Age	Total	¦ ¦ ¦Total	 Rumung					 Weloy		¦ ¦Gilman	¦ ¦Kanifay	Dalip-
All persons	11.241	7.391	126	592	734	1,023	547	1,197	2.019	233	275	645
Under 1 year		156	4	15	19		6	23	41	9	7	
1 year		141	_	9	14	23	8	24	38	6	8	
2 years	284	170	6	16	17	27	15	25	44	3	11	6
3 years	289	183	3	17	26	25	18	27	44	8	12	3
4 years	291	184	6	18	17	29	11	24	53	7	12	7
5 years	252	150	5	10	12	19	17	25	48	6	1	7
6 years	276	172	6	10	13	25	15	27	54	7	9	6
7 years	302	199	6	23	18	25	19	40	42	9	7	10
8 years	269	159	3	11	15	23	13	34	41	6	5	8
9 years	262	184	7	18	20	25	17	30	50	2	6	9
10 years		159 158	3 -	21 14	11 18	20 28	14 12	32 26	42 38	7 5	2	
11 years		182	5	25	25	23	15	30	45	4	6	
12 years		177	4	17	19	26	14	21	52	11	6	
13 years	272	155	5	10	15	20	14	21	42	6	13	
14 years		151	2	14	16	23	10	31	39	3	7	
16 years	285	194	_	22	21	31	22	29	53	7	3	
17 years	244	155	1	12	17	22	13	25	38	7	8	
18 years	313	218	1	14	16	30	9	31	48	5	7	
19 years	257	186	-	8	12	17	7	18	29	4	8	
20 years	252	182	3	9	15	21	6	19	41	3	3	62
21 years	209	156	-	6	17	16	13	26	39	2	6	31
22 years	183	118	1	5	14	19	3	17	42	3	3	11
23 years	161	108	-	6	9	11	8	24	21	4	4	
24 years		125	4	10	8	21	6	24	23	3	6	
25 years	142	99	3	3	14	15	7	17	20	2	4	
26 years	145	99	2	5	5		4	19	36	4	1	
27 years		107	1	12	8	11	10	14	31	1	5	
28 years	119 135	85 96	3	5 6	9	10 9	5 5	9 20	25 23	6 2	1 5	
30 years	157	104	1	12	10	14	8	15	25	1	3	15
31 years		87	_	7	2	17	5	14	27	1	3	
32 years		92	_	8	5	13	4	18	29	2	2	11
33 years	141	107	3	11	8	15	8	17	33	2	3	7
34 years	127	98	-	9	10	15	5	9	30	4	7	9
35 years	147	97	2	8	12	11	4	19	28	4	3	6
36 years	156	107	1	9	8	18	4	21	29	2	8	7
37 years	138	99	3	11	8	15	8	12	32	3	3	
38 years	113 164	77 113	2	4	11 16	7 9	6 10	14 18	23 41	3	4 2	
40 years	123	92	2	10	8	13	7	12	30	5	1	
41 years	169	127	2	9	12	17	3	20	49	3	9	
42 years	158	97	1	7	9		2	17	32	6	2	
43 years	139 134	96 96	3	6 7	11 7	10 16	10 6	13 22	31 30	3	2	
44 years												
45 years	98 132	68 93	- 1	4	12 9		12 14	8 16	20 29	1 1	5 2	
-	132	93 84	1	6	8		6	17	29	3	2	
47 years	118	77	1	3	10		3	20	23	1	1	
49 years	112	73	_	7	6	11	2	16	23	6	1	
50 years	91	63	_	5	9	10	6	9	19	2	1	2
51 years	99	62	1	6	5	9	6	13	18	1	2	
52 years	98	71	1	4	7	9	6	16	22	2	1	3
53 years	48	29	2	-	3	3	3	5	13	-	-	-
54 years	64	39	-	3	6		5	7	8	-	-	
55 years	46	26	-	2	3		1	4	8	-	2	3
56 years	53	37	-	3	7		1	6	10	1	2	4
57 years	36	23	-	4	2	5	2	3	6	-	-	-
58 years	53	36	-	2	5		4	9	11	-	-	-
59 years	38	23	1	-	4	5	2	4	5	-	-	2
60 to 64 years		151 339	3 10	7 33	14 38	29 50	18 30	22 49	43 83	1 17	6 15	
-												

Table B04. Single Years of Age by Municipality of Usual Residence, Yap: 2000 $\,$ - continued [For definitions of terms and meanings of symbols, see text]

				Yap Out	er 121					
ge !	1	Fais; lithi¦Soro	5/¦	1		:	Farau-		Lamo-	
All persons		773 21			113	561	221	96	339	531
nder 1 year	108	23	9 1		1	14	5	4	11	13
year	103		11 -		2	13	5	4	13	14
years	114	20	7 – 5 2		2	16	12	6	4	14 18
years	106 107	21 23 1	10 -		5	18 12	6 11	2	10 13	12
years	107	14	8 -		3	17	11	4	12	24
years	104	20	9 2		3	19	8	- 4	5	6
years	103	22	5 -			12	7	3	14	18
years	110	18	6 -		4	21	5	7	7	20
years	78	10	7 2		2	7	5	2	16	10
0 years	106	18	7 -	24	2	26	2	-	8	19
1 years	109	30	4 3	22	2	13	6	3	9	17
2 years	101	18	6 -	23	3	15	6	2	10	18
3 years	91	25	4 1	21	3	10	6	3	6	12
4 years	117	22	8 -		1	18	7	1	12	21
5 years	100	14	5 -		2	17	4	4	11	20
6 years	91	22	1 1		1	14	6	1	7	12
7 years	89	27	5 -		1	12	2	-	7	11
8 years	95	20	6 -		-	17	6	2	7	6
9 years	71	16	1 -	23	1	9	5	1	5	10
0 years	70 53	14 12	3 -		2	11 8	3	2	4 2	9 5
1 years		19	4 -		5	12	5	2	6	5
2 years	65 53	13	3 -		5	6	3	1	2	8
-	74	19	4 -		_	10	3	3	5	6
4 years		8	3 -		2	7	1	1	5	8
-	43			-	1	7	1	1	2	10
6 years	46 53	11 8	3 1 1		3	4	3	3	5	5
7 years	34	5	J I		2	7	3	2	6	2
9 years	39	7	2 1		4	6	3	1	4	3
0 years	53	12	8 1	10	2	7	_	1	2	10
1 years	54	5	7 -	12	2	7	6	3	7	5
2 years	43	9	2 -	11	1	8	3	-	3	6
3 years	34	10	3 -	4	4	5	1	-	3	4
4 years	29	6	1 -	8	2	3	2	1	1	5
5 years	50	17	4 -	8	1	8	2	2	5	3
6 years	49	6	2 -	14	2	10	-	2	7	6
7 years	39	9	3 -		1	7	-	1	2	6
8 years	36	7	2 -	-	2	5	4	-	5	3
9 years	51	11	2 -	12	2	8	2	3	2	9
0 years	31	7			1	2	5	3	3	3
1 years	42	11			2	6	3	-	5	4
2 years	61	10	2 -		1	6	3	-	6	9
3 years	43	12	1 1		1	8	3	2	5	2
4 years	38	6	1 1		3	6	4	-	1	7
5 years	30	5	2 -		- 1	5	2	- 1	2	4
6 years	39	8	1 -		1	4	2	1	4	4
7 years	46	8	 4 -		3	2	5	2	5	9
8 years	41 39	10 8	4 - 1 -	11 9	1	5 6	4	2	3	3 6
N vears	28	5	1 -	9	3	1	1	_	3	5
0 years	37	7			- -	6	2	1	2	7
2 years	27	1	2 1		1	5	5	1	1	5
2 years	19	3	4 -		_	6	_	_	1	1
4 years	25	2	1 -		_	8	1	_	2	1
5 years	20	6	- 1		_	6	2	_	_	_
6 years	16	3	- 1		1	4	1	_	1	_
7 years	13	4			2	-	_	_	_	1
8 years	17	6	1 -	-	3	_	_	_	1	1
9 years	15	3		-	1	1	1		1	3
0 to 64 years	70	14	1 -	18	1	5	3	3	11	14

Table B04. Female Single Years of Age by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

;	! .	 				Yap	Prope					
Age	! !		1			: :	Fanif				¦ ¦Kanifay	Dalip
Females	5 , 733	3 , 695	68	282	350	499	262	568	1,000	123	123	420
Under 1 year		68	2	6	10	8	1	9	21	3	3	
1 year	116	64	-	3	4	8	3	12	23	4	4	3
2 years	136	86	2	12	7	9	7	13	25	2	5	4
3 years	131 140	83 85	2 5	7 10	14	7 13	6 5	13 9	24 25	3	6 5	1
4 years	119	77	4	6	5	9	8	12	26	4	_	3
6 years	126	77	4	5	3	12	7	13	25	3	2	
7 years	161	104	3	7	11	14	10	24	24	5	1	
8 years	134	83	2	7	5	17	9	17	19	1	1	5
9 years	121	93	3	5	11	13	8	15	29	-	2	7
10 years	132	75	3	9	2	10	5	16	21	4	1	4
11 years	118 146	74 93	- 2	9 10	8 11	11 13	5 8	13 20	18 20	2 2	3 4	5 3
12 years	131	90	2	9	11	14	10	7	21	7	4	5
14 years	141	85	_	4	11	9	5	12	28	5	7	
15 years	115	68	1	4	8	13	7	14	14	3	2	2
16 years	120	82	-	8	14	8	10	10	26	2	1	3
17 years	123	83	1	7	10	9	7	9	22	6	4	8
18 years	173	125	1	8	6	17	2	15	22	2	4	48
19 years	149	115	-	4	7	8	4	9	9	3	1	70
20 years	130 114	90 87	1	3	4 7	11 11	3 8	7 9	15 23	1 1	1	44 24
21 years	103	65	1	1	6	10	3	8	24	1	1 2	24 9
23 years	103	65	_	3	7	8	2	13	14	3	4	11
24 years	103	58	3	4	3	11	4	11	9	2	_	11
25 years	84	57	3	2	6	5	5	9	12	1	4	10
26 years	75	49	-	3	2	4	1	9	15	3	-	12
27 years	88	57	-	8	4	3	5	8	14	1	2	12
28 years	73 79	50 55	- 3	4	5 5	5 3	3	5 11	12 14	4	1 4	11 8
	91	56	_	7	6	9	4	7	12	_	1	10
30 years	83	45	_	4	1	14	-	6	10	1	1	8
32 years	75	46	_	2	3	6	2	7	17	1	1	7
33 years	84	61	2	8	5	4	5	11	21	-	-	5
34 years	71	51	-	5	6	7	3	4	15	3	4	4
35 years	69	48	-	4	5	9	1	4	20	2	2	1
36 years	91	60	1	7	5	8	3	15	12	-	5	4
37 years	80 50	59	1	7 1	7 6	12 3	6 1	6 5	16 9	1	2 2	1
38 years	77	31 52	1	2	9	6	4	4	22	3	1	
40 years	70	45	_	3	5	8	4	6	15	2	_	2
41 years	77	58	_	2	5	8	2	8	26	1	5	1
42 years	87	51	-	4	4	9	2	10	17	3	-	2
43 years	74	49	3	1	6	6	5	7	15	-	2	4
44 years	64	44	1	4	2	6	4	9	15	2	-	1
45 years	41	22	- 1	1	4	2	5	2	6	- 1	2	-
46 years	65 60	42 36	1	3 2	4	6 6	4	11 8	10 9	1 3	-	2
47 years	55	35	1	_	6	4	_	8	15	3	_	1
49 years	54	33	_	3	5	3	2	8	10	2	-	-
50 years	41	31	_	1	2	5	4	5	12	1	_	1
51 years	48	31	-	3	3	2	3	8	9	1	1	1
52 years	43	28	1	4	1	4	2	6	8	-	1	1
53 years	19	11	-	-	2	3	-	1	5	-	-	-
54 years	26	8	-	1	1	3	1	1	1	-	-	-
55 years	24	12	_	2	-	2	- 1	-	4	- 1	1	3
56 years	25 19	14 11	_	2	2	4	1 1	3	3	1	_	2
57 years	30	20	_	1	3	2	3	6	4	_	_	1
59 years	26	13	1	-	2	2	2	2	2	-	-	2
60 to 64 years	117 277	72 177	- 6	4 17	4 19	17 26	9 13	8 29	21 43	- 11	5	4 5

Table B04. Female Single Years of Age by Municipality of Usual Residence, Yap: 2000 - continued [For definitions of terms and meanings of symbols, see text]

					Yap Out						
+ 	1	1	Fais/	1	¦ ¦Woleai	Eaur-	1	Farau-	1	Lamo-¦	
Females	2.038	368	112	16	523	 71	300	123	 54	187	284
Under 1 year	68	15	4	1	15	1	9			8	7
1 year	52	5	7	_	12	1	6			7	7
2 years	50	6	2	_	18	1	10	4	2	1	6
3 years	48	13	2	1	11		8	1		6	5
4 years	55	15	6	_	7	3	7	6		3	8
5 years	42	7	3	_	5	2	. 8	_	3	4	10
6 years	49	6	4	2	19		7	5		3	2
7 years	57	8	3	_	16		4	4		10	10
8 years	51	8	2	_	10		13			1	10
9 years	28	6	2	1	5		1	-	-	6	5
10 years	57	8	3	_	14	_	12	1	_	6	13
11 years	44	13	3	_	8	1	4	4	2	3	6
12 years	53	10	4	_	12		8	1		4	11
13 years	41	11	2	_	8	3	5	1	2	3	6
14 years	56	14	5	_	14	_	8	2		6	7
15 years	47	3	4	_	11	1	8	1		7	8
16 years	38	6	-	1	11	1	7	3		3	6
	40	12	_	_	12		5		_	4	6
17 years	40	12	3	_	14		10	3		4	5
18 years	34	8	1	-	10		5			2	4
20 years	40	6	2	_	13	1	7	1	_	3	7
21 years	27	1	1	-	10	1	5	3	1	2	3
22 years	38	11	1	_	4	3	8	3	1	3	4
23 years	38	10	2	_	14	_	5	2	_	2	3
24 years	45	11	2	_	16	_	4	1	2	4	5
25 years	27	5	1	_	5	2	4	1	_	4	5
26 years	26	3	3	1	6	_	4	1	_	1	7
27 years	31	2	1	1	14	1	4	3		1	2
28 years	23	3	_	_	3		6	2		5	1
29 years	24	3	1	-	5		5	2		4	1
30 years	35	8	4	1	5	2	5	_	1	2	7
31 years	38	3	6	_	8	_	6	4	1	6	4
32 years	29	6	1	_	6	_	6			2	5
33 years	23	8	2	_	2	2	2	1	_	2	4
34 years	20	5	1	_	4	2	1	2	1	_	4
35 years	21	9	3	_	4	1	1	1	1	1	_
36 years	31	2	_	_	10		6		2	5	4
37 years	21	2	1	_	6		4	_	_	2	6
38 years	19	3	2	_	5		4	2		1	1
39 years	25	6	-	-	7		3			1	5
40 years	25	6	_	_	5	1	1	4	2	3	3
41 years	19	3	-	-	4		4	1		3	2
42 years	36	6	1	_	15	1	4	2		5	2
43 years	25	5	_	_	5	_	7	2		4	1
44 years	20	2	1	1	4	3	3		_	1	4
45 years	19	_	2	_	8	_	4	1	_	1	3
45 years	23	6	1	_	10	1	4	1	1	2	1
	24	5	_	_	6	2	1			2	3
47 years	20	5 4	3	_	5		2			_	3
49 years	21	5	-	_	4	-	4			1	3
50 years	10		_	_	2	2	_	_	_	3	3
	17	2	_	_	6		3	1	_	1	4
51 years				_						_	3
52 years	15	1	1	_	3		3				
53 years	8	-	2		2		2			1	1
54 years	18	-	1	-	9		6			2	-
55 years	12	5	-	1	2		2			-	-
56 years	11	1	-	1	3		4			-	-
57 years	8	2	-	-	4		-	-		-	-
58 years	10 13	3 2	1	_	2 4		- 1			1 1	- 2
60 to 64 years	45 100	9) 12			9 4 3:		3 5 1		3 8 -	7 7	9 17
65+ years	100) 12	2 .	4 .	4 3	2 5	5 1	1 	8 – 	7	1

Table B05. Place of Birth by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

	 	 ¦					p Prope					
Place of Birth	Total	 Total	 Rumung	 Maap	 Gagil	 Tomil	¦ ¦Fanif	 Weloy	 Rull	¦ ¦Gilman	 Kanifay	Dalip- ebinaw
All persons			126	592		1,023		1,197		233	275	645
Federated States of Micronesia.			125	578	708	964		1,111		228	271	277
Yap			125	577	695	946		1,104			271	273
Yap proper		166	125 103	577 6	691 5	875 6	520	926 42	1,318		270	273 1
Maap	571	571	13	459	11	16	31	28	9		_	4
Gagil	731	728	2	11	582	47	16	31	28		_	7
Tomil	846	846	1	10	36	692	16	46	29		5	9
Fanif	584	583	-	11	11	44	415	55	34	9	1	3
Weloy			5	71	28	39		657	161	4	7	18
Rull			_	5	10	22	11 2	25 9	941 25		8	20 4
Gilman	301	214 301	_	1	_	1		4	37	167 11	4 241	2
Dalipebinaw	311	310	1	3	7	5		29	51	3	4	205
Outer Islands	4,433	692	-	-	4	71	1	178	431	6	1	-
Ulithi		124	-	-	1	6		31	84		-	-
Fais/Sorol	260	62	-	-			-	55	7		-	-
Ngulu	1 020	8 194	-	-	1 2	3 47		31	1 113	3 1	_	-
Woleai Eauripik		47	_	_	_	9	_	31	35	_	_	_
Ifalik	668	65	_	_	_	1		39	25		_	_
Faraulap	273	25	-	-	-	-	1	2	22		-	-
Elato	78	18	-	-	-	3	-	-	14	-	1	-
Lamotrek	434	61	-	-	-	1	-	5	55	-	-	-
Satawal	655	88	-	-	-	1		12	75	-	-	-
Chuuk	47 51	24 50	_	1	1 12	4 13	5 5	5 2	5 17	_	_	4
Kosrae	3	2	_	_		1	_	_	1	_	_	_
Guam	37	34	_	1	3	6	3	3	13	2	1	2
Northern Mariana Islands	33	29	-	-	3	1	3	8	10	-	-	4
Palau	93	92	-	2	2	5	1	7	67		-	6
Other Pacific Islands	25	24	-	-	-	3		1	17	-	-	1
Asia	528	528	_	4	3	19	4	43	101	-	-	354 350
China and Taiwan	351 149	351 149	_	_	3	16		39	1 88		_	350
Other Asia	28	28	_	4	_	3		4	12		_	3
United States	103 18	101 18	1	7	11 4	24	3	17 7	34 5	1	3 -	- 1
Females			68	282	350	499	262		1,000	123	123	420
Federated States of Micronesia.			67	276	341	475	257	537	894		121	139
Yap proper			67 67	275 275	331 330	464 422	250 250	534 457	880 671	122 120	121 120	136 136
Rumung	109	82	54		4	4	-	18	1		-	1
Маар	277	277	9	216	6	7	19	14	4	_	-	2
Gagil	354	351	1	9	260	31	12	16	12		-	6
Tomil	420	420	-	6	24	320		23	21		5	8
Fanif	286	286	-	7	8	22		32	28	5	1	2
Weloy	516 530	512 529	2	30 4	17 7	25 8	11 10	317 14	89 451	4 14	5 6	12 15
Gilman	115	114	_	1	1	1	2	7	12	83	3	4
Kanifay	133	133	-	_	_	2		1	23	7	98	-
Dalipebinaw	145	144	1	2	3	2	2	15	30	1	2	86
Outer Islands	2,315	332	-	-	1	42	-	77	209	2	1	-
Ulithi	406	72	-	-	1	4	-	16	50	1	-	-
Fais/Sorol	125	25	_	_	_	2	_	21	4		_	_
Ngulu	16 551	3 94	_	_	_	29		13	- 52		_	_
Eauripik	112	21	_	_	_	5		1	15		_	_
Ifalik	350	30	_	_	_	-		18	12		_	_
Faraulap		11	-	-	-	-	-	1	10	-	-	-
Elato	37	7	-	-	-	2		-	4		1	-
Lamotrek		27	-	-	-	-		2	25		-	-
Satawal		42	_	_	_	-		5	37		-	-
Chuuk	26	14	_			3 7		3	2		_	3
Pohnpei	34 3	33 2	_	1	10	1		_	11 1		_	_
Guam	18	17	_	1	_	4		1	8		1	1
Northern Mariana Islands	12	10	_	_	-	_		3	3		_	3
Palau	47	47	-	-	2	2		5	33		-	3
Other Pacific Islands	13	13	-	-	-	-	-	1	11	-	-	1
Asia	326	326	-	2	-	6		9	36		-	272
China and Taiwan	271	271	-	-	-	-		-	-	-	-	271
Philippines		44	-	-	-	5	- 1	8	31		-	- 1
Other Asia	11 48	11 47	- 1	2	- 6	1 12		1 9	5 14		1	1
Elsewhere		6	_	_	1	1.2	_	3	14		_	1
Eligenicie												

Table B05. Place of Birth by Municipality of Usual Residence, Yap: 2000 $\,$ - continued [For definitions of terms and meanings of symbols, see text]

	¦ +				Yap Out						
Place of Birth	i		Fais/	1		Eaur-	1	Farau-		Lamo-	:
All persons		773	215	26	975	113	561	221	96	339	531
Federated States of Micronesia		769	214	26	972	113	561	221	95	339	529
Yap proper		765 10	214 45	26	966 7	113	560	221	95 7	338	516 1
Rumung	52	_	45	_	_	_	_	_	7	_	_
Maap	-	-	-	_	-	_	_	-	_	-	_
Gagil	3	3	-	-	-	-	-	-	-	-	-
Tomil	-	-	-	-	-	-	-	-	-	-	-
Fanif	1	-	_	_	1	_	_	-	-	_	-
Weloy	11	5 2	_	_	4	1	_	1	_	_	1
Gilman	2	_	_	_	2	_	_	_	_	_	_
Kanifay	_	-	-	-	_	-	-	-	-	-	-
Dalipebinaw	1	-	-	-	-	-	-	1	-	-	-
Outer Islands	3,741	755	169	26	959	112	560	219	88	338	515
Ulithi	691	673	2	-	14	1	-	-	1		-
Fais/Sorol	198 23	20	166	21	_	_	_	_	1	8	3
Woleai	826	4	_	-	796	6	2	2	- 8	1	7
Eauripik	152	1	1	_	44	105	_	1	_	_	_
Ifalik	603	11	-	5	21	-	554	-	4	8	-
Faraulap	248	3	-	-	23	-	3	213	1	1	4
Elato	60	6	-	-	1	-	-	-	53	-	-
Lamotrek	373 567	15 20	-	-	25 35	_	- 1	2	15 5	316 4	501
Satawal	23	3	_	_	55	_	1	1	-	1	13
Pohnpei	1	1	_	_	_	_	_	-	_	_	-
Kosrae	1	-	-	-	-	-	1	-	-	-	-
Guam	3	1	-	-	-	-	-	-	-	-	2
Northern Mariana Islands	4	1	-	-	3	-	-	-	-	-	-
Palau	1	1	_	_	_	_	_	_	1	_	_
Other Pacific Islands	_	_	_	_	_	_	_	_	_	_	_
China and Taiwan	_	_	_	_	_	_	_	_	_	_	_
Philippines	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-
United States	2	1 -	1 -	-	-	_	_	_	-	-	-
Females	2,038	368	112	16	523	71	300	123	54	187	284
Federated States of Micronesia		368	111	16	521	71	300	123	54	187	283
Yap		366	111	16	517	71	299	123	54	187	276
Yap proper	37 27	6	24 24	_	3	_	_	1	3	_	_
Rumung	21	_	24	_	_	_	_	_	- -	_	_
Gagil	3	3	_	_	-	_	_	-	_	-	_
Tomil	-	-	-	-	-	-	-	-	-	-	-
Fanif	-	-	-	-	-	-	-	-	-	-	-
Weloy	4	2	-	-	2	-	-	-	-	-	-
Rull	1	1	-	-	1	-	-	-	-	-	-
Gilman	1	_	_	_	1	_	_	_	_	_	_
Dalipebinaw	1	-	_	_	-	_	_	1	_	-	_
Outer Islands	1,983	360	87	16	514	71	299	122	51	187	276
Ulithi	334	328	1	-	4	-	-	-	1	-	-
Fais/Sorol	100	8	85		-	-	-	-	1	4	2
Ngulu	13	1	_	12	439	- 4	-	2	7	_	-
Woleai		1	1	_	439		1	1	_	_	3
Ifalik	320	7	_	4	8		296	_	1		_
Faraulap	139	3	_	_	13		1	117	1		3
Elato	30	2	-	-	-	-	-	-	28	-	-
	207	5	-	-	12	-	_	2	10	178	_
Lamotrek	292	4	-	-	17	-	1	_	2		268
Lamotrek	4.0		-	-	4	-	-		-	-	7
Lamotrek	12					_		_		_	
Lamotrek Satawal Chuuk Pohnpei	1	1	-	_	-	-	- 1	_	_	_	_
Lamotrek		1					1				
Lamotrek Satawal Chuuk Pohnpei	1	1 -	-	-	-	-	1	-	-	-	-
Lamotrek	1 1 1	1 - - -	- - -	- - - -	- - 2	- - -	1 - -	-	- - -	- - -	- 1 - -
Lamotrek	1 1 1 2	1 - - - -	- - - -	- - - -	- 2 -	- - - -	1 - - -	- - - -	- - - -	- - - -	- 1 - -
Lamotrek	1 1 1 2	1 - - - - -	- - - - -	- - - -	- - 2	- - -	1 - - - -	- - -	- - -	- - -	- 1 - - -
Lamotrek Satawal. Chuuk. Pohnpei. Kosrae Guam Northern Mariana Islands Palau. Other Pacific Islands. Asia China and Taiwan	1 1 2 - -	1 - - - - -	- - - - -	- - - - -	- 2 - - -	- - - - -	1 - - - -	- - - - -	- - - - -	- - - - -	- 1 - - - -
Lamotrek Satawal Chuuk Pohnpei Kosrae Guam Northern Mariana Islands Palau Other Pacific Islands Asia China and Taiwan Philippines	1 1 1 2 - -	1 - - - - - -	- - - - -	- - - - - -	- 2 - - -	- - - - -	1 - - - - -	- - - - -	- - - - -	- - - - -	1 - - - - -
Lamotrek Satawal. Chuuk. Pohnpei. Kosrae Guam Northern Mariana Islands Palau. Other Pacific Islands. Asia China and Taiwan	1 1 2 - - - -	1 - - - - -	- - - - -	- - - - -	- 2 - - -	- - - - -	1 - - - -	- - - - -	- - - - -	- - - - - -	- 1 - - - -

Table B06. Legal Residence and Year of Entry by Municipality of Usual Residence, Yap: 2000 $[For\ definitions\ of\ terms\ and\ meanings\ of\ symbols,\ see\ text]$

	 !	 !					Prop					
Legal Residence	Imatal	 Motol	Dumum					 [1]]		Cilmon I		Dalip-
	;10ta1	;10ta1	Kumung	маар					, Kull;	Gilman¦I		
All persons			126	592		1,023		1,197		233	275	645
Federated States of Micronesia			126	584	710	976		1,141		231	273	292
Yap			126	583	708	973		1,137		231	273	291
Yap proper		5,865	126	583	704	899	529		1,289	228	273	291
Rumung	180	177	117	4	1	4	1	47	3	-	_	-
Maap	639 771	638 771	7	566 5	678	13 32	24 11	24 16	3 26	1	_	- 1
Gagil	856	855	1	1	6 / 8	785	7	27	23	_	3	1
Fanif	540	540	_	3	2	35	461	16	13	5	2	3
Weloy	816	814	_	_	9	10	8	738	41	2	2	4
Rull		1,181	_	2	1	7	11		1,122	3	1	6
Gilman	234	234	_	1	-	5	1	5	. 9	213	-	-
Kanifay	273	273	-	-	-	1	2	4	5	-	260	1
Dalipebinaw	382	382	-	1	5	7	3	38	44	3	5	276
Outer Islands	4,627	804	-	-	4	74	1	194	528	3	-	-
Ulithi	847	156	-	-	-	7	-	39	108	2	-	-
Fais/Sorol	324	76	-	-	_	-	-	58	18	-	_	-
Ngulu	23 1,115	233		_	4	- 52	_	33	1 144	1	_	_
Eauripik	172	49	_	_	_	9	_	4	36	_	_	_
Ifalik	676	82	_	_	-	1	-	40	41	_	_	_
Faraulap	267	25	-	-	-	-	1	2	22	-	-	-
Elato	125	22	-	-	-	3	-	-	19	-	-	-
Lamotrek	423	71	-	-	-	1	-	6	64	-	-	-
Satawal	655	88	-	-	-	1	-	12	75	-	-	-
Chuuk	24 12	13 9	-	1	_	- 2	5	3 1	4	_	-	- 1
Pohnpei	12	1		_	2	1	_	1	3	_	_	1
Kosrae	702	699	_	8	24	47	12	56	195	2	2	353
Females	5,733	3,695	68	282	350	499	262	568	1,000	123	123	420
Federated States of Micronesia	5,327	3,291	68	278	340	484	259	551	918	123	122	148
Yap		3,277	68	277	338	482	256	549	914	123	122	148
Yap proper		2,876	68	277	336	440	256	460	648	121	122	148
Rumung	93	91	64	1	1	1	-	22	2	-	_	-
Maap	303	302 373	4	268 3	-	3 20	15 7	10	1 12	1	_	- 1
Gagil	373 429	429	_	3	320 7	387	4	15	13	_	3	1
Fanif	252	252	_	2	1	15	213	6	8	3	2	2
Weloy	401	400	_	_	5	6	3	358	20	2	2	4
Rull	598	598	-	1	_	2	8	16	564	2	-	5
Gilman	122	122	-	1	-	1	1	4	4	111	-	-
Kanifay	117	117	-	-	-	1	2	-	2	-	112	-
Dalipebinaw	192	192	-	1	2	4	3	20	22	1	3	136
Outer Islands	2,425	401	-	-	2	42	-	89	266	2	-	-
Ulithi	433 157	93 34	_	_	_	4	_	24 23	64 11	1	_	_
Fais/Sorol	137	1	_	_	_	_	_	23	11	1	_	_
Woleai	602	120	_	_	2	31	_	14	73	_	_	_
Eauripik	100	24	_	_	_	5	_	2	17	_	_	_
Ifalik	355	39	_	_	-	_	-	18	21	_	_	_
Faraulap	145	9	-	-	-	-	-	1	8	-	-	-
Elato	65	9	-	-	-	2	-	-	7	-	-	-
Lamotrek	221	28	-	-	-	-	-	2	26	-	-	-
Satawal	334	44	-	-	-	-	-	5	39	-	-	-
Chuuk	15 5	9	_	1	2	1	3	2	3 1	_	_	_
Pohnpei	2	1	_	_	_	1	_	_	_	_	_	_
Elsewhere	406	404	_	4	10	15	3	17	82	_	1	272
DISCHNOTO												

Table B06. Legal Residence and Year of Entry by Municipality of Usual Residence, Yap: 2000 - continued [For definitions of terms and meanings of symbols, see text]

	!			Y	ap Oute		ands				
Legal Residence		 Ulithi	Fais/			Eaur-		Farau-		Lamo-	
All persons			215	26	975	113	561	221	96	339	531
Federated States of Micronesia			214 214	26 26	975 973	113 113	561 560	221 221	96 96	339 338	529 520
Yap			214	Z 0 -	9/3	113	360	1	90	330	2
Rumung		-	_	_	_	_	_	1	_	_	1
Maap			_	_	_	_	_	_	_	1	_
Gagil		-	-	-	-	-	-	-	-	-	-
Tomil	. 1	1	-	-	-	-	-	-	-	-	-
Fanif			-	-	-	-	-	-	-	-	-
Weloy			-	-	-	-	-	-	-	-	1
Rull	. 2	1	_	_	_	1	_	_	-	_	_
Gilman		_	_	_	_	_	_	_	_	_	_
Kanifay		_	_	_	_	_	_	_	_	_	_
Outer Islands	•		214		973	112	560	220	96	337	518
Ulithi				_	2	-	-	-	1	-	-
Fais/Sorol			213	_	_	_	1	1	-	6	3
Ngulu		-	-	21	-	-	-	-	-	-	-
Woleai	. 882	3	-	-	870	3	1	-	-	1	4
Eauripik			1	-	12	109	-	-	-	-	-
Ifalik			-	5	14	-	556		-	8	-
Faraulap			-	-	19	-	1	217	-	1	3
Elato			-	-	2	-	_	- 1	95	317	_
Lamotrek		13 20	_	_	21 33	_	1	1 1	_	31 / 4	508
Chuuk			_	_	2	_	_	1	_	1	7
Pohnpei	. 3	_	_	_	_	_	_	_	_	_	2
Kosrae	. 1		_	_	_	_	1	-	_	_	_
Elsewhere	. 3	-	1	-	-	-	-	-	-	-	2
Females	. 2,038	368	112	16	523	71	300	123	54	187	284
Federated States of Micronesia	. 2,036	368	111	16	523	71	300	123	54	187	283
Yap			111		522	71	299	123	54	187	278
Yap proper			-	-	-	-	-	-	-	1	1
Rumung			-	-	-	-	-	-	-	_	1
Maap			-	-	-	-	-	-	-	1	-
Gagil		_	_	_	_	_	_	_	_	_	_
Fanif	•	_	_	_	_	_	_	_	_	_	_
Weloy		1	_	_	_	_	_	_	_	_	_
Rull		_	_	_	_	_	-	-	-	_	-
Gilman		-	-	-	-	-	-	-	-	-	-
Kanifay		-	-	-	-	-	-	-	-	-	-
Dalipebinaw			-	-	-	-	-	-	-	-	-
Outer Islands			111	16	522	71	299	123	54	186	277
Ulithi			-	-	-	-	_	-	1	-	-
Fais/Sorol			110	- 10	_	-	1	1	-	2	1
Ngulu	. 12 . 482		_	12	478	2	_	_	_	_	2
Woleai Eauripik			1	_	4 / 6	69	_	_	_	_	_
Ifalik			_	4	5	-	296	_	_	4	_
Faraulap			-	_	10	-	1	121	-	1	2
Elato			-	-	1	-	_	-	53	_	_
Lamotrek	. 193	3	-	-	10	-	-	1	-	179	-
Satawal			-	-	13	-	1	-	-	-	272
Chuuk	. 6		-	-	1	-	-	-	-	-	4
Pohnpei	. 1		-	-	-	-	-	-	-	-	1
Kosrae	_		- 1	-	_	-	1	_	_	_	- 1
Elsewhere	. 2	-	1	-	-	-	-	-	-	-	1

Table B07. Length of Continuous Residence and Place of Previous Residence by Municipality of Usual Residence Yap: 2000 [For definitions of terms and meanings of symbols, see text]

		; +				Yar 	Prope	er 				
Previous Residence		1										Dalip-
Length of Continuous Residence												
All persons				592		1,023		1,197		233	275	645
Lived in this muni. since birth				467	536	674	381	682	993	155	241	175
Previous residence elsewhere In this state			33 24	125 92	198 113	349 266	166 119	515 418	1,026 747	78 71	34 32	470 95
Lived in municipality:	2,000	1,511	21	,,,	113	200	113	110	, , ,	, +	32	,,,
Less than 6 months	375	307	-	11	15	27	14	72	145	4	1	18
6 months up to 1 year 1 year up to 2 years	299 224	192 205	4	3	3 5	24 36	14 10	38 31	99 94	2 11	2	3 12
2 years up to 5 years	331	286	5	27	27	38	26	41	97	6	1	18
5 years or more		987		48	63	141	55	236	312	48	25	44
In other FSM State Lived in municipality:	140	118	1	1	18	23	14	15	41	1	-	4
Less than 6 months	26	19	_	_	1	2	7	1	8	_	_	_
6 months up to 1 year	5	3	-	1	-	-	-	-	-	-	-	2
1 year up to 2 years	17 37	14 35	- 1	_	8	11	4	- 4	2	-	_	- 1
2 years up to 5 years 5 years or more	55	47	1	_	2	10	-	10	23	1	_	1
Lived in Asia	500	500	-	3	5	19	4	31	85	-	-	353
Lived in municipality:	1 4 5	145	_	1	_	4	1	2	1.1	_	_	106
Less than 6 months 6 months up to 1 year	145 26	26	_	1	2	7	1	2	11 16	_	_	126
1 year up to 2 years	76	76	-	2	2	1	1	4	11	-	-	55
2 years up to 5 years	205	205 48	_	_	1	4	2	5 19	24 23	_	_	169
5 years or more Lived elsewhere outside FSM .	48 415	399	8	29	62	3 41	29	51	153	6	2	3 18
Lived in municipality:												
Less than 6 months	57 48	55 47	- 1	4	5 6	5 17	2	7	22 8	3	_	7
6 months up to 1 year 1 year up to 2 years	40	41	1 1	3	9	3	1	3	20	1	_	_
2 years up to 5 years	94	85	-	4	12	3	19	8	34	-	1	4
5 years or more	174	171	6	12	30	13	6	25	69	2	1	7
All persons	1,241	7,391	126	592	734	1,023	547	1,197	2,019	233	275	645
Lived in this muni. since birth			93	467	536	674	381	682	993	155	241	175
Previous residence elsewhere Federated States Micronesia .			33 25	125 93	198 131	349 289	166 133	515 433	1,026 788	78 72	34 32	470 99
Yap			24	92	113	266	119	418	747	71	32	95
Yap proper			24	91	111	221	118	263	348	63	32	95
Rumung	54 111	54 111	1 13	2	5 7	2 14	27	41 34	3 9	_	_	- 7
Gagil	159	154	2	12	4	61	18	18	32	2	-	5
Tomil	150	147	-	6	32	4	11	44	34	3	4	9
Fanif	155 342	155 319		14 37	9 33	42 50	6 35	38 12	30 112	13 5	1 9	2 19
Rull	222	214		16	15	41	15	41	13	21	9	43
Gilman	52	46		1	1	1	2	7	23	4	4	3
Kanifay	66 100	66 100		3	5	1 5	1	3 25	47 45	10 5	2	2 5
Outer Islands	942	611		1	2	45	1		399	8	-	-
Ulithi	148	133	_	- 1	2	5	_	37	87 7	2	_	_
Fais/Sorol Ngulu	72 7	45 6	_	_	_	1	_	36	1	5	_	_
Woleai	211	179	-	-	-	34	-	32	112	1	-	-
Eauripik	64 109	36 62	-	-	-	2	-	4 31	30 30	-	-	-
Ifalik Faraulap	55	17	_	_	_	1	1	2	14	_	_	_
Elato	29	16	-	-	-	2	-	-	14	-	-	-
Lamotrek	123 124	63 54	_	_	_	-	_	3 10	60 44	-	_	_
Satawal	46	27	_	1	1	11	_	4	6	_	_	4
Pohnpei	92	90	1	-	17	12	14	10	35	1	-	-
Kosrae	2 86	1 79	- 2	- 9	10	- 4	12	1 5	- 25	- 3	-	- 9
Guam	60	79 56	2	-	8	2	8	9	25	3 -	_	6
Palau	81	80	2	6	5	6	2	8	50	1	-	-
Marshall Islands Other Pacific Islands	8 20	7 20	_	_	- 1	1 2	1	1 1	5 13	-	-	2
Asia	500	500	_	3	5	19	4	31	85	_	_	353
China and Taiwan	351	351	-	-	-	-	-	-	1	-	-	350
Korea	1 118	1 118	_	_	3	1 15	2	- 27	71	_	_	_
Other Asia	30	30	_	3	2	3	2	4	13	_	_	3
United States	146	143	2	14	35	26	6	21	34	2	2	1
Elsewhere	14	14	-		3	-	-	6	5	-	-	-

Table B07. Length of Continuous Residence and Place of Previous Residence by Municipality of Usual Residence, Yap: 2000 - continued [For definitions of terms and meanings of symbols, see text]

				1	Yap Out	er Isla	inds				
		 :						Farau-		Lamo-	 !
Length of Continuous Residence											
All persons		773			975		561		96	339	531
Lived in this muni. since birth		670	214	13	811	108	548	214	54	317	487
Previous residence elsewhere		103	1		164		13	7			44
In this state	376	98	-	13	153	5	12	7	41	21	26
Lived in municipality: Less than 6 months	68	2	_	2	34	3	4	_	1	14	8
6 months up to 1 year		36	_		60		3	_	2		
1 year up to 2 years	19	10	-	4	3	-	-	-	-	-	2
2 years up to 5 years	45	17		-	9		2	4	3	-	8
5 years or more	137	33	-	9	47		3	3		7	5
In other FSM State Lived in municipality:	22	3	-	-	6	-	1	-	-	1	11
Less than 6 months	7	_	_	_	_	_	_	_	_	_	7
6 months up to 1 year	2	-	-	-	-	-	1	-	-	-	1
1 year up to 2 years	3		-	-	3		-	-	-	-	-
2 years up to 5 years		-	-	-		-	-	-	-	-	-
5 years or more Lived in Asia	8		_	_	1		_	_	_	1	3
Lived in municipality:											
Less than 6 months	-	-	-	-	-	-	-	-	-	-	-
6 months up to 1 year	-	-	-	-	-	-	-	-	-	-	-
1 year up to 2 years	-	-	-		-	-	-	-	-	-	-
2 years up to 5 years	-	_	_	_	_	-	-	-	_	-	-
5 years or more Lived elsewhere outside FSM	16		1		5		_	_	1	_	7
Lived in municipality:		_	_		Ü				_		,
Less than 6 months	2	-	-	-	-	-	-	-	-	-	2
6 months up to 1 year	1		-	-	-		-	-	-	-	-
1 year up to 2 years 2 years up to 5 years	1 9		- 1		- 4		_	_	1	-	- 4
5 years or more	3		_	-	1		_	_	_	-	1
All persons		773	215	26	975		561	221	96	339	531
Lived in this muni. since birth Previous residence elsewhere	3,436 414	670 103	214		811 164		548 13	214	54 42	317 22	487 44
Federated States Micronesia		103		13	159			7			37
Yap	376	98		13	153			7	41		
Yap proper	45	16	-	8	3		2	1	3	-	10
Rumung	_	-	_	-	-		-	_	_	-	-
Maap	- 5	5	_		_		_	_	_	_	_
Tomil	3	-	_	_	3		_	_	_	-	_
Fanif	-	-	-	-	-	-	-	-	-	-	-
Weloy	23	9	-	2	-		2	-	-	-	10
Rull	8	2	_		_	2	-	1	3	-	-
Gilman	6		_	6	_	_		_	_	_	_
Dalipebinaw	_	_	_	_	_	_	_	_	_	_	_
Outer Islands	331	82	-	5	150	3	10	6	38	21	16
Ulithi	15	7	-	-	6		1		1	-	
Fais/Sorol	27 1	18	-	- 1	1		_	1	_	6	1 -
Ngulu	32	3	_	_	9		4	_	8	1	
Eauripik	28	1	_				_	_	_	_	
Ifalik	47		-	4	19	-	-	-	5	8	-
Faraulap	38	3	-	-	23	1	1	4	1	1	4
Elato	13 60	6 15	_	_	1 27		4	1	1 16	1	-
Satawal	70	18	_	_	37	_	_	_	6	4	5
Chuuk	19	2	-	-	5	-	-	-	-	1	11
Pohnpei	2	1	-	-	1		-	-	-	-	-
Kosrae	1	-	-	-	-	_	1	_	_	_	-
Guam	7	2	_	_	- 3		_	_	_	_	5 1
Palau	1	_	_	_	1		_	_	_	_	_
Marshall Islands	1	-	-	-	-	-	-	-	1	-	-
Other Pacific Islands	-	-	-	-	-	-	-	-	-	-	-
Asia	-	-	-	-	-	-	-	-	-	-	-
China and Taiwan	_	_	_	-	-	_	_	-	_	-	_
Philippines	_	_	_	_	_	_	_	_	_	_	_
Other Asia	-	-	-	-	-	-	-	-	-	-	-
United States	3	-	1	-	1	-	-	-	-	-	1
Elsewhere	-	-	-	-	-	-	-	-	-	-	-

Table B08. Residence 5 Years Ago by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

		 				Yap	Prope	er				
	 Total	 Total	: :						Rull;	; Gilman¦K		Dalip- ebinaw
Persons 5+ years			107	517	641	894	489	1,074	1,799	200	225	611
Federated States of Micronesia.			104	498	606	852		1,033		197	224	252
Yap			103	497	592	841		1,028		197	224	248
Yap proper	113	113	103 96	497	592 4	808 1	450	943	1,401	196	224	248
Maap	506	506	2	456	4	6	19	12	2	_	_	5
Gagil	610	608	_	5	546	26	8	7	15	-	-	1
Tomil	786	784	-	3	17	729	2	12	15	1	3	2
Fanif	439	439	_	3	3	16	393	8	7	8	_	1
Weloy			5	19 9	8	16 13	20 6	871	69 1,261	1 4	3 2	8 26
Gilman	185	184	_	_	-	13	1		1,201	176	_	1
Kanifay	230	230	-	-	-	-	_	1	9	4	216	_
Dalipebinaw	234	234	-	2	4	1	1	3	17	2	-	204
Outer Islands		371	-	-	-	33	2	85	250	1	-	-
Ulithi	685 202	77 16	-	-	_	3	_	21 12	52 3	1	-	_
Fais/Sorol	19	16	_	_	_	_	_	12	3	_	_	_
Woleai	851	104	_	_	_	24	_	20	60	_	_	_
Eauripik	132	23	-	-	-	2	-	1	20	-	-	-
Ifalik	558	53	-	-	-	1	-	26	26	-	-	-
Faraulap	214	13	-	_	-	_	1	-	12	-	_	_
Elato	96 351	10 40	_	_	_	2	1	1	8 38	_	_	_
Satawal	511	35	_	_	_	_	_	4	31	_	_	_
Chuuk	19	8	_	1	_	1	_	_	2	_	_	4
Pohnpei	60	58	1	-	14	10	13	5	15	-	-	-
Kosrae	1	-	-	-	-	-	-	-	-	-	-	-
Guam	52	45	2	6	7	2	6	2	13	1	-	6
Northern Mariana Islands Palau	32 31	31 26	1	- 5	3 5	1	7	1 4	16 9	_	-	2
Other Pacific Islands	21	20	_	_	1	1	_	2	15	_	_	1
Asia	444	444	_	3	3	16	4	13	56	_	_	349
China and Taiwan	350	350	-	_	-	-	-	-	1	-	-	349
Philippines	77	77	-	-	3	13	2	10	49	-	-	-
Other Asia	17	17	-	3	-	3	2	3	6	-	-	-
United States	87 8	84	_	5	16	18 1	7	15 4	20 2	2	1	- 1
Elsewhere	0	0				_		7	2			_
Females 5+ years	5,074	3,309	57	244	309	454	240	512	882	107	100	404
Federated States of Micronesia.			56	234	294	440	231	497	825	105	100	131
Yap			56	234 234	285 285	434	223 223	495 452	819 699	105 104	100 100	128 128
Yap proper	63	63	56 51	234	285	414	223	452	699	104	100	128
Maap	233	233	1	208	2	3	8	9	1	_	_	1
Gagil	297	295	-	5	260	13	6	4	6	-	-	1
Tomil	402	402	-	2	9	369	2	6	8	1	3	2
Fanif	217	217	-	2	2	9	189	5	4	5	-	1
Weloy	500 684	491 678	4	11 5	4	10	11 5	408 10	37 629	1 1	2	3 16
Gilman	96	96	_	_	-	-	1	_	2	92	_	1
Kanifay	101	101	_	_	-	_	_	1	3	2	95	_
Dalipebinaw	119	119	-	1	1	1	1	1	9	2	-	103
Outer Islands		184	-	-	-	20	-	43	120	1	-	-
Ulithi	336	46	-	-	-	2	-	12	31	1	-	-
Fais/Sorol	100 11	6	_	_	_	1	_	5	_	_	_	_
Woleai	476	57	_	_	_	15	_	10	32	_	_	_
Eauripik	78	11	_	_	_	2	_	_	9	_	_	_
Ifalik	294	28	-	_	-	-	-	14	14	-	-	-
Faraulap	114	4	-	-	-	-	-	-	4	-	-	-
Elato	53	3	-	-	-	-	-	-	3	-	-	-
Lamotrek	185 270	13	-	_	_	-	_	2	13 14	_	-	_
Satawal	10	16 4	_	_	_	1	_	_	14	_	_	3
Pohnpei	32	30	_	_	9	5	8	2	6	_	_	-
Kosrae	1	-	-	-	_	_	_	_	_	-	-	-
Guam	22	19	1	3	2	-	3	2	5	1	-	2
Northern Mariana Islands	14	14	-	-	1	1	3	1	7	-	-	1
Palau	13	12	_	3	3	2	_	1	3	-	_	_
Other Pacific Islands Asia	10 301	10 301	_	1	_	- 5	1	2	10 22	_	_	270
China and Taiwan	270	270	_	_	_	5	_	_	-	_	_	270
			_	_	_	4	_	1	20	_	_	270
Philippines	25	25	_			- 4			20	_	_	
Philippines	25 6	25 6	-	1	-	1	1	1	2	_	-	-
Philippines					- 9 -					1		

Table B08. Residence 5 Years Ago by Municipality of Usual Residence, Yap: 2000 - continued [For definitions of terms and meanings of symbols, see text]

Residence 5 Years Ago	amo-!	¦I									
Persons 5+ years.				[falik	ipik	 Woleai	 Ngulu	Fais/ Sorol	 Ulithi	Total;	
Yap. 3,281 665 172 23 888 100 487 182 80 Rumung -<	288 460										
Yap proper	288 454										
Rumung	288 446										-
Maap			_	_	- -	_	_	_	- 11	-	
Gagil		_	_	_	_	_	-	-	_	_	
Fanif.		-	-	-	-	-	-	-	2	2	
Weloy 15 4 - 1 3 - 2 - - Rull 13 4 - - 3 3 - 1 -		-	-	-	-		-	-	1		
Rull	- :	-	-	-	-		-	-	_		
Gilman	- !							-			
Kanifay. - 1 - - 1 -<									-		
Outer Islands. 3,248 654 172 21 831 97 485 181 78 Ulithi 608 604 - 1 1 - 1 - 1 - 1 - 1 - 1 Fais/Sorol 186 9 172 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		-	-	-	-	-		-	-		
Ulithi		-	-	-	-	-	-		-	-	 Dalipebinaw
Fais/Sorol 186 9 172 - - 1 - Ngulu 19 - - 19 -	288 443				97		21				
Ngulu. 19 - 19	-			1	-	1	-				
Woleai	3 :	_	_	_	_	_		1/2	9		
Eauripik	- :	1	_	3				_	_		
Faraulap			-					-	-		
Elato	6 -	1	-	477	-	9	2	-	10	505	 Ifalik
Lamotrek 311 11 - 20 - - 1 - Chuuk 111 - - 26 -	- :				1			-			
Satawal. 476 14 - - 26 - <t< td=""><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td>-</td><td></td><td></td><td></td></t<>					-			-			
Chuuk. 11	278 1 1 43!		_		_						
Pohnpei. 2 - - 2 -<	- 45.				_						
Guam 7 3 -		-	-	-	_		_	-	-		
Northern Mariana Islands		-	-	1	-	-	-	-	-	1	 Kosrae
Palau. 5 2 - - 2 - <td>- 4</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td>-</td> <td>-</td> <td>3</td> <td></td> <td></td>	- 4	-	-	-	-		-	-	3		
Other Pacific Islands. 1 - - - 1 -	-	-	-	-	-		-	-	-		
Asia	- :	_	_	_	1		_	_			
China and Taiwan		_	_	_			_	_		_	
Philippines. - <t< td=""><td></td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>-</td><td>-</td><td>_</td><td>_</td><td></td></t<>		_	_	_	_	_	-	-	_	_	
United States		-	-	-	-	-	-	-	-	-	
Elsewhere. -		-			-						
Females 5+ years 1,765			-	-		2		1	-	3	
Federated States of Micronesia 1,759 312 90 14 459 64 260 102 47 Yap 1,750 312 90 14 455 64 259 102 47 Yap proper 17 7 - 1 3 1 2 2 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-	-	-	-	-	_	_	-	-	-	 sewnere
Federated States of Micronesia 1,759 312 90 14 459 64 260 102 47 Yap 1,750 312 90 14 455 64 259 102 47 Yap proper 17 7 - 1 3 1 2 1 2 2 1 2 1 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1	162 25	47	102	260	64	460	14	91	314	1,765	 Females 5+ years
Yap proper 17 7 - 1 3 1 1 1 1 Rumung -	162 249	47	102	260	64	459	14	90	312		
Rumung - <td>162 245</td> <td></td>	162 245										
Maap	- 2										
Gagil. 2 2		_	_	_	_	_	_	_		_	-
Tomil.		_	_	_	_	_	_	_		2	
Weloy. 9 3 - 1 2 - 1 Rull. 6 2 1 1 - 1 1 Gilman		-	-	-	-	-	-	-			-
Rull		-	-	-		-	-	-	-	-	 Fanif
Gilman - <td>- 2</td> <td>-</td> <td></td> <td>1</td> <td></td> <td></td> <td>1</td> <td>-</td> <td></td> <td></td> <td>-</td>	- 2	-		1			1	-			-
Kanifay. - 1 46 0 Ulithi . 290 289 - - - - - - 1 - 1 - - 1 -		1	1	-	1	1	-	-	2	6	
Dalipebinaw.		_	_	_	_	_	_		_	_	
Outer Islands. 1,733 305 90 13 452 63 258 101 46 Ulithi. 290 289 - - - - - 1 Fais/Sorol 94 2 90 - - - 1 - Ngulu 11 - - 11 - - - - - - 1 Woleai 419 - - - 412 2 3 - 1 Eauripik 67 - - - 7 60 - - - Ifalik 266 7 - 2 2 - 252 -		_	_	_	_	_	_		_	_	-
Ulithi	162 243										
Ngulu		1	-	-	-	-	-	-	289	290	
Woleai	1 .										
Eauripik											3
Ifalik	- :										
	3 -										
Faraulap	- :	_	99					_			
Elato		44		3	-	1	-	-	2	50	
Lamotrek	158		1		-						 Lamotrek
Satawal	- 240										
Chuuk											
romper											-
Kosrae	- :										
Northern Mariana Islands		_	_	_	_	_	_	-			
Palau 1 1		-	-	-	-	-	-	-	1	1	
Other Pacific Islands		-	-	-	-	-			-	-	 ther Pacific Islands
Asia		-	-	-	-	-			-	-	
China and Taiwan		-	-		-				-	-	
Philippines	_ :	_	_		_					_	
United States											
Elsewhere		_	_								

Table B09. Ethnicity by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

	1	!				Yap	p Prop	er				
		+ !	 !	 !	 !	 !	 !	 !	 !	 ¦	: !	Dalip-
Ethnicity	Total	Total	Rumung	Maap	Gagil	Tomil	¦Fanif	Weloy	Rull	Gilman	¦Kanifay	ebinaw
All persons	11,241	7,391	126	592	734	1,023	547	1,197	2,019	233	275	645
Single ethnic group			124	581	695	989	528	1,129	1,889	221	273	613
Yapese	5,515	5,511	124	572	679	872	516	882	1,131	220	272	243
Ulithian	1,101	192	-	1	-	2	-	76	113	-	-	-
Woleaian	2,581	462	-	-	2	64	-	82	314	-	-	-
Satawalese	415	93	-	-	-	1	-	13	79	-	-	-
Chuukese	212	20	-	-	-	2	4	6	4	-	-	4
Mortlockese	. 5	4	-	-	2	1	1	-	-	-	-	-
Pohnpeian	. 20	18	-	-	2	4	1	-	10	-	-	1
Pingelapese	-	-	-	-	-	-	-	-	-	-	-	-
Mwoakilloan	-	-	-	-	-	-	-	-	-	-	-	-
Nukuoroan	_	-	-	-	-	-	-	-	-	-	-	-
Kapingamarangian	_	-	-	-	-	-	-	-	-	-	-	-
Kosraean	. 3	2	-	-	-	1	-	-	1	-	-	-
Palauan	105	105	-	-	-	6	-	6	86	-	-	7
Marshallese	-	-	-	-	-	-	-	-	-	-	-	-
Other Pacific Islander	. 28	27	-	1	-	2	1	3	18	-	-	2
White	67	66	-	2	6	14	1	16	25	1	1	-
Asian	536	536	-	5	3	19	4	45	104	-	-	356
Filipino	152	152	-	-	3	16	2	39	91	-	-	1
Chinese/Taiwanese	351	351	-	-	-	-	-	-	1	-	-	350
Other single	. 6	6	-	-	1	1	-	-	4	-	-	-
Multiple ethnic group	647	349	2	11	39	34	19	68	130	12	2	32
Yapese and other	864	428	2	10	47	39	22	97	165	12	2	32
Chuukese and other	176	26	-	1	2	11	2	4	6	-	-	-
Pohnpeian and other	44	43	-	2	11	2	8	3	14	2	-	1
Kosraean and other	. 13	13	-	-	1	-	-	-	3	-	-	9
Other Multiple	197	188	2	9	17	16	6	32	72	10	2	22
Females	5,733	3,695	68	282	350	499	262	568	1,000	123	123	420
Single ethnic group			67	276	332	481	253	540	934	115	123	398
Yapese			67	272	327	424	248	432	564	115	123	116
Ulithian	545	104	-	-	-	1	-	36	67	-	-	-
Woleaian	1,377	220	-	-	-	37	-	39	144	-	-	-
Satawalese	203	45	-	-	-	-	-	6	39	-	-	-
Chuukese	127	12	-	-	-	1	2	4	2	-	-	3
Mortlockese	. 4	3	-	-	1	1	1	-	-	-	-	-
Pohnpeian	. 15	13	-	-	1	3	1	-	7	-	-	1
Pingelapese	-	-	-	-	-	-	-	-	-	-	-	-
Mwoakilloan	-	-	-	-	-	-	-	-	-	-	-	-
Nukuoroan	_	-	-	-	-	-	-	-	-	-	-	-
Kapingamarangian		-	-	-	-	-	-	-	-	-	-	-
Kosraean			-	-	-	1	-	-	1	-	-	-
Palauan			-	-	-	2	-	4	47	-	-	4
Marshallese		-	-	-	-	-	-	-	-	-	-	-
Other Pacific Islander		16	-	-	-	-	-	2	13	-	-	1
White			-	1	3	5	-	7	12	-	-	-
Asian			-	3	-	6	1		37	-	-	273
Filipino			-	-	-	5	-	7	32	-	-	-
Chinese/Taiwanese		271	-	-	-	-	-	-	-	-	-	271
Other single		1	-	-	-	-	-	-	1	-	-	-
Multiple ethnic group		176	1	6	18	18	9	28	66	8	-	22
Yapese and other		208	1	6	19	21	9	35	87	8	-	22
Chuukese and other		13	-	-	2	7	-	1	3	-	-	-
Pohnpeian and other		28	-	2	6	2	5	1	9	2	-	1
Kosraean and other		7	-	-	-	-	-	-	2	-	-	5
Other Multiple	. 97	96	1	4	9	6	4	19	31	6	_	16

Table B09. Ethnicity by Municipality of Usual Residence, Yap: 2000 $\,$ - continued [For definitions of terms and meanings of symbols, see text]

	¦ 				Yap Oute	er Isla	ands				
					:	Eaur-		Farau-	: :	Lamo-:	
Ethnicity	Total	Ulithi¦	Sorol	Ngulu	Woleai	ipik	Ifalik	lap	Elato	trek	Satawal
All persons	 3,850	773	215	26	975	113	561	221	96	339	531
Single ethnic group		743	212	24		112	561	214		339	280
Yapese		4	-			-		-		-	-
Ulithian		674	210	20	3	-	-	-		-	2
Woleaian	 ,	41	1	4	937		560	213		156	2
Satawalese		19	-	-	29	-	-	1		2	269
Chuukese		3	-	-	2	-	-	-		181	6
Mortlockese		1	-	-	-	-	-	-	-	-	-
Pohnpeian		1	-	-	-	-	-	-	1	-	-
Pingelapese		-	-	-	-	-	-	-	-	-	-
Mwoakilloan		-	-	-	-	-	-	-	-	-	-
Nukuoroan		-	-	-	-	-	-	-	-	-	-
Kapingamarangian		_	_	_	_	_	1	_	_	_	_
Kosraean		_	_	_	_	_	1	_	_	_	_
Palauan		_	_	_	_	_	-	_	_	_	_
Marshallese		_	_	_	_	_	_	_	_	_	1
White		_	1	_	_	_	_	_	_	_	1
Asian		_	1	_	_	_	_	_	_	_	_
Filipino		_	_	_	_	_	_	_	_	_	_
Chinese/Taiwanese	_	_	_	_	_	_	_	_	_	_	_
Other single	_	_	_	_	_	_	_	_	_	_	_
Multiple ethnic group	298	30	3	2	4	1	_	7	_	_	251
Yapese and other		54	6	4	8	2	_	7		_	355
Chuukese and other		5	_	_	_	_	_	_	_	_	145
Pohnpeian and other		_	_	_	_	_	_	_	_	_	1
Kosraean and other	_	_	_	_	_	_	_	_	_	_	_
Other Multiple	9	1	-	-	-	-	-	7	-	-	1
Females	 2,038	368	112	16	523	71	300	123	54	187	284
Single ethnic group		349	109	14	523	71	300	123	54	187	147
Yapese		1	-	-	-	-	-	-	-	-	-
Ulithian	 441	322	107	11	1	-	-	-	-	-	-
Woleaian	 1,157	19	1	3	509	71	299	122	53	79	1
Satawalese	 158	4	-	-	12	-	-	1	-	-	141
Chuukese	 115	1	-	-	1	-	-	-	-	108	5
Mortlockese		1	-	-	-	-	-	-	-	-	-
Pohnpeian		1	-	-	-	-	-	-	1	-	-
Pingelapese		-	-	-	-	-	-	-	-	-	-
Mwoakilloan		-	-	-	-	-	-	-	-	-	-
Nukuoroan		-	-	-	-	-	-	-	-	-	-
Kapingamarangian		-	-	-	-	-	-	-	-	-	-
Kosraean		-	-	-	-	-	1	-	-	-	-
Palauan	-	-	-	-	-	-	-	-	-	-	-
Marshallese	_	-	-	-	-	-	-	-	-	-	-
Other Pacific Islander		-		-	-	-	-	-	-	-	-
White		-	1	-	-	-	-	-	-	-	-
Asian	-	-	-	-	-	-	-	-	-	-	-
Filipino		-	-	-	-	-	-	-	-	-	-
Chinese/Taiwanese	-	-	-	-	-	-	-	_	-	_	-
Other single	1.61	- 10	-	-	-	-	-	-	-	-	127
Multiple ethnic group	161	19	3	2	_	-	-	_	-	-	137
Yapese and other	238	34	6	4	-	-	-	-	-	-	194
Chuukese and other	82 1	4	-	-	-	-	-	-	-	-	78
Pohnpeian and other	Τ	-	-	_	-	-	-	-	-	-	1
Kosraean and other	1			_	_	_	-	_	-		1
Other Multiple	_	_	_	_	_	_	_	-	_	_	1

Table Bl0. Marital Status and Religion by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

	 !	 !				Ya	p Prop	er				
Marital Status Religion		1	1	:	1		1	1		:		Dalip-
MARITAL STATUS												
Males 15+ years. Never married	1,372 1,804 67 94 71 3,745 1,382 1,776 117 368	927 1,279 64 63 71 2,458 848	2 1 34 7 19 2 4	185 71 96 6 5 7 173 45 97 8 15	6 14 8 231 76 122 3 23		86 14 6 3 165 49 86 8	161 239 5 9 11 363 87 211 15	694 243 412 11 11 17 651 167 367 36 61	63 24 32 2 3 2 74 23 34 1	888 411 40 2 1 4 75 16 41 4	174 97 66 6 3 2 360 270 74 2
Divorced	102	94	2	8	7	17	7	19	20	4	5	5
All persons	9,363 378 81 31		118	1 8	627 40 4	1,023 864 18 24 1 26 57 -	343 130 1 3 7 32	6 9 40 38 2		233 192 - 7 - 1 23 - 10	275 253 - - - 12 8 2	645 201 - - 5 - 187 - 252
Females	4,726 205 39 15 51 346 13	2,700 203 39 15	-		1	13	166 72 1 2 4 15	471 20 4 5 15 22	1,000 776 64 11 5 11 78 10 45	123 100 - 4 - - 14 - 5	123 117 - - - 3 2	420 98 - 2 - 131 - 189

Table B10. Marital Status and Religion by Municipality of Usual Residence, Yap: 2000 - continued [For definitions of terms and meanings of symbols, see text]

				1	Yap Oute	er Isla	inds				
Marital Status		I	Tais/			Eaur-;	1	Farau-	1	Lamo-	
Religion	Total	Ulithi S	Sorol	Ngulu	Woleai	ipik¦	Ifalik;	lap	Elato	trek	Satawal
MARITAL STATUS											
Males 15+ years	1,004	250	49	4	269	24	140	48	23	73	124
Never married	445	125	18	-	118	12	68	17	6	30	51
Now married, except separated	525	115	30	4	146	12	65	31	15	41	66
Separated	3	1	1	-	-	-	-	-	_	-	-
Widowed	31	9	-	-	5	-	7	-	1	2	7
Divorced	-	-	-	-	-	-	-	-	-	-	-
Females 15+ years	1,287	223	60	11	349	53	190	82	32	116	171
Never married	534	87	18	3	140	28	91	35	12	59	61
Now married, except separated	566	109	34	4	157	16	72	33	16	44	81
Separated	25	4	1	1	12	-	4	3	-	-	-
Widowed	154	22	7	2	38	9	21	11	3	13	28
Divorced	8	1	-	1	2	-	2	-	1	-	1
RELIGION											
All persons	3,850	773	215	26	975	113	561	221	96	339	531
Roman Catholic	3,826	770	213	25	971	112	551	219	96	339	530
Congregational	3	-	-	1	-	-	-	2	-	-	-
Seveth Day Adventist (SDA)	1	1	-	-	-	-	-	-	-	-	-
Baptist	-	-	-	-	-	-	-	-			-
Latter Day Saints (Mormon)	1	-	-	-	-	-	-	-	-	-	1
Other Religion	1	-	1	-	-	-	-	-	-	-	-
Refused	1	-	-	-	-	1	-	-		-	-
No Religion	17	2	1	-	4	-	10	-	-	-	-
Females	2,038	368	112	16	523	71	300	123	54	187	284
Roman Catholic	2,026	367	111	15	521	71	295	122	54	187	283
Congregational	2	-	-	1	-	-	-	1	-	-	-
Seveth Day Adventist (SDA)	-	-	-	-	-	-	-	-	-	-	-
Baptist	-	-	-	-					-		-
Latter Day Saints (Mormon)	1	-		-					-		_
Other Religion	1	-		-					-		-
Refused	-	-		-		-	-		-		-
No Religion	8	1	_	_	2	_	5	_	_	_	_

Table B11. Languages and Dialects Spoken at Home by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

		i +					p Prope					
anguages	 Total	Total R	tumung¦	Maap		Tomil	Fanif	Weloy	Rull	Gilman		bina
LL LANGUAGES SPOKEN AT HOME												
Persons 5+ years	9,869	6,557	107	517	641	894		1,074		200	225	61
nglish	6,238 5,261	4,756 5,212	41 107	357 508	507 619	736 792	382 485		1,423 1,174	154 198	118 224	20 25
lithian	1,247	292	-	1	39	10	2	100	134	5	1	23
oleaian	2,688	443	-	_	7	57	2	80	297	_	_	
atawalese	865	96	-	-	1	3	-	10	82	-	-	
huukese	198 60	48 56	_	2	2 13	10 5	6 8	9	13 23	- 1	1 1	
ohnpeian/Mwoakilloan/Pingelapese osraean	9	8	_	_	13	1	8	1	23		_	
olynesian	4	4	_	_	_	_	-	_	2		-	
sian	753	733	1	26	29	55	21	81	143	6	8	36
ther language	279	273	-	5	25	14	9	26	163	10	1	2
IRST LANGUAGE REPORTED												
Persons 5+ years	9,869	6,557	107	517	641	894	489	1,074	1,799	200	225	61
nglish	278	274	1	6	24	29	2	48	139	3	11	1
apese	4,962	4,942	106	504	598	773	473		1,038	196	213	23
lithian	995 2,407	213 418	-	-	5	5 57	- 1	91 78	111 282	1	_	
tawalese	590	85	_	_	_	1	_	70	75	_	_	
uuukese	22	17	-	1	2	3	4	4	2	-	-	
hnpeian/Mwoakilloan/Pingelapese	19	16	-	-	4	3	3	-	6	-	-	
sraean	2	1	-	-	-	1	-	-	-	-	-	
olynesian	1 483	1 483	_	- 5	- 3	- 16	- 4	- 29	- 71	_	-	3.5
ther language	110	107	-	1	5	6	2	6	75	-	1	1
COND LANGUAGE REPORTED												
5+ years with 2nd language	6,735	4,866	42	373	524	752	393		1,443	157	124	20
glish	5,617	4,329	40	350	465	696	370		1,211	144	106	18
pese	192 63	178 41	1	4	19 10	14	5 1	31 6	81 17	2	11	1
leaian	258	10	_	_	10	-	_	2	8	-	_	
tawalese	271	9	_	-	_	1	_	1	7	_	-	
uukese	28	9	-	-	-	2	2	1	2	-	1	
hnpeian/Mwoakilloan/Pingelapese	20	20	-	-	5	2	3	-	9	-	-	
sraean	3 1	3	-	-	-	_	_	_	2	-	_	
lynesian	204	1 189	1	19	18	29	11	37	58	4	6	
her language	78	77	-	-	7	5	1	9	48	3	-	
NGUAGE OF PERSONS SPEAKING ONLY	ONE LAN	GUAGE										
5+ years with 1 language .	3,129	1,688	65	144	117	142	96	222	356	42	101	40
glish	69 1,081	68 1,073	- 65	3 141	7 105	12 109	1 95	10 166	33 200	1 40	101	5
ithian	293	34	-	141	103	103	-	17	15	1	-	,
leaian	1,145	129	-	-	-	19	-	26	84	_	-	
tawalese	170	16	-	-	-	-	-	2	14	-	-	
uukese	1	1	-	-	-	-	-	-	-	-	-	
hnpeian/Mwoakilloan/Pingelapese	_	_	_	_	_	_	_	_	_	_	_	
sraean	_	_	_	_	_	_	_	_	_	_	_	
ian	356		-	-	- 5	- 1	-	-	6		-	3.
her language	14	11	_	-	5	1	_	1	4	-	_	
	9 869	6,557	107	517	641	894	180	1,074	1 700	200	225	6:
Persons 5+ years glish	280		107	13	26	28	489				225	0.
pese	5,005		107	502	595	783	475		1,045	197	222	23
ithian	3,986	706	-	-	9	61	-	173	461	1	1	
leaian	_		-	_	_	_	-	_	_	-	-	
tawalese	13		_	_	_	_			_		_	
hnpeian/Mwoakilloan/Pingelapese	10		_	_		3			2		_	
sraean	3	2	-	-	-	1	-	-	1	-	-	
lynesian	-	-	-	-		-			-		-	
sian	479		-	2	3	16	2		77		-	35
her language	93	90	-	-	5	2	_	1	76	_	_	

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Table B11. Languages and Dialects Spoken at Home, by Municipality of Usual Residence, Yap: 2000 - continued [For definitions of terms and meanings of symbols, see text]

!					Yap Out	er Isl	lands					_
Languages	Total	 Ulithi	Fais/	 Ngulu	¦ ¦Woleai	Eaur-	-¦ k¦Ifalik	Farau- lap	- Elato	Lamo-	-¦ k¦Satawa:	1
ALL LANGUAGES SPOKEN AT HOME												-
Persons 5+ years	3	,312	670	173	23	847	101	488	182	80	288	460
English			507	48	10	405	21	181	47	39	57	16
Yapese		49	21	1 7 2	21	4	_	- 1	1	- 1	1.50	
Ulithian		955	613 46	172 3	6 3	9 838	101	1 485	180	1 79	150 288	22
Satawalese			19	_	_	32	_	1	2	5	252	45
Chuukese		150	2	-	-	4	1	-	1	-	1	14
Pohnpeian/Mwoakilloan/Pingelapese		4	3	_	-	-	-	-	-	1	-	
Kosraean		1	_	_	_	_	_	1	_	_	-	
Asian		20	3	_	-	10	-	-	1	_	_	
Other language		6	2	-	-	-	-	2	-	1	-	
IRST LANGUAGE REPORTED												
Persons 5+ years			670	173	23	847	101	488	182	80	288	46
English		4 20	1	1	- 17	2	_	_	_	_	-	
Yapese		782	605	169	3	3	_	_	-	1	_	
Woleaian			37	3	3	813	101	485	180	77	283	
Satawalese		505	19	-	-	29	-	-	2	1	4	45
Chuukese		5	2	-	-	-	-	-	-	-	1	
Pohnpeian/Mwoakilloan/Pingelapese Kosraean		3 1	2	_	-	_	-	- 1	_	1	-	
Polynesian		_	_	_	_	_	_	_	_	_	_	
Asian		-	_	-	-	-	-	-	-	-	-	
Other language	• •	3	1	-	-	-	-	2	-	-	-	
ECOND LANGUAGE REPORTED												
5+ years with 2nd language.			514	50	13	427	21	182	48	44	257	31
English			492 9	47	8	383 2	21	180	47	37	2	7
Ulithian		22	7	3	2	5	_	1	_	_	4	
Woleaian			4	_	_	23	_	_	_	2	5	21
Satawalese		262	-	-	-	3	-	1	-	4	246	
Chuukese		19	-	-	-	3	-	-	-	-	-	1
Pohnpeian/Mwoakilloan/Pingelapese		-	-	-	-	-	-	-	-	-	-	
Kosraean		_	_	_	_	_	_	_	_	_	_	
Asian		15	2	_	-	8	-	-	1	_	_	
Other language		1	-	-	-	-	-	-	-	1	-	
ANGUAGE OF PERSONS SPEAKING ONLY (ONE LA	NGUAGE										
5+ years with 1 language			155	123	10	420	80	306	134	36	30	14
English		8	_	1	8	_	_	_	_	_		
Ulithian		259	137	122	_	_	_	_	_	_	_	
Woleaian		,016	13	-	2	418	80	304	133	36	30	
Satawalese			4	-	-	2	-	-	1	-	-	14
Chuukese		-	-	-	-	-	-	-	-	-	-	
Pohnpeian/Mwoakilloan/Pingelapese Kosraean		_	_	_	_	-	_	_	_	_	_	
Polynesian		_	_	_	_	_	_	_	_	_	_	
Asian		-	-	-	-	-	-	-	-	-	-	
Other language	• •	3	1	-	-	-	-	2	-	-	-	
ANGUAGE USUALLY SPOKEN AT HOME												
Persons 5+ years		,312 4	670 3	173 1	23	847	101	488	182	80	288	46
English		4 19	3 1	_	18	-	_	_	_	_	_	
Ulithian			663	172	5	847	101	485	182	80	288	45
Woleaian		-	-		-	-	-	-		-	-	
Satawalese		-	-	-	-	-	-	-	-	-	-	
Chuukese		5		-	-	-	-	-	-	-	-	
Pohnpeian/Mwoakilloan/Pingelapese		1	-	_	_	_	-	- 1	_	-	-	
Kosraean		_		_	_	_	_	_	_	_	_	
Asian		-	-	-	-	_	-	-	-	-	-	

Table B12. School Enrollment and Educational Attainment by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

	1	:					Prope					
Education	 Total	 Total	¦ ¦Rumung							 Gilman K		
SCHOOL ENROLLMENT AND TYPE OF	SCHOOL											
Persons 3+ years												
and enrolled in school .			50	211	234	316	181	358	537	78	80	90
Preprimary school			11 11	18 15	14 13	27 25	14 13	27 20	46 32	10 9	10 10	11 11
Elementary school, 1st to 8th.			37	142	151	190	111	230	335	54	47	56
Public school			37	121	131	140	109	142	231	44	44	52
High school, 9th to 12th grade		562	2	50	63	94	55	97	144	14	21	22
Public school			2	47	59	79	55	79	129	14	21	21
College		32 32	-	1	6 6	5 5	1 1	4	12 12	-	2	1 1
Females 3+ years												
and enrolled in school .			28	90	116	155	85	176	267	43	32	51
Preprimary school		102	9	11	7	12	7 7	14	26	6	3	7 7
Public school		81 658	9 18	8 57	6 70	10 99	50	9 116	16 167	6 29	3 20	32
Public school		507	18	50	59	69	48	69	120	26	18	30
High school, 9th to 12th grade		269	1	22	38	42	27	44	68	8	7	12
Public school			1	20	34	37	27	33	59	8	7	11
College		14 14	-	-	1	2	1 1	2	6 6	_	2	_
EDUCATIONAL ATTAINMENT												
Persons 25+ years		3,269	51	252	330	449	242	544	972	96	108	225
None		191	5	12	17	17	5	26	57	9	37	6
Elementary: 1 to 4 grade		161	5 9	12 26	24	24	11	19	45	9	4 5	8 16
5 and 6 grade		304 50	3	1	41 4	47 6	32 3	32 14	88 16	8 -	1	2
8 grade			3	18	19	24	17	39	51	6	7	9
High school: 9 grade		125	1	10	14	24	12	16	28	6	8	6
10 grade		111	-	18	10	8	8	16	42	2	3	4
11 grade	121	94	2	14 4	15 7	10	8	15 12	28	- 4	1	1 13
12 grade, no diplom High school graduate		127	6 10	73	86	11 158	88	172	56 275	28	8 20	91
Some college, no degree		395	4	21	37	61	12	86	102	13	8	51
Associate degree, occupational	200	149	1	18	18	15	21	17	51	5	1	2
Associate degree, academic		155	1	14	19	24	12	29	44	1	4	7
Bachelor's degree Graduate/professional degree .	164 65	151 62	1 -	7 4	15 4	14 6	6 1	39 12	59 30	2	1 -	7 2
Percent high school graduate .	52.3	58.5	33.3	54.4	54.2	61.9	57.9	65.3	57.7	54.2	31.5	71.1
Percent bachelor's degree	4.8	6.5	2.0	4.4	5.8	4.5	2.9	9.4	9.2	5.2	.9	4.0
Females 25+ years			26 2	128 9	159 9	226 14	115 4	258	473 39	50 8	55 27	130 3
None		132 106	4	10	14	14	8	17 16	29	5	3	3
5 and 6 grade		205	6	15	27	36	21	21	62	4	4	9
7 grade			2	_	3	4	3	9	12	-	-	1
8 grade			-	7	14	17	12	24	33	4	5	6
High school: 9 grade			-	5	4	12	5	8	18	3	3	5
10 grade 11 grade			1	10 8	5 6	1	4	7 11	20 13	2	1	2
12 grade, no diplom		59	3	2	4	6	3	4	26	2	2	7
High school graduate			5	41	42	76	38	75	127	13	6	57
Some college, no degree	203	169	2	8	15	25	4	33	41	8	3	30
Associate degree, occupational			-	4	5	4	5	6	8	1	-	-
Associate degree, academic Bachelor's degree	68 45	54 44	- 1	5 3	7	10 2	4	8 13	16 19	_	1	3 2
Graduate/professional degree .	21	21	-	1	1	2	-	6	10	-	-	1
Percent high school graduate .				48.4		52.7	45.2	54.7	46.7	44.0	18.2	71.5
Percent bachelor's degree	2.6	4.0	3.8	3.1	2.5	1.8	.9	7.4	6.1	-	-	2.3
Persons 18 to 24 years					20 30.0	25	15	27 11.1	39	3	6	5 20.0
Percent high school graduate .										-	16.7	

Table B12. School Enrollment and Educational Attainment by Municipality of Usual Residence, Yap: 2000 - cont'd [For definitions of terms and meanings of symbols, see text]

	 				ap Oute		nds				
Education	 Total	1	Fais/¦	1	1	Eaur-¦	1	Farau-	1	Lamo-¦	
SCHOOL ENROLLMENT AND TYPE OF SCH	OOL										
Persons 3+ years											
and enrolled in school	1,226	287	94	7	309	33	140	59	32	123	142
Preprimary school	183	31	21	-	35	9	29	9	5	25	19
Public school	183	31	21	-	35	9	29	9	5	25	19
Elementary school, 1st to 8th	765	163	62	6	165	21	94	47	24	77	106
Public school	765	163	62	6	165	21	94	47	24	77	106
High school, 9th to 12th grade	274	91	10	1	109	2	17	3	3	21	17
Public school	273	91	9	1	109	2	17	3	3	21	17
College	4	2	1	-	_	1 1	_	_	-	-	-
Females 3+ years											
and enrolled in school	552	128	48	2	137	19	56	24	19	53	66
Preprimary school	89	22	11	-	14	6	14	4	2	9	7
Public school	89	22	11	-	14	6	14	4	2	9	7
Elementary school, 1st to 8th	356	74	31	1	78	11	39	20	15	34	53
Public school	356	74	31	1	78	11	39	20	15	34	53
High school, 9th to 12th grade	106	31	6	1	45	2	3	-	2	10	(
Public school	105	31	5	1	45	2	3	-	2	10	(
College	1	1	-	-	-	-	-	-	-	-	-
Public school	1	1	-	-	-	-	-	-	-	-	-
EDUCATIONAL ATTAINMENT											
Persons 25+ years	1,530	297	74	14	403	64	214	90	38 7	133	203
None	340	30	19	5	128	18	38	21		35	3:
Elementary: 1 to 4 grade	129 187	24 16	7 13	4	21 48	- 17	27 33	17 13	4	6 10	2:
5 and 6 grade	29	2	3	-	9	3	4	13	1	3	۷.
8 grade	140	9	3	2	20	6	49	5	3	34	
High school: 9 grade	30	12	1	1	5	-	43	2	_	1	
10 grade	31	14	2	_	6	_	1	1	1	_	(
11 grade	27	12	1	_	4	_	_	1	2	2	
12 grade, no diploma	19	4	_	_	5	1	_	_	1	2	
High school graduate	293	79	12	_	71	5	34	19	4	29	4 (
Some college, no degree	160	60	9	_	43	5	13	3	7	5	15
Associate degree, occupational	51	9	1	1	17	2	7	2	1	4	-
Associate degree, academic	78	20	3	1	22	6	6	5	1	2	12
Bachelor's degree	13	4	-	-	3	1	2	1	-	-	2
Graduate/professional degree	3	2	-	-	1	-	-	-	-	-	
Percent high school graduate	39.1	58.6	33.8	14.3	39.0	29.7	29.0	33.3	34.2	30.1	37.4
Percent bachelor's degree	1.0	2.0	_	-	1.0	1.6	.9	1.1		-	1.0
Females 25+ years	892	147	44	10	234	44	126	62	23	82	120
None	268	21	15	5	101	16	28	21	5	27	2
Elementary: 1 to 4 grade	105	18	7	-	15	- 17	21	17	4	6	1
5 and 6 grade	171	13	10	3	44	17	32	12	6	10	2
7 grade	25		3	-	9	3	3		1	3	
8 grade	124	8	3	2	17	5	42	4 2	3	31	
High school: 9 grade	17 18	6 10	1	_	2	_	_	2	_	_	
10 grade	20	10	1	_	3	_	_	_	1	_	
11 grade	9	2	_	_	2	_	_	_	1	1	
High school graduate	82	30	3	_	29	_	_	5	2	3	1
Some college, no degree	34	19	-	_	9	1	_	_	_	_	1
Associate degree, occupational	4	2	_	_	_	_	_	_	_	1	
Associate degree, academic	14	7	1	_	_	2	_	1	_	_	
Bachelor's degree	1	1	_	_	_	-	_	_	_	_	
Graduate/professional degree	_	-	-	-	-	-	-	-	-	-	
Percent high school graduate	15.1	40.1	9.1	-	16.2	6.8	-	9.7	8.7	4.9	15.8
		_									
Percent bachelor's degree	.1	.7	_	-	-	-	_	-	_	_	
	.1	.7	7	-	31	1	3	-	1	2	

Table B13. Literacy, Vocational Training, and Veteran Status by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

Literacy Vocational Training		 ¦				Yap	p Prop	er				
Veteran Status Military Dependency	 Total	 Total	Rumung	¦ ¦Maap	 Gagil	Tomil	¦ ¦Fanif	¦ ¦Weloy	¦ ¦ Rull	 Gilman	Kanifay	Dalip-
LITERACY												
Persons 10+ years				445	563	777			1,564		197	
Can read & write in any language Cannot read and write			72 8	429 16	545 18	761 16		889 29	1,507 57		183 14	
Females 10+ years				214		389					94	
Can read & write in any language Cannot read and write		2,754 121	37 4	203 11		375 14					84 10	
VOCATIONAL TRAINING												
Persons 15 to 64 years			53		437	610			1,262	120	148	
Completed requirements			6	67 19	119	96			293		26 13	
In FSM		317 477	4		29 42	28 38		68 77	90 113	5	13	
Both inside and outside FSM		301	2	27	48					11	2	
Did not complete requirements		3,428	47	258	318	514	236	543	969	92	122	329
Females 15 to 64 years Completed requirements			28	156 21	212	306		334	608 99	63 9	67 7	
In FSM		130	_		32 14	41 15		60 25	37		3	
Outside FSM		211	_	5	10	14		20	37	3	4	
Both inside and outside FSM		84	-	9	8	12		15	25	1	-	
Did not complete requirements	3,016	1,856	28	135	180	265	130	274	509	54	60	221
Persons 15 to 24 years				106	145	211					55	
Completed requirements		196 50	-	6 4	10 5	11		14	36 13		7 5	
In FSM		128	_	1	3	5		3	16	1	1	
Both inside and outside FSM		18	-	1	2	_		3	7		1	
Did not complete requirements	2,143	1,397	12	100	135	200	91	230	337	39	48	205
Females 15 to 24 years		838 127	8	45 3	72 4	106 8		105 5	178 16	24	20 3	
Completed requirements In FSM		25	_	1	4	5		2		1	2	
Outside FSM		96	-	1		3		2			1	
Both inside and outside FSM		6	-	1	-	-			4		-	-
Did not complete requirements	1,104	711	8	42	68	98	47	100	162	22	17	147
Persons 25 to 34 years		974 255	13 2		80	127			279		34 5	
Completed requirements In FSM		233 85	_		24 5	20 6		43 20	66 28		2	
Outside FSM		124	1		14	12		16	25		3	
Both inside and outside FSM		46	1		5	2					-	
Did not complete requirements	1,091	719	11	55	56	107	43	109	213	20	29	76
Females 25 to 34 years		527 121	8			60 10			142 27		18 2	
Completed requirements In FSM		35	_	4	1	4		10	11		_	
Outside FSM		64	_	1	6	5		6			2	-
Both inside and outside FSM	22	22	-		1	1		4	6	-	-	
Did not complete requirements	670	406	8	37	35	50	22	59	115	13	16	51
VETERAN STATUS												
Persons 15+ years				358	475	660			1,345 5		163	
Now on active duty	28	21	1	2	2	-	3	4	5	-	1	3
On active duty in past, but not now	25	25	_	1	3	2	2	1	11	_	2	3
Never on active duty				355	470	658			1,329		160	
MILITARY DEPENDENCY												
All persons				592		1,023		1,197		233	275	
In Armed Forces		21 45	1	2	2 5	1	3	4 12	5 12	- 2	1	
Of active-duty member		40	_	6	5	1		11	10		1	
Other dependent	6	5	-	-	-	-	-	1	2	1	_	1
Other civilian	11,148	7,325		584		1,022	544		2,002		273	636

Table B13. Literacy, Vocational Training, & Veteran Status by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text] - cont'd

Literacy				7	ap Oute	er Isla	nds				
Veteran Status		1	Fais/	1		Eaur-¦	1	Farau-	1 1	Lamo-	1
LITERACY		Ulithi									
D	0.015	F0.6	120	1.0	725	0.0	410	1.57	6.4	234	202
Persons 10+ years Can read & write in any language. Cannot read and write	2,357	553	138 114 24	19 15 4	735 590 145	88 72 16	412 322 90	157 115 42	59	180 54	382 337 45
Females 10+ years Can read & write in any language.			77 59		405 292	59 44	227 164	91 53		138 97	214 177
Cannot read and write			18		113	15	63	38		41	
VOCATIONAL TRAINING											
Persons 15 to 64 years			102	10	560	70	307	121		175	266
Completed requirements	188 90		9	2	28 11	10 8	22 10	16 5		15 15	
In FSM	61		4	1	11	1	11	7		13	
Both inside and outside FSM	37		1	_	6	1	1	4		_	8
Did not complete requirements			93	8	532	60	285	105		160	238
Females 15 to 64 years			56	7	317	48	179	74		109	154
Completed requirements			2	1	2	1	-	1		-	-
In FSM	12		1		-	-	_	1		-	_
Outside FSM	9		1	_	2	- 1	_	_		_	-
Did not complete requirements			54	6	315	47	179	73		109	150
Persons 15 to 24 years	761	176	35	1	215	13	116	40	17	56	92
Completed requirements	15		1	-	1	1	2	2		-	
In FSM	6			-		1	1			-	1
Outside FSM	7		1	-	1	-	1	1		-	1
Both inside and outside FSM Did not complete requirements	746		34	1	214	12	114	1 38		- 56	90
Females 15 to 24 years	395	76	16	1	115	9	64	20	9	34	51
Completed requirements	2		-		-	-	-	-	-	-	-
In FSM	1	_	-		-	-	-	-	-	-	-
Outside FSM	-		-	-	-	-	-	-		-	-
Both inside and outside FSM Did not complete requirements	1 393		16	1	115	9	- 64	20		34	- 51
Persons 25 to 34 years	428	81	32	4	95	23	61	23	13	38	58
Completed requirements	56	13	3	1	10	5	5	3	1	4	11
In FSM	33	10	1	-	6	4	3	1	-	4	4
Outside FSM	18		2	1	3	1	2	2		-	4
Both inside and outside FSM	5				1						
Did not complete requirements	372	68	29	3	85	18	56	20	12	34	47
Females 25 to 34 years	276		20		58	13	43	19		27	
Completed requirements	12		1		2	-	_	1 1		_	4
In FSM	6		1		2	_	_	_		_	3
Both inside and outside FSM	_		_		_	_	_	_		_	_
Did not complete requirements	264		19		56	13	43	18		27	36
VETERAN STATUS											
Persons 15+ years	2,291		109	15	618	77	330	130	55	189	295
Now on active duty	7	5	-	-	-	-	-	-	1	-	1
but not now	2 204		109	- 15	- 618	- 77	330	120		100	- 294
Never on active duty	2,284	468	103	13	ρ10	/ /	330	130	54	189	294
	2 050		015	0.0	075	110	F 61	001	0.0	222	F 2 1
All persons	3,850 7		215	26	975	113	561	221		339	531 1
Military dependent	20		_	_	1	3	_	1		_	6
Of active-duty member	19		_	_	1	3	_	1		_	6
Other dependent	1	. 1	-	-	-	-	-	-	-	-	-

Table B14: Labor Force Characteristics by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

	!	¦ +					Prop					
Labor Force Status Subsistence Activity			¦ ¦Rumung	¦ ¦Maap	¦ ¦Gagil	Tomil	 Fanif	 Weloy	Rull	 Gilman		Dalip- ebinaw
LABOR FORCE STATUS												
Persons 15+ years	5,174 72.3	3,275 67.4	63 49 77.8 45	358 178 49.7 174	475 385 81.1 377	660 451 68.3 433	339 217 64.0 209	788 508 64.5 454	1,345 812 60.4 758	137 89 65.0 78	163 98 60.1 82	534 488 91.4 481
Formal work Agriculture/Fishing Subsistence Market Oriented	2,570 2,394 2,234		8 37 19	108 66 66	176 201 198 3	280 153 141 12	140 69 69	389 65 57	628 130 128 2	58 20 6 14	52 30 4 26	442 39
Unemployed	210 4.1 1,979	184 5.6 1,587 115	8.2 14	4 2.2 180 19	2.1 90 1	18 4.0 209 7	8 3.7 122 11	54 10.6 280 28	54 6.7 533 37	11 12.4 48 3	16 16.3 65 1	46
Not available for work	1,832	1,472	13	161	89	202	111	252	496	45	64	39
Females 15+ years In labor force	2,681 71.6 2,605 1,059	1,582 64.4	34 23 67.6 21 3 18	173 86 49.7 85 43	231 188 81.4 186 75 111	332 225 67.8 218 111 107	165 107 64.8 105 62 43	363 212 58.4 191 142 49	651 315 48.4 296 212 84	74 46 62.2 39 23 16	75 40 53.3 36 17 19	360 340 94.4 339 307 32
Subsistence Market Oriented Unemployed	104 76 2.8	467 54 66 4.2	11 7 2 8.7	1 1.2	108 3 2 1.1	97 10 7 3.1	43 - 2 1.9	44 5 21 9.9	82 2 19 6.0	6 10 7 15.2	3 16 4 10.0	1 1 .3
Not in labor force. Could have taken job Not available for work	75	876 56 820	11 1 10	87 5 82	43 1 42	107 4 103	58 6 52	151 14 137	336 20 316	28 1 27	35 - 35	-
With own children under 6 yrs . In labor force With own children 6-17 yrs only In labor force	1,165	580 367 777 563	13 11 12 10	49 28 68 42	63 54 91 82	88 62 103 84	44 31 60 50	93 52 136 97	161 80 220 132	23 18 28 22	22 12 29 18	24 19 30 26
SUBSISTENCE ACTIVITY												
Total, for home use	1,958 809 1,797	800 663 221 428 89	37 29 22 1	66 60 21 16 1	201 168 50 153 11	153 138 41 99 30	68 51 19 14 2	61 50 13 19	125 83 34 69 23	20 19 6 12 1	30 29 10 19	39 36 5 26 2
Total, sold		85 63 30 19 25	18 12 13 -	- - - -	3 3 - - 2	12 4 1 1 7	- - - -	3	2 - - - 2	14 13 4 7 1	26 26 8 11 8	2 1 1 -
Total, gave away	281 149 73 23 153	82 54 20 7 24	6 4 3 -	- - - -	22 14 6 2 5	26 20 4 2	- - - -	3 2 - - 1	10 1 3 - 6	8 7 3 3 1	6 5 1 -	
Females, for home use Gardening	1,509 68 1,229	515 493 7 270	18 18 3	42 42 - 10	111 107 - 77	107 104 1 65	43 43 - 9	46 44 - 18	81 70 1 49	16 15 2 8	19 19 - 12	21
Other		78	-	-	8	28	1		21	1	-	1
Females, sale	104 42 2 15 69	54 42 2 12 22	7 7 2 -	- - -	3 3 - - 2	10 3 - 1 7	- - - -	5 3 - - 4	2 - - - 2	10 9 - 5 1	16 16 - 6 6	1 1 - -
Females, gave away	191 128 2	57 44 2	4 4 1	- - -	11 11 -	21 16	- - -	3 2 -	6 -	6 5 1	5 5 -	1 1 -
Animal raising	16 125	5 20	-	- -	1 2	2 10	-	- 1	- 6	2 1	-	-

Table B14. Labor Force Characteristics by Municipality of Usual Residence, Yap: 2000 - continued [For definitions of terms and meanings of symbols, see text]

	¦ +				ap Oute						
Labor Force Status	 Total	Ulithi	Fais/¦ Sorol¦	 Ngulu¦	¦ Woleai¦	Eaur-¦	 Ifalik	Farau- lap	 Elato	Lamo-¦	Satawal
LABOR FORCE STATUS											
Persons 15+ years	2,291 1,899 82.9 1,873 289 1,584 1,509 75 26 1.4 392 32 360	473 302 63.8 298 104 194 177 17 4 1.3 171 13	109 102 93.6 101 16 85 85 - 1 1.0 7	15 13 86.7 12 1 11 11 - 1 7.7 2 1	618 502 81.2 501 75 426 422 4 1 .2 116	77 74 96.1 74 11 63 62 1 - 3 3	330 301 91.2 301 24 277 277 - - 29	130 127 97.7 126 17 109 109 - 1 .8 3 3	53 7 46 46 - - 2	189 188 99.5 188 17 171 171 - - 1	295 237 80.3 219 17 202 149 53 18 7.6 58 18 40
Females 15+ years	1,287 1,099 85.4 1,089 64 1,025 975 50 10 .9 188 19	223 155 69.5 153 39 114 101 13 2 1.3 68 5	60 56 93.3 55 4 51 51 - 1 1.8 4 -	11 9 81.8 9 - 9 9 - - - 2 1	349 289 82.8 289 12 277 275 2 - 60 -	53 50 94.3 50 2 48 48 - - 3 3	190 177 93.2 177 1 176 176 13	82 81 98.8 81 1 80 80 - - 1 1	31 2 29 29 - - 1	116 115 99.1 115 1 114 114 - - 1	171 136 79.5 129 2 127 92 35 7 5.1 35 13
With own children under 6 yrs In labor force	354 322 388 359	65 49 74 62	27 27 21 21	2 1 1 1	87 78 100 92	10 10 14 14	49 48 59 57	28 28 29 29	9 5	31 31 31 31	46 41 54 47
Total, for home use	1,582 1,295 588 1,369 1,111	192 159 74 140 81	85 85 33 84 22	11 11 2 9	426 340 146 382 361	63 48 15 47 63	277 219 101 253 261	109 109 32 109 108	46 29 17 -	171 120 55 170 138	202 175 113 175 69
Total, sold . Gardening . Fishing . Animal raising Other	75 1 - 4 72	17 - - 1 16	- - - -	- - - -	4 - - 2 2	1 - - 1	- - - -	- - - -	- - - -	- - - -	53 1 - 1 53
Total, gave away . Gardening . rishing . Animal raising . Other .	199 95 53 16 129	46 28 22 3 19	- - - -	4 3 - - 2	15 9 1 8 6	57 - 13 - 52	- - - -	- - - -	- - - -	48 33 12 1 33	29 22 5 4 17
Females, for home use	1,023 1,016 61 959 774	112 112 6 100 48	51 51 - 51 19	9 9 - 9 6	277 277 2 266 252	48 48 - 47 48	176 171 3 172 173	80 80 3 80 80	29 - -	114 113 2 113 103	127 126 45 121 45
Females, sale	50 - - 3 47	13 - - 1 12	- - - -	- - - -	2 - - 2 -	- - - -	- - - -	- - - -	- - - -	- - - -	35 - - - 35
Females, gave away Gardening Fishing Animal raising	134 84 - 11 105	22 22 - 2 13	- - - -	4 3 - - 2	12 9 - 7 4	43 - - - 43	- - - -	- - - -	- - - -	35 32 - - 30	18 18 - 2 13

Table B15: Labor Force Characteristics From U.S. Definition by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

	1	1				Yap	Prope					
Labor Force Status Work status in 1999	 Total	 Total	 Rumung	¦ ¦Maap	¦ ¦Gagil	 Tomil	¦ ¦Fanif	Weloy	Rull	Gilman	 Kanifay	ebinaw
LABOR FORCE STATUS												
Persons 16 years and over. In labor force	3,037 44.0	2,643 56.1	15 24.6	120 34.9	44.7	332 52.1		469 62.0	1,306 728 55.7	70 52.2	156 69 44.2	467 88.4
Armed Forces	3,037 2,662	2,643 2,371	15 8	120 109	205 178	332 297	168 145	469 408	728 653	70 59	- 69 53	467 461
At work 35 or more hours. Unemployed	375 12.3	272 10.3	7 46.7	9.2	27 13.2	35 10.5		365 61 13.0		15.7	43 16 23.2	6 1.3
Not in labor force		2,068 19		224	254	305	161	288 18	578 1		87 -	61
Females 16 years and over. In labor force	1,249 34.4	1,132 47.4	5 15.2	46 27.2	81 36.3	130 40.8	158 72 45.6	349 176 50.4	637 250 39.2		73 22 30.1	319 89.1
Armed Forces. Civilian labor force. Employed. At work 35 or more hours.	1,249 1,094	1,132 1,029	5 3		81 75	130 113	72 63 56	176 148 133	250 225 193	31 24 22	22 18 14	319 317
Unemployed Perct of civilian labor. Not in labor force	155 12.4 2,381	103 9.1 1,258	40.0 28	6.5 123	7.4 142	13.1 189	86	173	387	22.6 40	18.2 51	.6 39
Institutionalized persons With own children under 6 year.	1,884	1,198	23	112		171	96	187	334	43	56	49
In labor force	2,269	651 1,567 853	21	146	193	188	49 130 73	117 277 181	197 432 239	48	32 65 29	67
DURATION OF WORK IN 1999												
Persons 16 years and over. Worked in 1999	2,571 1,977 197	2,286 1,768 178	2 5	121 88 12	150 4	291 205 32	329 161 139 3	391 343 14	501 53	51 48 1	156 39 35 1	406 257 53
27 to 39 weeks	112 181 2,476		- 2 9	8 5 118	6 17 180	31 14 279	4 8 7 158	10 14 10 379		1 1 51	1 2 - 37	4 88 396
50 to 52 weeks	182 90	165 68	4 2	11 8	4 8	28 7	137 3 4 8	337 11 9 13	486 49 25 25	1 -	33 1 1 2	53 4
1 to 13 weeks	161 70	148 61	1 2	4	16 7	12 8	6 3 2	9 8 5	13 23 15	1 -	- 1 1	86 7
50 to 52 weeks Did not work in 1999		31 2,425			4 272		2 168	3 366	13 678	83	1 117	6 122
Females 16 years and over. Worked in 1999 50 to 52 weeks	1,039 769	978 729	3 1	35	76 60	114 81	67 59	349 148 127	637 216 171	20 19	73 13 13	274 163
40 to 49 weeks	43 43	37 41	-	4	4	10	2 1	3 5 9	15 12	-	- - -	48 2 2
1 to 13 weeks	94 994 747 87	85 939 707 83	1	35	73 59	110 79	3 65 57 2	4 143 126 2	201 162 15	1 20 19	12 12	59 266 157 48
27 to 39 weeks	36 41 83	31 39 79	-	4 3 2	3	4 10	2 1 3	4 8 3	12 11 1	- - 1	- - -	2 2 57
Usually worked 15 to 34 hours 40 or more weeks 50 to 52 weeks	39 23 20	33 23 20	- - -	1 1 -	3 1 1	4 3 2	2 2 2	4 1 -	12 9 9	- - -	1 1 1	6 5 5
Did not work in 1999	2,591	1,412	30	122	147		91	201	421	51	60	84

Table B15. Labor Force Characteristics From U.S. Definition by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text] - continued

				Y	ap Oute						
Labor Force Status	+										
Work status in 1999	Total	Ulithi	Sorol	Ngulu¦	Woleai¦	ipik;	Ifalik¦	lap	Elato	trek	Satawal
LABOR FORCE STATUS											
Persons 16 years and over .		459	104	15	595	75	313	126		178	275
In labor force .			18	2	77	12	24	63 50.0		27 15.2	42 15.3
Percent of 16+ yrs . Armed Forces .	18.0		17.3	13.3	12.9	16.0	7.7	50.0		15.2	15.3
Civilian labor force .	394		18	2	77	12	24	63		27	42
Employed .	291		16	1	75	11	24	18		17	17
At work 35 or more hours .	275		16	1	74	10	24	17	7	17	17
Unemployed .	103	92 17	2	1	2	1	-	45	-	10	25
Perct of civilian labor .	26.1				2.6	8.3	-	71.4			59.5
Not in labor force .	1,797			13	518	63	289	63		151	233
Institutionalized persons .	-	-	-	-	-	-	-	-	-	-	-
Females 16 years and over .	1,240		56	11	338	52	182	81	28	109	163
In labor force	117		6 10.7	-	12	2	1	29		4	10 6.1
Percent of 16+ yrs . Armed Forces .	9.4		10.7	_	3.6	3.8	.5	35.8	7.1	3.7	0.1
Civilian labor force .	117		6	_	12	2	1	29	2	4	10
Employed .	65	40	4	_	12	2	1	1		1	2
At work 35 or more hours .	56		4	-	11	2	1	1	2	1	2
Unemployed .	52	11	2	-	-	-	-	28	-	3	8
Perct of civilian labor .	44.4			-	-	-	-	96.6		75.0	80.0
Not in labor force .	1,123		50	11	326	50	181	52		105	153
Institutionalized persons .	-	_	-	-	-	-	-	-	-	-	-
With own children under 6 year .	686	137	54	3	180	17	89	54	16	61	75
In labor force .	138				28	1	9	31		12	13
With own children 6 to 17 year . In labor force	702 127		39 7	2	174 23	25 2	103 8	52 26		55 13	93 11
DURATION OF WORK IN 1999 .											
Persons 16 years and over .	2,191	459	104	15	595	75	313	126	51	178	275
Worked in 1999	285	107	14	1	68	12	24	18	7	17	17
50 to 52 weeks	209		7	1	53	10	24	18		17	15
40 to 49 weeks	19		6	-	6	-	-	-	-	-	-
27 to 39 weeks	25	19	1	-	2	- 1	_	_	1	-	2
14 to 26 weeks . 1 to 13 weeks .	12 20	9 14	_	_	2 5	1	_	_	_	_	_
Usually worked 35 + hours .	271		12	1	67	11	24	18	7	17	16
50 to 52 weeks	207		7	1	52	10	24	18		17	15
40 to 49 weeks .	17		4	-	6	_	-	_		-	_
27 to 39 weeks .	22	17	1	-	2	-	-	-	1	-	1
14 to 26 weeks .			-	-	2	1	-	-	-	-	-
1 to 13 weeks .	13		-	-	5	-	-	-	-	-	-
Usually worked 15 to 34 hour .	9		_	_	1	-	-	_	-	-	_
40 or more weeks	2		_	_	1	_	_	_	_	_	_
Did not work in 1999 .	1,906		90	14	527	63	289	108	44	161	258
. Females 16 years and over .	1,240	220	56	11	338	52	182	81	28	109	163
Worked in 1999 .	61		2	_	11	2	2	1		1	2
50 to 52 weeks .	40	21	2	-	8	2	2	1		1	2
40 to 49 weeks .	4		-	-	1	-	-	-	1	-	-
27 to 39 weeks .	6		-	-	-	-	-	-	-	-	-
14 to 26 weeks	2			-	-	-	-	-	-	-	-
1 to 13 weeks	9				2	-	-	-		- 1	-
Usually worked 35+ hours . 50 to 52 weeks .	55 40				11 8	2	2 2	1		1	2
40 to 49 weeks .	40				8	_	_		1	1	2
27 to 39 weeks .	5			_	_	_	_	_	_	_	_
14 to 26 weeks .	2				_	_	_	_		_	_
1 to 13 weeks	4			-	2	-	_	-	_	-	_
Usually worked 15 to 34 hours.		6		-	-	-	-	-	-	-	-
40 or more weeks .	-			-	-	-	-	-	-	-	-
50 to 52 weeks .	-			-	-	-	-	-		-	
Did not work in 1999 .				11	327	50	180	80	26	108	161

Table B15A. Activity and Place of Work in Week Before Census by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

	 !	 !				Var	Drone	r				
Activity in Week before Census Where Worked Last Week Workers in Families in 1999	 Total	¦ ¦Total	 Rumung	Maap	 Gagil	Tomil	 Fanif	Weloy	Rull:	 Gilman	 Kanifay	Dalip- ebinaw
ACTIVITY IN WEEK BEFORE CENSUS												
Persons 15+ years Paid work, no subsistence Paid work and subsistence Subsistence activity only No work	1,899 671 2,438	1,794 487 837	63 1 7 42 13	358 87 21 66 184	475 63 113 201 98	660 178 102 155 225	339 108 32 69 130	788 319 70 67 332	1,345 528 100 131 586	137 45 13 24 55	163 31 21 41 70	534 434 8 41 51
Females 15+ years Paid work, no subsistence Paid work and subsistence Subsistence activity only No work	803 256 1,563	775 220	34 1 2 21 10	173 34 9 42 88	231 20 55 111 45	332 75 36 108 113	165 42 20 43 60	363 118 24 50 171	651 160 52 84 355	74 15 8 18 33	75 9 8 22 36	360 301 6 32 21
WHERE WORKED LAST WEEK												
Current formal workforce persons 15+ years Worked in same municipality Worked in same village Worked in other village Worked in other municipality	1,336 966 370	1,068 720 348	8 6 1 5 2	108 28 12 16 80	176 25 12 13 151	280 71 49 22 209	140 28 22 6 112	389 294 167 127 95	628 223 88 135 405	58 16 6 10 42	52 6 5 1 46	442 371 358 13 71
Current formal workforce females 15+ years	600 466 134	995 539 407 132 456	2		75 10 5 5	111 28 17 11 83	62 15 12 3 47	142 105 53 52 37	212 72 35 37 140	23 10 4 6 13	17 3 3 - 14	307 281 272 9 26
Families	676 688 403 54 25	293 508 378 54 24	23 12 11 - -	1	143 40 60 33 6 4	178 37 68 59 10 4	88 13 35 29 7 4	199 33 79 72 9	359 66 153 119 19 2	43 16 15 11 1	50 27 17 5 -	68 13 26 26 1 2

Table B15A. Activity and Place of Work in Week Before Census by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

[101 dollmictone of colme dnd m	041121190	01 01	2010,	000 001							
Activity in Week before Census+ Where Worked Last Week Workers in Families in 1999	Total;	Ulithi;	Sorol¦!	Ngulu¦W	oleai¦	ipik¦	Ifalik¦	lap ¦	Elato;	trek;	Satawal
ACTIVITY IN WEEK BEFORE CENSUS											
Persons 15+ years Paid work, no subsistence Paid work and subsistence Subsistence activity only No work	105 184 1,601 401 1,287 28	473 58 46 195 174 223 20	109 - 16 85 8 60 -	15 - 1 11 3 11 -	618 42 33 426 117 349 8	77 1 10 63 3 53 -	330 - 24 277 29 190 -	130 2 15 109 4 82 -	55 - 7 46 2 32 - 2	189 - 17 171 1 116 -	295 2 15 218 60 171 -
Subsistence activity only No work	1,032		51 5	9	-	_	176 13	80 1	29 1	114	134 35
WHERE WORKED LAST WEEK											
Current formal workforce persons 15+ years Worked in same municipality . Worked in same village Worked in other village Worked in other municipality .	289 268 246 22 21	8	16 10 10 -	1 - - - 1		-	24 23 18 5	17 16 15 1	7 6 6 - 1	17 16 16 -	17 15 15 - 2
Current formal workforce females 15+ years Worked in same municipality Worked in same village Worked in other village Worked in other municipality . WORKERS IN FAMILIES IN 1999	64 61 59 2 3	36 2	4 2 2 - 2	-	12 12	2	1 1 1 -	1	2	1 1 1 -	2 2 2 -
Families. No workers. 1 worker 2 workers. 3 workers. 4 or more workers.	589 383 180 25 - 1	132 55 59 17 -	42 29 12 1 -	-	4 -	2 -	-	- -	-	-	91 75 16 - -

Table B16. Occupation by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

	 !	 !					Prope	er				
		+ ¦	 :	: :				1	1	1	1	Dalip-
Occupation	Total	Total	Rumung	Maap	Gagil	Tomil;	Fanif	Weloy;	Rull	Gilman	Kanifay¦	ebinaw
Current formal workforce												
persons 15+ years	2,570	2,281	8	108	176	280	140	389	628	58	52	442
Legislators, senior officials .		157	_	9	16	14	11	41	48	7	3	8
Professionals		210	1	10	15	17	10	46	87	8	2	14
Technicians & Associate Profesl	439	327	4	28	34	64	21	44	98	18	7	9
Clerks	359	346	1	18	46	61	29	70	87	8	11	15
Service Workers & Shop & Market	173	160	-	8	4	16	14	40	63	1	5	9
Skilled Agricultural and fishe.	46	41	-	2	3	5	1	4	21	2	1	2
Craft & Related Workers	629	611	1	16	30	46	26	45	72	4	5	366
Plant & Machine Operators & As.	152	141	-	6	5	20	9	35	48	4	5	9
Elementary Occupations	295	287	1	11	23	37	19	64	103	6	13	10
Armed Forces	1	1	-	-	-	-	-	-	1	-	-	-
Current formal workforce												
males 15+ years	1.511	1.286	5	6.5	101	169	78	247	416	35	35	135
Legislators, senior officials .	132	128	_	8	11	11	9	29	43	7	2	- 8
Professionals	205	120	_	7	11	11	7	30	43	3	2	6
Technicians & Associate Profesl	271	182	3	14	22	26	7	25	65	13	3	4
Clerks	90	82	_	3	8	21	9	15	22	1	2	1
Service Workers & Shop & Market	99	92	_	5	2	10	6	17	41	1	5	5
Skilled Agricultural and fishe.	42	37	_	2	2	4	1	4	20	2	1	1
Craft & Related Workers	270	261	1	10	20	31	15	34	53	_	5	92
Plant & Machine Operators & As.	142	131	_	6	5	20	9	32	43	3	4	9
Elementary Occupations	259	252	1	10	20	35	15	61	85	5	11	9
Armed Forces	1	1	-	-	-	-	-	-	1	-	-	-
Current formal workforce												
females 15+ years	1,059	995	3	43	75	111	62	142	212	23	17	307
Legislators, senior officials .	30	2.9	_	1	5	3	2	12	5	_	1	_
Professionals	109	90	1	3	4	6	3	16	44	5	_	8
Technicians & Associate Profes.	168	145	1	14	12	38	14	19	33	5	4	5
Clerks	269	264	1	15	38	40	20	55	65	7	9	14
Service Workers & Shop & Market		68	_	3	2	6	8	23	22	_	_	4
Skilled Agricultural and fishe.	4	4	-	_		1	_	_	1	_	_	1
Craft & Related Workers	359	350	_	6	10	15	11	11	19	4	_	274
Plant & Machine Operators &	10	10	-	_	_	_	_	3	5	1	1	_
Elementary Occupations	36	35	_	1	3	2	4	3	18	1	2	1
Armed Forces	-	-	-	-	-	-	-	-	-	=	=	=

Table B16. Occupation by Municipality of Usual Residence, Yap: 2000 - $\,$ continued [For definitions of terms and meanings of symbols, see text]

	!			Y	ap Oute	er Isla	nds				
			Fais/	1	1	Eaur-	1	Farau-		Lamo-¦	
Occupation	Total U		Sorol								
Current formal workforce											
persons 15+ years	289	104	16	1	75	11	24	17	7	17	17
Legislators, senior officials	5	4	-	-	1	-	-	-	-	-	-
Professionals	104	19	12	1	36	7	16	2	4	1	6
Technicians & Associate Profesls.	112	42	1	-	25	3	3	13	2	14	9
Clerks	13	9	-	-	3	-	1	-	-	-	-
Service Workers & Shop & Market	13	6	1	-	1	-	3	-	1	1	-
Skilled Agricultural and fishe	5	1	1	-	-	-	1	1	-	1	-
Craft & Related Workers	18	12	-	-	4	1	-	-	-	-	1
Plant & Machine Operators & As	11	5	1	-	4	-	-	1	-	-	-
Elementary Occupations	8	6	-	-	1	-	-	-	-	-	1
Armed Forces	-	-	-	-	-	-	-	-	-	-	-
Current formal workforce											
males 15+ years	225	65	12	1	63	9	23	16	.5	16	15
Legislators, senior officials	4	3	_	_	1	_	_	_	_	_	_
Professionals	85	13	10	1	29	6	15	2	3	1	5
Technicians & Associate Profesl .	89	28	_	_	21	2	3	12	2	13	8
Clerks	8	4	-	-	3	_	1	_	_	_	_
Service Workers & Shop & Market .	7	3	-	-	_	_	3	_	_	1	_
Skilled Agricultural and fishe	5	1	1	-	-	-	1	1	-	1	-
Craft & Related Workers	9	3	-	-	4	1	-	-	-	-	1
Plant & Machine Operators & As	11	5	1	-	4	-	_	1	-	_	-
Elementary Occupations	7	5	-	-	1	-	-	-	-	-	1
Armed Forces	-	-	-	-	-	-	-	-	-	-	-
Current formal workforce											
females 15+ years	64	39	4	_	12	2	1	1	2	1	2
Legislators, senior officials	1	1	_	_	_	_	_	_	_	_	_
Professionals	19	6	2	_	7	1	1	_	1	_	1
Technicians & Associate Profes	2.3	1.4	1	_	4	1	_	1	_	1	1
Clerks	5	5	_	_	_	_	_	_	_	_	_
Service Workers & Shop & Market .	6	3	1	_	1	_	_	_	1	_	_
Skilled Agricultural and fishe	_	_	_	_	_	_	_	_	_	_	_
Craft & Related Workers	9	9	-	-	-	_	_	-	_	_	_
Plant & Machine Operators &	_	_	-	-	-	_	_	-	_	_	_
Elementary Occupations	1	1	_	_	_	_	_	_	_	_	_
Armed Forces	_	_	_	_	_	_	_	_	_	_	_

Table B17. Industry by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

		: +				Yap	p Prope	er 				
Industry	 Total	 Total		 Maap		Tomil	Fanif			Gilman	Kanifay	Dalip-
Current formal workforce												
persons 15+ years	2,570	2,281	8	108	176	280	140	389	628	58	52	442
Agriculture, hunting & forestry.	22	18	-	1	2	1	1	4	5	1	1	
Fishing	37	36	-	-	2	4	1	6	17	3	1	
Mining and quarrying	420	7	_	_	12	- 22	-	1.4	2	_	_	5
Manufacturing Electricity, gas & water supply.	438 94	437 79	_	6 1	12	22 8	8 2	14	9 35	5 1	4 5	
Construction	185	181	_	10	20	27	18	48	49	4	3	
Wholesale & Retail Trade, Repair Motor Vehicles, Motorcycles &											_	_
Personal & Household Goods	311	309	1	14	24	39	37	70	92	4	8	20
Hotels and Restaurants Transport, Storage &	186	180	-	8	12	22	12	48	69	2	3	4
Communication	141 22	137 22	-	6 -	4 5	20 3	9	36 5	47 5	4	9	2
Real Estate, Renting & Business Activities Public Administration & Defense;	129	125	=	5	15	11	3	25	54	6	3	3
Compulsory Social Security	204	202	_	9	29	20	7	48	77	4	5	3
Education	524	310	5	28	23	56	23	55	84	16	5	
Health and Social Work Other Community, Social &	128	109	-	6	10	25	6	13	41	5	1	
Personal Service Activities Private Households With Employed	130	119	2	14	9	21	10	9	36	3	3	12
Persons	6	6	-	-	=	1	-	-	4	=,	-	1
Bodies	4	4	-	-	1	-	-	-	2	-	1	_
Current formal workforce			_					0.45		0.5		405
males 15+ years			5	65	101	169	78	247	416	35	35	
Agriculture, hunting & forestry. Fishing	17 29	13 28	_	1	1	1 2	1	2 5	5 15	1	1	
Mining and quarrying	6	5	_	_	_	_	_	_	1	_	_	4
Manufacturing	115	114	_	1	6	10	_	3	6	2	3	
Electricity, gas & water supply.	88	74	-	1	8	8	2	7	33	-	5	10
Construction	177	173	-	10	18	26	16	47	47	4	3	2
Wholesale & Retail Trade, Repair Motor Vehicles, Motorcycles &												
Personal & Household Goods Hotels and Restaurants	168 109	167 105	-	5 6	13 6	17 17	20 5	38 28	56 39	2	3 2	
Transport, Storage & Communication	114	112	-	4	2	17	7	32	37	4	7	2
Financial Intermediation Real Estate, Renting & Business Activities	6 74	6 70	_	2	3 7	9	1	1 13	1 29	4	2	1
Public Administration & Defense; Compulsory Social Security	154	153	_	8	16	15	6	36	66	2	2	
Education	314	145	3	12	12	26	11	25	41	7	2	
Health and Social Work Other Community, Social &	60	45	-	2	3	8	1	5	21	3	-	2
Personal Service Activities Private Households With Employed	76	72	2	13	5	13	5	5	17	2	3	7
Persons	2	2	-	-	=	=	=	=	1	=	-	1
Bodies	2	2	-	-	-	-	-	-	1	-	1	_
Current formal workforce												
females 15+ years		995	3	43	75	111	62	142	212	23	17	
Agriculture, Hunting & Forestry.	5	5	_	_	1	-	1	2	2	_	_	2
Fishing	3	8	_	_	1	2	_	1	1	_	_	1
Manufacturing	323	323	-	5	6	12	8	11	3	3	1	
Electricity, Gas & Water Supply.	6	5	-	_	-	-	-	1	2	1	-	1
Construction	of 8	8	=	-	2	1	2	1	2	=	=	=
Motor vehicles, motorcycles &	1 4 0	1 4 0		_	4.4	0.0	4.5	2.0	2.0	_	_	-
personal & household goods Hotels and Restaurants		142 75	1 -	9	11 6	22 5	17 7	32 20	36 30	2	5 1	
Transport, Storage & Communication	27 16	25	-	2	2 2	3	2 2	4 4	10	=	2	
Financial Intermediation Real Estate, Renting & Business Activities	55	16 55	-	3	8	2	_	12	25	2	1	1 2
Business Activities Public Administration & Defense;	23	23	_	3	0	2	_	12	23	2	1	
Compulsory Social Security	50	49	_	1	13	5	1	12	11	2	3	1
Education	210	165	2		11	30	12	30	43	9	3	
Health and Social Work	68	64	=	4	7	17	5	8	20	2	1	
Other Community, Social & Personal Service Activities	54	47	-	1	4	8	5	4	19	1	-	5
Private Households With Employed Persons	4	4	-	-	-	1	-	-	3	-	-	_
Extraterritorial Organizations &	_	2			1	_	_		1			
Bodies	2											

Table B17. Industry by Municipality of Usual Residence, Yap: 2000 - continued [For definitions of terms and meanings of symbols, see text]

¦ +					Yap Oute	er Isla 	nds 				
Industry	Total		Fais/ Sorol		 Woleai	Eaur- ipik		Farau- lap		Lamo- trek	
Current formal workforce											
persons 15+ years	289	104	16	1	75	11	24	17	7	17	17
Agriculture, hunting & forestry	4	1	-	-	-	=	1	1	-	1	-
Fishing	1	-	-	-	1	-	-	-	-	-	-
Mining and quarrying	2	2	-	-	-	-	-	-	-	-	-
Manufacturing	1	-	-	-	-	-	1	-	-	-	-
Electricity, gas & water supply	15	12	-	-	3	-	-	_	_	-	-
Construction	4	3	-	-	1	-	-	-	-	-	-
Motor Vehicles, Motorcycles &	2	1			1						
Personal & Household Goods Hotels and Restaurants	6	1 5	_	_	1	_	_	_	_	_	_
Fransport, STransport, Storage &		9			_						
Communication	4	1	2	_	_	_	_	1	-	_	-
Financial Intermediation	-	_	_	_	_	_	_	_	_	_	_
Real Estate, Renting &											
Business Activities	4	1	1	-	2	-	_	_	_	_	_
Public Administration & Defence;											
Compulsory Social Security	2	1	-	-	-	-	-	-	-	-	1
Education	214	62	13	1	61	9	20	13	7	14	14
Health and Social Work	19	5	-	-	4	2	2	2	-	2	2
Personal Service Activities Private Households With Employed	11	10	-	-	1	-	-	-	-	-	=
Persons	-	-	-	-	-	-	-	-	-	-	-
Extraterritorial Organizations & Bodies	-	-	-	-	-	-	-	-	-	-	-
Current formal workforce	225	CE	1.0	1	(2)	0	2.2	1.0	-	1.0	1.5
males 15+ years	225	65	12	1	63	9	23	16	5	16	15
Agriculture, hunting & forestry	4	1	-	-	- 1	-	1	1	_	1	_
Fishing	1	1	_	_	1	_	_	_	_	_	_
Manufacturing	1	_	_	_	_	_	1	_	_	_	_
Electricity, gas & water supply	14	11	_	_	3	_	_	_	_	_	_
Construction	4	3	_	_	1	_	_	_	_	_	_
Wholesale & Retail Trade, Repair Motor Vehicles, Motorcycles &											
Personal & Household Goods	1	-	-	-	1	-	-	-	-	-	-
Hotels and Restaurants	4	3	-	-	1	-	_	_	_	_	-
Fransport, Storage &											
Communication	2	-	1	-	-	-	-	1	-	-	-
Financial Intermediation	-	-	-	-	-	-	-	-	-	-	-
Real Estate, Renting & Business Activities	4	1	1	-	2	-	-	-	-	-	-
Public Administration & Defence; Compulsory Social Security	1	=	_	_	_	=.	_	_	_	_	1
Education	169	38	10	1	50	8	19	12	5	13	13
Health and Social Work	15	4	-	-	3	1	2	2	-	2	1
Personal Service Activities	4	3	-	-	1	-	-	-	-	-	-
Private Households With Employed											
Persons	-	-	-	-	-	-	-	-	-	-	-
Extraterritorial Organizations & Bodies	-	-	-	-	-	-	-	-	-	-	-
Current formal workforce											
females 15+ years	64	39	4	-	12	2	1	1	2	1	2
Agriculture, Hunting & Forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Mining and Quarrying	1	1		-	-	=	-	-	-	-	-
Manufacturing	-	-	-	-		-	-	-	-	-	-
Electricity, Gas & Water Supply Construction	1 -	1 -	-	-		-	-	-	-	-	-
Wholesale & Retail Trade, Repair Motor vehicles, motorcycles &											
personal & household goods	1	1	_	_	-	_	_	_	_	_	_
Hotels and Restaurants	2	2		_	-	-	_	_	-	_	_
Fransport, Storage &											
ransport, storage &	2	1	1	-		-	-	-	-	-	-
Communication	_	-	-	-	-	-	-	-	-	-	-
Communication							_	_	_	-	=
Communication. Financial Intermediation. Real Estate, Renting & Business Activities	=	=	-	-	_	_					
Communication		- 1	=	-	_	_	_	_	_	_	_
Communication. Financial Intermediation Real Estate, Renting & Business Activities Public Administration & Defence; Compulsory Social Security	1	- 1 24		- - -	- 11	- 1	- 1	- 1	- 2	- 1	- 1
Communication. Financial Intermediation. Real Estate, Renting & Business Activities. Public Administration & Defence, Compulsory Social Security. Reducation.		1 24 1	3	- - -		- 1 1	- 1 -	- 1 -	- 2 -	- 1 -	
Communication. Pinancial Intermediation. Real Estate, Renting & Business Activities. Public Administration & Defence; Compulsory Social Security Education . Bealth and Social Work	1 45	24	3						- 2 -		
Communication. Frinancial Intermediation. Real Estate, Renting & Business Activities. Public Administration & Defence; Compulsory Social Security Education. Health and Social Work. Dether Community, Social & Personal Service Activities	1 45	24	3 -						- 2 -		- 1 1
Communication. Financial Intermediation Real Estate, Renting & Business Activities. Public Administration & Defence; Compulsory Social Security Education Health and Social Work Other Community, Social &	1 45 4	24 1	3 -						- 2 - -		

Table B18. Class of Worker and Commuting Characteristics by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

Class of Worker Transportation to Work and Car Pooling		: : +					Prope					
Departure Time	Total	Total	Rumung	Maap	Gagil;	Tomil;	Fanif	Weloy;	Rull	Gilman	Kanifay	ebinaw
CLASS OF WORKER												
Current formal workforce persons 15+ years	2,570	2,281	8	108	176	280	140	389	628	58	52	442
Private wage and salary workers			2	52	82	171	92	240	350	20	31	407
Municipal government workers				-	1	1	-	-	2	-	-	
State government workers	817		5	43	58	84	36	110	206	26	12	28
National government workers	83		_	_		6	3	18			2	
Foreign or U.S. Federal workers Self-employed workers		73	1		9	3 14		12 7			3	
Unpaid family workers			_		1	1	1	2	1	1	3	
-												
Current formal workforce females 15+ years	1 050	995	3	43	75	111	62	142	212	23	17	307
Private wage and salary workers	691		- -		33	65	40	89	118	23	7	
Municipal government workers	1		_	_		-	-	_	_	_		_
State government workers	256		2	16	28	36	17	36	58	9	4	
National government workers	28	26	-	1	5	3	-	6	7	1	1	2
Foreign or U.S. Federal workers	55	51	-	4	6	3	2	8	20	2	3	3
Self-employed workers	20	20				4	_	2	8	1		
Unpaid family workers	8	8	-	-	1	-	1	1	1	1	2	1
TRANSPORTATION TO WORK AND CARPOO	OLING											
Current formal workforce												
persons 15+ years			8		176	280	140	389		58	52	442
Car, truck, van, bus or boat			2	90	129	199	112	238		45	39	73
Car, truck, van or bus			-	68	97	134	79	156	341	33	34	
Boat	19 407		2		32	3 62	33	82		12	- 5	
Taxicab or public transport Drove alone			2		24	32	34	89		21	15	
		567	_		73	105	45	67		12	19	
2-person carpool			_		39	55	26	43		10	8	
3-person carpool			-			21		14	28	2	5	
4-to-6-person carpool		98	-	11	18	25	11	10	17	-	6	-
7-to-9-person carpool	5	4	-	-	-	-	3	-	1	-	-	
10-or-more-person carpool.	25		-	1	-	4	-	-	18	-	-	2
Worked at home	71		1			_ 4	3	19	25	3	4	
Other means	1,067	802	5	15	41	77	25	132	120	10	9	368
TRAVEL TIME TO WORK AND DEPARTURE	E TIME											
Current formal workforce												
persons 15+ years				108	176	280	140	389	628	58	52	442
Did not work at home Less than 5 minutes		506	_	105 3	170 3	276 18	137 5	370 80	603 65	55 4	48	
5 to 9 minutes	636		3	-	3	25	9	134		4	2	
10 to 14 minutes	352		1		3	31	26	85		4	3	
LO LO INLINGUED									95	12	10	
15 to 19 minutes	350	330	-		17	61	54	46	20			
			-		17 19	61 43	54 9	46 9	29	13	18	
15 to 19 minutes		150	- - -	7		61 43	54 9	9		13		3
15 to 19 minutes	151 71 343	150 68 331	- - 3	7 7 4 67	19 21 96	61 43 23 68	54 9 4 27	9 3 9	29 1 41	13	18 5 9	3 1 -
15 to 19 minutes	151 71 343 25	150 68 331 24	- - 3 -	7 7 4 67 3	19 21 96 8	61 43 23 68 5	54 9 4 27 2	9 3 9 3	29 1 41 1	13 6 11 1	18 5	3 1 -
15 to 19 minutes	151 71 343 25 6	150 68 331 24 6	- 3 -	7 7 4 67 3	19 21 96 8	61 43 23 68 5	54 9 4 27 2	9 3 9 3	29 1 41 1	13 6 11 1	18 5 9 1	3 1
15 to 19 minutes	151 71 343 25 6 12.5	150 68 331 24 6	- 3 - - 16.4	7 7 4 67 3 1 30.5	19 21 96 8 - 27.0	61 43 23 68 5 2	54 9 4 27 2 1	9 3 9 3 1 8.6	29 1 41 1 1	13 6 11 1 -	18 5 9 1 - 20.9	3 1 - - - 3.5
15 to 19 minutes	151 71 343 25 6 12.5	150 68 331 24 6	- 3 - - 16.4	7 7 4 67 3 1 30.5 3	19 21 96 8 - 27.0 6	61 43 23 68 5 2 20.6	54 9 4 27 2 1 17.4 3	9 3 9 3 1 8.6 19	29 1 41 1 1 10.7 25	13 6 11 1 - 18.8 3	18 5 9 1 - 20.9 4	3 1 - - 3.5 1
15 to 19 minutes	151 71 343 25 6 12.5	150 68 331 24 6	- 3 - - 16.4	7 7 4 67 3 1 30.5 3	19 21 96 8 - 27.0 6	61 43 23 68 5 2 20.6	54 9 4 27 2 1 17.4 3	9 3 9 3 1 8.6 19	29 1 41 1 1 10.7 25	13 6 11 1 - 18.8 3	18 5 9 1 - 20.9 4	3.5
15 to 19 minutes	151 71 343 25 6 12.5	150 68 331 24 6	- 3 - - 16.4	7 7 4 67 3 1 30.5 3	19 21 96 8 - 27.0 6	61 43 23 68 5 2 20.6	54 9 4 27 2 1 17.4 3	9 3 9 3 1 8.6 19	29 1 41 1 1 10.7 25	13 6 11 1 - 18.8 3	18 5 9 1 - 20.9 4	3 1 - - 3.5 1
15 to 19 minutes	151 71 343 25 6 12.5	150 68 331 24 6	- 3 - - 16.4	7 7 4 67 3 1 30.5 3	19 21 96 8 - 27.0 6	61 43 23 68 5 2 20.6	54 9 4 27 2 1 17.4 3	9 3 9 3 1 8.6 19	29 1 41 1 1 10.7 25	13 6 11 1 - 18.8 3	18 5 9 1 - 20.9 4	3.5
15 to 19 minutes	151 71 343 25 6 12.5	150 68 331 24 6	- 3 - - 16.4	7 7 4 67 3 1 30.5 3	19 21 96 8 - 27.0 6	61 43 23 68 5 2 20.6	54 9 4 27 2 1 17.4 3	9 3 9 3 1 8.6 19	29 1 41 1 1 10.7 25	13 6 11 1 - 18.8 3	18 5 9 1 - 20.9 4	3.5
15 to 19 minutes	151 71 343 25 6 12.5	150 68 331 24 6	- 3 - - 16.4	7 7 4 67 3 1 30.5 3	19 21 96 8 - 27.0 6	61 43 23 68 5 2 20.6	54 9 4 27 2 1 17.4 3	9 3 9 3 1 8.6 19	29 1 41 1 1 10.7 25	13 6 11 1 - 18.8 3	18 5 9 1 - 20.9 4	3.5
15 to 19 minutes	151 71 343 25 6 12.5	150 68 331 24 6	- 3 - - 16.4	7 7 4 67 3 1 30.5 3	19 21 96 8 - 27.0 6	61 43 23 68 5 2 20.6	54 9 4 27 2 1 17.4 3	9 3 9 3 1 8.6 19	29 1 41 1 1 10.7 25	13 6 11 1 - 18.8 3	18 5 9 1 - 20.9 4	3.5
15 to 19 minutes	151 71 343 25 6 12.5	150 68 331 24 6	- 3 - - 16.4	7 7 4 67 3 1 30.5 3	19 21 96 8 - 27.0 6	61 43 23 68 5 2 20.6	54 9 4 27 2 1 17.4 3	9 3 9 3 1 8.6 19	29 1 41 1 1 10.7 25	13 6 11 1 - 18.8 3	18 5 9 1 - 20.9 4	3.5
15 to 19 minutes	151 71 343 25 6 12.5	150 68 331 24 6	- 3 - - 16.4	7 7 4 67 3 1 30.5 3	19 21 96 8 - 27.0 6	61 43 23 68 5 2 20.6	54 9 4 27 2 1 17.4 3	9 3 9 3 1 8.6 19	29 1 41 1 1 10.7 25	13 6 11 1 - 18.8 3	18 5 9 1 - 20.9 4	3 1 3.5 1
15 to 19 minutes	151 71 343 25 6 12.5	150 68 331 24 6	- 3 - - 16.4	7 7 4 67 3 1 30.5 3	19 21 96 8 - 27.0 6	61 43 23 68 5 2 20.6	54 9 4 27 2 1 17.4 3	9 3 9 3 1 8.6 19	29 1 41 1 1 10.7 25	13 6 11 1 - 18.8 3	18 5 9 1 - 20.9 4	3 1 - - 3.5 1
15 to 19 minutes	151 71 343 25 6 12.5	150 68 331 24 6	- 3 - - 16.4	7 7 4 67 3 1 30.5 3	19 21 96 8 - 27.0 6	61 43 23 68 5 2 20.6	54 9 4 27 2 1 17.4 3	9 3 9 3 1 8.6 19	29 1 41 1 1 10.7 25	13 6 11 1 - 18.8 3	18 5 9 1 - 20.9 4	3.5

Table B18. Class of Worker and Commuting Characteristics by Municipality of Usual Residence, Yap: 2000 - cont'd [For definitions of terms and meanings of symbols, see text]

Class of Worker Transportation to Work and Car Pooling	: :				Yap Oute						
		¦ al¦Ulithi						_			
CLASS OF WORKER											
Current formal workforce persons 15+ years .	2	89 104	1 16	1	75	11	24	17	7	17	17
Private wage and salary workers		41 27			6	1	-	2			
Municipal government workers			- 1		1		_	_		_	_
State government workers		09 63					21	15	3	13	16
National government workers		7 5		-	1	-	1	-			-
Foreign or U.S. Federal workers		28 ⁷ 2 2	7 3	-	6		2	-	-		1
Self-employed workers Unpaid family workers		2 2		_		_	_	_			_
Current formal workforce											
females 15+ years		64 39	9 4	_	12	2	1	1	2	1	2
Private wage and salary workers		17 12	2 2	-	-	1	-	1	1	-	-
Municipal government workers		1 -		-	1	-	-	-	-		-
State government workers		40 22 2 2	2 2	-	11	1	1	_	_	1	2
National government workers Foreign or U.S. Federal workers		2 2	2 -			_	_	_			_
Self-employed workers						_	_	_			_
Unpaid family workers			-	-	-	-	-	-	-	-	-
TRANSPORTATION TO WORK AND CARPOO	LING										
Current formal workforce	2	89 104	1 10	1	75	11	24	17	7	17	17
persons 15+ years Car, truck, van, bus or boat		89 104 22 7		1	75	11 2	24 1	2	_	1 /	17 1
			, 5 -	_	3			_	_	_	1
			2 -	-		1		2	_	_	_
Taxicab or public transport				-	-	-	-	-	-	-	-
Drove alone		9 1		-	5	1	1	-			1
			5 -	-	-	1	-	2		_	-
		7 3	3 -	_	2	1	_	2	_	_	_
4-to-6-person carpool			3 -	_	_	_	_	_	_	_	_
				-	1	-	_	_	_	_	_
10-or-more-person carpool				-	-	-	-	-	-	-	-
			2 -	-	-	-	-	-			-
		65 95	5 16	1	66	9	23	15	7	17	16
TRAVEL TIME TO WORK AND DEPARTURE	TIME										
Current formal workforce	2	00 10	1 16	1	7.5	11	2.4	17	7	17	17
persons 15+ years Did not work at home		89 104 87 102		1		11 11	24 24	17 17			17 17
Less than 5 minutes							1		2		3
5 to 9 minutes	1	47 66	5 2	-	13 36	-	11	5	5	9	13
10 to 14 minutes		44 8		1		1	8	9	-	-	1
15 to 19 minutes			3 5	-	11	_	-	1		-	-
20 to 24 minutes				_	1	_	3	_		_	_
30 to 39 minutes		12 1		_		1	1	2			_
50 to 59 minutes			1 -	-	_	_	_	_	_	_	_
60 or more minutes				-	-	-	-	-	-	-	-
Mean (minutes)	7		3 18.4				10.5				5.0
Worked at home	• •	2 2	2 -	-	-	-	-	-	-	-	-
Current formal workforce persons 15+ years	2	89 104	1 16	1	75	11	24	17	7	17	17
Did not work at home	2	87 102	2 16	1	75 75	11	24	17	7	17	
12:00 AM to 5:59 AM				-	-	-	-	-	-	-	-
6:00 AM to 6:59 AM		5 -		-	1	-	1	3	-	-	-
7:00 AM to 7:29 AM		33 1	L -	-	11	2	7	12	_	- 17	_
/:3U AM to /:59 AM	1	ნე 51. 68 ერ	/ 13	1	49 11	5	T T	1	-7		12
8:30 AM to 8:59 AM		6 3	2 1	_	1	2	- -	_	_	_	12
	• •	6		_	2	1	_		_		_
9:00 AM to 12:59 PM		0 .	,		_			_		_	
Did not work at home		4 3		-	_	_	-	_	-	-	-

Table B19. Income in 1999 by Municipality of Usual Residence, Yap: 2000 [For definitions of terms and meanings of symbols, see text]

[For definitions of	terms ar	na meani	ngs or	symbols	s, see 1	text]						
:						Yap	Proper					
Household Income Family Income	-				 !	 		 !	 !	 !	 !	Dalip-
Income by Type			Rumung								Kanifay	
Households	1,578	1,309	26	105	133	173	96	224	374	52	45	81
Less than \$1,000.	82	55	5				3			4		
\$1,000 to \$1,999.	99	80	7	11			8			3		3
\$2,000 to \$2,999.	154	119	3	13	11					5		
\$3,000 to \$3,999. \$4,000 to \$4,999.	177 112		4	7 7			8		43 14			
\$5,000 to \$7,499.	277	205	4	15	14		14	45	58			
\$7,500 to \$9,999.	169	150	1	11	12		11	26	53		4	
\$10,000 to \$12,499	118	109	-	9	8	15	8	16	38	3	2	10
\$12,500 to \$14,999	81		1	7	11		5	13	27	1		7
\$15,000 to \$19,999	119		-	6	11		15			6	2	
\$20,000 to \$24,999	53	52	-	2	8	7	3	8	19	2	-	3
\$25,000 to \$34,999 \$35,000 to \$49,999	76 35	76 35	_	1 2	11	13 5	4	19 11	23 8	1	_	4
\$50,000 or more	26	25	_	_	1	1	_	7	9	-	_	7
Median (dollars) .		7,299		5,083	_	7,042	7,143			6,071	3,643	9,821
Mean (dollars)		11,462	3,225			10,491			12,836			15,535
FAMILY INCOME												
Families		1,165	23	99	122	160	86	193	330	43	41	68
Less than \$1,000 .	70	44	3	13	7		2	1		2	3	1
\$1,000 to \$1,999 .	78	59	7 2	9	2	12 13	5	6	8	3	4 9	3
\$2,000 to \$2,999 . \$3,000 to \$3,999 .	138 165	104 119	4	12 6	10		10 8	14 18	23 38	6	7	
\$4,000 to \$4,999 .	104	73	1	7	17		4	11	12	2	1	
\$5,000 to \$7,499 .	256	188	4	15	14	27	13	43	48	7	10	7
\$7,500 to \$9,999 .	160	141	1	11	12	19	10	23	50	4	4	7
\$10,000 to \$12,499	111	102	-	8	8	12	8	15	38	3	1	9
\$12,500 to \$14,999	79	75	1	7	11		5	12	26	1	-	7
\$15,000 to \$19,999 \$20,000 to \$24,999	111 47	106 46	_	6 2	11 8	16 7	14	16 7	29 16	6 1	2	6 2
\$25,000 to \$34,999	69	69	_	1	10	13	4	17	21	1	_	2
\$35,000 to \$49,999	27	27	_	2	3	4	-	7	7	3	_	1
\$50,000 or more	13	12	-	-	_	1	-	3	7	_	-	1
Median (dollars) .	6,553	7,440	2,750			7,222				6,607		7,857
Mean (dollars)	9,713	10,796	3,474	7,409	11,243	10,716	9,815	12,665	12,280	10,071	4,752	10,426
INCOME BY TYPE												
Persons 15+ yrs					0.54	0.5.5						
with income. Mean income(\$)		2,914 5,149	1 823	219 3,439	251 6,007	357 5,084	207 4,292	476 6,715	762 6,300	88 5,527	66 3,240	442 2,847
Earnings		2,620	43	206	217	303	175	429	691	75	61	420
Mean income(\$)	5,198		1,761	3,501	6,514	5,443	4,538	7,080	6,447	5,728		
Wages and salary	2,674		11	126	189	290	163	407	656	57		415
Mean income(\$)	5,256	5,401	3,123		6,529	5,568	4,621	6,284		7,168		2,842
Own business	354	341	38	90	42	18	19	42	59	21		7
Mean income(\$)		3,376	1,088	849	4,275	1,921		11,426	4,513	1,002		676
Interest & div Mean income(\$)	152 968	137 985	_	_	13 1,155	6 1,476	10 245	39 1,118	43 1,177	2 3,515	1 250	
S.S. & other govt.	318	287	4	15	33	48	32	49	69	10		
Mean income(\$)		2,715		1,735					3,374	4,511		
Remittances	104	84	-	8	5	2	5	16	35	7	-	6
Mean income(\$)	554	602	-	756	170		623		698			1,050
From inside FSM.	73	57	-	4	3		3		23			4
Mean income(\$)	360 41	397 35	-	175 4	133		982 2		233 17			1,425 2
From outside FSM Mean income(\$)	764	800	_	1,338	113		85		1,122	400		300
Other income	45	44	_	-,556	3		8		8		_	5
Mean income(\$)		1,759	-	-	1,633		1,539		4,777	-	-	1,072

Table B19. Income in 1999 by Municipality of Usual Residence, Yap: 2000 - continued [For definitions of terms and meanings of symbols, see text]

[For definitions of	terms a	na mean	ings of		s, see						
!					ap Oute						
Household Income +											
Family Income	1	1	Fais/¦	1		Eaur-	1	Farau-¦	1	Lamo-¦	
Income by Type	Total;	Ulithi¦	Sorol;	Ngulu¦	Woleai¦	ipik¦	Ifalik	lap ¦	Elato	trek;	Satawal
T	260		1.4			1.0		1.0		16	
Households .	269	89	14		15	12	25	19	6	10	
\$1.000 to \$1.999	19	10	2	_	4	2	1	_	_	_	
\$2,000 to \$2,999.	35	11	3	1	7	1	1	2	2	3	
\$3,000 to \$3,999.	46	16	3	1	11	1	5	2	1	3	
\$4,000 to \$4,999.	31	8	1	-	3	1	3	6	1	4	
\$5,000 to \$7,499.	72	16	3	-	15	3	14	8	1	5	7
\$7,500 to \$9,999.	19	12	2	-	2	- 1	-	- 1	1	1	1
\$12 500 +0 \$14 999	4	2	_	_	_	1	1	_	_	_	_
\$15,000 to \$19,999	5	2	_	_	2	1	_	_	_	_	_
\$20,000 to \$24,999	1	1	-	-	-	-	-	-	-	-	-
\$25,000 to \$34,999	-	-	-	-	-	-	-	-	-	-	-
\$35,000 to \$49,999		-	-	-	-	-	-	-	-	-	
Households . Less than \$1,000 . \$1,000 to \$1,999 . \$2,000 to \$2,999 . \$3,000 to \$4,999 . \$5,000 to \$7,499 . \$7,500 to \$9,999 . \$10,000 to \$12,499 . \$12,500 to \$14,999 . \$15,000 to \$19,999 . \$20,000 to \$24,999 . \$25,000 to \$24,999 . \$25,000 to \$24,999 . \$25,000 to \$49,999 . \$35,000 to \$49,999 . \$50,000 or more . Median (dollars) .	1 4,242	4 063	2 667	2 500	2 455		E 446	4 017	4 000	4 500	1
Median (dollars) . Mean (dollars)	4,242	4,063 5 170	1 272	1 861	3,455 4 161	5,000	5 104				
mean (dollars)	4,000	3,170	7,2/2	1,001	4,101	3,732	3,104	7,/11	4,000	4,000	0,2/4
FAMILY INCOME											
Families	263	84	14	3	62	12	25	19	6	15	23
Less than \$1,000.	26	6	-	1	15	1	-	-	-	-	3
\$1,000 to \$1,999.	19	10	2	-	4	2	1	-	-	-	-
\$2,000 to \$2,999.	34	10	3	1	7	1	1	2	2		
\$3,000 to \$3,999.	46	16	3 1	1	11	1	5 3	2	1 1		3 4
\$5,000 to \$7,499.	68	13	3	_	15	3	14	8	2 1 1 1	4	7
\$7,500 to \$9,999.	19	12	2	_	2	_	_	_	1		1
\$10,000 to \$12,499	9	4	-	-	3	1	-	1	-	-	-
\$12,500 to \$14,999	4	2	-	-	-	1	1		-	-	-
\$15,000 to \$19,999	5	2	-	-	2	1	-		-	-	-
\$20,000 to \$24,999	1	1	_	_	_	_	_	_	_	_	_
\$35.000 to \$34,999	_	_	_	_	_	_	_	_	_	_	_
\$50,000 or more	1	_	_	_	_	_	_	_	_	_	1
Median (dollars) .	4,210	4,000	3,667	2,500	3,455	5,000	5,446	4,917	4,000	4,375	4,375
Mean (dollars)	4,917	5,252	4,272	1,861	4,161	5,732	5,104	4,711	4,990	4,559	6,274
\$50,000 or more. Median (dollars) . Mean (dollars) . FAMILY INCOME Families . Less than \$1,000 . \$1,000 to \$1,999 . \$2,000 to \$2,999 . \$3,000 to \$4,999 . \$5,000 to \$7,499 . \$7,500 to \$9,999 . \$10,000 to \$12,499 . \$12,500 to \$14,999 . \$12,500 to \$14,999 . \$25,000 to \$14,999 . \$25,000 to \$34,999 . \$25,000 to \$34,999 . \$35,000 to \$49,999 . \$35,000 or more . Median (dollars) . INCOME BY TYPE											
Persons 15+ yrs											
rereeme re. gre								19	7	17	25
with income. Mean income(\$)	3,877	3,933	3,987	930	3,000	2,991	5,104	4,711	4,277	4,376	5,772
Earnings	307	TTT	1.0	2	19	13	24	18	/	Ι/	21
Mean income(\$)	4,080	3,823	3,987	1,050	3,231	4,945	5,267	4,417	4,277	4,376	6,504
	302								1 277	4,376	7,044
Own business	13	4	J, JO7	1	1		-				
Mean income(\$)	728	1,642	-	100	50	-	-	-	-		392
Interest & div	15	1	-	4	8	-	1	1	-	-	-
Mean income(\$) Own business . Mean income(\$) Interest & div . Mean income(\$) S.S. & other govt. Mean income(\$) Remittances . Mean income(\$) From inside FSM. Mean income(\$) From outside FSM Mean income(\$) Other income (\$) Mean income(\$)	812	500	-	15	52	-	1,200	10,000	-	-	-
S.S. & other govt.	31	2 (()	-	2 400	17	1	-	-	-	-	3
mean income(\$) Remittances	2,492	3,000 4	_	3,400 1	122	∠∪0 1∩	_	_	_	_	2,545 1
Mean income(\$)	350	600	_	22	54	430	_	_	_	_	70
From inside FSM.	16	3	-	_	4	8	-	-	-	-	1
Mean income(\$)	230	100	-	-	54	388	-	-	-	-	70
From outside FSM	6	2	-	1	-	3	-	-	-	-	-
Mean income(\$)	554	1,050	_	22	- 1	400	-	-	-	-	_
Mean income(\$)	59	_	_	_	59	_	_	_	_	_	_
rican Income (y)	55				55						

Table H01. Structural Characteristics, Yap State: 2000 [For definitions of terms and meanings of symbols, see text]

							Prope					
Characteristics	Total	Total	Rumung	Maap	Gagil	 Tomil	 Fanif	 Weloy	Rull	Gilman	¦ ¦Kanifay	ebinaw
UNITS IN STRUCTURE												
Total	2,246	1,541	43	115	177	223	105	256	430	53	60	7.9
One-family house detached.	1,959	1,312	43	110	155	187	102	200	330	47		
One-family house attached.	160	117	-	4	21	13	3	38	31			1
2 apartments	12 43	10 39	_	_	-	2 5	-	- 1.4	8	-		_
3 or 4 apartments 5 to 9 apartments	28	22	_	_	1	8	_	14 2	20 11		_	_
10 to 19 apartments	28		_	_			_	_	21		_	_
20 to 49 apartments	_		-	-	-	-	-	-	-		-	-
Other	16	13	-	1	-	1	-	2	9	-	-	-
MATERIAL OF OUTSIDE WALLS												
Total		1,541	43		177	223	105	256	430	53		
Poured concrete	267 312	143 281	1 4		10 42	8 48	22 13	18 38	61 93			
Concrete blocks	1,037	947	33		108	137	63	163	228	36		
Plywood	398	125	-		10	23	7	28	45			
Thatch	103	11				2	-	1	-	_		
Bamboo or local wood	116	24		7		1		5	2			2
No walls	5 8	2	-		1	2	-	- 3	- 1			-
Other	8	8	-	1	1	2	-	3	1	_	-	_
MATERIAL OF ROOF												
Total		1,541	43		177	223	105	256	430	53		
Poured concrete	109	64	1			4	4	15	29	2		
Metal/tin	1,643 13	1,338 13	32	98	158 2	195	93 2	222	379 5	43		71
Thatch	470	117	10		12	24	6	15	11			
Bamboo	2	-	_	-		-		-	-	-		
Other	9	9	-	2	-	-	-	1	6	-	-	-
MATERIAL OF FOUNDATION												
Total		1,541		115	177	223	105	256	430	53		
Concrete	1,151 827	837 626	13 24		96 71	128 86	68 33	121 130	250 164	39 13		
Wood pier or pilings Coral	101	17	24		3	2	33	130	164			33
Other	167	61	4		7	7		5	15		2	
WHEN BUILDING WAS FIRST BUIL	Г											
Total	2,246	1,541	43	115	177	223	105	256	430	53	60	79
1999 or 2000	102	79	5	6	15	15	6	8	8	5	7	4
1996 to 1998	283	227	8		26	41	14	30	47			
1993 to 1995	305 315	201 212	11 7	17 23	33 20	25 29	10 22	34 30	48 62	4 11	-	
1988 to 1992	465	346	6	32	45	29 57	23	58	83			
1970 to 1979	294	188	1		26	28	12	35	57			
1960 to 1969	107	69	1		8	4	5	9	26			
1959 or earlier	96	46	1	1	1	6	6	10	15	-	4	2
WHEN HOUSEHOLDER MOVED IN												
Total		1,541	43		177	223	105	256	430	53		
1999 or 2000	332	250	9		23	39	10	40	87			
1996 to 1998	374	294	12	20	30	52	20	38	74	7 5		
1993 to 1995	332 325	224 218	5 7	23 18	34 18	21 32	10 23	41 42	65 55	15		
1987 or earlier	883	555	10	41	72	79	42	95	149	16		

Table H01. Structural Characteristics, Yap State: 2000 $\,$ - continued [For definitions of terms and meanings of symbols, see text]

[For definitions of terms	 ¦				Yap Oute	er Isla	inds				
			Fais/	1	1 1	Eauri-	 Ifalik	Farau-		Lamo-	
UNITS IN STRUCTURE											
Total		176						66		64	112
One-family house detached One-family house attached		158 6				14		65 1		64	108 2
2 apartments				_		_		_		-	-
3 or 4 apartments				-		-		-		-	2
5 to 9 apartments 10 to 19 apartments	6	6		_	_	_		-		_	_
20 to 49 apartments			_	-			-	-		-	-
Other	3	2	-	-	1	-	-	-	-	-	-
MATERIAL OF OUTSIDE WALLS											
Total	705	176	48	6	119	14	82	66	18		112
Poured concrete		69				-	9	-	_	9	13
Concrete blocks Metal/tin		14 43				_	3	2 5		- 3	4 5
Plywood	273	48	10	-	67		0	10	1.3	49	68
Thatch					10	14		30 19		3	12 7
No walls											3
Other	-	-	-	-	-	-	-	-	-	-	-
MATERIAL OF ROOF											
Total	705	176	48	6		14	82	66	18	64	112
Poured concrete		34			_	-	_	-		-	5
Metal/tin	305	121				_		15		35	58
Thatch	353	21	8			14	77	51		29	48
Bamboo	2	_	-			-	_	-		-	1
MATERIAL OF FOUNDATION											
	205	176	4.0		110		0.0		1.0		112
Total		176 115			119 41			66 8		64 43	63
Wood pier or pilings	201	46	25	-	23	-	40	28	4	-	35
Coral	84 106	7 8			21			4 26		1 20	3 11
		0		3	31		2	20		20	11
WHEN BUILDING WAS FIRST BU											
Total	705 23	176 5	48 4		119 5	14		66 2		64 2	112 3
1996 to 1998	56	7						18			10
1993 to 1995	104	11	3	-	9	-	11	17	13	35	5
1988 to 1992	103 119	16 45				_		6 2		8	54 20
1980 to 1987		31			/		30				20
1960 to 1969	38	5	-	-	10		. 9				3
1959 or earlier	50	5	1	3	12	8	-	8	2	6	5
WHEN HOUSEHOLDER MOVED IN											
Total	705	176					82	66		64	112
1999 or 2000		33 20	14 12			1	5 2	3 18			10 16
1993 to 1995	108	13				-	12	17	12	34	4
1988 to 1992	107	18		-	14	-	2	7		8	52
1987 or earlier	328	92	11	4	77	13	61	21	4	15	30

Table H02. Utilization Characteristics, Yap State: 2000 [For definitions of terms and meanings of symbols, see text]

1	Yap Proper											
Characteristics			1	1	- 1	1	1			ilman!K		Dalip-
											.aa., t	
ROOMS												
Total	2,246 794 456 425 288 195 51 16 6 15 2.7	1,541 207 377 410 276 186 51 14 6 14 3.5	43 15 20 5 1 2 - - - 2.3	115 23 38 31 13 9 - 1 - 2.9	177 29 49 52 18 22 5 - 1 1 3.2	223 41 60 58 33 16 5 3 - 7	105 9 15 31 23 15 7 3 1 1 1 3.9	256 14 67 65 57 34 12 3 2 2	430 49 72 117 101 65 17 4 2 3	53 8 8 14 8 12 3 - - - 3.8	60 9 28 11 7 4 1 - - 2.8	79 10 20 26 15 7 1 - - 3.4
PERSONS IN UNIT												
Total Occupied	2,030 168 180 239 302 301 255 174 137 274 5.4	1,413 143 151 186 224 208 162 108 82 149 5.0	26 3 4 4 3 1 2 3 3 3 4.7	115 9 14 15 14 18 12 7 12 14 5.3	158 15 18 23 21 31 17 12 10 11 5.1	194 11 16 22 31 28 33 20 11 22 5.6	101 12 9 8 13 14 11 12 7 15 5.6	231 28 21 39 38 27 21 12 20 25 4.7	407 45 40 54 78 61 41 29 15 44	53 10 7 4 6 8 8 4 1 5	57 7 10 4 7 8 7 5 3 6 5.1	71 3 12 13 13 12 10 4 - 4
PERSONS PER ROOM												
Total Occupied	2,030 165 102 261 264 312 113 174 639	1,413 160 101 233 250 258 98 119 194	26 - 1 7 3 2 1 4 8	115 7 5 14 14 28 8 17 22	158 17 9 30 24 30 9 15 24	194 10 10 26 37 36 17 23	101 14 6 17 20 16 8 9	231 42 16 35 44 35 18 18 23	407 51 36 73 79 74 24 24	53 8 5 10 10 9 5 3	57 6 5 6 5 14 3 5	71 5 8 15 14 14 5 1
With complete plumbing												
Total	79 37 9 15 10 5 - 2	79 37 9 15 10 5 - 2	-	3 1 1 - - -	4 3 - 1 - - - -	13 2 2 4 4 - - 1	- - - - - -	17 9 1 2 3 - - 2	41 21 5 7 3 5 -	1 1 - - - - -	- - - - - - -	- - - - - - -
BEDROOMS												
Total 1 bedroom 2 bedrooms 3 bedrooms 4 bedrooms 6 bedrooms 7 bedrooms 8 bedrooms 9 or more bedrooms Median	2,246 973 689 413 125 22 11 4 1 8	1,541 356 621 403 117 21 11 3 1 8	43 22 15 4 1 - - - 2.0	115 27 49 32 5 2 - - - 2.6	177 40 65 51 16 4 1 - - 2.7	223 63 86 53 12 1 2 - 6 2.6	105 13 35 31 18 3 4 1 -	256 51 108 70 20 4 1 1 1	430 93 173 118 35 5 3 1 - 2	53 10 20 17 5 1 - - - 2.8	60 18 29 10 3 - - - - 2.4	79 19 41 17 2 - - - - 2.5

Table H02. Utilization Characteristics: 2000 $\,$ - continued [For definitions of terms and meanings of symbols, see text]

	!			Y	ap Oute	er Islan	nds				
	 Total	¦ ¦Ulithi	Fais/ Sorol	 Ngulu	Woleai	Eauri- ipik	 Ifalik	Farau- lap	 Elato	Lamo-; trek;	Satawal
ROOMS											
Total	705	176	48	6	119	14	82	66	18	64	112
l room		100	30	5	115	14	79	65	16	61	102
rooms	79	51	13	-	4	-	2	1	1	2	5
rooms	15	10	2	1	_	_	-	-	1	1	-
rooms	12	9	1	_	_	_	-	-	_	_	2
rooms		5	1	-	-	-	-	-	-	-	3
rooms		-	_	_	_	_	-	-	_	_	
rooms	2	1	-	-	-	-	1	-	-	-	
rooms		-	-	-	-	-	-	-	-	-	
or more rooms	1	_	1	-	_	_	_	-	_	-	
edian	1.6	1.9	1.8	1.6	1.5	1.5	1.5	1.5	1.6	1.5	1.5
ERSONS IN UNIT											
Total Occupied	617		44	6	119	12	82	42		55	94
person			2	-	1	-	1	3		1	
persons			1	1	3	-	2	1		7	
persons			9	1	4	-	4	4		2	1
persons			13		10	-	10	5		6	1:
persons	93		6	1	12	-	13	9		5	1:
persons			3		15	2	11	11		9	1
persons			3		16	1		2		6	9
persons			5		12	2	7	5		7	(
or more persons			2	-	46	7		2		12	12
edian	6.3	5.6	4.8	5.0	7.9	21.9	7.0	5.9	7.5	6.7	5.9
ERSONS PER ROOM											
Total Occupied	617	149	44	6	119	12	82	42	14	55	94
.50 or less	5	3	2	-	-	-	-	-	-	-	-
.51 to 0.75	1	1	-	-	-	-	-	-	-	-	-
.76 to 1.00	28	16	2	-	2	-	1	3	-	1	
.01 to 1.50	14	8	4	-	-	-	-	-	-	-	:
.51 to 2.00	54	25	5	2	2	_	3	1	_	7	
.01 to 2.50	15	11	1	_	_	_	_	_	1	1	
.51 to 3.00	55		8		4	_	5	4		2	10
.01 or more	445		22		111	12	73	34		44	69
ith complete plumbing											
Total			-	-	-	-	-	-		-	-
.50 or less			-		-	-	-	-		-	
.51 to 0.75			-		-	-	-	-		-	
.76 to 1.00			-		-	-	-	-		-	
.01 to 1.50			-	-	-	-	-	-		-	
.51 to 2.00			-		-	-	-	-		-	
.01 to 2.50			-		-	-		-		-	
.51 to 3.00			_		_	_		-		-	
EDROOMS											
Total	705	176	48	6	119	14	82	66	18	64	112
bedroom	617		37	5	116	14	81	65		63	10
bedrooms	68		9	_	3	-	1	1		-	
bedrooms	10		1	1	_	_	_	_		1	
bedrooms	8		1	_	_	_	_	_		_	2
bedrooms	1		_	_	_	_	_	_		_	
bedrooms	_		_	_	_	_	_	_		_	
bedrooms	1		_	_	_	_	_	_	_	_	
bedrooms	_	_	_	_	_	_	_	_	_	_	
or more bedrooms	_	_	_	_	_	_	_	_	_	_	
edian	1.6	1.8	1.6	1.6	1.5	1.5	1.5	1.5		1.5	1.5
ledian											

·	1					Yap	p Prope					
Characteristics	Total	 Total	Rumung	Maap	 Gagil	Tomil	 Fanif	Weloy	Rull¦	 Gilman Ka	anifay¦e	
COMPLETE PLUMBING FACILITIES												
Total	2,246 308 90 218 1,938 77 1,861	62	- - 43 -	115 9 3 6 106 1	177 19 4 15 158 6 152	223 27 13 14 196 12 184	105 4 1 3 101 2 99	256 65 18 47 191 13 178	430 149 50 99 281 20 261	53 11 1 10 42 3	60 4 - 4 56 2 54	79 12 - 12 67 3 64
PIPED WATER												
Total	2,246 101 92 1 2 6 486 607 1,052	1,541 97 91 1 2 3 469 580 395	43 - - - - 2 11 30	115 4 4 - - 8 8 4 19	177 4 4 - - 24 100 49	223 15 13 1 - 1 37 106 65	105 1 - 1 - 23 24 57	256 21 20 - 1 107 49 79	430 51 49 - 1 1 200 116 63	53 1 1 - - 21 29 2	60 - - - - 19 38 3	79 - - - 28 23 28
BATHTUB OR SHOWER												
Total	2,246 340 23 820 1,063	1,541 327 19 765 430	43 - - 9 34	115 9 1 56 49	177 25 2 108 42	223 35 5 109 74	105 5 - 59 41	256 69 3 112 72	430 153 7 184 86	53 11 1 40 1	60 5 - 50 5	79 15 - 38 26
FLUSH TOILET												
Total	2,246 649 356 22 271 1,597	1,541 594 340 20 234 947	43 - - - 43	115 33 9 1 23 82	177 46 22 3 21 131	223 71 33 3 35 152	105 17 6 - 11 88	256 112 73 3 36 144	430 261 166 6 89 169	53 18 14 1 3 35	60 11 5 1 5	79 25 12 2 11 54
SOURCE OF WATER												
Total	2,246 270 401 64 147 16 1,312 9 8	1,541 266 395 50 108 12 677 6 8	43 - 11 - 4 - 28 -		34	223 44 102 4 27 - 39 - 7	91	256 21 13 6 13 1 192 3 4	430 117 55 31 24 7 187 1	53 2 49 - 1 - 1 -	60 4 50 - 4 - 2 -	79 - 3 - 3 1 71 - - 1
WASTE DISPOSAL												
Total	273 261	1,541 264 242 1,035	43 - - 43	115 - 29 86	177 - 38 139	223 1 54 168	105 - 13 92	256 78 20 158	430 179 48 203	53 - 17 36	60 2 3 55	79 4 20 55

Table H03. Plumbing and Water Source Characteristics, Yap State: 2000 $\,$ - continued [For definitions of terms and meanings of symbols, see text]

	¦ +					er Islar					
Characteristics	 Total U	Jlithi	Fais/ Sorol	 Ngulu¦	 Woleai	Eauri-	Ifalik	Farau- lap	 Elato	Lamo- trek S	Satawal
COMPLETE PLUMBING FACILITIES											
Total		176	48	6	119	14	82	66	18	64	112
Complete plumbing		8	-		-	-	-	-			-
With hot and cold water		-		-	-	-	-	-		-	-
With cold water only		8						_			
Lacking complete plumbing		168			119						112
Some but not all facil		11 157			1 118		1 81				112
No plumbing facilities	682	15/	46	6	118	14	81	66	18	64	112
PIPED WATER											
Total	705	176	48	6	119	14	82	66	18	64	112
Hot and cold in the unit	4	2	1	-	-	-	1	-	-	-	-
Heated by electricity	1	1	-	-	-	-	-	-	-	-	-
Heated by gas		-	-	-	-	-	-	-	-	-	-
Heated by solar		-		-	-	-	-	-	-	-	-
Heated other way		1	-	-	-	-	1	-		-	-
Cold only in the unit		15			-	-	-	-		-	2
Cold only outside the unit .		25			2	_	_	_		-	
No piped water	657	134	47	6	117	14	81	66	18	64	110
BATHTUB OR SHOWER											
Total	705	176	48	6	119	14	82	66	18	64	112
Bathtub/shower in unit	13	11	1	-	1	-	_	-	-	-	_
Bathtub/shower in building .	4	4	-	-	-	-	-	-	-	-	-
Bathtub/shower outside	55	37	-	-	17	-	-	-	-	1	-
None	633	124	47	6	101	14	82	66	18	63	112
FLUSH TOILET											
Total	705	176	48	6	119	1.4	82	66	18	64	112
Flush toilet	55	50		_	2	_	_	_		_	1
In the unit		16		_	_	_	_	_	_	_	-
In this building		2	-	-	_	-	-	-	-	-	_
Outside		32	2	-	2	-	-	-	-	-	1
None		126	46	6	117	14	82	66	18	64	111
SOURCE OF WATER											
Total	705	176	4.8	6	119	1.4	82	66	18	64	112
Public system only		4	_	_	_	_	-	_	_	-	
Community system only	6	2	_	4	_	_	_	_	_	_	_
Public system & catchment	14	7	1	_	6	_	_	_	-	_	_
Comm. system & catchment	39	15	2	-	14	-	-	6	-	-	2
Individual well	4	1	-	-	2	-	-	-	-	-	1
Catchment, tank, drum only .		146	44	2	97			60	18	64	108
Pubiic standpipe or hydrant.		1	44	-	-	-		-			1
Distilled water		-	-	-	-	-	-	-		-	-
Other source	-	-	-	-	-	-	-	-	-	-	-
WASTE DISPOSAL											
Total	705	176	48	6	119	14	82	66	18	64	112
Public sewer		9			_	-	_	_		-	-
Septic tank or cesspool	19	19	-	-	-	-	-	-	-	-	-
Use other means		148	48	6	119	14	82	66	18	64	112

Table H04. Cooking Facilities and Appliances, Yap State: 2000 $[For\ definitions\ of\ terms\ and\ meanings\ of\ symbols,\ see\ text]$

	;						Prope:					
Characteristics		 Total Ru	umung¦	Maap¦	Gagil¦'	romil;	Fanif¦	Weloy¦	Rull	Gilman;	Kanifay	ebinaw
COMPLETE KITCHEN FACILITIES												
Total				115	177	223	105	256	430	53	60	
Complete kitchen facilities . Incomplete kitchen facilities	349 1,897	347 1,194	43	8 107	15 162	26 197	8 97	76 180	177 253	12 41	9 51	
COOKING FACILITIES												
Total		1,541	43	115	177	223	105	256	430	53	60	
Cooking facilities inside With electric stove	547 164	538 162	3	16 6	28 9	42 11	2.3 5	133 46	231 74	15 5	14	
With kerosene stove	308	305	3	6	13	26	13	77	126	7	10	
With gas stove	51	51	-	3	5	4	2	9	22	3	-	3
With microwave & burners	2	2	-	-	-	-	-	-	-	-	2	
With microwave only	10	10	-	1	-	1	2	1	4	-	-	-
With wood stove	- 5	- 4	_	_	- 1	_	- 1	_	1	_	-	
With open fire	7	4	_	_	_	_	_	_	4	_	_	_
ooking facilities outside	1,640	974	38	99	143	169	82	119	195	38	46	
With electric stove	27	27	15	1	1	2	1	2	4	1	-	-
With kerosene stove	536	522	6	41	42	87	44	77	131	15	44	
With gas stove	23	23	-	4	1	6	1	2	5	2	-	-
With microwave oven	3	2	-	1	-	-	1	-	-	-	-	
With portable elect. stove.	2 33	2 29	- 11	2	2 1	_	- 6	- 6	- 2	_	_	
With wood stove	1,016	369	6	50	96	74	29	32	53	20	2	_
Other	-,010	303	_	-	_		-	-	-	-	_	
o cooking facilities	59	29	2	-	6	12	-	4	4	-	-	1
LECTRICAL POWER												
Total	2,246	1,541	43	115	177	223	105	256	430	53	60	79
ublic Utility	1,273	1,146	2	68	117	160	82	200	379	43	36	59
enerator	8	5	2	-	1	1	-	-	1	-	-	
olar power	34	8	7	-	-	-	-	-	-	-	-	-
one	931	382	32	47	59	62	23	56	50	10	24	19
EFRIGERATOR												
Total		1,541		115	177	223	105	256	430	53	60	
lectric	740	722	-	28	62	84	48	122	283	29	30	
as	6	6	_	1	_	1	_	1	1	_	1 -	
erosene	4 1,496	1 812	43	86	115	138	- 57	1 132	146	24	- 29	
	1,490	012	43	00	113	130	37	132	140	24	23	7.2
IR CONDITIONING												
Total		1,541	43	115	177	223	105	256	430	53	60	
entral air conditioning individual room unit	47 95	46 91	_	1 2	5 7	1 10	4 1	11 18	21 43	1 4	- 2	
or more individual units	34	33	_	_	_	5	_	8	19	-	1	
one		1,371		112	165	207	100	219	347	48	57	
ELEVISION AND VCR												
Total		1,541	43	115	177	223	105	256	430	53	60	
elevision and VCR	739	684	-	42	56	97	41	114	251	23	18	
elevision only	101	92	-	5	7	11	11	17	39	-	1	
CR only	9 1,397	4 761	43	1 67	- 114	115	- 53	2 123	140	30	41	
one												
ATTERY OPERATED RADIO	1,101	1,033	23	78	121	151	63	130	331	36	29	71
ELEPHONE OR CB RADIO											_	
Total		1,541	43	115	177	223	105	256	430	53	60	
	883	881	2	63	75	138	65	151	269	40	23	
	4 ∩	1 8	_	_	Δ	1	1	4	5	_	3	-
CB Radio only	40 99	18 96	_	- 6	4 20	1 11	1 5	4	5 34	-	3 8	

Table H04. Cooking Facilities and Appliances, Yap State: 2000 - continued [For definitions of terms and meanings of symbols, see text]

						r Islan					
	Total;U		Fais/	1	1	Eauri-;	1	Farau-		Lamo-	
OMPLETE KITCHEN FACILITIE											
Total		176			119	14	82	66		64	11
omplete kitchen facil ncomplete kitchen facil.		2 174			119	14	82	- 66		64	11
OOKING FACILITIES											
Total ooking facilities insi .	705 9	176 7		6	119 1	14	82 1	66	18	64	11
With electric stove	2			_	_	_	_	_	_	_	
With kerosene stove	3	3		_	_	_	_	_	_	_	
With gas stove	-	-		-	-	-	-	-	-	-	
With microwave & burn .	-	-	-	-	-	-	-	-	-	-	
With microwave only	-	-		-	-	-	-	-	-	-	
With wood stove	-	-		-	-	-	-	-		-	
With open fire	1	1		-	-	-	-	-		-	
Other	3	1 147		- 6	1	- 14	1 81	-		- 61	1
ooking facilities outs . With electric stove	666 -	14/		-	118	14	81	66		61	1:
With kerosene stove	14	5		1	1	3	_	2	_	_	
With gas stove	_	_		_	_	_	_	_	_	_	
With microwave oven	1	_	_	_	1	_	_	_	_	_	
With port. elect. stove	_	_	_	_	_	-	-	_	_	_	
With wood stove	4	-	-	1	-	2	-	1	-	-	
With open fire	647	142	45	4	116	9	81	63	18	61	1
Other	-	-			-		-	-		-	
o cooking facilities	30	22	3	-	-	-	-	-	-	3	
LECTRICAL POWER											
Total	705	176			119	14	82	66		64	1
ublic Utility		76			50	-	1	-		-	
enerator	3	2	_	-		-				_	
olar power	26 549	96				14	81	1 65		5 59	1
EFRIGERATOR											
Total	705	176	48	6	119	14	82	66	18	64	1
lectric	18	13		-	4	-	-	-		-	
as	-	-			-	-	-	-		-	
erosene	3 684	- 163		- 6	1 114	14	82	2 64		- 64	1
IR CONDITIONING											
Total	705	176	48	6	119	14	82	66	18	64	1
entral air conditionin .	1	-	-	-	-	-	-	-	-	-	
individual room unit	4	4		-	-	-	-	-		-	
or more individual un .	1	1		-	110	- 1.4	-	-		-	-
one	699	171	48	6	119	14	82	66	18	64	1
ELEVISION AND VCR											
Total	705	176	48	6	119	14	82	66	18	64	1
elevision and VCR elevision only	55	25	- 1	_	16 2	_	_	1	_	3	
Elevision only	9 5	1 3	1	_	1	_	_	_	1	_	
one	636	147	47	6	100	14	82	64	17	59	1
	148	61		5	14	9	4	21	6	11	
ATTERY OPERATED RADIO ELEPHONE OR CB RADIO	140	91	5	J	14	9	4	21	Ö	11	
	705	170	4.0	_	110	1 4	0.0		1.0		4
Total	705 2	176 1	48	6	119	14	82	66	18	64	1
		1	_	_	-	_	-	_	_	_	
			1	_	3	_	_	1	Λ	Q	
elephone only B Radio only	22	4 2	1	-	3	_	- 1	1	4	8	

Table H05. Vehicles and Monthly Costs, Yap State: 2000 [For definitions of terms and meanings of symbols, see text]

	:						Prope					
Characteristics		Total R	umung¦	Maap¦	Gagil¦	romil¦1	Fanif¦	Weloy¦	Rull¦G	ilman¦Ka	anifay¦e	ebinaw
AUTOMOBILES, VANS and TRUCKS												
Total		1,541		115	177	223	105	256	430	53	60	79
1 vehicle	680	674	17	41	66	100	48	108	203	23	28	40
2 vehicles	186 32	167 30	_	16 3	18 4	20 4	5 1	34 5	57 9	6 2	3 2	8
3 vehicles	32	30	_	-	-	1	1	-	1	_	_	_
5 vehicles	2	2	_	_	1	_	_	1	_	_	_	_
6 vehicles	-	-	-	-	-	-	-	-	-	-	-	-
7 or more vehicles	-	-	-	-	-	-	-	-	-	-	-	-
None	1,343	665	26	55	88	98	50	108	160	22	27	31
BOATS OF LESS THAN 25 FEET												
Total		1,541		115	177	223	105	256	430	53	60	79
1 boat	448	252	12	30	22	38	16	53	55	4	5	17
2 boats	58	8	-	-	1	-	-	5	2	-	-	-
3 boats	12 6	1	_	_	1	_	_	_	-	_	-	_
4 boats	70	1	_	_	_	_	_	1	_	_	_	_
None		1,279	31	85	153	185	89	197	373	49	55	62
MONTHLY ELECTRICAL COSTS												
Total with cost	1 226	1,103	1	68	112	144	80	195	366	42	36	59
Less than \$10	93	73	_	4	18	10	3	10	20	4	1	3
\$10 to \$24	392	333	_	27	27	63	31	61	73	17	15	19
\$25 to \$49	461	433	1	25	50	43	37	66	153	15	17	26
\$50 to \$74	156	147	_	8	9	17	5	30	67	3	2	6
\$75 to \$99	46	40	-	1	2	1	2	7	24	1	-	2
\$100 to \$149	44	44	-	1	4	7	1	12	16	1	1	1
\$150 to \$199	20	20	-	1	-	3	1	7	6	-	-	2
\$200 to \$299	12	12	-	1	2	-	-	2	6	1	-	-
\$300 to \$399	-	-	-	-	-	-	-	_	-	-	-	-
\$400 to \$499	-	_	_	-	_	_	_	_		-	-	-
\$500 or more	2 32	1 33	38	28	31	- 25	- 29	35	1 40	25	28	32
MONTHLY KEROSENE COSTS												
Motel with cost	1,570	1 100	22	91	100	1.60	76	174	285	39	57	68
Total with cost Less than \$10	917	1,102 662	14	61	122 100	168 131	36	91	131	39	26	40
\$10 to \$24	561	404	6	24	20	37	35	74	143	7	31	27
\$25 to \$49	50	31	1	5	2	_	4	9	9	_	_	1
\$50 to \$74	11	5	1	1	_	_	1	_	2	_	_	_
\$75 to \$99	2		-	-	-	-	-	-	-	-	-	-
\$100 or more	29	_	-	-	-	-	-	-	-	-	-	-
Median	9	8	8	7	6	6	11	10	11	6	11	9
MONTHLY WATER COSTS												
Total with cost	724	713	-	4	117	135	-	90	260	49	53	5
Less than \$10	411	409	-	4	94	76	-	39	113	40	40	3
\$10 to \$24	246	240	-	-	22	46	-	39	111	8	12	2
\$25 to \$49	46		-	-	1	8	-		27	1	1	-
\$50 to \$74	14	14	-	_	-	5	-	6	3	-	-	-
\$75 to \$99	1	1 6	_	_	_	_	-	- 1	1 5	_	_	-
\$100 or more	9	9	_	- 5	6	9	_	12	12	6	7	- 8
OTHER MONTHLY UTILITIES												
Total with cost	1,151	495	17	60	106	86	41	51	92	25	2	15
Less than \$10	69	66	-	12	13	24	10	6	1	-	-	_
\$10 to \$24	348	175	6	35	37	32	6	11	32	13	-	3
\$25 to \$49	339	174	7	5	43	27	12	20	41	9	1	9
\$50 to \$74	178	53	4	6	6	3	12	8	9	1	1	3
\$75 to \$99	23	13	-	-	6	-	1	3	2	1	-	-
\$100 or more	194	14	-	2	1	-	-	3	7	1	-	-
Median (dollar)	37	26	34	18	27	19	34	36	33	24	50	38

Table H05. Vehicles and Monthly Costs, Yap State: 2000 $\,$ - continued [For definitions of terms and meanings of symbols, see text]

				Y	ap Out	er Isla					
		1	Fais/			Eauri-	 Ifalik	Farau-	1	Lamo-	
AUTOMOBILES, VANS and TRUCKS											
Total	705	176	48	6	119	14	82	66	18	64	112
1 vehicle				-	_						1
2 vehicles				-	-			-		-	-
3 vehicles				-	-			-		_	-
4 vehicles	_			_	_			_		_	_
6 vehicles			_		_			_		_	_
7 or more vehicles	-		_	-	_			_	_	_	_
None	678	152	48	6	118	13	82	66	18	64	111
BOATS OF LESS THAN 25 FEET											
Total	705	176	48	6	119	14	82	66	18	64	112
1 boat	196		3					14		35	24
2 boats	50			-	4			1		6	11
3 boats			_	_	-	_		-	-		_
4 boats	6 69				_	0			4		_
None	373		45		66		02		8		77
MONTHLY ELECTRICAL COSTS											
Total with cost	123	74	_	_	49	_	_	_	_	_	_
Less than \$10				-	8	-		-		-	-
\$10 to \$24	59	36	-	-	23	-	-	-	-	-	-
\$25 to \$49	28		-	-	12		-	-		-	-
\$50 to \$74	9			-	4		-	-		-	-
\$75 to \$99	6			-	2			-		-	-
\$100 to \$149	-			-	-			-		-	-
\$150 to \$199	_		_		_			_		_	_
\$300 to \$399	_			_	_			_		_	_
\$400 to \$499	_			_	_			_		_	_
\$500 or more	1		_	_	_	_	_	_	_	_	_
Median (dollar)	21		-	-	21	-	-	-	-	-	-
MONTHLY KEROSENE COSTS											
Total with cost	468	51	45	1	90	14	81	65	16	55	50
Less than \$10	255		-	-	48	8	55	58	15	44	-
\$10 to \$24	157			1	38	6		7		11	6
\$25 to \$49	19				_	-		-		-	9
\$50 to \$74	6			-	-			-		-	5
\$75 to \$99	2 29								_		2 28
Median (dollar)	9				9			6		6	196
MONTHLY WATER COSTS											
Total with cost	11	11	-	-	-	-	-	-	-	-	-
Less than \$10			-	-	-			-		-	-
\$10 to \$24	6		-	-	-	-	-	-	-	-	-
\$25 to \$49	3		-	-	-	-	-	-	-	-	-
\$50 to \$74	-	-	-	-	-	-		-		-	-
\$75 to \$99	-	_	_	-	-	-		-		_	-
\$100 or more	19		-	-	-	-		-		-	-
MONTHLY OTHER FUEL COSTS											
	656	145	45	5	117	11	82	64	18	61	108
Total with cost	3		-		-			-		-	-
Total with cost Less than \$10	ر.	_	20	_	42	7		_		_	2
	173	102	20								
Less than \$10			9	_	20	4	2	1	6	60	
Less than \$10 \$10 to \$24	173	8		- 1				1 52		60 1	55
Less than \$10 \$10 to \$24 \$25 to \$49 \$50 to \$74 \$75 to \$99	173 165	8 10	9 13 -		20	-	-		11	1 -	55 11 1
Less than \$10 \$10 to \$24 \$25 to \$49 \$50 to \$74	173 165 125	8 10 6 16	9 13	1	20 26	-	- - 80	52	11 - 1	1	55 11

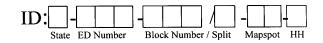
Table H06. Tenure and Financial Characteristics, Yap State: 2000 [For definitions of terms and meanings of symbols, see text]

!						Yap	Prope:	r				
Characteristics	Total!							: :	1		Kanifay	
Moto 1	2 020	1,413	26	115	158	194	101	231	407	53	57	71
Total	122	122		4	16	134	24	231	18	11	4	11
Mortgage, deed of trust	113	113		4	15	13	22	18	16	10	4	11
Contract to purchase	9	9		_			2	3	2	1	_	_
Owned free and clear		1,061	25	109	134	160	69	176	239	40	52	57
Rented for cash rent	120	120		-					84	1	-	1
Occupied without payment.	160	110	1	2	5	15	7	10	66	1	1	2
MONTHLY RENT PAID												
Total paying rent	111	111	-	-	3		1	23	76	1	-	1
Less than \$100	60	60	-	-	-	4	1	5	50	-	-	-
\$100 to \$199	4		_	-	_	_	_	3	1	_	_	-
\$200 to \$299 \$300 to \$399	6 11	6 11	_		1		_	2	3 5	_	_	1
\$400 to \$499	10	10	_	_	_	_	_	5	5	_	_	_
\$500 to \$599	16		_	_	2	_	_	5	8	1	_	_
\$600 to \$699	2	2	-	-	_	-	-	_	2	_	-	-
\$700 to \$799	1	1	-	-	-	-	-	-	1	-	-	-
\$800 to \$899	-	-	-	-	-	-	-	-	-	-	-	-
\$900 to \$999	-		-	-	-	-	-	-	-	-	-	-
\$1,000 or more Median (dollar)	1 93	1 93	-	-	- 525	- 75	- 50	- 350	1 76	- 550	_	250
VALUE OF HOUSE												
Total owning	1.750	1,183	2.5	113	150	173	93	197	257	51	56	68
Less than \$2,000	471	223	8	31	36		11	31	20	7	26	15
\$2,000 to \$4,999	358	286	10	23	29	48	31	55	57	6	9	18
\$5,000 to \$9,999	431	313	6	36	37		28	53	70	17	12	20
\$10,000 to \$19,999	261	187	1	11			11	29	55	12	6	7
\$20,000 to \$29,999	80		-	_			7	14	15	3	1	4
\$30,000 to \$39,999	75 22		_	5 1				4	19 9	3 1	1	3 1
\$40,000 to \$49,999 \$50,000 to \$59,999	25		_	1	5	1	- 1	3	3	1	_	1
\$60,000 to \$69,999	10		_	_			_	1	3	1	1	_
\$70,000 to \$79,999	7		_	1	_	_	_	_	5	_	_	_
\$80,000 to \$89,999	3	3	-	-	-	-	1	2	-	-	-	-
\$90,000 to \$99,999	-		-	-	-	-	-	-	-	-	-	-
\$100,000 or more	7	4	2 250	- 247		1		2	1	- 0 676	-	- 250
Median (dollars)	5,534	6,318	3,350	3,347	6,331	3,074	5,804	6,179	8,679	8,676	2,667	5,250
MONTHLY MORTGAGE PAYMENT												
Total with mortgage	118	118	_	4	16	11	24	21	17	11	3	11
Less than \$100	77	77	-	1			18	17	7	7	1	7
\$100 to \$199	15	15	-	-	-	1	4	2	3	2	2	1
\$200 to \$299	15	15	-	2	3		-	1	4	2	-	1
\$300 to \$399	4	4	-	1		_	_	_	2	_	-	1
\$400 to \$499 \$500 to \$599	2	2	_	_	1 1		2	1	1	_	_	_
\$600 to \$699	4		_	_	_	_	_	_	_	_	_	_
\$700 to \$799	_	_	_	_	_	_	_	_	_	_	_	_
\$800 to \$899	_	_	_	_	_	_	-	_	_	_	_	_
\$900 to \$999	-	-	-	-	-	-	-	-	-	-	-	-
\$1,000 or more	1	1	-	-	-	-	-		-	-	-	1
Median (dollar)	77	77		250	73	69	67	62	150	79	125	79

Table H06. Tenure and Financial Characteristics, Yap State: 2000 $\,$ - continued [For definitions of terms and meanings of symbols, see text]

1	Yap Outer Islands										
i	1	1	Fais/¦	1		Eauri-	1	Farau-	1 1	Lamo-¦	
Characteristics				Ngulu¦							
Total	617	149	44	6	119	12	82	42	14	55	94
mortgage	-	-	-	-	-	-	-	-	-	-	-
Mortgage deed of trust	-	-	-	-	-	-	-	-	-	-	-
Contract to purchase	-	-	-	-	-	-	-	-	-	-	-
Owned free and clear	567	127	29	6	111	12	82	42	14	55	89
Rented for cash rent	_	_	_	_	_	_	_	_	_	_	
Occupied without	F.0	0.0	1.5		0						
payment	50	22	15	-	8	_	-	-	-	-	5
MONTHLY RENT PAID											
Total paying rent	-	-	-	-	-	-	-	-		-	
Less than \$100 \$100 to \$199	-	_	-	-	_	-	-	-	_	_	-
\$200 to \$299	_	_	_	_	_	_	_	_	_	_	-
\$300 to \$399	-	-	-	-	-	-	-	-	-	-	-
\$400 to \$499	-	-	-	-	-	-	-	-	-	-	-
\$500 to \$599	-	-	-	-	-	-	-	-	-	-	-
\$600 to \$699	-	_	-	-	-	-	-	-	_	_	-
\$700 to \$799	_	_	_	_	_	_	_	_		_	
\$800 to \$899 \$900 to \$999	_	_	_	_	_	_	_	_	_	_	_
\$1,000 or more	_	_	_	_	_	_	_	_	_	_	_
Median (dollar)	-	-	-	-	-	-	-	-	-	-	-
VALUE OF HOUSE											
Total owning	567	127	29	6	111	12	82	42	14	55	89
Less than \$2,000	248	25	16	2	61	-	77	27		4	31
\$2,000 to \$4,999	72	27	4	2	15	-	4	7		5	6
\$5,000 to \$9,999	118	37	3	2	28	-	1	8		13	19
\$10,000 to \$19,999 \$20,000 to \$29,999	74 15	21 9	6	-	6	6 5	_	_	-	8 -	27 1
\$30,000 to \$39,999	18	1	_	_	1	1	_	_		13	2
\$40,000 to \$49,999	1	1	_	_	_	_	_	_		_	-
\$50,000 to \$59,999	16	2	_	_	_	_	_	_	_	11	3
\$60,000 to \$69,999	1	-	-	-	-	-	-	-	-	1	-
\$70,000 to \$79,999	1	1	-	-	-	-	-	-	-	-	-
\$80,000 to \$89,999	-	-	-	-	-	-	-	-	-	-	-
\$90,000 to \$99,999	-	-	-	-	-	-	-	-	-	-	-
\$100,000 or more Median (dollar)	3 3,479	3 6,554	1,813	3,500	- 1,820	20,000	1,065	1,556		- 16,875	6 , 974
MONTHLY MORTGAGE PAYMENT											
Total with								_			
mortgage	-	_	-	_	_	-	-	_	_	_	-
\$100 to \$199	_	_	_	_	_	_	_	_	_	_	_
\$200 to \$299	_	_	_	_	_	_	_	_	_	_	_
\$300 to \$399	_	_	_	_	_		_	_	_	_	-
\$400 to \$499	-	-	-	-	-		-	-		-	-
\$500 to \$599	-	-	-	-	-	-	-	-		-	-
\$600 to \$699	-	-	-	-	-	-	-	-		-	
\$700 to \$799	-	-	-	-	-	-	-	-		-	-
\$800 to \$899	-	-	-	-	-	-	-	-		-	
\$900 to \$999	-	-	-	-	-	-	-	-		-	-
\$1,000 or more	-	-	-	-	-	-	-	-		-	-
Median (dollar)	_	_	-	_	-	-	-	_	-	-	-

APPENDIX B



QUESTIONNAIRE

2000 CENSUS OF POPULATION AND HOUSING

FEDERATED STATES OF MICRONESIA

FORM ____ OF ____



2000 CENSUS OF POPULATION AND HOUSING FEDERATED STATES OF MICRONESIA DEPARTMENT OF ECONOMIC AFFAIRS STATISTICS DIVISION



1b. When you told me the names of the persons living here on April 1, did

INTRODUCTION: Hello, my name is (Your name) and I'm working for the 2000 Population and Housing Census. This is my identification (Pause). I have some questions I need to ask you. Ask the questions on page 1. Complete a form for each household.

need to ask you.	Ask the questions on page	1. Complete a form	for each household.	you leave anyone out because you were not sure if the persons should be listed –
COMPLETE BE	FORE INTERVIEW	COMPLET	E AFTER THE INTERVIEW	for example, someone temporarily away on a business trip or vacation, a newborn baby still in the hospital, or a person who
A . State B	. Municipality	J. Respondent's	Name:	stays here once in a while and has no other home?
C. Enumeration Dis	trict	K. Respondent's	Telephone:	
D. Block:		L. Population cou	unt: M F Total	1 Yes – Determine if you should include the person(s) based on the instructions
E. Map-Spot:		M. Type of unit:	Occup Reg Vacant UHE	for question Ia, if so, include the person and circle the person's name.
F. Household No.:		N. Complete afte	er (circle): 1 st 2 nd 3 rd Last Resort	,
G. Village:		O. Total number	of households in this unit:	2 No
H. Interview Started		P . Interview com	pleted: ;:AM / PM	1c. When you told me the names of the
INCLUDE: • Everyone who use members, house roomers, boarde • Persons who are vacation, or in a • Students who liv DO NOT INCL • Persons who use • Persons who are	"means the place where the sually lives here such as fam mates and roommates, foster irs, and live-in employees. It temporarily away on a busing eneral hospital. It has been enough the enerous white attending school with the somewhere else to confined to an institution the somewhere else while attending attending school with the somewhere else while attending school with the school w	oily • Ne r children, Ap • Pe. ness trip, on we sool ol/college • Pe sta • Pe liv. • Pe	wwborn bables born on or before vill 1, 2000 rill 1, 2000 rsons who stay here most of the eks, even if they have a home mewhere else. rsons with no home who were the word of the end of the staying here on April 1, 2000. rsons in the Armed Forces who e somewhere else. rsons who stay somewhere else opt of the week	listed – for example, a visitor who is staying here temporarily or a person who usually live somewhere else? 1 Yes – Determine if you should include the person(s) based on the instructions for questions la, if so, circle the person's name, if not, draw a line through any entry. 2 No If EVERYONE listed is staying here only
answers will be k your answers. Y	cept confidential by the sa our information will only the name of each person liv	ame law. Only sw y be used for statis wing here (whose usu	wer the 2000 Census. Your forn Census employees may see stical purposes. ual residence is this household home. Begin with the household	temporarily and usually lives somewhere else, mark (X) in this box and ask ld. Where do these people usually live? If the usual residence is within the FSM, enter the State, Municipality, and Village.
member in whose n	ame the home is owned, be	ing bought, or rente	ed. If there is no such person,	State:
	t household member (<i>If EV</i> the name of each person an		g here temporarily and usually lives	Municipality:
	• •	_	ns live in this household, you must use	Village:
more than one book	alet.	Sex (1=M,		
Last,	First,	M.I. 2=F)		If the usual residence is not within the FSM, enter the country.
1				Country:
2				
3				
4				NOTES:
-				NOTES.
5				
6				
7				
8				
9				
10				

HOUSING	GOUESTIONS
H1. Which best describes this building? Include all apartments even if yacant.	H10. Does this unit have electric power?
A one-family house detached from any other house A one-family house attached to one or more houses	1. Yes, public utility 3. Yes, solar power 2. Yes, generator 4. No
A building with 2 apartments A building with 3 or 4 apartments	H11. Do you have a telephone or CB radio in this unit?
5. A building with 5 to 9 apartments 6. A building with 10 to 19 apartments	1. Yes, both 3. Yes, CB radio only 2. Yes, telephone only 4. No
7. A building with 20 or more apartments 8. Other 9. Don't know	H12. Do you have a battery-operated radio? Count car radios, transistors radios, and other battery operated sets in working order or needing only new batteries to operate.
H2. When did (person 1 listed in question 1a on page 1) move to this house/apartment?	1. Yes, one or more 2. No
1. 1999 – 2000 4. 1985 – 1989 7. 1960 – 1969	H13. Do you have a television set or Video Cassette Recorder (VCR)?
2. 1995 – 1998 5. 1980 – 1984 8. 1959 or earlier 3. 1990 – 1994 6. 1970 – 1979 9. Don't know	1. Yes, both TV and VCR 3. Yes, VCR only 2. Yes, TV only 4. No
H3. What is the MAIN type of material used for the outside walls of this building? (Read each category and circle ONE item.) 1. Poured concrete 2. Concrete blocks 3. Metal/tin 7. Other 4. Plywood 8. No walls	H14. Do you have air conditioning? 1. Yes, central air conditioning system 2. Yes, 1 individual room unit 3. Yes, 2 or more individual room units 4. No
H4. What is the MAIN type of material used for the roof of this building? (Read each category and circle ONE item.)	H15. Where do you get most of your drinking water from? Read list and circle ONE item. 1. A public system only
1. Poured concrete 3. Wood 5. Bamboo 2. Metal/tin 4. Thatch 6. Other	2. A community system only 3. A public system and catchment 4. A community systems and catchment 5. An individual well 6. A catchment, tanks, or drums only
H5. What is the MAIN type of material used for the foundation of this building? (Read each category and circle ONE item)	7. A public standpipe or steel hydrant 8. Purchased bottled water 9. Some other source such as spring, river, creek, etc.
1. Concrete 3. Coral 5. Other 2. Wood pier or piling 4. Stone	H16. Is this building connected to a public sewer?
H6. About when was this building first built?	1. Yes, connected to a public sewer 2. Yes, connected to a septic tank or cesspool
1. 1999 – 2000 4. 1985 – 1989 7. 1960 – 1969 2. 1995 – 1998 5. 1980 – 1984 8. 1959 or earlier	3. No, use other means
3. 1990 – 1994 6. 1970 – 1979 9. Don't know	H17a. Are your MAIN cooking facilities inside or outside this unit?
H7. How many rooms do you have in this house/apartment? (Count living rooms, dining rooms, kitchens, and bedrooms; but do NOT count	1. Yes, inside this unit 2. Yes, outside this unit 3. No cooking facilities –SKIP TO H18
bathrooms, balconies, foyers, or halls).	H17b. What are your MAIN cooking facilities?
Room(s). If 9 or more rooms, enter 9.	Description 1. Electric range S. Portable electric stove Word at the state
H8. How many rooms are designed primarily for sleeping?	2. Kerosene stove 6. Wood stove 3. Gas stove 7. Open fire
Room(s). If 9 or more rooms, enter 9.	4. Microwave oven 8. Other H17c. Do you have a refrigerator in this unit? If yes, ask what type?
H9a. Do you have piped water?	1. Yes, electric 3. Yes, kerosene
Yes, hot and cold in this unit. Yes, cold only in this unit	2. Yes, gas 4. No refrigerator
Yes, cold only outside this unit No piped water	H17d. Do you have a separate freezer in this unit? 1. Yes 2. No
H9b. What type of energy does your water heater use most?	H17e. Do you have a sink in this unit?
1. Electricity 2. Gas 3. Solar power 4. Other fuel	1. Yes 2. No
H9c. Do you have a bathtub or shower?	H18. How many automobiles, vans, and pick-up trucks are kept at home
1. Yes, in this unit 2. Yes, in this building but not in unit 4. No	for use by members of this household?
H9d. Do you have a flush toilet?	H19. How many boats/canoes are kept at home for use by members of this
1. Yes, in this unit 2. Yes, in this building but not in unit 3. Yes, outside this building 4. No	household? Lif 9 or more, enter 9

- 2 -

	HOUSING Q	DUESTIONS							
H20a. What is the average monthly cost for electr \$.00 OR 1. Included in rent 2. No charge, or elect	ricity not used	INTERVIEWER INSTRUCTIONS: Ask questions H23 to H24c if this is a one-family house that someone in this household OWNS OR IS BUYING; otherwise go to page 4 and ask population questions for each member of the household starting with the householder							
### H20b. What is the average monthly cost for keros .00 OR 1. Kerosene not used		H23. What is the value of this house? If respondent does not know the value of the house, ask —							
### H20c. What is the average monthly cost for water \$ \[\] \	for this unit?	How much it would cost to build a house like this? \$ \[, .00 \]							
H20d. What is the average monthly cost for other wood, etc.) for this unit?	fuels (such as oil, gas,	H24a. Is there a mortgage, deed of trust, contract to purchase, or similar debt on this unit?							
\$	fuels not used.	Yes, mortgage, deed of trust, or similar debt Yes, contract to purchase							
H21. Is this unit - Read list and circle ONE item.		3. No – SKIP TO FIRST PERSON							
 Owned by you or someone in this household with Owned by you or someone else in this household mortgage)? Rented for cash? Occupied without payment of cash rent? Other; Specify: 		H24b. How much is the regular monthly mortgage payment on THIS UNIT? Include payments only on the first mortgage or contract to purchase. \$							
Ask only if RENT IS PAID for this unit H22. What is the monthly rent for this house/unit	,	No regular payment required – SKIP TO FIRST PERSON H24c. Does the regular payment include payments for fire, hazard, or flood insurance on this unit?							
If rent is NOT PAID BY THE MONTH, see the QR monthly rent		Yes, insurance included in payment No, insurance paid separately or no insurance							
\$		3. No – SKIP TO FIRST PERSON							
INTERVIEWER INSTRUCTION household starting with the person		ask the population questions for each member of the house is owned or rented							
	FOR VACA	NT UNITS							
C1. Vacancy Status	C2. Is this unit boarded up	? <u>C3.</u> Months vacant							
1. For rent	1. Yes	1. Less than 1							
2. For sale only	2. No	2. 1 or 2							
3. Rented or sold, not occupied		3. 3 to 6							
4. For seasonal/recreational/occasional		4. 7 to 12							
5. For migrant worker		5. 13 to 23							
6. Other vacant		6. 24 or more							
NOTES:									
	-3-								

			POPULATION QUESTIONS			
INTERVIEWER INSTRUCTION: Questions 1 – should be asked of all household members. For all questions, CIRCLE only ONE entry. 1. PERSON NUMBER (from question page 1) Last name: First name: 2. How is related to the Householder? (Circle)	la on		10. Is a dependent of an active-duty or retired member of the Armed Forces of the United States or of the full-time Military Reserves or National Guard? "Active duty" does NOT include training for the military Reserves or National Guard. 1. Yes, dependent of active-duty member of the Armed Forces. 2. Yes, dependent of retired member of the Armed Forces, or dependent of an active duty or retired member of the National Guard or	2. 3.		
2. Hows: related to the Householder: (christentry: If "Other relative" circle 7 below, and print relationship, such as wife's mother, sister's son, etc. 1. Householder 7. Other relative, specify: 3. Natural born son/daughter 4. Adopted son/daughter 5. Brother/sister 8. Non-relative 6. Father/ mother	exact	_	Armed Forces Reserves 3. No 11a. Since when has live continuously in this municipality? 1. Since birth - SKIP TO INTERVIEWER CHECK ITEM (ICI) AFTER 11b.	ICI: CIRCLE BASED ON QUESTION 4. 1. Born before April. 1, 1995 – Ask Q16a 2. Born after April 1, 1995 or later – GO TO NEXT PERSON 16a. Did live in this municipality 5 years ago? (April 1, 1995)		
3. Is 1. Male 2. Female 4a. What is 's date of birth? If unknown, ple your best estimate. (Print the date in the boxe MM DD YYYY		ve	2. Since /	1. Yes - SKIP TO NEXT ICI 2. No - Ask 16b 16b. What is the name of the municipality, FSM state, or other country where lived 5 years ago? Municipality:		
MM DD YYYY 4b. How old is? (Age should be in complete of April 1, 2000. Print age in the boxes). Age in years 5. Is now married, widowed, divorced, separ			Other country: INTERVIEWER CHECK ITEM (ICI).CIRCLE ONE BASED QUESTION 4. 1. Born before April 1, 1997 – Ask Q12 2. Born after April. 1, 1997 or later – GO TO NEXT PERSON	FSM state: Other country: ICI: CIRCLE ITEM BASED ON QUESTION 3. 1. Females born before April 1, 1987- Ask O17		
has never been married? Circle ONE item. 1. Now married 4. Separated 2. Widowed 5. Never married 3. Divorced 6. What is 's ethnic origin? For example, Yapohnpeian, Mortlockese, Satawalese, Filipino, etc. Print no more than two groups. 1			12. Since February 1, 2000, has attended regular school or college? Include only pre-kindergarten, pre-school, kindergarten, elementary school, and school which leads to a high school diploma or a college. 1. No, never attended school – SKIP TO 14. 2. No, attended in the past, but not since February 1, 2000. 3. Yes, public school, public college 4. Yes, private school	2 All others – SKIP TO NEXT (ICI) 17a.What is the number of children ever born alive? Include all natural children even if they have been adopted by somebody or are living away from home. Do not count stepchild or children adopted. Enter the information in the categories below. Males Females Living at home Living elsewhere Died Total number of children		
7. What is 's religion? 1. Roman Catholic 5. Baptist 2. Congregation 6. Other religion 3. Latter Day Saints (Mormon) 7. Refused 4. Seventh Day Adventist 8 No religion 8. Where was born? Print the name of the village/ island, municipality, FSM state, or other country in the space below. If was born in a hospital, record the place of the usual residence of the mother just before she went to the hospital. Village/island: Municipality: FSM state:			13. How much school has COMPLETED? Read categories if person is unsure. Circle entry for the highest grade COMPLETED or degree received. If currently enrolled, circle the previous grade attended or highest grade completed. 30. No school completed 31. Pre-school, head-start, or kindergarten 1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12. 12th grade, NO DIPLOMA 13. HIGH SCHOOL GRADUATE—High school equivalent (example: GED program) 14. Some college but no degree 15. Associate degree in college-Occup. program	IF NONE, ENTER ZERO (0) AND SKIP TO NEXT ICI. 17b. What is the date of birth of the last child born alive? MM DD YYYY 17c. Was the last child born alive male or female? 1. Malc 2. Femalc 17d. Is that child still alive? 1 Yes 2 No ICI: CIRCLE based on question 4. 1. Born before April 1, 1985 – Ask Q18		
Other country: 1. If is a FSM citizen, what is 's legal res Print the name of the municipality and the FS in the space below. If not, record the country of citizenship. Municipality: FSM state: Country of citizenship:	SM sta		16. Associate degree in college-Acad, program 17. Bachelor's degree (example: BA,AB,BS) 18. Master's degree (example: MA,MS, Meng, Med, MSW, MBA) 19. Professional school degree (example: MD, DDS, DVM, LLB, JD) 20. Doctorate degree (example: PhD, EdD) 14. Does know how to read and write in any language? 1. Yes 2. No	2. Born April 1,1985 or later-GO TO NEXT PERSON 18. Has completed the requirements for a vocational training program in a trade school business school, hospital, some other kind of business school for occupational training, or "at place or work"? Do not include academic college courses. If "Yes" – Was training received in the FSM? 1.No 3. Yes, outside FSM		
Country of citizenship.			2. 110	2. Yes, in FSM 4.Both in and outside FSM		

23b. How many people including ... usually rode together to work LAST WEEK?

5. Other means - SKIP TO 24

2000 I SIM Census of Tup		<u> Zuestionitaire</u>
	POPULATION QUESTIONS	
19. Has ever been on active duty military service in the Armed Forces of the United States? "Active duty" does NOT include training for the military Reserves or National Guard. 1. Yes, now on active duty 2. Yes, on active duty in the past, but not now 3. No	24a. What time did leave home most days to go to work LAST WEEK? 24b. How many minutes did it usually take to get from home to work LAST WEEK? Number of minutes	31a. Last year (1999), did work, even for a few days, at a paid job or in a business or a farm, excluding subsistence activity? 1. Yes 2. No – SKIP TO 32a 31b. How many weeks did work in 1999, excluding subsistence activity? Count paid vacation, paid sick leave, and military service.
20a. Did work at any time LAST WEEK, either full-time or part-time? Work includes part-time or full-time work such as helping without pay in a family business or farm; it also includes active duty in the	INTERVIEWER INSTRUCTIONS – If this person was working for income LAST WEEK, SKIP TO 28a. 25. Was on vacation, sick, or temporarily absent from	Number of weeks 31c. During the weeks worked in 1999, how many hours did usually work each week?
Armed Forces. Work does NOT include unpaid volunteer work. Subsistence activities include fishing, growing crops, etc., NOT primarily for commercial purposes. Read each category and circle in	a job LAST WEEK for any other reason? 1. Yes, on layoff 2. Yes, on vacation, temporary illness, labor dispute, etc. 3. No	The following questions are about income received in 1999. If an exact amount is not known, accept a best
the entry that applies. 1. Yes, worked full-time or part-time at a job skip or business and did NO subsistence activity To 21 2. Yes, worked full-time or part-time at a job or business and did subsistence activity. Ask	26a. Has been looking for work to earn money during the last 4 weeks? 1. Yes 2. No 26b. Could have taken a job LAST WEEK if one had	estimate. If net income in 32b, 32c or question 33 was a loss, write "loss" above the dollar amount. 32a. How much didearn from wages, salary,
3. Yes, did subsistence activity only 4.No – SKIP TO 25 20b. What kind of subsistence activity did	been offered? If NO, Ask – For what reason? 1. Yes, could have taken a job 2. No, already has a job 3. No, temporarily ill	commissions, bonuses, or tips? Report amount before deductions for taxes. \$
do last week? Ask the categories and mark (X) all that apply. Home Sold Gave away use any any 1. Gardening	27. In what year did last work at a job, business, or farm, even for a few days? 1.2000 4. 1990 to 1994 Go to 32a	32b. How much did earn from (his/her) own farm or non-farm business, proprietorship, or partnership? Report amount before deductions for taxes.
2.Fishing 3.Animal raising 4.Other:crafts,etc	2.1999 5. Never worked or did 3.1995-1998 subsistence only Go to 32a	S
INTERVIEWER INSTRUCTION — If this person did subsistence activity only (20a = 3), Skip to 25.	30: Questions 28-30 ask about the job worked last week. If had more than one job, describe the one worked the most hours. If did not work, the questions refer to the most recent job or business since 1995.	even small amounts credited to an account. \$
21. How many hours did work LAST WEEK at all jobs, excluding subsistence activity? Subtract any time off and add any overtime or extra hours worked.	28a. For whom did usually work? Print the name of the business or employer.	payments or any pension payments from retirement, survivor, or disability? \$
22. Where did usually work LAST WEEK? If worked at more than one location, ask — Where did work most last week? Print	28b. What kind of business or industry was this? For example: hospital, garment factory, retail store, bakery, etc.	32e. How much did receive as remittances from relatives within FSM outside this household? \$
the village/island, municipality, FSM state or other country where worked Village/island:	29a. What was job title? For example: registered nurse, industrial machinery mechanic, cake baker, etc.	32f. How much did receive in remittances from relatives outside FSM, including the military?
Municipality:	29b. What was's main task? For example: patient care, repair machines, baking cakes, etc.	\$
Other country:	30. WasRead list. Circle ONE entry	32g. How much did receive in income from Veterans' (VA) payments, unemployment compensation, child support, alimony, or any other regular sources of income?
used to get to work LAST WEEK? 1. Private car, truck, or van 2. Boat	I. Employee of PRIVATE FOR PROFIT company business or individual, for wages, salaries, or commissions. Employee of PRIVATE NOT FOR PROFIT, tax exempt, or	\$,
3. Taxi or public transport bus 4. Worked at home – SKIP TO 28a	charitable organization 3.Municipal GOVERNMENT employee	Do not ask question 33 if questions 32a through 32g are complete. Instead, sum these entries and

7.SELF EMPLOYED

5. National GOVERNMENT employee

8. Working WITHOUT PAY in a family business/farm

4. State GOVERNMENT employee

6.FOREIGN/FEDERAL employee

enter the amount below.

33. What was the ...'s total income in 1999?

INTERVIEWER INSTRUCTIONS:

-Before you leave this housing unit, be sure you have recorded -

- 1. Information in items A, B, C, D, E, F, G, and H on page 1 of the questionnaire.
- 2. The respondent's name in item J and the respondent's telephone number (if any) in item K on page 1 of the questionnaire.
- 3. Information in items L, M, N, O and P.

Also, be sure you have –

- 4. Completed as many of the census questions as possible, including the last resort questions.
- 5. Completed the FOR VACANT UNITS section on page 3 (only if unit is vacant).
- 6. Entered the required information on the List of Regular Households pages in the Listing Book and the ED map.
- 7. Written all entries clearly.

After you complete items 1-7 above, be sure to enter your signature and date in the certification box below.

THANK THE RESPONDENT FOR HIS/HER COOPERATION

NOTES:		
	- CERTIFICATION -	
	Enumerator:	
	I certify that the entries I have made on this questionnaire are true and correct to the best of my knowledge.	
	Enumerator's name (Print)	Code
	Enumerator's signature	Date
	Crew leader:	
	I have reviewed and certify that the entries made on this questionnaire are true and correct.	
	Crew leader's name (Print)	Code
	Crew leader's signature	Date
		/