

THE STATUS OF MICRONESIAN MIGRANTS IN 1998

A Study of the Impact of the Compacts of Free Association
based of Censuses of Micronesian Migrants to Hawaii, Guam and the
Commonwealth of the Northern Mariana Islands

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1. INTRODUCTION

The Compact of Free Association between the United States and the Federated States of Micronesia (FSM) and the Republic of the Marshall Islands (RMI) went into effect in late 1986, and with the Republic of Palau (ROP) in late 1994. These three countries together make up what is frequently called the Freely Associated States (FAS). The Compact, as a joint congressional-executive agreement, charts relationships between the United States and the three island nations. Under the Compact, the United States funds the FSM, the RMI, and the ROP for a range of development programs, the use of United States currency, immigration privileges, federal processing of applications for air services, United States transportation of mail, and other benefits. In exchange, each Pacific nation guarantees the United States exclusive use of its land for military purposes.

Several key provisions in the Compact between the FSM, RMI, ROP and the United States concern its impact on *United States areas*, discussed in Section 104(e) as follows:

- (1) *Statement of Congressional Intent.* In approving the Compact, it is not the intent of the Congress to cause adverse consequences for the United States territories and commonwealths or the State of Hawaii.
- (2) *Annual Reports and Recommendations.* One year after the date of enactment of this joint resolution and at one year intervals thereafter, the President shall report to the Congress with respect to the impact of the Compact on the United States territories and commonwealths and on the State of Hawaii. Reports submitted because of this paragraph will identify adverse consequences resulting from the Compact and shall make recommendations for corrective action to eliminate those consequences. The reports shall pay particular attention to matters relating to trade, taxation, immigration, labor laws, minimum wages, social systems and infrastructure, and environmental regulation. With regard to immigration, the reports shall include statistics concerning the number of persons availing themselves of the rights described in section 141(a) of the Compact during the year covered by each report.¹ With regard to trade, the reports shall include an analysis of the impact on the economy of American Samoa resulting from imports of canned tuna into the United States from the Federated States of Micronesia and the Marshall Islands.
- (3) *Other Views.* In preparing the reports, the President shall request the views of the Government of the State of Hawaii, and the governments of each of the United States territories and commonwealths, the Federated States of Micronesia, the Marshall Islands, and Palau, and shall transmit the full text of these views to the Congress as part of reports.
- (4) *Commitment if Congress to Redress Adverse Consequences.* The Congress hereby declares that, if any adverse consequences to United States territories and commonwealths or the State of Hawaii result from implementation of the Compact of Free Association, the Congress will act sympathetically and expeditiously to redress those adverse consequences.

¹ These data are collected and tabulated by the Department of the Interior's Office of Insular Affairs (OIA) Statistical Enhancement project, both as technical assistance to and training for the Insular Areas' personnel.

- (5) *Definition of U.S. Territories and Commonwealths.* As used in this subsection, the term "United States territories and commonwealths" means the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.²
- (6) *Impact Costs.* There are hereby authorized to be appropriated for fiscal years beginning after September 30, 1985, such sums as may be necessary to cover the costs, if any, incurred by the State of Hawaii, the territories of Guam and American Samoa, and the Commonwealth of the Northern Mariana Islands resulting from any increased demands placed on educational and social services by immigrants from the Marshall Islands and the Federated States of Micronesia.

² The Governors of American Samoa and the Virgin Islands report no adverse consequences of the Compact of Free Association; however, the Governors of Hawaii, Guam, and the Commonwealth of the Northern Mariana Islands have reported adverse consequences.

CHAPTER 2

PURPOSE OF STUDY AND FREELY ASSOCIATED STATES POPULATIONS

This study focuses on the numbers and social, economic, housing and expenditure characteristics of Micronesian migrants to Hawaii, Guam, and the Commonwealth of the Northern Mariana Islands (CNMI). It will not, however, look specifically at the impact that the Compact of Free Association has had on any of the receiving areas. This impact can be either positive (e.g. by increasing tax revenues) or negative (e.g. by increasing the demands on public services). This report will not assess financial impact – the positive, negative or net impact – of Compact implementation.

The 1997 Censuses of Micronesian Migrants to Hawaii and Guam, and 1998 Census of Micronesian Migrants on Saipan were developed to measure both:

- ?? the negative impact of the Micronesian Migrants (as noted in the parts of the Compact shown earlier), but also
- ?? the positive impact of the migrants in terms of salaries earned, purchases made, and taxes paid.

THE FREELY ASSOCIATED STATES

The Federated States of Micronesia (FSM) and the Republic of the Marshall Islands (RMI) implemented their Compacts of Free Association with the United States in November 1986. The Republic of Palau implemented its Compact in October 1994. Historically, these island groups were sovereign entities until they came under the control of Spain from the 1500s to 1898, Germany from 1899 to 1914, Japan from 1914 to 1945 and finally under an American Administration from about 1945.. After World War II ? and Japan's successful bombing of Pearl Harbor from the Marshall Islands ? the Trust Territory of the Pacific Islands (TTPI) was created by the United States as a ?strategic? trust territory and administered for the United Nations from 1947 until 1986. The TTPI consisted of what became the Commonwealth of the Northern Mariana Islands, the Republic of Palau, the Federated States of Micronesia, and the Republic of the Marshall Islands. The following is a brief summary of population size and migration trends of the RMI, ROP and FSM.

Marshall Islands. The Republic of the Marshall Islands is made up of two parallel chains of islands and has more than 50,000 persons. The Marshall Islands implemented its Compact at the same time as the FSM, but the pace of out-migration from the RMI has been much slower than that from the FSM. Most of the Marshall Islands migration, in fact, has been to Hawaii and the U.S. mainland rather than to Guam and the CNMI. Part of the reason for this flow is geographic ? transportation is better to Hawaii than to Guam ? and part is almost certainly economic. Based on the 1990 Census, at least 350 Marshallese were living in Hawaii while only 88 were living on Guam and 103 in the CNMI. The 1992 Office of Insular Affairs Survey of Micronesian migrants to Guam recorded 150 Marshallese. The 1993 Survey of Micronesian migrants to CNMI recorded 177 Marshallese, while the 1995 Census of the CNMI reported 130 individuals born in the Marshall Islands. Thus, Marshall Islands emigration west to Guam and the CNMI is relatively small (unfortunately, differences in reporting preclude stating that the 1995 data show a reverse trend). Most of the Marshall Islands migration is to Hawaii, with about 2,500 present there in 1997.

Palau. Palau is located southwest of Guam and has a population of about 18,000 people, with approximately 1/3rd foreign-born. Compared to the Marshall Islands, Palauan out-migration to Guam, CNMI and Hawaii has been more significant. Both Guam and CNMI have attracted Palauan migrants since the 1950s, during the early TTPI administration. Many Palauans came to Guam to study at the University of Guam, some enlisted in the U.S. Armed Forces (one was killed in Vietnam during the war) and returned to Guam to live and work, and others have simply migrated to work, even when doing so was illegal. Many Palauans went to Saipan to work in the TTPI government, and many of these stayed in Saipan after the Commonwealth was formed in 1986; many Palauans have responsible positions in the CNMI government. The 1990 Census recorded 1,233 Palau-born on Guam and 1,407 in the CNMI. In 1995, the CNMI Census recorded 1,594 Palau-born, while the concurrent survey of Palauans on Guam reported 1,089; however, latter figure is likely an undercount. Of the three Freely Associated States groups, Palauans have had the longest history of residence in Hawaii and Guam.

Federated States of Micronesia. Four states ? Chuuk, Kosrae, Pohnpei, and Yap ? constitute the Federated States of Micronesia. Kosrae is composed of a main island, a smaller island (Lelu), and a number of even smaller islands. Pohnpei and Yap both have main islands and inhabited and uninhabited atolls, creating easy geographic differentiation. Chuuk, because it is the most populated state, and because of its history, is divided into five geographic regions ? Northern and Southern Namoneas, and Faichuk in the Chuuk Lagoon, the Mortlock Islands to the south, and Oksoritod to the north and west. Oksoritod itself is made up of the Western Islands (Pulusuk, Puluwat, Pulap, and Tamatam), Namonuito, and the Hall Islands. Historical census and survey data for the FSM appear in Chapter 13.

CHAPTER 3

WHO IS A POST-COMPACT MIGRANT

One of the problems in studying the impact of the Compacts of Free Association on Guam, the CNMI, and the State of Hawaii – the receiving areas – is defining who, exactly, is a “Compact migrant”. Many Micronesians³ came to these receiving areas before implementation of the Compacts, either on visas or through other arrangements, whether legal or not. During the early years of the TTPI Administration, very few migrants could afford to emigrate. The first migrants were students, who used a combination of TTPI scholarship and U.S. Federal scholarships and grants (particularly the Pell Grant, when it was implemented) to attend schools, first in Guam and Hawaii, and later on the U.S. mainland.

During the Carter Administration, in the late 1970s, the TTPI experienced a flood of emigrants for schooling, because the Pell Grant’s \$2,000 funding at that time was enough to get the potential student to a school, even if the migrant was more “potential” than “student”. In fact, so many students or ex-students were in the States at the time of the 1980 TTPI Census that the data were artificially skewed. In the early 1980s, at a time when jobs were still plentiful, many of these migrants returned to the TTPI after having their adventures (see, for example, Levin 1976), taking over the government jobs that were being vacated throughout the TTPI by expatriate contract workers and Peace Corps volunteers.

Some of these students, whether they finished their studies or not, however, remained in Guam, Hawaii and the U.S. mainland. They married and started families, got entry level jobs which eventually led to higher positions, and generally acted like the typical U.S. immigrants they were enrolling their children in schools, renting or buying houses or apartments, and paying taxes. These immigrants, who were born in the TTPI and migrated before the Compacts of Free Association were implemented, are considered “pre-Compact” migrants. As we discuss below, it is not clear whether the U.S. Federal Government must act “sympathetically” to whatever impact these individuals have on social and educational services. Further, many of these early migrants now have families, with either Micronesian or non-Micronesian spouses, and it is not clear whether the children of these migrants, many of whom have never been in Micronesia, are to be considered part of the impact of the Compacts of Free Association.

Also, before the Compacts of Free Association were implemented, a few Micronesians joined the U.S. military as a means of entry into the United States, sometimes with a wink from the recruiters, sometimes with their collusion. This means of entry to the United States went from a trickle to a minor cascade after Compact implementation. Like the American Samoans before them, the modern military is attractive because of the minor chance of death or injury and the opportunity to have free room and board and medical attention, to learn a skill, and to earn many times the money which would be available for a similar job in the sending country. Those who do not become career military apparently can retire to the United States. If they initially came before Compact implementation, they are considered “pre-Compact” migrants and, if they came after implementation, they are considered “post-Compact” migrants.

³ In this paper we use the term “Micronesian” loosely. In most cases, Micronesian refers to persons born in the Federated States of Micronesia, and the Republics of Palau and the Marshall Islands. Geographically, linguistically, and, to a certain extent, culturally, the Chamorros and Carolinians of Guam and the CNMI should also be considered “Micronesian”, but in most cases here are excluded since we are looking at the “migrants.” Also, often we use FSM and “Micronesia” interchangeably so caution should be used in interpreting the data.

The TTPI itself ended up contributing a type of migrant. As the TTPI wound down in the late 1970s and early 1980s, many Micronesians from Palau, the Federated States of Micronesia, and the Marshall Islands who were working in Saipan for the TTPI government returned to their home areas to work. The population of Kosrae, for example, went from about 3,000 to over 5,000 between 1973 and 1980, and while fertility was high, return migration also contributed to the population increase. Other TTPI employees, though, had either married Saipanese or chose to remain in Saipan, where they were relatively welcomed (particularly compared to the reception of Micronesian government workers on Guam, where they were not welcomed), where they had houses, better schools, and better health facilities. Many of these people also would be considered “pre-Compact” migrants because they came long before the Compact was implemented, and either never returned to their home areas, or only returned for a short time before returning to Saipan to live and work. The children of these persons, also, might never have lived in the TTPI areas, so it is not clear, even with both parents having been born in the TTPI, whether or not these persons should be considered impact persons.

Many other persons originally went to Guam, the CNMI or the United States, either as students or tourists, and overstayed their visas and resided illegally in their respective receiving areas. A few cases were caught by the U.S. Immigration and Naturalization officials and deported but, because of their very small numbers, in most cases they were ignored. When the Compacts of Free Association were implemented, these people suddenly became “legal” and, because their immigration status had been regularized, they no longer had to accept low-wage jobs from employers willing to risk legal sanctions and hire illegal aliens.

When the Palau Compact was implemented in 1994, many Palauan students were paying out-of-state tuition, long after the FSM and Marshall Islands students were able to pay in-state tuition. These students now were able to reduce their hours working (often at quasi-legal jobs), go to school full-time, finish their schooling and either return to Palau or continue working in the United States. These persons would probably be considered “pre-Compact” migrants. Once again, it is not clear whether the children of these migrants, many of whom have a non-Micronesian mother or father and have been outside of the Guam, the CNMI or the United States, should be considered “Compact” persons or not.

3.1 **DEFINING “PRE-COMPACT” AND “POST-COMPACT” MIGRANTS**

In order to assess the impact of the Compacts of Free Association, it is first necessary to define who is a “pre-Compact” and “post-Compact” migrant. It is possible, as the Government of Guam does in its impact report, to define any person born in Palau, the FSM or the Marshall Islands – whether pre- or post-Compact – as having an impact on social and educational services. It is also possible to adopt the Compact reporting requirements and to look solely at the burden caused by Compact implementation, which means considering only post-Compact migrants. As discussed earlier, this report does not assess the impact of Compact implementation. However, in order to facilitate the use of the information provided in this report, *both* pre- and post-Compact migrants are included in the analysis. Also, because the 1997/8 Censuses of Micronesian Migrants enumerated households with at least one Micronesian migrant, the data includes the children of Micronesian migrants as well as their non-Micronesian relatives. The members of these households are classified in one of the four following ways:

1. *Post-Compact Migrants* are those who migrated after implementation of the Compacts of Free Association (after 1986 for persons born in the Federated States of Micronesia or the Republic of the Marshall Islands and after 1994 for persons born in the Republic of Palau).
2. *Children of Micronesian Migrants* are those children who were not born in one of the Freely Associated States and who have at least one Micronesian-born parent. All children of Micronesian migrants are included in this category, whether or not their parent(s) came before or after the implementation of the Compacts of Free Association, because it is often difficult to determine their pre- and post-Compact “status.” For example, if a child has at least one Micronesian parent present in the household, a link could be made and the information about pre- or post-Compact migration could be determined. However, if a child has two Micronesian parents present who migrated at different times, or if neither parent was present, ambiguities occurred. For this study, it was decided to include all U.S. or territory-born children of Freely Associated States migrants in the category of children of Micronesian migrants

3. *Pre-Compact migrants* are those who migrated to Guam, the CNMI, or Hawaii before implementation of the Compacts of Free Association (before 1987 for persons born in the FSM or the Marshall Islands or before 1995 for persons born in Palau).
4. *Other persons* are all non-Micronesian persons living in a household with at least one Micronesian migrant. In most cases, these were non-Micronesian spouses and persons related to those spouses. In some cases, particularly in the CNMI, maids or other household workers might also be included.

Clear definitions of these migrant categories are essential to determine the impact of the population on the receiving areas. This is because the number of “Compact” persons depends on how they are classified. If we look at all persons in households with at least one Micronesian migrant, the total “impact population” would be greater and its characteristics would be different than if we looked only at the migrants themselves. The same is true if we looked only at the post-Compact migrants; we would have a different population with a different impact. It is not the purpose of this exercise to state which set of persons is the “true” impact population. The wording of the Compact law is sufficiently obscure that different populations can be selected for analysis, depending on the actual criteria selected.

Because of the Office of Insular Affairs, Department of the Interior’s reading of the Compact law, this report will focus on two groups: 1) the pre-Compact migrants and 2) the post-Compact migrants and all the children born of Freely Associated States immigrants not born in Micronesia. In order to assess the maximum impact that immigration initiated by Compact implementation is having on Guam, the CNMI and Hawaii, all non-migrant children are included in the post-Compact category, regardless of the when their parents actually arrived in the receiving areas.

Table 3.1. Pre- and Post-Compact Migrants to Hawaii, 1997.

Group	Total	Palau	FSM	RMI
Total	6,744	486	3,786	2,472
Post-Compact migrants and children	5,509	127	3,312	2,070
Post-Compact migrants only	4,815	123	2,853	1,839
Children of migrants only	694	4	459	231
Pre-Compact migrants	610	193	232	185
Other persons in the households	625	166	242	217

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

It is important to remember that when households had members of more than one Freely Associated States, the household was placed in one or the other groups, usually by the enumerator who got to the house first (but finally determined by the Census coordinator). This situation did not happen very often and should not have appreciably affected the results. Hence, in a few cases, when a Chuukese married a Palauan, for example, the individuals would appear in their appropriate country statistics, but the household characteristics would only appear for one or the other.

The distribution of migrants among the pre-migrant, post-migrant, children of migrants and other persons categories varies among both receiving states and among the Palauan, FSM and RMI migrant communities. Table 3.1 shows the number of persons enumerated by the census of Micronesian migrants in Hawaii. As can be seen, the census collected information on 6,744 persons. Almost 5,000 were post-Compact migrants, 700 were children of migrants, and 600 were pre-Compact migrants. About 3,800 persons were enumerated as FSM migrants and their families, 2,500 Marshallese, and about 500 Palauans.

Table 3.2 shows that of the 6,744 persons enumerated in Haawaii, 82 percent were post-Compact migrants or their children (71 percent were post-Compact migrants only and 10 percent were their non-Micronesian born children), 9 percent were pre-Compact migrants and 9 percent were other persons. Based on the largest groups of persons in the household, 486 (7 percent) were Palauan, 3,786 (56 percent) were associated with the Federated States of Micronesia, and 2,472 (37 percent) were associated with the Marshall Islands.

Table 3.2. Pre- and Post-Compact Migrants to Hawaii, 1997.

Group	Total	Palau	FSM	RMI
Total	6,744	486	3,786	2,472
Post-Compact migrants and children	81.7	26.1	87.5	83.7
Post-Compact migrants only	71.4	25.3	75.4	74.4
Children of migrants only	10.3	0.8	12.1	9.3
Pre-Compact migrants	9.0	39.7	6.1	7.5
<u>Other persons in the households</u>	<u>9.3</u>	<u>34.2</u>	<u>6.4</u>	<u>8.8</u>

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Table 3.3 shows the number of persons enumerated by the census of Micronesian migrants in Guam. The census collected information on 8,338 persons. The 5,446 post-Compact migrants constituted the largest group, but Guam also had 730 pre-Compact migrants and more than 1,100 children. The FSM migrants were the overwhelming majority, with very few enumerated from the Marshall Islands.

Table 3.3. Pre- and Post-Compact Migrants to Guam, 1997.

Group	Total	Palau	FSM	RMI
Total	8,338	1,257	6,949	132
Post-Compact migrants and children	6,550	102	6,325	123
Post-Compact migrants only	5,446	87	5,254	105
Children of migrants only	1,104	15	1,071	18
Pre-Compact migrants	730	458	270	2
<u>Other persons in the households</u>	<u>1,058</u>	<u>697</u>	<u>354</u>	<u>7</u>

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Table 3.4 shows that of the 8,338 persons, 79 percent were post-Compact migrants or their children (65 percent were post-Compact migrants only and 13 percent were their non-Micronesian born children), 9 percent were pre-Compact migrants and 13 percent were other persons. Based on the largest groups of persons in the household, 1,257 (15 percent) were Palauan, 6,949 (83 percent) were associated with the Federated States of Micronesia, and 132 (2 percent) were associated with the Marshall Islands.

Table 3.4. Pre- and Post-Compact Migrants to Guam, 1997.

Group	Total	Palau	FSM	RMI
Total	8,338	1,257	6,949	132
Post-Compact migrants and children	78.6	8.1	91.0	93.2
Post-Compact migrants only	65.3	6.9	75.6	79.5
Children of migrants only	13.2	1.2	15.4	13.6
Pre-Compact migrants	8.8	36.4	3.9	1.5
<u>Other persons in the households</u>	<u>12.7</u>	<u>55.4</u>	<u>5.1</u>	<u>5.3</u>

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Table 3.5 shows the number of persons enumerated by the census of Micronesian migrants in the CNMI. The census collected information on 4,469 persons. About 1,200 were post-Compact migrants, 600 were children of migrants, and another 1,200 were pre-Compact migrants. The other persons were not migrants or their children, but could have been third or later generation persons of Micronesian migrant ethnicities. For example, the children of children of Palauan migrants would not be included because neither they nor their parents were born outside of the CNMI.

Table 3.5. Pre- and Post-Compact Migrants to CNMI, 1998.

Group	Total	Palau	FSM	RMI
Total	4,469	2,154	2,199	116
Post-Compact migrants and children	1,755	178	1,503	74
Post-Compact migrants only	1,184	146	995	43
Children of migrants only	571	32	508	31
Pre-Compact migrants	1,192	885	289	18
<u>Other persons in the households</u>	<u>1,522</u>	<u>1,091</u>	<u>407</u>	<u>24</u>

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Of the 4,500 migrants to the CNMI, 39 percent were post-Compact migrants or their children (27 percent were post-Compact migrants only and 13 percent were their non-Micronesian born children), 27 percent were pre-Compact migrants and 34 percent were other persons (Table 3.6). The percentage of post-Compact migrants in the CNMI is smaller than either Guam or Hawaii, which can be partially explained by the later implementation of the Compact in Palau. Based on the largest groups of persons in the household, 2,154 (48 percent) were from Palau, 2,199 (49 percent) were associated with the Federated States of Micronesia, and 116 (3 percent) were associated with the Marshall Islands. Clearly, Marshallese migrants were much more likely to go to Hawaii than either Guam or the CNMI, probably because Hawaii is closer to the Marshalls and has more affordable housing, food and other amenities.

Table 3.6. Pre- and Post-Compact Migrants to CNMI, 1998.

Group	Total	Palau	FSM	RMI
Total	4,469	2,154	2,199	116
Post-Compact migrants and children	39.3	8.3	68.3	63.8
Post-Compact migrants only	26.5	6.8	45.2	37.1
Children of migrants only	12.8	1.5	23.1	26.7
Pre-Compact migrants	26.7	41.1	13.1	15.5
<u>Other persons in the households</u>	<u>34.1</u>	<u>50.6</u>	<u>18.5</u>	<u>20.7</u>

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Table 3.7 shows the number of persons enumerated by all three censuses. In total, the censuses collected information on 19,551 persons. Of these, more than 11,000 were post-Compact migrants, and another 2,400 were the children of migrants. About 2,500 were pre-Compact migrants. And, about 3,000 other persons lived in these households. The FSM enumerated population was about 2/3rd of the total for the three areas. RMI also contributed substantially to the post-Compact component, while most of the Palauans, partly because of the later Compact implementation date, were mostly pre-Compact migrants.

Table 3.7. Pre- and Post-Compact Migrants to Hawaii and Guam, 1997 and CNMI, 1998.

Group	Total	Palau	FSM	RMI
Total	19,551	3,897	12,934	2,720
Post-Compact migrants and children	13,814	407	11,140	2,267
Post-Compact migrants only	11,445	356	9,102	1,987
Children of migrants only	2,369	51	2,038	280
Pre-Compact migrants	2,532	1,536	791	205
<u>Other persons in the households</u>	<u>3,205</u>	<u>1,954</u>	<u>1,003</u>	<u>248</u>

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Of the 20,000 persons in the three censuses, 71 percent were post-Compact migrants or their children (59 percent were post-Compact migrants only and 12 percent were their non-Micronesian born children), 13 percent were pre-Compact migrants and 16 percent were other persons (Table 3.8). Approximately 20 percent were from Palau, 66 percent were associated with the Federated States of Micronesia, and 14 percent were associated with the Marshall Islands.

Table 3.8. Pre- and Post-Compact Migrants to Hawaii and Guam, 1997 and CNMI, 1998.

Group	Total	Palau	FSM	RMI
Total	19,551	3,897	12,934	2,720
Post-Compact migrants and children	70.7	10.4	86.1	83.3
Post-Compact migrants only	58.5	9.1	70.4	73.1
Children of migrants only	12.1	1.3	15.8	10.3
Pre-Compact migrants	13.0	39.4	6.1	7.5
<u>Other persons in the households</u>	<u>16.4</u>	<u>50.1</u>	<u>7.8</u>	<u>9.1</u>

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

We will look at just two variables using the various selection criteria to get a better idea of how the migrant categories might influence the extent of the impact of the immigration resulting for the implementation of the Compacts of Free Association.

Table 3.9 shows the labor force participation rates of the 4,715 persons over the age of 16 in the labor force for Freely Associated States in Hawaii. The total labor force participation rates was 47 percent., meaning that less than half of the population 16 years and over was in the labor force (whether employed or unemployed). However, 58 percent of the Palauan adults were in the labor force, compared to 54 percent of the FSM associated persons but only 33 percent of the Marshallese.

Table 3.9. Labor Force Participation of Migrants to Hawaii, 1997

Group	Total	Palau	FSM	RMI
All persons age 16 year and over	4,715	404	2,774	1,537
Persons in Labor Force	47.1	58.2	53.5	32.5
Post-Compact migrants and children	44.6	48.2	52.5	29.9
Post-Compact migrants only	44.7	48.6	52.6	29.7
Children of migrants only	41.9	0.0	42.9	42.9
Pre-Compact migrants	58.1	59.7	65.8	45.8
<u>Other persons in the households</u>	<u>54.9</u>	<u>65.7</u>	<u>50.9</u>	<u>48.7</u>

Source: Census of Micronesian Migrants to Hawaii.

More than 58 percent of the pre-Compact migrants were in the labor force (60 percent of the Palauans, 66 percent of the FSM migrants, and 46 percent of the Marshallese), compared to only 45 percent of the post-Compact migrants. This latter figure is not completely surprising since many of the migrants arrived in Hawaii only shortly before the census. These persons may not have had time to get a job, or, like many persons just joining the work force, may have been moving in and out of entry level jobs until they established themselves as workers. About 48 percent of the Palauans, 53 percent of the FSM migrants, and 30 percent of the Marshallese post-Compact migrants were in the labor force.

It is also important to note that about 55 percent of the “others” in Freely Associated States households were in the labor force, significantly higher than the Freely Associated States migrants themselves, indicating that marriage to outsiders boosts labor force participation within the household. Almost 2/3rds of the “others” in Palau associated households were in the labor force compared to about half of those in FSM and Marshall Islands households.

So, the rates of labor force participation for the Freely Associated States migrants change depending on the criteria for selection for inclusion in the “impact” population.

A second variable – per capita income – further illustrates the differences caused, depending on selection criteria. Per capita income is calculated by dividing all of the income obtained by a population in a year by the number of people in that population. Income from all sources ? earnings, own business income, interest and dividends, welfare, etc ? is usually included in the per capita income determination, as it is here. The per capita income for 1996 for the post-Compact migrants and their children in the 1997 Hawaii Census of Micronesia Migrant was \$3,759 (Table 3.10). The per capita income for post-Compact Palau associated migrants was \$4,688, more than that of either FSM (\$4,213) or the Marshall Islands (\$2,977). Pre-Compact migrants presented a much more positive impact. They had per capita incomes of about \$13,622 -- \$15,372 for Palauans, \$17,629 for FSM, but only \$6,770 for RMI.

Table 3.10. Per Capita Income in 1996 of Migrants in Hawaii, 1997.

Group	Per Capita Income			
	Total	Palau	FSM	RMI
Post-Compact migrants and children	\$3,759	\$4,688	\$4,213	\$2,977
Post-Compact migrants only	\$4,278	\$4,840	\$4,859	\$3,338
Children of migrants only	\$163	?	\$194	\$103
Pre-Compact migrants	\$13,622	\$15,372	\$17,629	\$6,770

Source: Censuses of Micronesia Migrants to Hawaii.

The Marshallese had the lowest per capita incomes across the board, but even here, the pre-Compact per capita income of almost \$7,000 was more than double that of the post-Compact migrants showing that length of residence has a positive impact on income levels (as represented by the per capita numbers). Once again, the per capita income levels change rather dramatically depending on what criteria are used to determine the “impact” population.

We can summarize the distribution of pre-Compact and post-Compact migrants and their children for the three sending areas and three receiving areas, as in Table 3.11. As noted before, of the 16,346 migrants and children, 7,280 were in Guam in 1997, 6,119 were in Hawaii in 1997, and 2,947 were in the CNMI in 1998. Almost 12,000 of the migrants were from the FSM, while about 2,500 came from the Marshall Islands, and less than 2,000 from Palau (which was still about 1/6th of the Palau-born population in Palau itself.)

Table 3.11. Micronesian Migrants to Guam, Hawaii, and the CNMI: 1997/8

Group		Guam	Hawaii	CNMI
Freely Associated State	Total	1997	1997	1998
Total	16,346	7,280	6,119	2,947
FSM	11,931	6,595	3,544	1,792
RMI	2,472	125	2,255	92
Palau	1,943	560	320	1,063
Post-Compact and Children	13,814	6,550	5,509	1,755
FSM	11,140	6,325	3,312	1,503
RMI	2,267	123	2,070	74
Palau	407	102	127	178
Post-Compact	11,445	5,446	4,815	1,184
FSM	9,102	5,254	2,853	995
RMI	1,987	105	1,839	43
Palau	356	87	123	146
Children	2,369	1,104	694	571
FSM	2,038	1,071	459	508
RMI	280	18	231	31
Palau	51	15	4	32
Pre-Compact	2,532	730	610	1,192
FSM	791	270	232	289
RMI	205	2	185	18
Palau	1,536	458	193	885

Sources: Censuses of Micronesian Migrants to Guam, Hawaii, and CNMI

Of the 16,000 migrants and children, almost 14,000 (85 percent) were post-Compact migrants and their children, and about 2,500 (15 percent) were pre-Compact migrants. This last group was heavily influenced by the late implementation of the Palau Compact – 1,500 (more than 60 percent) of the 2,500 were Palau born.

The influence of the post-Compact migrants is also seen in the distribution of the three sending and receiving areas' migrants attending public elementary and high school. More than 3,184 migrants (and children) were enrolled in public school in the three areas in 1997/8 – 1,360 in Guam in 1997, 1,192 in Hawaii in 1997, and 632 in the CNMI in 1998 (Table 3.12). Of these, 2,250 (more than 70 percent) were from the FSM, 705 (22 percent) from the Marshalls, and 229 (about 7 percent) were from Palau. As before, the majority of the pre-Compact migrants (131 of the 212 – or 62 percent) were Palauan, and most of those were in the CNMI.

These tables show that the numbers of migrants are small in international terms, and even compared to the size of the receiving populations of Guam, Hawaii, and the CNMI. But, the migrant populations are very large as a segment of the sending populations.

Table 3.12. Micronesian Migrants Enrolled in Public Elem & High Schools, Guam, Hawaii, and the CNMI: 1997/8

Group		Guam	Hawaii	CNMI
Freely Associated State	Total	1997	1997	1998
Total	3,184	1,360	1,192	632
FSM	2,250	1,291	515	444
RMI	705	43	630	32
Palau	229	26	47	156
Post-Compact and Children	2,972	1,327	1,141	504
FSM	2,202	1,271	507	424
RMI	672	43	598	31
Palau	98	13	36	49
Post-Compact	2,369	1,115	979	275
FSM	1,702	1,067	410	225
RMI	590	39	536	15
Palau	77	9	33	35
Children	603	212	162	229
FSM	500	204	97	199
RMI	82	4	62	16
Palau	21	4	3	14
Pre-Compact	212	33	51	128
FSM	48	20	8	20
RMI	33	0	32	1
Palau	131	13	11	107

Sources: Censuses of Micronesian Migrants to Guam, Hawaii, and CNMI

Finally, Table 3.13 shows another aspect of the difficulties in determining exactly who should and who should not be included in an analysis of the impact of the Micronesian migrants. Only migrants and their children are included; non-FAS spouses and other relatives are excluded. Of the 16,346 first and second generation migrants in the three areas, more than 2,000 were actually born in the receiving areas. Most of these children, of course, had parents born in the FSM, but about 300 had parents born in the Marshalls and about 50 had parents born in Palau. Hence, 87 percent of the migrants and children were born outside the receiving area – 85 percent of the FSM migrants were born outside of the receiving areas compared to 89 percent of the Marshallese and 97 percent of the Palauans.

Table 3.13. Year of Entry Micronesian Migrants to Hawaii, Saipan, and Guam: 1997/8

Area Birthplace	Total	Born in this Area		Born Outside the Area Migrated:									
		Number	Percent	Total		1996- 1997/8	1994- 1995	1992- 1993	1990- 1991	1987- 1989	1985- 1986	1980- 1984	Before 1980
				Number	Percent								
Total	16,346	2,112	12.9	14,234	87.1	3,232	2,929	2,193	2,273	1,792	522	580	713
Palau	1,943	54	2.8	1,889	97.2	201	194	171	204	290	122	248	459
FSM	11,931	1,784	15.0	10,147	85.0	2,367	2,112	1,699	1,809	1,377	327	250	206
RMI	2,472	274	11.1	2,198	88.9	664	623	323	260	125	73	82	48
Hawaii	6,119	640	10.5	5,479	89.5	1,658	1,442	822	631	386	167	178	195
Palau	320	4	1.3	316	98.8	79	61	21	15	11	10	29	90
FSM	3,544	408	11.5	3,136	88.5	938	820	494	396	260	88	70	70
RMI	2,255	228	10.1	2,027	89.9	641	561	307	220	115	69	79	35
Guam	7,280	1,016	14.0	6,264	86.0	1,173	1,263	1,090	1,270	898	190	158	222
Palau	560	15	2.7	545	97.3	37	66	51	43	48	41	69	190
FSM	6,595	988	15.0	5,607	85.0	1,125	1,151	1,023	1,195	844	148	89	32
RMI	125	13	10.4	112	89.6	11	46	16	32	6	1	0	0
CNMI	2,947	456	15.5	2,491	84.5	401	224	281	372	508	165	244	296
Palau	1,063	35	3.3	1,028	96.7	85	67	99	146	231	71	150	179
FSM	1,792	388	21.7	1,404	78.3	304	141	182	218	273	91	91	104
RMI	92	33	35.9	59	64.1	12	16	0	8	4	3	3	13

Source: Censuses of Micronesian Migrants to Hawaii, Guam, and the CNMI, Table T-72

The data show a snapshot of the population at the time of enumeration. The migration flows show generally increased migration in the two-year periods in the 1990s. Of course, we show only net migration. It is important to remember in assessing flows that some return migration also occurs over time, so it is dangerous to use estimates from continuing sources. Tax data, for example, will include persons who were in an area some time during the year – some people might be in the area at the beginning of the year and leave, others might come to the area partway through. Depending on when the census is taken, we might count both of these individuals, only one of them, or neither. The snapshot approach is not perfect, but it does allow us to see a kind of change over time by taking a series of snapshots, and then assessing what we have.

In this paper we use additional sources, besides the series of Office of Insular Affairs Surveys: The United States collected the 1990 Decennial Census on Guam and in the CNMI. These data sets are used here, in both published and unpublished form, to provide insight into the numbers and characteristics of pre- and post-Compact Micronesian migrants. During the early 1990s, the Office of Insular Affairs, Department of the Interior, funded two surveys: the first, a 1992 census of Micronesians residing on Guam, was supervised by Donald Rubinstein, an anthropologist at the University of Guam. The second funded survey was a 1993 survey of Micronesians (from the Federated States of Micronesia, the Marshall Islands, and Palau) residing in the CNMI. Data from the 1995 Census of the Northern Mariana Islands are also being used, with the approval of the Central Statistics Division, Department of Commerce, CNMI. The University of Guam collected a survey of Palauans on Guam in 1995. Some data from that survey are used here. Finally, in 1997, the Office of Insular Affairs funded censuses of Micronesian Migrants to Hawaii, Guam, and the CNMI.

CHAPTER 4

NUMBERS AND CHARACTERISTICS OF MICRONESIAN MIGRANTS IN GUAM

In this and the next two Chapters we will look only at the post-Compact migrants and their children. We already described how the different sets of migrants were identified. At the International Programs Center, we wrote a computer program in the Census Bureau's Integrated Microcomputer Processing System (IMPS) Consistency and Correction (CONCOR) edit package to add a variable to each person and housing record for the 1997 Censuses of Micronesian Migrants to Hawaii and Guam and the 1998 Census of Micronesian Migrants to the CNMI to indicate migration group for that person.

For the CNMI, in addition to the 1998 Census of Micronesian Migrants to Saipan, we used the 1995 CNMI Census results to obtain more information about Freely Associated States migrant trends to the Commonwealth. Also, in order to see changes in the post-Compact migrant populations, we also used data from the 1990 Censuses of the CNMI and Guam. As noted elsewhere in this paper, the 1990 Census of Hawaii could not provide useful comparative data, so the data presented here use data only from the 1997/8 Censuses of Micronesian migrants.

In order to use the 1990 Census data for Guam and CNMI and the 1995 CNMI data, Michael T. Stroot of the Census Bureau's International Programs Center and the author developed a research subset from the censuses. The subset contained only those households containing at least one person born in one of the Freely Associated States areas – Palau, the Federated States of Micronesia, or the Marshall Islands. These new data sets were comparable to the data sets collected in the 1997/8 Censuses of Micronesian Migrants to Hawaii, Guam, and the CNMI, since in 1997/8, we collected data only from households having at least one Micronesian migrant. So, the analysis uses the following data sets: the 1990 Guam Census subset and data from the 1997 Census of Micronesian Migrants to Guam; the 1990 and 1995 CNMI Censuses, and the 1998 Saipan Census of Micronesian migrants; and, the 1997 Census of Micronesian Migrants to Hawaii.

4.1 Demography

The earliest Micronesian migrants to Guam – like the earliest migrants in most migration streams – were predominantly young males in search of jobs. Many of the original households were inherently unstable, composed as they were of several young men in their twenties or thirties working at low-paying jobs and pooling their income to cover rent and other expenditures (Hezel and McGrath 1989:58-60). In the absence of a more viable authority structure and generational depth, such "peer-group households," as Rubinstein terms them, were continually "dissolving and reforming, with new arrivals coming in, others moving out" (Rubinstein 1993:260). Rubinstein went on to note the gradual evolution of this fragile type of household into more typically Micronesian forms.

And, as in most migration flows, in the second stage of the pattern Rubinstein identified on Guam, two-generation households emerged around a nuclear family, but they contained a potpourri of loosely related kin and friends. Later on, household membership followed kinship principles similar to those back home, with grandparents and other older people being added, giving households important generational depth (Rubinstein 1993:260-261).

Guam has had a broad range of migrant household types, extending from "peer-group households" to the much more stable types that mirror social organization in the migrant's home islands. Data on gender and age distribution of migrants in Guam show how far households in each place have advanced along Rubinstein's spectrum.

Table 4.1 shows some demographic characteristics of the Micronesian migrants and their children in Guam. Because of the very small sample size, information about the pre-Compact Marshallese for this and the following tables in this Chapter will not be shown. The 1997 Census reported a total of 7,280 Micronesian migrants, including 730 pre-Compact migrants and 6,550 post-Compact migrants and children. Of the 6,550 post-Compact migrants, 97 percent were from the Federated States of Micronesia, 2 percent were from the Marshall Islands, and approximately 2 percent were from Palau. Of the total post-Compact migrant category, 1,104, or approximately 17 percent, were the children of Freely Associated States-born persons.

Table 4.1: Demographic Characteristics of Micronesian Migrants and Children, Guam, 1997.

Characteristic	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Population	6,550	730	6,325	270	123	2	102	458
Males	45.3	50.0	50.8	58.5	54.5	50.0	50.0	45.0
Females	54.7	50.0	49.2	41.5	45.5	50.0	50.0	55.0
Sex Ratio	82.9	100.0	103.4	141.1	119.6	100.0	100.0	81.7
Median Age	21.7	37.4	21.7	34.9	17.5	20.0	24.3	41.1
Less than 15 years	35.1	3.7	35.1	5.6	43.1	0.0	21.6	2.6
15 to 29 years	38.9	19.9	38.9	16.3	35.0	100.0	48.0	21.6
30 to 44 years	19.1	46.0	19.2	64.1	17.1	0.0	18.6	35.6
45 to 59 years	5.4	20.0	5.4	12.2	4.9	0.0	6.9	24.7
60 years and over	1.5	10.4	1.5	1.9	0.0	0.0	4.9	15.5
Males 15+ Never Married	51.7	22.3	51.6	19.5	45.5	0.0	61.0	24.5
Females 15+ Never Married	44.1	18.7	43.8	23.6	45.9	100.0	56.4	16.3
Households	979	356	931	139	22	1	26	216
Persons per Household	6.7	2.1	6.8	1.9	5.6	2.0	3.9	2.1
Persons per Family	7.0	2.2	7.1	1.9	5.9	2.0	5.7	2.4

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

The sex ratio for the pre-Compact migrants was 100, indicating that the number of males was the same as the number of females in the population. Among the post-Compact migrants, the ratio was 83, showing more females than males. However, the sex ratios varied among the three Freely Associated States groups. The pre-Compact sex ratio of FSM was 141, indicating a large surplus of males, while the post-Compact ratio of 103 is more balanced, indicating the sex ratio has only slightly more males than females. Among the Marshallese, the post-Compact sex ratio was 120, indicating a surplus of males. The sex ratio of the pre-Compact Palauan community, however, was 82, indicating a surplus of females, while the post-Compact ratio was 100, indicating a balance between the sexes.

The median age of the post-Compact migrants and their children was 21.7 years, while the median age of the pre-Compact migrants was 37.4, almost 16 years older than the post-Compact migrants. This age difference has two aspects. First, the pre-Compact migrants have been residents of Guam for a longer period than the post-Compact migrants. Second, the post-Compact migrants include all children born of Freely Associated States-born persons who were not born in the Freely Associated States, which would lower the median age. Of the post-Compact migrants, the Palauans were the oldest (24.3 years), followed by the FSM (21.7 years) and the Marshallese (17.5 years). Among the pre-Compact migrants, the Palauans were the oldest (41.1 years) followed by the migrants from FSM (34.9 years).

Of the 6,550 post-Compact migrants to Hawaii, approximately 35 percent were less than 15 years old, while about 40 percent were between 15 and 29 years, indicating that many migrants were coming as young families. The post-Compact Marshallese migrants had the largest percentage of children, with 43 percent less than 15 years old. Approximately 35 percent of the FSM and 21 percent of the Palauan post-Compact migrants were less than 15 years old. The low proportion⁴ may be the result of the relatively shorter period of post-Compact migration time Palauans had (three years) compared to Marshallese and FSM migrants (10 years), which could have limited Palauan household formation in Hawaii. In fact, 48 percent of Palauan post-Compact migrants were 15 to 29 years old, compared to 35 percent of the Marshallese and 39 percent of the FSM post-Compact migrants. Approximately 19 percent of all post-Compact migrants were 30 to 44 years, while less than 7 percent were 45 years or older.

With 69 percent of the total population below the age of 30, clearly, the Micronesian migrant community in Guam was a young population in 1997. This youth is reflected in the proportion of never-married pre- and post-Compact migrants. Approximately 52 percent of the adult post- and 22 percent of the pre-Compact males were never married, compared 44 percent of the adult post- and 19 percent of the pre-Compact females were never married.

4 We use “proportion” and “percentage” interchangeably in this paper, although we know that they are not always the same statistically.

The average household size of the 979 post-Compact Freely Associated States households was 6.7 persons ? 6.8 for the FSM households, 5.6 for the Marshall Islanders, and 3.9 for the Palauan households. The average family size was 7.0 persons ? 7.1 for the FSM households, 5.9 for the Marshallese and 5.7 for the Palauans. As expected, because one-person households were not included in the calculation of the average family size, average family size was larger than average household size.

Migration Trends from 1990 to 1997. We use the 1990 Census of Guam and the 1997 Census of the Micronesian Migrants to show trends during the 1990s. Table 4.1a shows some of the basic demographic characteristics these migrants from the Freely Associated States (Freely Associated States) to Guam.

Table 4.1a. Demographic Characteristics, Post-Compact Migrants and Children, Guam: 1990 and 1997

Demographic Characteristics	Total		FSM		RMI		Palau
	1997	1990	1997	1990	1997	1990	
Total	6,550	2,739	6,325	2,658	123	76	102
Males	2,967	1,478	3,213	1,424	67	49	51
Females	3,583	1,261	3,112	1,234	56	27	51
Males per 100 females	82.8	117.2	103.3	115.4	119.8	181.5	100.0
Median	21.7	20.7	21.7	20.9	17.5	15.4	24.3
Less than 15 years (%)	35.1	34.2	35.1	33.7	43.1	48.7	21.6
15 to 29 years (%)	38.9	44.8	38.9	45.0	35.0	42.1	48.0
30 to 44 years (%)	19.1	16.6	19.2	16.9	17.1	7.9	18.6
45 to 59 years (%)	5.4	3.2	5.4	3.3	4.9	1.3	6.9
60 years and over (%)	1.5	1.2	1.5	1.2	0.0	0.0	4.9
Males Never Married (%)	51.7	58.9	51.6	58.4	45.5	73.3	61.0
Females Never Married (%)	44.1	51.6	43.8	51.7	45.9	44.4	56.4
Households	979	331	931	325	22	6	26
Persons per household	6.66	8.27	6.77	8.18	5.59	12.67	3.78
Persons per family	6.97	8.27	7.03	8.18	5.86	12.67	5.37

Sources: 1997 Guam Micronesian Census and 1990 Decennial Census of Guam

As noted in the methodology section, we are showing here only persons who migrated after the Compacts of Free Association were implemented ? 1987 for migrants from the Federated States of Micronesia (FSM) and the Republic of the Marshall Islands (RMI) ? and children of migrants (no matter when they migrated.) All children were included because they were either migrants themselves, and therefore in the first category if they migrated after compact implementation, or were children of householders who were not born in the Freely Associated States, but who had at least one parent born there.

The number of post-Compact migrants and their children more than doubled between 1990 and 1997, from 2,739 persons in 1990 to 6,550 in 1997. The percentage increase for males was much less than for females, as shown in the number of males for every 100 females, which decreased from 117 in 1990 to 83 in 1997. The selective migration of females shows increasing family unification as well as increased migrant female labor force participation. The median age increased by about one year between 1990, from 21 in 1990 to 22 in 1997, showing an aging of the resident Micronesian migrant population, and possibly an increase in older migrants.

The aging of the population is also shown in the percentage distribution by age group. While the percentage of those under 15 years old slightly increased (and, of course, the numbers continued to increase, so the impact on elementary schools continued to rise), the percentage in the 15 to 29 year group decreased sharply, while the percentage 20 to 59 increased sharply.

More families were moving to Guam as the period of the compact continued, and they were more likely to live in smaller households. In 1990 about 6 in every 10 males 15 years and over were never married, but this proportion decreased to about half in 1997; similarly, the percentage of never married females also declined. The number of post-Compact households increased from 331 to 979 during the period, while the number of persons per household (and per family) decreased from more than 8 in 1990 to less than 7 in 1997. This decrease was more than one person per household, but still well above Guam's overall average.

Since the Republic of Palau did not implement its Compact of Free Association until October 1, 1994, the 1990 Census data could show no post-Compact Palau migration; hence, only the 1997 Guam data for Palau born (and offspring) are shown in the table. And, since only 102 post-Compact Palau migrants went to Guam, the numbers are essentially too small to discuss. The number of Marshall Islands migrants increased from 76 to 123 during the period (with the increase in female migrants much greater than male migrants), but with the numbers being so small that the numbers also are too small to show very much. Between 1990 and 1997, the percentage of never married adult Marshallese decreased to less than half of the total, and the persons per household decreased by 50 percent, from more than 12 per household to less than 6.

The FSM migration was very similar to the migration for all Freely Associated States, as would be expected since most of the migrants were from the FSM.

4.2 Citizenship and Residency Status

Citizenship is collected in most censuses and population surveys, and, in the U.S. Areas, the focus is on U.S. citizenship. Since persons born in Freely Associated States cannot be citizens by birth, they can only become U.S. citizens through Naturalization (or by having one U.S. born parent). And clearly, the longer the residence is in a U.S. Area, the more likely a person would be to become a citizen.

Table 4.2: Citizenship Status and Place of Residence 1 and 5 Years Ago of Micronesian Migrants and Children. Guam. 1997.

Characteristics	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Population	6,550	730	6,325	270	123	2	102	458
Population born 5 Years Ago or Before	86.9	100.0	86.8	100.0	88.6	100.0	91.2	100.0
Citizenship Status								
U.S. Citizen	17.1	9.2	17.2	0.7	15.4	0.0	15.7	14.2
Permanent Resident	17.8	49.6	17.5	27.8	22.0	50.0	34.3	62.4
Residency Status								
Current Residence, 5 Years Ago	19.1	58.5	19.3	34.1	8.3	0.0	38.7	73.1
Current Residence, 1 Year Ago	61.7	90.0	61.7	82.2	57.7	100.0	65.7	94.5
Outside Area, 5 Years Ago	44.0	6.8	43.5	7.8	57.8	100.0	54.8	5.9
Outside Area, 1 Year Ago	23.4	1.4	23.5	2.6	15.4	0.0	24.5	0.7

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Table 4.2 shows the citizenship status and place of residence one and five years ago of the Micronesian migrants and their children in Guam. (See Appendix B for definitions of terms used.) Approximately 9 percent of the pre- and 17 percent of the post-Compact migrants were citizens. In general, the proportion of post-Compact migrants who were citizens was higher than the proportion of pre-Compact migrants, because the post-Compact category included all children of the Freely Associated States migrants born in the United States.

Of the non-citizens, about 18 percent of the post-Compact migrants were permanent residents compared to 50 percent of the pre-Compact migrants. In each of the Freely Associated States groups, a higher proportion of pre-Compact migrants than post-Compact migrants were permanent residents, which reflects the longer settlement period experienced by the pre-Compact migrants. About 28 percent of the FSM and 62 percent of the Palauan pre-Compact migrants were permanent residents. Among the pre-Compact migrants, 34 percent of the Palauan, 22 percent of the Marshallese and 18 percent of the FSM post-Compact migrants were permanent residents.

Table 4.2 also shows information on the place of residence one and five years prior to the 1997 Census. Approximately 19 percent of the post- and 59 percent of the pre-Compact migrants lived in the same residence in 1997 as they did in 1992. Not surprisingly, a larger proportion of post-Compact migrants (44 percent) lived outside Guam five years before than pre-Compact migrants (7 percent). Approximately 62 percent of the post-Compact migrants lived in the same residence in 1996 as they did in 1997, with only about 23 percent living outside of Guam in 1996. The largest groups of pre-Compact residence (90 percent) lived in the same house one year prior as they did in 1997.

Post-Compact Marshallese (58 percent) were the most likely to live outside of Guam five years earlier, followed by the post-Compact Palauans (55 percent), while the post-Compact Palauans were the most likely to live outside of Guam one year earlier, which probably reflects the later Compact implementation date. The pre-Compact Palauans were the most likely to have lived in the same house either one (95 percent) or five (73 percent) years earlier.

Migration trends. The 1990 census and the recent censuses also collected self-reported information on whether the respondent considered him/herself to be a permanent or temporary resident. Permanent residence indicated a desire to remain, that immigration was for the purpose of settling in and remaining over the very long term. “Temporary” residence being more like a “trip”, as a transition from adolescence to adulthood (Levin 1976). Many young people in Micronesia, like their distant and recent ancestors use a trip as a method of moving from one extended family to the next.

Table 4.2a shows some migration characteristics for the Freely Associated States migrants. The percentage of U.S. citizens among the post-Compact migrants (and offspring) decreased from 24 percent in the 1990 Census, to about 17 percent in 1997. It is important to remember here that the 1990 Census was conducted, for the most part, by non-Micronesian interviewers who probably did not understand the Compact relationships, and who may have intimidated the Micronesian respondents into self-reporting U.S. citizenship even when citizenship requirements were not met. Marshallese were more likely to report U.S. citizenship in 1990 (2 in every 5 persons), than in 1997 (only about 3 in 20).

Table 4.2a. Migration Characteristics, Post-Compact Migrants & Children, Guam: 1990 and 1997

Migration Characteristics	Total		FSM		RMI		Palau
	1997	1990	1997	1990	1997	1990	
U.S. citizen (%)	17.1	24.2	17.2	23.6	15.4	39.5	15.7
Noncitizens, Permanent (%)	21.5	45.2	21.1	45.3	26.0	41.3	40.7
Moved for employment (%)	43.2	...	44.0	...	22.7	...	21.8
Persons 5 yrs and over:							
5 yrs ago in this house (%)	19.4	7.9	19.3	7.9	8.3	11.5	38.7
5 yrs ago outside Area (%)	44.0	84.8	43.5	84.7	57.8	85.2	54.8
1 yr ago in this house (%)	70.6	...	70.7	...	65.1	...	72.0
1 yr ago outside Area (%)	11.9	...	12.0	...	4.6	...	17.2

Sources: 1997 Guam Micronesian Census and 1990 Decennial Census of Guam

In both 1990 and 1997, for those persons who reported that they were not U.S. citizens, the census requested whether the migration was “permanent” or “temporary”, but these categories are self-determined, and it is not known whether enumerator training and practice actually were the same in the two censuses. These categories are not conventional Census Bureau categories, and were included at the request of Guam and the other Insular Areas in 1990, so are open to interpretation.

Of the Freely Associated States noncitizens in 1990, 45 percent were permanent noncitizens, compared to 22 percent in 1997, indicating that by 1997 about 4 in every 5 Micronesian migrants did not intend to stay permanently on Guam. These “temporary” migrants may have come for schooling or medical treatment, but they are more likely to have migrated to take advantage of the Compact’s provisions about free entry to work for a while, with the intention of returning to their respective nations some time later.

The percentage of persons who lived in the same house 5 years before the census increased from 8 percent in 1990 to 19 percent in 1997 (both the numbers and percentages more than doubling during the 7 year period). What this means is that many of the Micronesians had established themselves by 1997, and were living in housing on a more permanent basis. Similarly, the percentage of the Micronesians who had lived outside Guam 5 years before the census decreased rapidly, from 85 percent in 1990 to 44 percent in 1997. The percentage decreases for the FSM and RMI migrants were about the same as for the Freely Associated States total population.

Only the 1997 Census had an item on residence one year before the census. About 7 in every 10 Micronesians lived in the same house in 1996 as 1997, and only about 1 in every 8 lived outside of Guam in 1996. Palauans were most likely to have lived outside one year before the census, Marshallese least likely.

4.3 Reasons for Migrating

Table 4.3 shows the reasons for migrating by sex for both the pre- and post-Compact migrants. Even though the amount of migration increased dramatically since the implementation of the Compact, the reasons given for emigration by both pre- and post-Compact migrants have remained basically unchanged.

Table 4.3: Reasons for Migrating by Sex for Pre- and Post-Compact Migrants Only, Guam, 1997.

Reason for Migrating	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Migrant Population	5,446	730	5,254	270	105	2	87	458
Employment	43.9	32.1	44.7	41.1	23.8	50.0	21.8	26.6
Spouse of Employed	6.7	10.0	6.7	7.4	7.6	0.0	4.6	11.6
Dependent of Employed	25.4	11.2	25.5	11.5	32.4	0.0	10.3	11.1
Family Subsistence	2.1	0.4	2.1	0.4	2.9	0.0	1.1	0.4
Family Business	0.4	0.1	0.4	0.4	0.0	0.0	1.1	0.0
Missionary Activities	0.6	1.6	0.5	0.7	1.9	0.0	3.4	2.2
Medical Reasons	0.5	0.1	0.5	0.4	0.0	0.0	0.0	0.0
Visiting or Vacation	4.8	9.9	4.6	1.9	3.8	0.0	21.8	14.6
School	15.5	34.5	14.9	36.3	27.6	50.0	35.6	33.4
Males	2,769	365	2,672	158	54	1	43	206
Employment	54.0	43.0	54.8	52.5	33.3	100.0	27.9	35.4
Spouse of Employed	0.8	1.6	0.8	0.6	0.0	0.0	2.3	2.4
Dependent of Employed	23.8	7.1	24.0	8.2	33.3	0.0	2.3	6.3
Family Subsistence	1.3	0.8	1.3	0.6	1.9	0.0	0.0	1.0
Family Business	0.3	0.3	0.3	0.6	0.0	0.0	0.0	0.0
Missionary Activities	0.6	1.4	0.5	0.6	3.7	0.0	0.0	1.9
Medical Reasons	0.4	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Visiting or Vacation	3.9	8.2	3.6	1.3	3.7	0.0	27.9	13.6
School	14.9	37.5	14.3	35.4	24.1	0.0	39.5	39.3
Females	2,677	365	2,582	112	51	1	44	252
Employment	33.5	21.1	34.2	25.0	13.7	0.0	15.9	19.4
Spouse of Employed	12.8	18.4	12.9	17.0	15.7	0.0	6.8	19.0
Dependent of Employed	27.1	15.3	27.2	16.1	31.4	0.0	18.2	15.1
Family Subsistence	3.0	0.0	2.9	0.0	3.9	0.0	2.3	0.0
Family Business	0.5	0.0	0.5	0.0	0.0	0.0	2.3	0.0
Missionary Activities	0.6	1.9	0.5	0.9	0.0	0.0	6.8	2.4
Medical Reasons	0.6	0.3	0.6	0.9	0.0	0.0	0.0	0.0
Visiting or Vacation	5.8	11.5	5.7	2.7	3.9	0.0	15.9	15.5
School	16.1	31.5	15.6	37.5	31.4	100.0	31.8	28.6

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

The largest groups of pre-Compact migrants left for schooling (35 percent), employment (32 percent) or as a spouse (10 percent) or dependent (11 percent) of an employed person. The three main reasons post-Compact migrants moved were employment (44 percent), as a spouse (7 percent) or dependent (25 percent) and schooling (16 percent). Not surprisingly, when comparing the pre- and post-Compact groups, the proportion emigrating for reasons of employment was larger for the later group who could migrate freely, while education was greater for the earlier group who *had* to migrate for education. Spousal emigration also was a smaller percentage, while dependent emigration was a larger portion, possibly reflecting an increase in the percent of never married immigrants among the post-Compact migrants.

This pattern held for the FSM migrant groups, not surprising since they represented 97 percent of the Micronesian migrant community. One difference from the more general pattern is that the proportion of FSM migrants coming to Guam for a visit or vacation was twice as large – approximately 2 percent compared to 4 percent. Among male and female migrants, the only difference was in the proportion who came to Guam as either a spouse or dependent of an employed person. Among FSM males, the proportion migrating as a spouse remained low and unchanged, while the proportion emigrating as a dependent was almost 3 times as large. Among FSM females, the proportion emigrating as a spouse was smaller, while the proportion emigrating as a dependent was larger.

The very few pre-Compact Marshallese migrants did not provide enough information on the changes in the reasons for migrating. However, differences varied in the reasons why male and female Marshallese migrated. The largest groups of Marshallese males migrated for employment (33 percent), as a dependent of an employed person (33 percent) or for school (24 percent).

For Palau, more pre-Compact migrants were in Guam than post-Compact migrants, reflecting the shorter post-Compact migration period or indicating a decline in the amount of Palauan immigration through time. Along with this smaller number, the reasons given for migration also changed. The percent of Palauans immigrating for reasons of employment or as either a spouse or dependent of an employed person was lower for the pre-Compact migrants, but the percent immigrating for education was higher. However, this pattern was different for male and female immigrants. The proportion of males emigrating for visits or vacation was greater for the post-Compact migrants, while the proportion emigrating for employment or as a dependent of employed was less. The proportion emigrating as a spouse of an employed person or for school was about the same. The proportion of females emigrating for visits or vacations was about the same for both groups, while the proportion emigrating for employment or as a spouse of an employed person was lower for the post-Compact migrants. The proportion emigrating for school or as a dependent of an employed person was greater for post-Compact migrants.

Migration trends. Although the 1990 Censuses did not ask questions about the reasons for migration, the 1997 Census of Micronesian migrants did ask this item to all persons not born on Guam. Of those, 43 percent of the migrants migrated for ?employment?, but others migrated either as the spouse or children of a migrant who came to work (Table 4.2a).

The decennial censuses and many of the surveys in the Insular Areas collect data on short and long term migration. Basic long-term migration data are obtained from the item on birthplace, which is used in this paper as the basic identifier and gives migration since birth. A second long-term migration measure is generational migration which shows movement from one generation to the next (and which we are not showing here). The citizenship item obtained information about long term migration.

We have already discussed one of the short-term migration variables – year of arrival at the new destination. Another is to look at a specific point in the past, usually 5 years before the census or survey, but sometimes 1 year before. The 1990 and 1997 Censuses also asked questions on residence 5 years before the census, and the 1997 Census asked an item on residence one year before the census.

4.4 **Social Characteristics**

Table 4.4: Language Use, School Enrollment and Educational Attainment of Micronesian Migrants and Children, Guam, 1997.

Characteristics	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Population	6,550	730	6,325	270	123	2	102	458
Persons 5+ Years	5,694	730	5,492	270	109	2	93	458
Language Use (5+ Years)								
Speak English at Home	15.8	20.0	15.9	14.1	6.4	50.0	24.7	23.4
Speak Other Language at Home More Frequently than English	75.1	41.4	75.7	68.1	93.6	50.0	34.4	25.8
School Enrollment								
Persons 3+ Years, Enrolled	1,748	81	1,667	35	56	1	25	45
Public Elementary School	57.1	27.2	57.3	42.9	58.9	0.0	40.0	15.6
Public High School	18.8	13.6	19.0	14.3	17.9	0.0	12.0	13.3
College/University	14.5	56.8	14.0	42.9	14.3	0.0	48.0	68.9
Educational Attainment (Cumulative Percent)								
Total Persons 25+ Years	2,617	632	2,535	236	34	0	48	396
No Education	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0
Grade 8 or Less	96.8	99.2	96.6	98.3	100.0	0.0	100.0	99.7
Some High School	68.5	87.8	67.7	86.9	100.0	0.0	85.4	88.4
High School Graduate	48.8	74.2	47.8	77.5	85.3	0.0	77.1	72.2
Some College/Two Year Degree	20.1	48.4	19.2	55.5	38.2	0.0	54.2	44.2
Bachelor's Degree	1.5	9.8	1.3	9.7	5.9	0.0	8.3	9.8
Graduate Degree	0.2	1.4	0.2	0.4	0.0	0.0	2.1	2.0
Males 25+ Years								
No Education	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0
Grade 8 or Less	97.5	99.4	97.4	99.3	100.0	0.0	100.0	99.4
Some High School	72.6	88.8	72.0	85.0	100.0	0.0	82.1	91.9
High School Graduate	53.4	77.0	52.4	73.6	89.5	0.0	75.0	79.8
Some College/Two Year Degree	23.3	52.1	22.2	55.7	52.6	0.0	53.6	49.1
Bachelor's Degree	1.7	11.2	1.6	11.4	5.3	0.0	3.6	11.0
Graduate Degree	0.4	1.6	0.3	0.0	0.0	0.0	3.6	2.9
Females 25+ Years								
No Education	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0
Grade 8 or Less	96.0	99.1	95.9	96.9	100.0	0.0	100.0	100.0
Some High School	63.9	86.8	63.0	89.6	100.0	0.0	90.0	85.7
High School Graduate	43.7	71.5	42.7	83.3	80.0	0.0	80.0	66.4
Some College/Two Year Degree	16.6	44.8	15.9	55.2	20.0	0.0	55.0	40.4
Bachelor's Degree	1.2	8.5	0.9	7.3	6.7	0.0	15.0	9.0
Graduate Degree	0.1	1.3	0.1	1.0	0.0	0.0	0.0	1.3

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Table 4.4 includes information about selected social characteristics of the pre- and post-Compact migrants and their children, including language spoken at home, school enrollment and educational attainment. About 16 percent of the post-Compact Freely Associated States migrants aged 5 years and over spoke English at home compared to 20 percent of the pre-Compact migrants. Of the post-Compact migrants, Palauans (25 percent) were the most likely to speak English at home, followed by migrants from FSM (16 percent) and the Marshalls (6 percent). Approximately 75 percent of the post-Compact Freely Associated States migrants spoke a language other than English more frequently at home, compared to only 41 percent of the pre-Compact migrants. Among the post-Compact migrants, the Marshallese (94 percent) were the most likely to speak a language other than English at home, followed by FSM (76 percent) and Palauan (34 percent) migrants.

In 1997, 1,829 pre- and post-Compact migrants were three years and over enrolled in school. Of those, 56 percent were enrolled in public elementary school, 19 percent in public high school and 16 percent in college. Of the total enrolled, 1,748, or 96 percent, were post-Compact Freely Associated States migrants or their children. Of the post-Compact migrants enrolled in school, 95 percent were FSM migrants, 3 percent were Marshallese and less than 2 percent were Palauan. Most of those enrolled were attending either public elementary school (57 percent) or public high school (19 percent). Approximately 250 post-Compact Freely Associated States migrants were attending college, either public or private.

Approximately 49 percent of post- and 74 percent of pre-Compact migrants aged 25 years and over had at least a high school diploma – that is, were high school graduates, had some college or a two-year degree, or a bachelor’s or graduate degree. Pre-Compact migrants had a higher proportion of persons who had some college or a two-year degree or a bachelor’s or graduate degree, but the post-Compact migrants had a higher proportion of high school graduates. However, compared to pre-Compact migrants, post-Compact migrants had a higher percentage of individuals with no education, grade 8 education or less and some high school. The differences between the pre- and post-Compact groups may be a result of the migration privileges associated with the Compact, which facilitated the emigration of a greater proportion of less-educated, and probably less-skilled, Micronesians. This pattern held for the FSM pre- and post-Compact groups. For the Palauans, a higher proportion of post-Compact migrants had grade 8 education or less and some college or a two-year degree, while the pre-Compact group had a higher proportion with some high school, a high school degree or a bachelor’s degree.

Table 4.4a. Social Characteristics, Post-Compact Migrants & Children, Guam: 1990 and 1997

Social Characteristics	Total		FSM		RMI		Palau 1997
	1997	1990	1997	1990	1997	1990	
Speak English at home (%)	15.0	8.1	15.0	7.6	4.7	27.9	26.0
Other lang more than English (%)	75.1	64.6	75.7	64.9	82.6	49.2	34.4
Persons 3+, enrolled	1,408	779	1,336	735	53	41	19
Public elementary school	787	351	751	332	30	16	6
Public high school	282	145	269	143	11	2	2
College	211	151	193	140	7	11	11
Persons 25 + years:							
High school Graduates (%)	48.8	60.0	47.8	59.7	85.3	76.9	77.1
Bachelor's Degrees (%)	1.5	8.0	1.3	8.1	5.9	0.0	8.3
Females:							
High school Graduates (%)	43.7	57.5	42.7	57.9	80.0	25.0	80.0
Bachelor's Degrees (%)	1.2	8.2	0.9	8.3	6.7	0.0	15.0

Sources: 1997 Guam Micronesian Census and 1990 Decennial Census of Guam

Among both the pre- and post-Compact migrants, larger proportions of females than males were less than high school graduates. However, the difference between pre- and post-Compact migrants was greater for females than for males. For example, 29 percent of the pre- and 56 percent of the post-Compact females had less than a high school education, compared to 23 percent of the pre- and 47 percent of the post-Compact males, indicating a larger proportional increase of less educated post-Compact females. Among post-Compact migrants, a lower proportion of females than males graduated high school, had some college or a two-year degree, or a bachelor’s or graduate degree. Among pre-Compact migrants, a lower proportion of females than males had some college or a two-year degree or a bachelor’s or graduate degree, but a higher proportion graduated high school.

Migration trends. Table 4.4a shows social characteristics for the Micronesian migrants to Guam in 1990 and 1997. The social characteristics selected for this study are language spoken at home, school enrollment, and educational attainment. The 1990 Census collected information on other topics, and the 1997 Census of Micronesian Migrants collected information on many more items, but these will be analyzed in a later report.

About 8 percent of the post-Compact Micronesian migrant population aged 5 years and over spoke English at home, as reported in the 1990 Census, compared to 15 percent in 1997. Of those who spoke a language other than English, about 2 in 3 spoke that language more than English in 1990, but that proportion increased to 3 in 4 in 1997. The percentages for the FSM were similar to the total, while the small number of Marshallese showed a different pattern—the percentage speaking only English decreased and the percentage speaking a language other than English who also spoke that language more than English increased considerably during the 7 year period. About 1 in every 4 Palau migrants spoke only English at home, and of those who spoke another language, about 1 in 3 spoke that language more than English.

About 1,400 post-Compact migrants 3 years and over in 1997 were enrolled in school, up considerably from the 800 in 1990. The number in public elementary schools increased from 351 in 1990 to 787 in 1997, and those in public high schools increased from 145 to 282 during the period. As noted, all post-Compact migrants who are children or are children of post-Compact migrants are included here, but children of migrants whose parents were also born on Guam or the U.S. were excluded. Most of the migrants in the table were from the Federated States of Micronesia, as would be expected. More than half of the enrolled Palauan migrants were in college. The number of post-Compact migrants in college increased from 151 to 211 during the 7 year period, and, of course, most of these migrants were from the Federated States of Micronesia.

As the migration from the Freely Association States continued over the decade, the percentage of high school and college graduates decreased, partly because of the lag between implementation of the Compact and large scale migration. Also, economic conditions worsened in the Federated States of Micronesia (which has been sending most of the migrants). About 60 percent of the post-Compact migration population 25 years and over in 1990 were high school graduates compared to 49 percent in 1997 (and 58 percent of the females in 1990 decreasing to 44 percent in 1990). The percentage of college graduates decreased from 8 percent in 1990 to about 2 percent in 1997.

The percentages for the FSM were similar to those for the whole population. More than 85 percent of the adult post-Compact Marshallese in 1997 were high school graduates, and 4 in every 5 of the Marshallese females. About 6 percent of the Marshallese were college graduates, including 7 percent of the females. And, for 1997, 77 percent of the Palauans were high school graduates and 8 percent were college graduates, including 80 percent of the females being high school graduates and almost 15 percent being college graduates.

In the 1996 Impact report (Levin, 1996) we showed educational levels of migrants and the resident FSM population in 1994. Since the older age cohorts, under-represented in the migrant communities, have had fewer opportunities for schooling since many were raised during the time of Japanese colonization, we selected only a mid-range age group (aged 25 to 44) in an effort to make a more meaningful comparison. For this age group, migrant communities in the CNMI and Guam had a significantly greater percentage of those who obtained their high school diplomas. Fully 53 percent of all FSM citizens on Guam in 1992 and nearly 59 percent in the CNMI in 1993 had finished high school, compared with less than 40 percent of the FSM resident population in 1994. As we progress up the educational ladder, however, the figures lean in the other direction. The percentage of those who had some college but did not finish their degree was roughly the same in all three populations, while the rate of college degree holders in the FSM was much higher than in either of the migrant communities abroad. Nearly 12 percent of all FSM residents aged 25 to 44 had either associate's or bachelor's degrees, whereas only 4 percent of the FSM migrants on Guam and about 3 percent of those in the CNMI had such degrees.

These data reveal that the outflow of migrants to Guam and the CNMI cannot be called a "brain drain" in the usual census of that term. They also confirm the suspicion that those Micronesians with the best degrees, and thus the brightest prospects for employment, will remain in the FSM and take the best jobs (Hezel and McGrath 1989:62). Those who have left home characteristically have been those with a high school diploma, or perhaps a year or two of college, who would be entering the labor pool in the FSM without the kind of credentials that would have given them a competitive edge in the battle for employment there.

4.5 **Economic Characteristics**

Table 4.5 shows labor force characteristics of the Micronesian migrants and their children aged 16 years and over. Of the 4,840 Freely Associated States migrants age 16 years and over on Guam, 4,144, or 86 percent, were post-Compact migrants. Fully 59 percent of the post-Compact migrants aged 16 years and over were in the labor force, which was slightly higher than the 57 percent of the pre-Compact migrants that were in the labor force. Among the FSM migrants, the proportion of pre-Compact migrants in the labor force was higher than that of the post-Compact migrants. The reverse was true for the Palauan migrants. A larger proportion of male than female pre- and post-Compact migrants were in the labor force. Approximately 70 percent of the pre- and post-Compact males were in the labor force, but 44 percent of the pre- and 47 percent of post-Compact females were in the labor force. Among the FSM migrant community, a higher proportion of male and female pre-Compact than post-Compact migrants were in the labor force. Among the Palauans, the proportion of pre- and post-Compact males in the labor force was about the same, but a higher proportion of post- than pre-Compact females were in the labor force. Among all the Freely Associated States groups, pre-Compact FSM males (74 percent) and females (54 percent) were the most likely to be in the labor force.

Table 4.5: Labor Force Characteristics of Micronesian Migrants and Children, Age 16 Years and Over, Guam, 1997.

Characteristics	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Persons 16+ Years	4,144	696	3,997	252	68	2	79	442
In the Labor Force	58.6	57.0	58.6	65.5	54.4	50.0	60.8	52.3
Unemployed	13.0	4.5	13.1	7.3	13.5	0.0	8.3	2.6
Worked During 1996	44.5	46.6	44.7	57.1	44.1	50.0	35.4	40.5
Worked Whole Year	29.5	34.9	29.5	40.5	32.4	50.0	24.1	31.7
Worked Full-Time	42.3	44.3	42.6	54.8	38.2	50.0	32.9	38.2
Worked Whole Year, Full-Time	28.4	34.2	28.4	39.7	29.4	50.0	24.1	31.0
Males 16+ Years	1,470	244	1,421	108	21	1	28	135
In the Labor Force	69.6	70.7	69.7	73.5	65.6	100.0	68.3	68.5
Unemployed	9.7	4.1	9.9	4.6	4.8	0.0	3.6	3.7
Worked During 1996	78.7	83.6	79.0	89.8	90.5	100.0	57.1	78.5
Worked Whole Year	53.3	66.8	53.0	69.4	85.7	100.0	42.9	64.4
Worked Full-Time	76.1	80.3	76.4	88.9	81.0	100.0	53.6	73.3
Worked Whole Year, Full-Time	52.0	65.6	51.8	69.4	76.2	100.0	42.9	62.2
Females 16+ Years	2,032	351	1,958	105	36	1	38	245
In the Labor Force	47.1	43.6	47.1	54.3	44.4	0.0	52.6	39.2
Unemployed	18.1	5.2	18.0	12.3	25.0	...	15.0	1.0
Worked During 1996	33.9	34.2	34.0	44.8	30.6	0.0	31.6	29.8
Worked Whole Year	21.6	22.8	21.9	25.7	11.1	0.0	18.4	21.6
Worked Full-Time	31.3	31.9	31.4	40.0	25.0	0.0	28.9	28.6
Worked Whole Year, Full-Time	20.3	22.2	20.5	23.8	11.1	0.0	18.4	21.6

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Approximately 10 percent of all Freely Associated States migrants and their children aged 16 years and over were unemployed. Among the post-Compact migrants, 13 percent were unemployed while only 4 percent of the pre-Compact migrants were unemployed. Unemployment was higher among the post-Compact FSM (13 percent), Marshallese (14 percent) and Palauan (8 percent) migrants. The proportion of unemployed was higher among the post-Compact migrants than among the pre-Compact group, a pattern that generally held for each of the Freely Associated States groups.

Unemployment for females was higher than for males. The pre-Compact unemployment rate of 5 percent for women was much lower than the post-Compact rate of 18 percent. Among the post-Compact female migrants, 25 percent of the Marshallese, 18 percent of the FSM and 15 percent of the Palauan migrants were unemployed. The pre-Compact unemployment rate of 4 percent for pre-Compact males was lower than the 10 percent for post-Compact males. Among the post-Compact males, 10 percent of the FSM, 5 percent of the Marshallese and 4 percent of the Palauan migrants were unemployed, while only 5 percent of the Marshallese and 4 percent of the Palauan pre-Compact migrants were unemployed.

Generally speaking, pre-Compact migrants worked more than post-Compact migrants. About 47 percent of the pre-Compact migrants worked in 1996, with 35 percent working the whole year, 44 percent working full-time and 34 percent working the whole year full-time. However, only 45 percent of the post-Compact migrants worked during 1996, with 30 percent working the whole year, 42 percent working full-time and 28 percent working the whole year full-time. Of the Freely Associated States groups, the pre-Compact FSM migrants were the most likely and the post-Compact Palauan migrants were the least likely to have worked during the previous year, the whole year, full-time and the whole year full-time. Approximately 79 percent of the males and 34 percent of the females worked in 1996.

Occupational and Industrial Concentration Among Freely Associated States Migrants

Table 4.5a shows the major occupation groups for employed pre- and post-Compact migrants aged 16 years and older. The largest groups (55 percent) of the Freely Associated States migrants and their children were employed in precision production and craft occupations. This occupational concentration can be seen in both the pre- and post-Compact categories. Approximately 45 percent of the pre-Compact and 57 percent of the post-Compact migrants were in this occupational category. However, differences between the pre- and post-Compact groups existed. Among the pre-Compact migrants, 24 percent were in agricultural, forestry and fishing occupations, 11 percent were in professional, technical and managerial occupations, while 10 percent were operators, fabricators and general laborers. Among the post-Compact migrants, 16 percent were operators, fabricators and general laborers, 15 percent were in agricultural, forestry and fishing, and less than 2 percent were in professional, technical and managerial occupations.

Table 4.5a: Occupation of Micronesian Migrants and Their Children, Guam, 1997.

Occupation	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Employed Persons 16+ Years	2,113	379	2,037	153	32	1	44	225
Professional/Technical/Managerial	1.4	10.6	1.4	6.5	0.0	0.0	4.5	13.3
Clerical/Sales	1.1	2.6	1.0	0.7	6.3	0.0	2.3	4.0
Services	0.5	1.3	0.5	0.0	0.0	0.0	0.0	2.2
Agriculture/Forestry/Fishing	14.7	24.0	14.5	26.1	21.9	100.0	15.9	22.2
Precision Production/Crafts	57.4	44.9	57.3	44.4	56.3	0.0	59.1	45.3
Operators/Fabricators/Laborers	16.1	10.3	16.3	13.1	9.4	0.0	13.6	8.4
All Others	8.8	6.3	8.9	9.2	6.3	0.0	4.5	4.4
Employed Males 16+ Years	1,328	234	1,281	103	20	1	27	130
Professional/Technical/Managerial	1.4	11.1	1.4	8.7	0.0	0.0	3.7	13.1
Clerical/Sales	1.4	3.4	1.2	1.0	10.0	0.0	0.0	5.4
Services	0.5	1.7	0.5	0.0	0.0	0.0	0.0	3.1
Agriculture/Forestry/Fishing	10.8	17.1	10.8	21.4	15.0	100.0	7.4	13.1
Precision Production/Crafts	54.5	45.3	54.4	42.7	55.0	0.0	59.3	47.7
Operators/Fabricators/Laborers	23.7	15.8	24.0	18.4	10.0	0.0	22.2	13.8
All Others	7.7	5.6	7.7	7.8	10.0	0.0	7.4	3.8
Employed Females 16+ Years	785	145	756	50	12	0	17	95
Professional/Technical/Managerial	1.4	9.7	1.3	2.0	0.0	0.0	0.0	13.7
Clerical/Sales	0.8	1.4	0.7	0.0	0.0	0.0	0.0	2.1
Services	0.5	0.7	0.5	0.0	0.0	0.0	0.0	1.1
Agriculture/Forestry/Fishing	21.3	35.2	20.9	36.0	33.3	0.0	0.0	34.7
Precision Production/Crafts	62.2	44.1	62.3	48.0	58.3	0.0	0.0	42.1
Operators/Fabricators/Laborers	3.3	1.4	3.3	2.0	8.3	0.0	0.0	1.1
All Others	10.6	7.6	11.0	12.0	0.0	0.0	0.0	5.3

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

This pattern of occupational concentration can be generally seen among the Freely Associated States groups, although with some differences. The largest groups of all of the pre- and post-Compact Freely Associated States groups were in precision production and craft occupations. This proportion ranged from a high of 59 percent for the post-Compact Palauan community to a low of 44 percent for the pre-Compact FSM community. The second most common occupational category for most groups was agriculture, forestry and fishing. For the pre-Compact FSM and Palauan migrants and the post-Compact Marshallese and Palauan groups, the agricultural, forestry and fishing was the second most common occupation, ranging from a high of 26 percent for pre-Compact FSM migrants to a low of 15 percent for post-Compact FSM migrants. The third most common occupational category was operators, fabricators and laborers. This category was the second most common category for the post-Compact FSM migrants. Notably, 13 percent of the pre-Compact Palauan migrants were in professional, technical and managerial occupations.

The largest groups of both male and female pre- and post-Compact migrants were in precision production and crafts occupation. The post-Compact females had the highest percentage (62 percent) in precision production and crafts occupations. The second most common occupational category for women was agriculture, forestry and fishing. Approximately 21 percent of the post- and 35 percent of the pre-Compact women were in agriculture, forestry and fishing occupations. Approximately 10 percent of the pre-Compact women were in professional, technical and managerial occupations, but the largest groups of these were Palauan women. The second most common occupational category for post-Compact males was operators, fabricators and laborers (24 percent), followed by agriculture, forestry and fishing (11 percent). The proportion of pre-Compact males was about the same in these two categories. Approximately 17 percent were in agriculture, forestry and fishing occupations, while 16 percent were operators, fabricators and laborers. About 11 percent of the pre-Compact males were in professional, technical and managerial professions, but, again, the largest groups of these were Palauan males.

In the precision production and craft category, the largest groups of employed Micronesians worked in the food and beverage preparation and service occupations (46 percent), which represented about 30 percent of the total employed labor force. Approximately 16 percent worked in cleaning and building service occupations (including personal service occupations) and about 10 percent worked as guards. Some differences existed between males and females. A greater proportion of females worked in food and beverage preparation and service occupations (64 percent) and in cleaning and building service occupations (24 percent) than males (35 percent and 10 percent, respectively). However, a greater proportion of males (14 percent) than females (3 percent) worked as guards. In general, in the precision production and craft category, males were less concentrated within certain occupations than women.

In the “operators, fabricators and laborers” category, the largest groups of employed Micronesians worked as helpers for either machine operators and tenders (22 percent) or the construction trades (19 percent), which together represent about 7 percent of the total labor force. Approximately 15 percent worked in unclassified manual occupations. Only 7 percent of the laborers in this occupational category were women, the largest groups (54 percent) being helpers for machine operators and tenders. In the agriculture, forestry and fishing category, the largest groups worked in general sales occupations (41 percent), which represented about 8 percent of the total labor force. Over 82 percent of these laborers were female. In fact, 54 percent of the laborers in this occupational category were females. The largest group of males in this category (39 percent) worked as either mail or message distributors or material clerks.

Table 4.5b shows the major industry groups by Freely Associated State for employed pre- and post-Compact migrants aged 16 years and older. The largest groups (69 percent) of the Freely Associated States migrants and their children were employed either in the retail trade (36 percent) or services (33 percent) industries. This pattern generally persisted among both the pre- and post-Compact and male and female migrants. However, more pre-Compact males (13 percent) and females (14 percent) than post-Compact males (5 percent) and females (4 percent) were in the transportation and communication industry, while more post-Compact males (16 percent) than pre-Compact males (10 percent) were in construction.

Table 4.5b: Industry of Micronesian Migrants and Their Children, Guam, 1997.

Industry	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Employed Persons 16+ Years	2,113	379	2,037	153	32	1	44	225
Agriculture	2.1	1.8	2.2	2.0	0.0	0.0	0.0	1.8
Mining	0.6	0.5	0.6	0.0	0.0	0.0	0.0	0.9
Construction	10.6	6.3	10.8	6.5	3.1	0.0	6.8	6.2
Manufacturing	1.8	2.1	1.9	1.3	0.0	0.0	0.0	2.7
Transportation/Communication	4.4	13.2	4.2	10.5	3.1	0.0	13.6	15.1
Wholesale Trade	0.9	2.4	1.0	1.3	0.0	100.0	0.0	2.7
Retail Trade	37.2	25.6	37.3	26.1	40.6	0.0	34.1	25.3
Finance/Insurance	0.8	1.8	0.7	2.6	0.0	0.0	2.3	1.3
Services	32.4	36.9	32.1	39.2	50.0	0.0	36.4	35.6
Public Administration	1.1	4.7	1.1	3.9	0.0	0.0	2.3	5.3
All Others	8.0	4.5	8.1	6.5	3.1	0.0	4.5	3.1
Employed Males 16+ Years	1,328	234	1,281	103	20	1	27	130
Agriculture	3.2	2.6	3.3	1.9	0.0	0.0	0.0	3.1
Mining	0.9	0.9	0.9	0.0	0.0	0.0	0.0	1.5
Construction	16.4	10.3	16.8	9.7	5.0	0.0	7.4	10.8
Manufacturing	2.0	3.4	2.1	1.9	0.0	0.0	0.0	4.6
Transportation/Communication	4.9	12.8	4.6	11.7	5.0	0.0	18.5	13.8
Wholesale Trade	1.5	3.4	1.6	1.9	0.0	100.0	0.0	3.8
Retail Trade	29.2	22.6	29.1	25.2	35.0	0.0	29.6	20.8
Finance/Insurance	0.5	0.4	0.5	1.0	0.0	0.0	0.0	0.0
Services	33.3	33.8	33.0	35.0	50.0	0.0	33.3	33.1
Public Administration	1.2	6.0	1.2	4.9	0.0	0.0	3.7	6.9
All Others	6.9	3.8	6.9	6.8	5.0	0.0	7.4	1.5
Employed Females 16+ Years	785	145	756	50	12	0	17	95
Agriculture	0.3	0.7	0.3	2.0	0.0	0.0	0.0	0.0
Mining	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Construction	0.9	0.0	0.8	0.0	0.0	0.0	5.9	0.0
Manufacturing	1.5	0.0	1.6	0.0	0.0	0.0	0.0	0.0
Transportation/Communication	3.6	13.8	3.6	8.0	0.0	0.0	5.9	16.8
Wholesale Trade	0.0	0.7	0.0	0.0	0.0	0.0	0.0	1.1
Retail Trade	50.8	30.3	51.1	28.0	50.0	0.0	41.2	31.6
Finance/Insurance	1.3	4.1	1.2	6.0	0.0	0.0	5.9	3.2
Services	31.0	42.1	30.4	48.0	50.0	0.0	41.2	38.9
Public Administration	1.0	2.8	1.1	2.0	0.0	0.0	0.0	3.2
All Others	9.7	5.5	10.1	6.0	0.0	0.0	0.0	5.3

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Among the Freely Associated States groups, the largest groups of the FSM migrants (36 percent) worked in retail trade, while the largest groups of the Marshallese (48 percent) and the Palauan (36 percent) worked in services. In all groups, a greater proportion of post-Compact migrants than pre-Compact migrants worked in the retail trade industry. More pre-Compact FSM and post-Compact Palauans worked in services than post-Compact FSM and pre-Compact Palauans.

In every Freely Associated States group, more females than males worked in the retail trade industry. Approximately 50 percent of the FSM and Marshallese and 33 percent of the Palauan females worked in retail trade, compared to 29 percent of the FSM, 33 percent of the Marshallese and 22 percent of the Palauan males. Approximately the same amount of FS and Marshallese males and females worked in services, but more Palauan females than males worked in services.

Within the retail trade industry, the largest groups (57 percent) worked in eating and drinking establishments (which represented about 24 percent of the total employed) and 25 percent worked in food and general merchandise stores. Differences occurred in the pattern of industry participation of men and women. Approximately 72 percent of the women and 43 percent of the men worked in eating and drinking establishments, while about 30 percent of the men and 21 percent of the women worked in food or general merchandise stores.

Within the service industry, 51 percent worked in hotels, rooming houses and other lodging places, which represented about 20 percent of the total labor force. About 15 percent worked within the business services sector and another 11 percent in the amusement and recreation services sector. The industry participation of men and women differed. Among the males, 44 percent worked in hotels, rooming houses or other lodging places, 19 percent in business services and 16 percent in amusement recreation services.

Migration trends. The number of post-Compact migrants 16 years and over increased from about 1,756 to 4,144 during the 7 year period (a doubling during the period) (Table 4.5c). The percentage in the labor force decreased from about 68 percent to 59 percent, while the unemployment rate increased from 11 percent to 13 percent between the two censuses. The percentage of females in the labor force decreased from 49 percent in 1990 to 47 percent in 1997, while the percentage unemployed increased from 15 to 18 percent.

Table 4.5c. Labor Force Characteristics, Post-Compact Migrants and Children, Guam: 1990 and 1997

Labor Force Characteristics	Total		FSM		RMI		Palau 1997
	1997	1990	1997	1990	1997	1990	
Persons 16 years and over	4,144	1,756	3,997	1,723	68	33	79
In labor force (%)	58.6	67.5	58.6	67.6	54.4	60.6	60.8
Unemployed (%)	13.0	11.1	13.1	11.0	13.5	20.0	8.3
Females 16 years and over	2,032	769	1,958	761	36	8	38
In labor force (%)	47.1	48.9	47.1	49.0	44.4	37.5	52.6
Unemployed (%)	18.1	15.4	18.0	15.3	25.0	33.3	15.0
Worked last year (%)	44.5	54.6	44.7	54.7	44.1	51.5	35.4
Worked whole year (%)	29.5	29.2	29.5	29.3	32.4	27.3	24.1
Worked full-time (%)	42.3	49.0	42.6	49.2	38.2	39.4	32.9
Full-time, whole year (%)	28.4	28.1	28.4	28.1	29.4	27.3	24.1

Sources: 1997 Guam Micronesian Census and 1990 Decennial Census of Guam

The next set of figures in the tables shows work in the whole year preceding the census. About 44 percent of the adults in 1997 had worked in the year before the census, a decrease from the 55 percent for the 1990 Census. And, when using the total adult population as the base, we find that the percentage who worked during the whole year (50 to 52 weeks) remained at about 29 percent. The percentage who worked full time (that is, 35 hours per week or more) in the year before the census decreased as well, from 49 percent to 42 percent, while the percentage who worked the whole year (50 to 52 weeks) full time (35 or more hours) remained at 28 percent.

Table 4.5d shows the distribution of the employed population by occupation, industry, and class of worker. The percentages for occupational categories sum to 100 percent, but persons who had “not stated” occupations are not shown separately; these “not stated” persons are left out of the percentage distribution to get a better idea of the distribution of known occupations. For the post-Compact Freely Associated States migrants to Guam, the percentage distribution by occupation changed considerably during the 1990s. The percentage who were operators, fabricators, and laborers decreased from 30 percent in 1990 to 20 percent in 1997, while those in service occupations increased from 33 percent in 1990 to 48 percent in 1997. The percentage in managerial and professional occupations decreased slightly during the 7 years, while the percentage in technical, sales, and administrative support occupations increased during the period. As usual, the percentages for the FSM mirrored those for the Freely Associated States. Half of the Marshallese and Palauans in 1997 were in service occupations, followed by those in technical, sales and administrative support occupations, and those who were operators, fabricators, and laborers.

Table 4.5d. Employment Characteristics, Post-Compact Migrants and Children, Guam: 1990 and 1997

Employment Characteristics	Total		FSM		RMI		Palau 1997
	1997	1990	1997	1990	1997	1990	
OCCUPATION:							
Manag and professional (%)	3.0	4.2	2.9	4.2	6.7	0.0	7.1
Tech.sales and admin support (%)	16.4	13.9	16.3	13.6	23.3	31.3	16.7
Service (%)	47.6	33.2	47.4	33.6	53.3	12.5	52.4
Farming, forestry, and fishing (%)	4.3	5.1	4.5	5.2	0.0	0.0	0.0
Precision production, crafts (%)	8.0	13.2	8.0	12.8	6.7	37.5	9.5
Operators, fabric & laborers (%)	20.5	30.3	20.9	30.5	10.0	18.8	14.3
INDUSTRY:							
Retail trade (%)	37.2	25.3	37.3	25.4	40.6	18.8	34.1
All Services (%)	32.4	30.3	32.1	30.4	50.0	25.0	36.4
Hotels (%)	17.4	11.4	17.0	11.5	34.4	6.3	25.0
Private Sector (%)	90.3	94.7	90.2	94.6	90.6	100.0	93.2

Sources: 1997 Guam Micronesian Census and 1990 Decennial Census of Guam

Only three categories of industry are shown in the table. Of these, we see that 37 percent of the employed post-Compact Freely Associated States migrants were in retail trade in 1997, up from 25 percent in 1990. A second category – all services – increased from 30 percent to 32 percent during the period, thus these two categories made up 56 percent of the industries in 1990, but about 70 percent in 1997. Hotels and motels, one sub-category of the service industry, increased from 11 percent of the employed post-Compact Freely Associated States migrants in 1990 to 17 percent in 1997; hence, more than 1 in every 6 of the employed migrants worked in hotels in 1997. The FSM migrants showed similar patterns to the whole population. For 1997, 4 in 10 of the Marshallese were in retail trade and half were in services (leaving only 10 percent in all other industries); for the Palauans, about 1 in 3 were in retail trade, and more than 4 in 10 in services.

Class of worker is roughly divided into those who worked in the private sector and those who worked in the public sector, but with separate categories for those who are self-employed or who worked for families without pay. The private sector percentage for post-Compact Freely Associated States migrants to Guam decreased from 95 percent in 1990 to 90 percent in 1997. The private sector percentages were high for all groups, and much higher than in any of the sending populations.

4.6 **Income and Poverty**

Table 4.6 shows the income characteristics of Micronesian migrants and their children, including household and family income, per capita income and poverty status. The median income is the mid-point value that divides the income distribution in half, with half of the distribution above and half below the mid-point. The mean income is the average of all income values.

As noted previously, the post-Compact Micronesian Migrants on Guam occupied 979 units compared to 356 pre-Compact units. Household and family income is based on the migration status of the householder only. Thus, if the householder was a post-Compact migrant, the whole household was considered post-Compact even if all of the other members were pre-Compact migrants. Similarly, the household became pre-Compact if the householder arrived before Compact implementation.

The median household income for the post-Compact Micronesian Migrants in the year before the Census (calendar 1996 for Hawaii and Guam, calendar 1997 for CNMI) was \$12,747 compared to \$12,096 for the pre-Compact migrant households (Table 4.6). That is, the values were essentially the same. Also, the mean household incomes were the same as well. The household income medians and means were about the same as the total for the FSM and Marshallese migrants, but somewhat lower for the Palauan households.

Family incomes were somewhat greater than household incomes, mostly because single person households are include in the household count, but a single person does not make a family – it takes two related people.

Table 4.6 also shows per capita income for Micronesian Migrants on Guam. Per capita income is obtained by summing all income for all persons in a category, and then dividing by the number of persons in that category. For example, the per capita income of all post-Compact migrants was \$3,371 for the year before the census. The \$3,371 figure was derived by aggregating all income obtained by post-Compact migrants from all sources, and then dividing by the sum of all the post-Compact migrants. The per capita income for pre-Compact migrants was twice as much, at \$6,762. Per capita income was greater for Palauans, but less for the Marshallese.

Table 4.6: Income Characteristics of Micronesian Migrants and Their Children, Guam, 1997.

Income Characteristics	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Households	979	356	931	139	22	1	26	216
Median Income (Dollars)	12,747	12,096	12,878	13,166	12,499	12,499	9,999	10,999
Mean income (Dollars)	18,205	18,986	18,449	17,930	11,712	10,080	14,983	19,706
Families	936	333	897	139	21	1	18	193
Median Income (Dollars)	13,102	13,016	13,170	13,166	13,124	12,499	11,249	12,884
Mean income (Dollars)	18,649	19,647	18,808	17,930	12,270	10,080	18,138	20,933
Per Capita Income (in Dollars)	3,371	6,762	3,371	6,194	2,521	5,040	4,399	7,104
Poverty Universe	6,541	730	6,316	270	123	3	102	458
Below Poverty Level	67.8	58.6	67.4	61.5	91.9	66.7	59.8	56.8
Below 50% of Poverty Level	46.5	45.1	46.6	43.3	40.7	33.3	49.0	46.1
Below 125% of Poverty Level	75.1	64.8	74.8	70.7	97.6	66.7	66.7	61.1
Below 185% of Poverty Level	88.6	77.5	88.6	84.8	97.6	66.7	81.4	73.1

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Finally, the table also contains data on poverty levels for the Micronesian Migrants. Appendix B has definitions of the poverty universe and poverty levels. About 68 percent (more than 2/3rd of the post-Compact migrants) were living below the U.S. poverty line, compared to 59 percent of the pre-Compact migrants. Using the US poverty figures for Guam is difficult, even with the non-migrant population, because factors are different – food and housing cost more on Guam, and other factors also distort use of the same measures. Nonetheless, the percent in povrty is high. The Marshallese were the most likely to be in poverty, the Palauans were the least likely, but ALL groups had more than half their populations living below the poverty line.

Migration trends. Finally, table 4.6a shows data for income and poverty from the two censuses for the post-Compact Freely Associated States migrants. The number of Freely Associated States-householder households increased from 678 in 1990 to 979 in 1997 (although the income and poverty data are based on income in the year before the census.) The median household income in **unadjusted dollars** decreased from about \$20,300 in 1989 to \$12,747 in 1996; since the value decreased over time when not adjusted for inflation, if inflation were applied, the decrease in household income would be even greater. The median household income is that income which divides all household incomes in half, with half earning more than that amount, and half less. The mean income is the average income – the amount found when all income from all households is divided by the number of households. This value is more susceptible to skewing, since values at the edges – very high or very low incomes – have an impact of the mean. The mean household income for post-Compact householder households was higher than the median in both 1989 and 1996, decreasing from \$27,700 to \$18,200 during the period. As before, the Freely Associated States household incomes were similar to the total Freely Associated States.

Table 4.6a. Income Characteristics, Post-Compact Migrants and Children, Guam: 1990 and 1997

Income Characteristics	Total		FSM		RMI		Palau
	1997	1990	1997	1990	1997	1990	1997
Households	979	678	931	647	22	30	26
Median (dollars)	12,747	20,332	12,878	20,069	12,499	26,428	9,999
Mean (dollars)	18,205	27,705	18,449	27,581	11,712	31,176	14,983
Per capita income (\$)	3,371	2,686	3,371	2,684	2,521	2,907	4,399
Poverty Universe	6,550	4,156	6,325	4,045	123	104	102
Below 50 % of poverty level(%)	46.4	19.0	46.5	19.1	40.7	13.5	49.0
Below poverty (%)	67.7	34.1	67.3	34.3	91.9	26.9	59.8
Below 125 % poverty level (%)	75.0	41.6	74.7	41.8	97.6	34.6	66.7
Below 185 % poverty level (%)	88.5	51.5	88.5	51.5	97.6	50.0	81.4

Sources: 1997 Guam Micronesian Census and 1990 Decennial Census of Guam

Per capita income is obtained by taking all of the income for all persons from all sources and dividing by the number of persons in the group or category. The per capita income increased from \$2,700 in 1989 to \$3,400 in 1996, but these values are not adjusted for inflation, which, in this case, would show a more modest increase or a decline. The per capita income for the FSM migrants was the same as the total, but the per capita income for Marshallese migrants decreased during the period, from \$2,900 to \$2,500 during the 7 years. The per capita income for Palauans in 1996 was \$4,400, significantly more than the average for all Freely Associated States migrants.

Five or six dollars an hour can seem like a regal salary to an islander who has just arrived from a place where the minimum wage may be little more than a dollar an hour. In fact, the high salaries to be made on Guam and in the CNMI are one of the main attractions of these places. Nonetheless, the average Micronesian salary is small by Guam or Saipan standards, and most migrants find themselves hard pressed to stretch their take home pay enough to provide all the necessities. These necessities include the high cost of housing, the need to buy all their food, and the outlay they are required to make for suitable clothes in the workplace.

Even so, the new jobs in Guam (and Hawaii and the CNMI) have created a substantial amount of additional income for the migrants. We need only recall that in 1992 FSM born earned an estimated \$28 million on Guam and in 1993 another \$10 million in the CNMI. We look at this later in more detail in Chapter 11. The remittances that economic planners have been anticipating since the beginning of the outflow have been slow in coming, though, because of the migrants' set-up needs in Guam and the CNMI. So far the major benefits those at home received from their relatives abroad were the cases of frozen chicken and boxes of secondhand clothing that were being shipped back regularly.

Finally, table 4.6a shows the numbers and percentages of persons in poverty in 1989 and 1996. The poverty universe is composed of persons in households (and excludes those in group quarters); the poverty universe increased from 4,156 to 6,550 during the 7 year period. The percentage of persons in poverty increased from 34 percent in 1989 to 68 percent in 1996. The table also shows percentages for different levels of poverty.

CHAPTER 5

NUMBERS & CHARACTERISTICS OF MICRONESIAN MIGRANTS IN THE CNMI

5.1 Demography

Table 5.1 shows selected demographic characteristics of the Micronesian migrants and their children. The 1998 Census reported a total of 2,947 Micronesian migrants in the CNMI, including 1,192 pre-Compact and 1,755 post-Compact migrants and children. Of the 1,744 post-Compact migrants, 86 percent were from the Federated States of Micronesia, 4 percent were from the Marshall Islands, and 10 percent were from Palau. Of the total post-Compact category, 571, or approximately 33 percent, were the children of Freely Associated States-born persons.

Table 5.1: Demographic Characteristics of Micronesian Migrants and Children, CNMI, 1998.

Characteristic	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Population	1,755	1,192	1,503	289	74	18	178	885
Males	50.3	47.9	50.2	45.0	47.3	38.9	51.7	49.0
Females	49.7	52.1	49.8	55.0	52.7	61.1	48.3	51.0
Sex Ratio	101.0	91.9	100.9	81.8	89.7	63.6	107.0	96.2
Median Age	17.4	34.8	17.4	36.8	13.5	40.0	18.5	34.0
Less than 15 years	44.3	8.0	44.6	3.1	56.8	5.6	36.5	9.6
15 to 29 years	34.5	27.3	34.0	25.6	28.4	33.3	41.6	27.7
30 to 44 years	15.6	43.5	15.4	48.1	13.5	44.4	17.4	42.0
45 to 59 years	4.2	17.2	4.4	18.3	1.4	16.7	3.4	16.8
60 years and over	1.4	4.0	1.5	4.8	0.0	0.0	1.1	3.8
Males 15+ Never Married	54.9	31.4	51.6	26.6	66.7	28.6	75.0	33.1
Females 15+ Never Married	54.1	30.1	52.9	27.0	60.0	30.0	61.4	31.2
Households	237	506	212	129	6	5	19	372
Persons per Household	7.4	2.4	7.1	2.2	12.3	3.6	9.4	2.4
Persons per Family	8.9	2.6	8.3	2.5	18.5	3.6	14.8	2.6

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Because males are traditionally more likely to migrate internationally than females, migrant communities are likely to have more males, especially in the initial stages of its establishment. This male dominance is especially likely if the primary motive for emigration is economic opportunity. Females tend to migrate either as dependents of male migrants or, if male migration preceded female migration, in subsequent family-reunification flows. However, among the Micronesian migrants to the CNMI, more females than males migrated. The sex ratio for pre-Compact migrants was 101, indicating that the number of males slightly exceeded the number of females in the population. Among the post-Compact migrants the ratio was 92, showing a surplus of females.

Among the Freely Associated States groups, low sex ratios were common, indicating more females than males. The sex ratio of post-Compact Palauans was 107 (a surplus of males), but the sex ratio for the post-Compact FSM was close to 100 (equal numbers of each sex). However, the sex ratio for the post-Compact Marshallese and the pre-Compact Marshallese, FSM and Palauan Freely Associated States groups showed a surplus of females over males. The pre-Compact Marshallese migrants had a sex ratio of 64.

The median age of the post-Compact migrants and their children was 17.4 years, while the median age of the pre-Compact migrants was 34.8 years, a difference of more than 17 years. This age difference has two parts. First, the pre-Compact migrants were residents of the CNMI for a longer period than the post-Compact migrants. Second, the post-Compact migrants include all children of Freely Associated States-born persons who were not born in the Freely Associated States, which lowers the median age. Of the post-Compact migrants, Palauans were the oldest (18.5 years), followed by FSM migrants (17.4 years) and Marshallese (13.5). Among the pre-Compact migrants, Marshallese were the oldest (40 years), followed by FSM migrants (37 years) and Palauans (34 years).

Of the 1,755 post-Compact migrants in the CNMI, approximately 44 percent were younger than 15 years old while about 35 percent were between 15 and 29 years old, indicating that many migrants were coming as young families. The post-Compact Marshallese migrants had the largest percentage of children, with approximately 57 percent younger than 15 years old compared to 45 percent of the post-Compact FSM and 37 percent of the post-Compact Palauans. In general, the pre-Compact migrants were older than the post-Compact migrants. Approximately 79 percent of the post-Compact migrants were less than 30 years old compared to only 35 percent of the post-Compact migrants. Each of the Freely Associated States pre-Compact groups had less than 10 percent of their population younger than 15, but between 42 percent and 48 percent between the ages of 30 and 44 years.

With 61 percent of the total population below the age of 30, the Micronesian migrant community in the CNMI is a young population. The proportion of never married pre- and post-Compact migrants reflects this young age structure. Approximately 55 percent of the post-Compact males and 54 percent of the females were never married, while 31 percent of the pre-Compact males and 30 percent of the females were never married. Among the pre-Compact groups, Marshallese males (29 percent) and FSM migrants (27 percent) were the most likely to have been never married, while among the post-Compact groups, FSM males (52 percent) and females (53 percent) were the most likely to have been never married. Among each of the Freely Associated States groups, a higher proportion of the post-Compact than the pre-Compact females were never married.

The average household size of the 237 post-Compact Freely Associated States households was 7.4 persons – 7.1 for the FSM, 12.3 for the Marshalls and 9.4 for the Palauan households. The average family size was 8.9 persons – 8.3 for FSM, 18.5 for Marshallese and 14.8 for Palauan families. As expected, because one-person households were not included in the calculation of average family size, average family size was larger than average household size.

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Migration Trends. The demographic change for the CNMI from 1990 to 1995 to 1998 is shown in table 5.1a. The number of post-Compact Freely Associated States migrants increased from 1,951 to 2,928 (about 50 percent) during the 5 years between the two censuses. The migrant population showed an apparent decline after that, to 1,755, but some of this decline has to do with selective migration, and a general aging of the population. After Compact implementation, movement became easier, so some persons resident in the CNMI before implementation, left for various reasons. In the 5 years between the two censuses, the number of females increased somewhat more than the males, as shown in the sex ratio, which decreased from 92 males for each 100 females to 89. This figure showed an increasing bias to females, which may be partially caused by females being more likely than males to be in the garment industry. The sex ratio reversed in the years between 1995 and 1998, and became slightly male in the most recent census.

The median age – that age cutting the population in half, with half being older and half younger -- increased between 1990 and 1995, from 16 years in 1990 to almost 18 years in 1995 and remained at about the same level in 1998. These figures are much lower than for Guam, indicating higher fertility and/or migration of young families rather than post-high school non-married individuals. The median age for FSM migrants increased slightly, from 16 to 17 years, while the Marshallese median age increased from 11 to 13.5 years.

The percentage distributions also showed a younger population than for Guam. The percentage of post-Compact Freely Associated States migrants less than 15 years old decreased from 47 percent in 1990 to 43 percent in 1995 and increased slightly in 1998. The 15 to 29 year group showed an even steeper decline, but the percentage 30 to 59 showed a sharp increase in the first half of the decade. The distribution for the Federated States of Micronesia migrants was similar to the total Freely Associated States distribution. As expected, about 2 out of every 3 Marshallese in 1990 were less than 15 years old, and that percentage only decreased to 55 percent in 1995, with all older groups being smaller than the percentages for the total Freely Associated States population

Table 5.1a. Demographic Characteristics, Post-Compact Migrants and Children, CNMI: 1990, 1995 and 1998

Characteristics	Total			FSM			RMI		
	1998	1995	1990	1998	1995	1990	1998	1995	1990
Total	1,755	2,928	1,951	1,503	2,485	1,853	74	158	87
Males	883	1,382	936	755	1,194	889	35	68	39
Females	872	1,546	1,015	748	1,291	964	39	90	48
Males per 100 females	101.0	89.4	92.2	100.9	92.5	92.2	89.7	75.6	81.3
Median	17.4	17.7	15.9	17.4	16.9	16.2	13.5	13.5	11.0
Less than 15 years (%)	44.3	43.3	47.3	44.6	45.2	46.3	56.8	55.1	65.5
15 to 29 years (%)	34.5	34.3	40.0	34.0	34.4	40.5	28.4	31.6	28.7
30 to 44 years (%)	15.6	16.2	8.7	15.4	14.7	8.9	13.5	12.0	4.6
45 to 59 years (%)	4.2	4.3	2.2	4.4	4.0	2.3	1.4	0.6	0.0
60 years and over (%)	1.4	1.9	1.9	1.5	1.6	2.0	0.0	0.6	1.1
Males Never Married (%)	29.8	51.7	67.8	27.0	53.9	67.3	22.9	62.5	77.8
Females Never Married (%)	31.8	46.7	64.6	30.9	48.2	64.9	30.8	55.3	57.1
Households	237	336	89	212	251	87	6	11	2

Sources: 1990 and 1995 Censuses of the CNMI and the 1997/8 Census of Micronesians

The percentage of never married adults decreased precipitously during the eight years, from 68 to 55 percent for males and from 65 to 54 percent for females, indicating, again, the increasingly likelihood that whole families were migrating, rather than individuals. The FSM migrants showed the same decreases as the total Freely Associated States and the Marshallese males showed a steep decline, with female Marshallese remaining about the same.

5.2 Citizenship and Residency Status

Table 5.2 shows the citizenship and place of residence one and five years ago of the Micronesian migrants and their children in the CNMI. Approximately 34 percent of the post- and 6 percent of the pre-Compact Freely Associated States migrants to CNMI were U.S. citizens at the time of the survey. Between 20 percent and 47 percent of all of the post-Compact migrants were citizens, while only between 5 percent and 11 percent of the pre-Compact migrants were citizens. In general, the proportion of post-Compact migrants was higher than the proportion of pre-Compact migrants, probably because the post-Compact category included all children of the Freely Associated States migrants born in the United States.

Table 5.2: Citizenship Status and Place of Residence 1 and 5 Years Ago of Micronesian Migrants and Children, CNMI, 1998.

Characteristics	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Population	1,755	1,192	1,503	289	74	18	178	885
Population born 5 Years Ago or Before	84.7	99.7	84.8	100.0	83.8	100.0	84.8	99.7
Citizenship Status								
U.S. Citizen	33.6	5.8	34.5	4.8	47.3	11.1	20.2	6.0
Permanent Resident	43.0	73.4	42.8	68.9	17.6	61.1	55.1	75.1
Residency Status								
Current Residence, 5 Years Ago	29.3	42.8	30.1	43.6	38.7	50.0	19.2	42.4
Current Residence, 1 Year Ago	60.1	79.8	60.9	78.2	68.9	100.0	49.4	79.9
Outside Area, 5 Years Ago	34.3	7.3	29.9	7.6	45.2	0.0	66.9	7.4
Outside Area, 1 Year Ago	10.9	1.7	9.9	2.1	6.8	0.0	20.8	1.6

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Of the non-citizens, about 43 percent of the post-Compact migrants were permanent residents, compared to 73 percent of the pre-Compact migrants. In each of the Freely Associated States groups, a higher proportion of pre-Compact migrants than post-Compact migrants were permanent residents, which probably reflects the longer settlement period experienced by the pre-Compact migrants. About 75 percent of the Palauan, 70 percent of the FSM and 61 percent of the pre-Compact migrants were permanent residents. Among the post-Compact migrants, 55 percent of the Palauan, 43 percent of the FSM and 18 percent of the Marshallese were permanent residents.

Table 5.2 also shows information on the place of residence one and five years prior to the 1998 Census. Approximately 29 percent of the post- and 43 percent of the pre-Compact migrants lived in the same residence in 1998 as they did in 1993. Not surprisingly, a larger proportion of post-Compact migrants (34 percent) lived outside the CNMI five years before than pre-Compact migrants (7 percent). Approximately 60 percent of the post-Compact migrants lived in the same residence in 1998 as they did in 1997, with only about 11 percent living outside of the CNMI in 1997. The largest groups of pre-Compact migrants (80 percent) lived in the same house one year prior as they did in 1998.

Post-Compact Palauan migrants were the most likely of all Freely Associated States groups to have lived outside of the CNMI either one (21 percent) or five (67 percent) years before, which probably reflects the later Compact implementation date. The pre-Compact FSM migrants were the most likely to have lived in the same house one (78 percent) year earlier. The pre-Compact FSM (44 percent) and the Marshallese (50 percent) were the most likely to have lived in the same house five years earlier.

Migration trends. The percentage of post-Compact Freely Associated States migrants (and children) who were U.S. Citizens decreased from 49 percent in 1990 to 43 percent in 1995 and 34 percent in 1998 (Table 5.2a). The large percentage of U.S. citizens in the first two censuses probably resulted from the long period of time that Saipan was the capital of the Trust Territory of the Pacific Islands (TTPI). Also, Micronesians from Palau, what became the Federated States of Micronesia, and the Marshall Islands moved to Saipan to work in the TTPI government, and stayed on after the dissolution of that entity. Some married CNMI-born persons and eventually gained citizenship that way, others were the offspring of these unions. The percentages for the FSM were similar to those of the total Freely Associated States, but the percentage of U.S. citizens among the Marshallese was much higher – decreasing from 62 percent in 1990 to 52 percent in 1995 and 47 percent in 1998.

Table 5.2a. Migration Characteristics, Post-Compact Migrants & Children, CNMI: 1990 and 1995

Migration Characteristics	Total			FSM			RMI		
	1998	1995	1990	1998	1995	1990	1998	1995	1990
U.S. citizen (%)	33.6	43.2	49.3	34.5	44.9	48.4	47.3	52.5	62.1
Noncitizens, Permanent (%)	43.0	57.8	28.9	42.8	57.2	29.4	17.6	60.0	15.2
Moved for employment (%)	35.6	27.7	...	39.2	27.8	...	16.3	14.3	...
Persons 5 yrs and over:									
5 yrs ago in this house (%)	29.3	29.9	25.0	30.1	29.8	25.0	38.7	26.1	19.7
5 yrs ago outside Area (%)	34.3	41.1	74.2	29.9	40.8	74.1	45.2	48.5	80.3
1 yr ago in this house (%)	60.1	64.3	...	60.9	64.9	...	68.9	67.2	...
1 yr ago outside Area (%)	10.9	18.4	...	9.9	16.7	...	6.8	21.6	...

Sources: 1990 and 1995 Censuses of the CNMI and the 1997/8 Census of Micronesians

Of the non-citizens, about 29 percent were “permanent” residents in 1990, but this increased to 58 percent in 1995, then dropped again to 43 percent in 1998. This level of “permanent” migration, much higher than for Guam, indicates more commitment to migration than the “temporary” migration; again, both “permanent” and “temporary” migration were self-reported and so reflected the subjective views of the post-Compact migrants about their intentions. As before, reason for migration was not collected in 1990, but about 28 percent of the post-Compact Freely Associated States migrants reported moving for employment in the 1995 Census. By 1998, this figure increased to 36 percent of the migrants, showing a more traditional migration pattern.

The proportion of post-Compact Freely Associated States migrants who lived in the same house 5 years before the census increased from 1 in 4 in 1990 to 3 in 10 in 1995 and 1998 (about 5 percentage points). The proportion who lived outside of the CNMI 5 years before the census decreased from 3 out of 4 in 1990 to 2 out of 5 in 1995 and 1 in 3 in 1998.

For 1995, about 64 percent lived in the same house in 1994 as 1995, but this decreased to 60 percent in the 1998 Census. Also, about 18 percent migrated from outside during the year before the 1995 Census compared to 11 percent in 1998.

5.3 Reasons for Migrating

Table 5.3 shows the reasons for migrating by sex for pre- and post-Compact migrants. The largest groups of pre-Compact migrants left for employment (39 percent), as a spouse or dependent of an employed person (5 percent and 20 percent respectively) or for a visit or vacation (19 percent). The three main reasons post-Compact migrants moved were employment (36 percent), as a spouse or dependent of an employed person (6 percent or 24 percent respectively) or school (19 percent). When the pre- and post-Compact groups are compared, a greater proportion of post-Compact migrants than pre-Compact migrants departed as a spouse or dependent of an employed person and for school. The proportion of post-Compact migrants coming to the CNMI for employment and for visits or vacations declined between groups arriving in the pre- and post-Compact periods.

Table 5.3: Reasons for Migrating by Sex for Pre- and Post-Compact Migrants Only, CNMI, 1998.

Reason for Migrating	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Migrant Population	1,184	1,192	995	289	43	18	146	885
Employment	35.6	39.3	39.2	42.2	16.3	27.8	17.1	38.6
Spouse of Employed	5.8	5.2	6.5	4.2	4.7	11.1	1.4	5.4
Dependent of Employed	23.7	19.6	23.5	6.6	32.6	22.2	22.6	20.5
Family Subsistence	1.2	1.3	1.3	0.3	0.0	0.0	0.7	1.6
Family Business	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.3
Missionary Activities	1.0	0.5	0.5	1.0	2.3	0.0	4.1	0.3
Medical Reasons	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Visiting or Vacation	14.0	18.5	12.2	13.1	18.6	0.0	25.3	20.6
School	18.5	15.3	16.7	21.8	25.6	38.9	28.8	12.7
Males	577	571	487	130	17	7	73	434
Employment	43.8	47.1	47.4	53.1	29.4	57.1	23.3	45.2
Spouse of Employed	0.2	0.9	0.2	0.8	0.0	0.0	0.0	0.9
Dependent of Employed	23.1	19.8	22.6	18.5	29.4	28.6	24.7	20.0
Family Subsistence	1.2	0.9	1.2	0.0	0.0	0.0	1.4	1.2
Family Business	0.0	0.4	0.0	0.8	0.0	0.0	0.0	0.2
Missionary Activities	0.2	0.5	0.0	0.8	5.9	0.0	0.0	0.5
Medical Reasons	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Visiting or Vacation	12.5	17.0	10.7	6.2	17.6	0.0	23.3	20.5
School	18.9	13.5	17.7	20.0	17.6	14.3	27.4	11.5
Females	607	621	508	159	26	11	73	451
Employment	27.8	32.2	31.3	33.3	7.7	9.1	11.0	32.4
Spouse of Employed	11.2	9.2	12.6	6.9	7.7	18.2	2.7	9.8
Dependent of Employed	24.4	19.5	24.4	15.7	34.6	18.2	20.5	20.8
Family Subsistence	1.2	1.6	1.4	0.6	0.0	0.0	0.0	2.0
Family Business	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.4
Missionary Activities	1.8	0.5	1.0	1.3	0.0	0.0	8.2	0.2
Medical Reasons	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Visiting or Vacation	15.5	19.8	13.6	18.9	19.2	0.0	27.4	20.6
School	18.1	16.9	15.7	23.3	30.8	54.5	30.1	13.7

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

This pattern of change generally held for both the total males and females and for each of the Freely Associated States migrant groups. However, some differences existed. For Palau, more pre-Compact migrants were in the CNMI than post-Compact migrants, possibly indicating a decline in the amount of Palauan immigration through time or a shift in preferred migrant destinations. Along with this decline, the reasons given for migration also changed. The largest groups of pre-Compact Palauans migrated for employment (39 percent), as a spouse or dependent of an employed person (26 percent) or for a visit or vacation. Post-Compact Palauans were more likely to migrate for school (29 percent), a visit or vacation (25 percent) or as a spouse or dependent of an employed person (24 percent). In other words, the proportion emigrating for employment and as a dependent declined, but the proportion emigrating for school or a visit or vacation increased. In general, all Palauan migrants followed this pattern, except among the females, the proportion emigrating as a spouse or dependent of an employed person declined.

Immigration from FSM increased from the pre- to the post-Compact periods. In 1998, FSM migrants represented the largest Freely Associated States immigrant group in the CNMI. As the FSM migrant community increased through time, their reasons for migrating to the CNMI shifted. The largest groups of pre-Compact migrants left for employment (42 percent), school (22 percent) or as a spouse or dependent of an employed person (11 percent). The largest groups of post-Compact migrants migrated for employment 39 percent, school (17 percent) or as a spouse or dependent of an employed person (30 percent). Compared to pre-Compact migrants, the percentage of post-Compact migrants moving for employment, school or for a visit or vacation declined, while the proportion emigrating as a spouse or dependent of an employed person increased. This pattern generally held for FSM migrants of both sexes. However, the proportion of post-Compact males emigrating for visits or a vacation (11 percent) was higher than the pre-Compact proportion (6 percent). Also, the difference between the pre- and post-Compact females in the proportion emigrating as a spouse or dependent of an employed person was greater than the difference between the pre- and post-Compact males, indicating more dependent female migration. All of these changes show that migration from the FSM to CNMI may be shifting from employment migration to family reunification migration.

The Marshallese migrant community is the smallest Freely Associated States immigrant group in the CNMI. The largest groups of pre-Compact migrants moved for schooling (39 percent), as spouses or dependents of employed persons (33 percent) or for employment (28 percent). The largest groups of post-Compact migrants went as spouses or dependents of employed persons (37 percent), schooling (26 percent) or for visits or vacations (19 percent). Generally speaking, emigration for employment from the Marshall Islands declined, while emigration as a dependent, for schooling or for a visit or vacation increased.

5.4 Social Characteristics

Table 5.4 includes information about the social characteristics of both the pre- and post-Compact migrants and their children, including language spoken at home, school enrollment and educational attainment. About 19 percent of the post-Compact migrants aged 5 years and over spoke English at home compared to 16 percent of the pre-Compact migrants. Of the post-Compact migrants, the Marshallese (26 percent) were the most likely to speak English at home, followed by the Palauans (19 percent) and the FSM (18 percent) migrants. Approximately 72 percent of the post-Compact migration spoke a language other than English more frequently at home, compared to 63 percent of the pre-Compact migrants. Among the post-Compact migrants, the FSM migrants (75 percent) were the most likely to speak a language other than English at home, followed by the Palauans (55 percent) and the Marshallese (53 percent). The FSM and Marshallese pre-Compact migrants were more likely to speak English at home than the post-Compact migrants, while Palauan post-Compact migrants were more likely to speak English at home than the pre-Compact migrants.

Table 5.4: Language Use, School Enrollment and Educational Attainment of Micronesian Migrants and Children, CNMI, 1998.

Characteristics	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Population	1,755	1,192	1,503	289	74	18	178	885
Persons 5+ Years	1,487	1,189	1,274	289	62	18	151	882
Language Use (5+ Years)								
Speak English at Home	18.7	15.7	18.4	21.8	25.8	27.8	18.5	13.5
Speak Other Language at Home More Frequently than English	71.6	62.9	74.5	67.1	53.2	27.8	55.0	62.2
School Enrollment								
Persons 3+ Years, Enrolled	612	167	514	30	35	2	63	135
Public Elementary School	59.6	47.9	61.7	33.3	68.6	50.0	38.1	51.1
Public High School	22.7	28.7	20.8	33.3	20.0	0.0	39.7	28.1
College/University	5.4	21.6	4.9	30.0	2.9	50.0	11.1	19.3
Educational Attainment (Cumulative Percent)								
Total Persons 25+ Years	560	925	487	243	18	12	55	670
No Education	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Grade 8 or Less	96.8	99.1	96.7	97.5	100.0	100.0	96.4	99.7
Some High School	74.1	87.9	73.5	77.0	77.8	100.0	78.2	91.6
High School Graduate	43.6	72.9	41.3	51.9	50.0	75.0	61.8	80.4
Some College/Two Year Degree	15.2	23.1	13.8	19.8	11.1	50.0	29.1	23.9
Bachelor's Degree	2.0	5.8	1.6	4.1	0.0	16.7	5.5	6.3
Graduate Degree	0.0	1.5	0.0	1.6	0.0	8.3	0.0	1.3
Males 25+ Years								
No Education	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Grade 8 or Less	97.0	99.8	97.0	100.0	100.0	100.0	96.4	99.7
Some High School	80.7	92.2	79.6	85.3	100.0	100.0	85.7	94.4
High School Graduate	50.7	77.3	48.9	61.5	71.4	80.0	60.7	82.6
Some College/Two Year Degree	18.9	23.9	17.9	28.4	28.6	60.0	25.0	21.7
Bachelor's Degree	3.0	5.3	3.4	7.3	0.0	40.0	0.0	4.0
Graduate Degree	0.0	2.1	0.0	3.7	0.0	20.0	0.0	1.2
Females 25+ Years								
No Education	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Grade 8 or Less	96.6	98.6	96.4	95.5	100.0	100.0	96.3	99.7
Some High School	67.9	84.0	67.9	70.1	63.6	100.0	70.4	89.1
High School Graduate	36.9	68.9	34.1	44.0	36.4	71.4	63.0	78.4
Some College/Two Year Degree	11.7	22.5	9.9	12.7	0.0	42.9	33.3	25.9
Bachelor's Degree	1.0	6.3	0.0	1.5	0.0	0.0	11.1	8.3
Graduate Degree	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.4

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

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In 1998, 779 pre- and post-Compact migrants were three years of age and over enrolled in school. Of those, 57 percent were enrolled in public elementary school, 24 percent in public high school and 9 percent in college. Of the total enrolled, 612, or 79 percent, were post-Compact Freely Associated States migrants and their children. Of the post-Compact migrants enrolled in school, 84 percent were FSM migrants, 6 percent were Marshallese and 10 percent were Palauan. Most of those enrolled were attending either public elementary school (60 percent) or high school (23 percent). The largest groups (81 percent) of pre-Compact migrants enrolled in school were Palauan. Almost 70 pre- and post-Compact Freely Associated States migrants were attending college, either public or private.

Approximately 44 percent of the post- and 73 percent of the pre-Compact migrants aged 25 years and over were high school graduates, had some college or a two year degree, or a bachelor's or graduate degree. The pre-Compact migrants had a lower proportion in each of these educational attainment categories than post-Compact migrants. However, the pre-Compact migrants had a higher proportion with some high school, grade 8 education or less, and no education than the post-Compact migrants. Among each of the Freely Associated States groups, pre-Compact migrants were more likely to have graduated high school, had some college or a two year degree, or a bachelor's or graduate degree. Therefore, in general, pre-Compact migrants were better educated than their post-Compact counterparts. The differences between the pre- and post-migrant groups may be a result of the migration privileges associated with the Compact, which may have facilitated the emigration of a greater proportion of less-educated, and possibly less-skilled, Micronesians. Of all the Freely Associated States groups, the pre-Compact Palauans were the best-educated, with 80 percent being at least high school graduates.

Among both the pre- and post-Compact Freely Associated States migrants in 1998, a larger proportion of females than males had less than a high school graduate education. The only exception was the post-Compact Palauan females, who were better educated than their male counterparts. However, the differences between pre- and post-Compact migrants were greater for females than for males. For example, 51 percent of the pre- and 77 percent of the post-Compact male migrants were less than high school graduates, compared to 37 percent of the pre- and 69 percent of the post-Compact female migrants, indicating a larger proportional increase of less educated post-Compact females. Generally speaking, pre-Compact males and females were better educated than their post-Compact counterparts.

Migration Trends. Table 5.4a shows various social characteristics for the 3 censuses. The percent speaking English at home increased from 3 percent in 1990 to 16 percent in 1995 and 19 percent in 1998. The percentages for the FSM migrants were about the same, while the percentage of Marshallese speaking English increased from 5 percent in 1990 to 26 percent in 1998.

Table 5.4a. Social Characteristics, Post-Compact Migrants & Children, CNMI: 1990, 1995 and 1998

Social Characteristics	Total			FSM			RMI		
	1998	1995	1990	1998	1995	1990	1998	1995	1990
Speak English at home (%)	18.7	16.4	3.0	18.4	15.8	3.0	25.8	19.4	4.9
Other lang more than English (	71.6	58.2	73.2	74.5	60.3	74.0	53.2	33.6	52.5
Persons 3+, enrolled	612	1,107	704	514	971	663	35	94	39
Public elementary school	365	613	409	317	548	386	24	46	22
Public high school	139	223	126	107	187	118	7	21	7
College	33	96	65	25	84	64	1	9	1
Persons 25 + years:									
High school Graduates (%)	43.6	34.0	30.6	41.3	31.4	30.4	50.0	45.2	42.9
Bachelor's Degrees (%)	2.0	4.1	3.8	1.6	4.0	3.8	0.0	3.2	0.0
Females:									
High school Graduates (%)	36.9	25.8	31.8	34.1	25.5	28.4	36.4	40.0	36.8
Bachelor's Degrees (%)	1.0	1.8	2.9	0.0	1.9	1.9	0.0	0.0	5.3

Sources: 1990 and 1995 Censuses of the CNMI and the 1997/8 Census of Micronesians

Of the post-Compact Freely Associated States migrants who spoke a language other than English in 1990, about 73 percent spoke that language more than English, about the same percentage as in 1998. Of those 3 years and over, the number of post-Compact Freely Associated States migrants (and children) enrolled in school increased from 704 in 1990 to 1,107 in 1995 but only 612 reported in 1998. The number in public elementary schools was about the same in 1990 as 1998 according to the censuses, and also in high schools. As before, most of those enrolled in school were from the FSM.

Of the post-Compact Freely Associated States migrants 25 years and over, about 31 percent were high school graduates in 1990, 34 percent in 1995, but this increased to 44 percent in 1998. The percentage increase for college graduates was much smaller, from 3.8 percent in 1990 to 4.1 percent in 1995, but then showed a decrease to 2 percent in 1998. Perhaps educated Micronesian Migrants were taking jobs elsewhere as movements to Guam, Hawaii, and the mainland US became easier. The percentage of female high school graduates decreased from 32 percent to 26 percent in the first 5 years of the decade, but then showed a large increase, to 37 percent in 1998. The percentages for female college graduates continued to decrease during the decade.

5.5 Economic Characteristics

Table 5.5 shows the CNMI labor force characteristics of the Micronesian migrants and their children aged 16 years and over. Of the 2,021 Freely Associated States migrants aged 16 years and over, 936, or 46 percent, were post-Compact migrants. The CNMI is the only one of the three receiving area where pre-Compact migrants out-number post-Compact migrants in the labor force. Approximately 61 percent of the post-Compact migrants age 16 years and over were in the labor force, which was lower than the 70 percent of all pre-Compact migrants in the labor force. In each of the Freely Associated States groups, labor force participation by post-Compact migrants was lower than the pre-Compact rate. Among the post-Compact migrants, 61 percent of the FSM, 60 percent of the Palauan and 53 percent of the Marshallese migrants 16 years and over were in the labor force. About 70 percent of the FSM and Palauan and 65 percent of the Marshallese pre-Compact migrants were in the labor force. For most of the Freely Associated States groups, the lower proportion of post-Compact labor force participation can also be seen in the total male and female migrants, but the differences were greater between female pre- and post-Compact migrants. About 75 percent of post-Compact males were in the labor force compared to 48 percent of post-Compact females. Approximately 92 percent of the Marshallese post-Compact males were in the labor force, compared to 76 percent of the FSM and 63 percent of the Palauans. Not surprisingly, a lower percentage of females than males were in the labor force, a pattern that held for all Freely Associated States pre- and post-Compact migrant groups. Approximately 57 percent of the Palauan post-Compact females were in the labor force, followed by 48 percent of the FSM and 28 percent of the Marshallese migrants.

Table 5.5: Labor Force Characteristics of Micronesian Migrants and Children, Age 16 Years and Over, CNMI, 1998.

Characteristics	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Persons 16+ Years	936	1,085	796	278	30	17	110	790
In the Labor Force	60.6	69.9	60.9	69.1	53.3	64.7	60.0	70.3
Unemployed	8.6	9.1	8.2	7.8	25.0	0.0	7.6	9.7
Worked During 1997	56.4	70.1	57.8	66.5	46.7	70.6	49.1	71.4
Worked Whole Year	37.4	61.2	37.7	55.8	33.3	47.1	36.4	63.4
Worked Full-Time	54.1	67.3	55.9	63.7	43.3	64.7	43.6	68.6
Worked Whole Year, Full-Time	36.5	59.2	36.8	53.6	30.0	41.2	36.4	61.5
Males 16+ Years	439	521	373	127	12	7	54	387
In the Labor Force	74.5	79.7	75.6	81.9	91.7	71.4	63.0	79.1
Unemployed	8.9	9.4	8.9	8.7	27.3	0.0	2.9	9.8
Worked During 1997	67.0	79.3	69.7	77.2	75.0	85.7	46.3	79.8
Worked Whole Year	47.2	69.9	48.0	65.4	58.3	57.1	38.9	71.6
Worked Full-Time	65.1	75.0	67.8	73.2	66.7	71.4	46.3	75.7
Worked Whole Year, Full-Time	45.8	66.4	46.6	62.2	50.0	42.9	38.9	0.8
Females 16+ Years	497	564	423	151	18	10	56	403
In the Labor Force	48.3	60.8	48.0	58.3	27.8	60.0	57.1	61.8
Unemployed	8.3	8.7	7.4	6.8	20.0	0.0	12.5	9.6
Worked During 1997	47.1	61.7	47.3	57.6	27.8	60.0	51.8	63.3
Worked Whole Year	28.8	53.2	28.6	47.7	16.7	40.0	33.9	55.6
Worked Full-Time	44.3	60.1	45.4	55.6	27.8	60.0	41.1	61.8
Worked Whole Year, Full-Time	28.4	52.5	28.1	46.4	16.7	40.0	33.9	55.1

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Approximately 9 percent of all Freely Associated States migrants and their children aged 16 years and over were unemployed. Unemployment was highest among the Marshallese (25 percent), followed by the FSM (8 percent) and Palauan (also 8 percent) groups. Palauan Pre-Compact migrants had a higher unemployment rate than Palauan post-Compact migrants. This pattern held for the FSM and Palauan groups, but for the Marshallese, post-Compact migrants had a higher unemployment rate than pre-Compact migrants, which is probably the result of the small sample size. Total unemployment for males was about the same as the female rate. The proportion of unemployed female post-Compact migrants was 8.3 percent, lower than the 8.7 percent rate for pre-Compact females. Among the post-Compact female migrants, the Marshallese women had the highest proportion of unemployed (20 percent), followed by the Marshallese (12 percent) and the FSM migrants (7 percent). The proportion of unemployed post-Compact migrant males was 8.9 percent, lower than the pre-Compact rate of 9.4 percent.

Generally speaking, pre-Compact migrants worked more than post-Compact migrants. About 70 percent of the pre-Compact migrants worked during 1997, with 61 percent working the whole year, 67 percent working full-time and 60 percent working the whole year full-time. However, only 56 percent of the pre-Compact migrants worked in 1997, with 37 percent working the whole year, 54 percent working full-time and 37 percent working the whole year full-time. Of the Freely Associated States groups, the pre-Compact Palauan migrants were the most likely to have worked during 1997 (71 percent), worked the whole year (63 percent), worked full-time (69 percent), and the whole year full-time (62 percent); the post-Compact Marshallese were the least likely. Approximately 67 percent of all male and 47 percent of female migrants worked during 1997.

Occupational and Industrial Concentration Among Freely Associated States Migrants

Table 5.5a shows the major occupation groups for employed pre- and post-Compact migrants aged 16 years and older. About 1/3rd (34 percent) of the Freely Associated States migrants and their children were employed in precision production and crafts occupations. The second most common occupation category was agriculture, forestry and fishing (28 percent). This occupational concentration occurred in both the pre- and post-Compact groups. However, among the pre-Compact group, about 1 in 3 (34 percent) were in agriculture, fishing and forestry, while about 2 in 5 (40 percent) of the post-Compact migrants were in precision production and craft occupations. Approximately 30 percent of the post- and 17 percent of the pre-Compact migrants were operators, fabricators and laborers.

Table 5.5a: Occupation of Micronesian Migrants and Their Children, CNMI, 1998.

Occupation	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Employed Persons 16+ Years	518	689	445	177	12	11	61	501
Professional/Technical/Managerial	2.5	7.5	2.5	6.8	0.0	27.3	3.3	7.4
Clerical/Sales	3.1	6.8	3.1	6.2	0.0	0.0	3.3	7.2
Services	2.5	2.9	1.1	1.1	0.0	0.0	13.1	3.6
Agriculture/Forestry/Fishing	18.7	34.3	18.0	27.7	50.0	45.5	18.0	36.3
Precision Production/Crafts	40.0	28.9	40.4	33.3	41.7	9.1	36.1	27.7
Operators/Fabricators/Laborers	29.2	16.7	30.3	20.9	8.3	18.2	24.6	15.2
All Others	4.1	2.9	4.5	4.0	0.0	0.0	1.6	2.6
Employed Males 16+ Years	298	376	257	95	8	5	33	276
Professional/Technical/Managerial	2.0	7.7	2.3	10.5	0.0	20.0	0.0	6.5
Clerical/Sales	3.0	3.2	3.1	6.3	0.0	0.0	3.0	2.2
Services	2.0	3.2	1.2	2.1	0.0	0.0	9.1	3.6
Agriculture/Forestry/Fishing	16.1	27.4	16.0	21.1	62.5	40.0	6.1	29.3
Precision Production/Crafts	30.2	29.8	28.4	22.1	25.0	0.0	45.5	33.0
Operators/Fabricators/Laborers	42.3	25.3	44.0	33.7	12.5	40.0	36.4	22.1
All Others	4.4	3.5	5.1	4.2	0.0	0.0	0.0	3.3
Employed Females 16+ Years	220	313	188	82	4	6	28	225
Professional/Technical/Managerial	3.2	7.3	2.7	2.4	0.0	33.3	7.1	8.4
Clerical/Sales	3.2	11.2	3.2	6.1	0.0	0.0	3.6	13.3
Services	3.2	2.6	1.1	0.0	0.0	0.0	17.9	3.6
Agriculture/Forestry/Fishing	22.3	42.5	20.7	35.4	25.0	50.0	32.1	44.9
Precision Production/Crafts	53.2	27.8	56.9	46.3	75.0	16.7	25.0	21.3
Operators/Fabricators/Laborers	11.4	6.4	11.7	6.1	0.0	0.0	10.7	6.7
All Others	3.6	2.2	3.7	3.7	0.0	0.0	3.6	1.8

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

The largest groups of all of the pre- and post-Compact Freely Associated States groups were in either precision production and craft occupations or agriculture, forestry and fishing. The largest groups of pre-Compact FSM (33 percent) and post-Compact FSM (40 percent) and Palauan (36 percent) migrants worked in precision production and craft occupations, while the largest groups of pre-Compact Palauan (36 percent) and Marshallese (46 percent) and post-Compact Marshallese (50 percent) worked in agriculture, forestry and fishing occupations. The third most common occupational category was operators, fabricators and laborers. This was the second most common category for post-Compact FSM and Palauan and pre-Compact Marshallese migrants.

The largest groups of male pre- and post-Compact migrants worked as operators, fabricators and laborers (33 percent), followed by precision production and craft occupations (30 percent). Post-Compact Palauan migrants were the most likely (46 percent) to work in precision production and craft occupations, while the post-Compact FSM migrants were the most likely (44 percent) to have precision production and craft occupations. Approximately 22 percent of male migrants were in agricultural, forestry and fishing occupations. The largest groups of female pre- and post-Compact migrants worked in precision production and craft occupations (38 percent) followed by agricultural, forestry and fishing occupations (34 percent). Post-Compact Marshallese (75 percent) and FSM (57 percent) migrants were the most likely to work in precision production and craft occupations, while the pre-Compact Marshallese (50 percent) and Palauan 45 percent migrants were the most likely to work in agriculture, fishing and forestry occupations. Approximately 11 percent of pre-Compact females worked in clerical and sales occupations, but the largest groups of these were Palauan. Generally speaking, the Micronesian migrants in the CNMI were not as occupationally concentrated as in either Guam or Hawaii.

This lack of occupational concentration is reflected in what the migrants did in each category. For example, for both males and females in the precision production and craft category, 19 percent worked as operators and tenders in textile, apparel and furniture shops, 16 percent worked in hand working occupations, 15 percent in cleaning and building service occupations (including personal service), 11 percent in food and beverage preparation and service occupations, and 9 percent as guards. Definite differences between male and female occupational participation patterns existed. The largest groups of females worked in hand working occupations (30 percent) and as machine operators and tenders for textile, apparel and furniture shops. Less than 10 percent of the males worked in these occupations combined. No clear largest occupation emerges for the migrant males. However, 16 percent worked as guards, 13 percent in food and beverage preparation and services occupations, and 12 percent worked in cleaning and building service occupations. Only 2 percent, 8 percent and 18 percent of the women worked in these respective occupations.

[WALLY: The following paragraph is wrong, needs to be looked up:]

The lack of occupational concentration can also be seen in the agricultural, forestry and fishing category. For the total number of migrants in this category, 28 percent were in general sales occupations, 14 percent in material handling and distribution, 13 percent in insurance, securities, real estate and business service sales occupations, 10 percent worked as information 7 percent as mail and message distribution clerks. However, as with the precision production and craft category, the proportion of males and females in these occupations varied. For males, approximately 28 percent worked in material handling and distribution, 15 percent as mail and message distribution clerks and 12 percent as information clerks. For females, 43 percent worked in general sales occupations, 17 percent in insurance, securities, real estate and business service sales occupations, and 8 percent as information clerks.

The operators, fabricators and laborer occupation category had more males. Approximately 80 percent of all migrants in this occupational category were male. Of these, 31 percent were general freight, stock and material movers, 20 percent were motor vehicle operators and 16 percent were hand packers and packagers. The largest groups of women (33 percent) in this occupational category worked as helpers to machine operators and tenders.

Table 5.5b shows the major industry groups by Freely Associated States state for employed pre- and post-Compact migrants aged 16 years and older. The largest groups of the Freely Associated States migrants and their children were employed in manufacturing (25 percent), services (21 percent) or retail trade (21 percent). This pattern generally persisted among both the pre- and post-Compact male and female migrants. However, 25 percent of all the pre- and post-Compact males were in the transportation and communication industry, while only 5 percent of the females were.

Table 5.5b: Industry of Micronesian Migrants and Their Children, CNMI, 1998.

Industry	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Employed Persons 16+ Years	518	689	445	177	12	11	61	501
Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mining	0.2	0.0	0.0	0.0	0.0	0.0	1.6	0.0
Construction	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.2
Manufacturing	42.5	12.5	45.2	23.7	25.0	9.1	26.2	8.6
Transportation/Communication	11.4	19.6	11.5	14.7	8.3	36.4	11.5	21.0
Wholesale Trade	1.4	1.9	1.1	0.6	0.0	0.0	3.3	2.4
Retail Trade	18.7	22.2	16.9	22.0	50.0	18.2	26.2	22.4
Finance/Insurance	1.0	3.3	0.7	2.3	0.0	9.1	1.6	3.6
Services	16.0	24.5	15.7	23.7	16.7	27.3	19.7	24.8
Public Administration	4.2	13.8	3.8	10.2	0.0	0.0	8.2	15.4
All Others	4.4	2.0	4.9	2.8	0.0	0.0	1.6	1.8
Employed Males 16+ Years	298	376	257	95	8	5	33	276
Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mining	0.3	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Construction	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.4
Manufacturing	33.6	9.6	36.2	15.8	0.0	0.0	21.2	7.6
Transportation/Communication	18.8	29.3	18.7	24.2	12.5	60.0	21.2	30.4
Wholesale Trade	1.7	1.9	1.6	0.0	0.0	0.0	3.0	2.5
Retail Trade	19.1	20.2	15.2	23.2	62.5	0.0	39.4	19.6
Finance/Insurance	0.3	1.6	0.4	1.1	0.0	0.0	0.0	1.8
Services	16.4	20.2	17.1	20.0	25.0	40.0	9.1	19.9
Public Administration	4.7	14.4	5.1	12.6	0.0	0.0	3.0	15.2
All Others	5.0	2.7	5.8	3.2	0.0	0.0	0.0	2.5
Employed Females 16+ Years	220	313	188	82	4	6	28	225
Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mining	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Construction	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Manufacturing	54.5	16.0	57.4	32.9	75.0	16.7	32.1	9.8
Transportation/Communication	1.4	8.0	1.6	3.7	0.0	16.7	0.0	9.3
Wholesale Trade	0.9	1.9	0.5	1.2	0.0	0.0	3.6	2.2
Retail Trade	18.2	24.6	19.1	20.7	25.0	33.3	10.7	25.8
Finance/Insurance	1.8	5.4	1.1	3.7	0.0	16.7	7.1	5.8
Services	15.5	29.7	13.8	28.0	0.0	16.7	28.6	30.7
Public Administration	3.6	13.1	2.1	7.3	0.0	0.0	14.3	15.6
All Others	3.6	1.3	3.7	2.4	0.0	0.0	3.6	0.9

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Among the Freely Associated States groups, most of the FSM migrants worked in manufacturing (39 percent), while most of the Marshallese (35 percent) worked in retail trade, and the largest groups of Palauan migrants worked in services. In all groups, a greater proportion of post-Compact than pre-Compact migrants worked in manufacturing, while a greater proportion of pre-Compact than post-Compact migrants worked in services. For the total migrant population, more pre-Compact than post-Compact migrants worked in transportation and communication and retail trade. However, this pattern did not hold for all Freely Associated States groups.

In every Freely Associated States group, more females than males worked in manufacturing. Approximately 55 percent of the post- and 16 percent of the pre-Compact females worked in manufacturing, compared to 34 percent and 10 percent of the pre- and post-Compact males. The opposite was true for the transportation and communication industry. More pre-Compact (29 percent) and post-Compact (19 percent) worked in this industry than pre-Compact (8 percent) or post-Compact (1 percent) women. More pre-Compact females (54 percent) than males (40 percent) worked in the retail trade and services industry, while more post-Compact males (36 percent) than females (34 percent) do.

Within the manufacturing industry, 96 percent of all migrants, including 98 percent of the females and 69 percent of the male migrants, worked in apparel and other fabric products production. In the services industry, 58 percent of all migrants work in hotels, rooming houses and other lodging places, including 63 percent of the male and 52 percent of the female migrants. Another 17 percent of the migrants work in education services, including 24 percent of the female migrants and 10 percent of the male migrants.

Greater variation existed in the proportion of migrants in the various sectors of the retail industry. Approximately 30 percent of all migrants worked in general merchandise stores, 24 percent in miscellaneous retail and 19 percent in eating and drinking establishments. The pattern of male and female participation in this industry differs slightly. Among female migrants, 35 percent worked in miscellaneous retail, 28 percent in general merchandise stores and 19 percent in eating and drinking establishments. Among male migrants, 32 percent worked in general merchandise stores, 19 percent in eating and drinking establishments, and 14 percent in miscellaneous retail.

Within the transportation and communication industry, 86 percent of the laborers were male. Of those, 34 percent worked in the air transportation sector, while 24 percent worked in general transportation services. The largest groups of women in this sector (36 percent) worked in the air transportation sector.

Migration Trends. Table 5.5c shows the change in labor force characteristics for the post-Compact migrant adults between 1990 and 1998. The number of post-Compact Freely Associated States migrants 16 years and over was about the same in 1990 and 1998. The percentage in the labor force increased from 58 percent in 1990 to about 61 percent in 1998, while the unemployment rate decreased, from 6 percent in 1990 to 5 percent in 1998. The percentage for females showed similar figures, with labor force participation at about half of adult females, and the unemployment rate at about 4 percent.

Table 5.5c. Labor Force Characteristics, Post-Compact Migrants and Children, CNMI: 1990, 1995 and 1998

Labor Force Characteristics	Total			FSM			RMI		
	1998	1995	1990	1998	1995	1990	1998	1995	1990
Persons 16 years and over	936	1,577	980	798	1,289	947	30	66	29
In labor force (%)	60.6	66.4	58.5	60.9	65.6	59.6	53.3	60.6	24.1
Unemployed (%)	5.2	11.0	6.1	5.0	10.9	6.2	13.3	19.7	3.4
Females 16 years and over	497	875	531	423	697	511	18	43	20
In labor force (%)	48.3	57.3	49.9	48.0	55.7	51.5	27.8	46.5	10.0
Unemployed (%)	4.0	11.2	4.5	3.5	11.0	4.7	5.6	14.0	0.0
Worked last year (%)	56.4	54.3	54.2	57.8	53.1	55.0	46.7	45.5	27.6
Worked whole year (%)	37.4	39.8	29.9	37.7	37.9	30.5	33.3	25.8	10.3
Worked full-time (%)	54.1	51.6	51.6	55.9	50.7	52.4	43.3	37.9	27.6
Full-time, whole year (%)	36.5	38.3	28.8	36.8	36.7	29.4	30.0	25.8	10.3

Sources: 1990 and 1995 Censuses of the CNMI and the 1997/8 Census of Micronesians

The table also shows information about work in the year before the census. The percentage of persons who worked in the year before the census increased slightly between the 1990 and 1998 censuses, increasing from about 54 percent to 56 percent of the post-Compact Freely Associated States migrant adults. The percentage of persons who worked the whole year (50 to 52 weeks), however, increased considerably between 1989 and 1997, from 30 percent in 1989 to 37 percent in 1997. The percentage of full-time workers, those who worked 35 hours or more, increased from 52 percent to 54 percent, while the percentage of year-round full-time workers increased from 29 percent in 1989 to 36 percent in 1997.

As with Guam, the employment picture changed over the decade. For the CNMI, the percentage of post-Compact Freely Associated States migrants working as operators, fabricators, and laborers greatly decreased during the 5 year period, while the percentage in technical, sales, and administrative support occupations and managers and professionals increased quite a bit (Table 5.5d). Still, about 1 in every 3 workers were working in occupations indicating the garment industry, down from about half in 1990. The percentage of persons doing precision production and crafts also decreased.

Table 5.5d. Employment Characteristics, Post-Compact Migrants and Children, CNMI: 1990, 1995 and 1998

Employment Characteristics	Total			FSM			RMI		
	1998	1995	1990	1998	1995	1990	1998	1995	1990
OCCUPATION:									
Manag and professional (%)	2.5	16.4	8.5	2.5	15.0	0.0	0.0	14.8	0.0
Tech,sales and admin support	3.1	29.6	19.0	3.1	25.4	0.0	0.0	66.7	50.0
Service (%)	2.5	13.6	13.7	1.1	14.9	100.0	0.0	7.4	0.0
Farming, forestry, and fishing	18.7	0.9	1.0	18.0	1.0	0.0	50.0	0.0	0.0
Production Prod, crafts (%)	40.0	3.1	7.3	40.4	3.1	0.0	41.7	0.0	0.0
Operators, fabric & laborers (	29.2	36.4	50.1	30.3	40.6	0.0	8.3	11.1	50.0
INDUSTRY:									
Retail trade (%)	18.7	17.2	13.1	16.9	15.6	12.9	50.0	40.7	33.3
All Services (%)	16.0	21.9	20.3	15.7	21.4	20.2	16.7	18.5	16.7
Hotels (%)	...	10.0	6.4	...	10.1	6.3	...	0.0	0.0
Private Sector (%)	...	79.0	84.4	...	79.0	84.4	...	81.5	100.0

Sources: 1990 and 1995 Censuses of the CNMI and the 1997/8 Census of Micronesians

The data on industry also show changes, but we are not showing manufacturing here, specifically to keep the data comparable to Guam and Hawaii. About 13 percent of the post-Compact Freely Associated States workers in 1990 were in retail trade, a figure which increased to 17 percent in 1995 and 19 percent in 1998. During the same time period, the percentage in service industries increased only slightly, from 20 percent in 1990 to 22 percent in 1995, but decreased to 16 percent in 1998. Of these, the Hotel industry increased from about 6 percent of the total in 1990 to 10 percent in 1995.

The post-Compact Freely Associated States migrant workers were much more likely than Guam's workers to be in the public sector. While substantial, only 79 percent of the Freely Associated States migrant workers in the CNMI in 1995 were in the private sector, down from 84 percent in 1990. The values for FSM were identical, but the percentage for the Marshallese workers decreased from 100 percent private sector in 1990 to 82 percent in 1995, and 79 percent of the Palau migrant workers were in the private sector.

5.6 Income and Poverty

Table 5.6 shows the income characteristics of Micronesian migrants and their children, including household and family income, per capita income and poverty status. CNMI had 237 post-Compact households and 506 pre-Compact households in the 1998 Census. The median income for the post-Compact households was \$13,400, about \$8,000 less than the median of \$21,000 for the pre-Compact households. The mean household income levels were greater in each case. The means and medians were heavily influenced by the largest groups – the pre-Compact Palauans were 372 of the 506 pre-Compact households (about 3/4th of the units) and the post-Compact FSM migrant households were 212 of the 237 units (89 percent) of their units.

Family income followed the pattern of household income – with post-Compact family median income of \$14,500 being about \$7,500 less than the pre-Compact family median income. Mean family incomes were close to the mean household incomes.

The per capita incomes were relatively high – post-Compact per capita income was about \$5,300, slightly more than half the \$9,900 per capita income of the pre-Compact migrants. The biggest differences in per capita income occurred among the few Marshallese in the CNMI, and the smallest differences were for the post- and pre-Compact Palauans, who had essentially the same per capita income, at just under \$10,000.

As noted in the Guam chapter, definitions of poverty appear in Appendix B. About 1,750 post-Compact and 1,200 pre-Compact migrants were in the poverty universe. Of these, about 58 percent of the post-Compact migrants and 42 percent of the pre-Compact migrants were living below the US-defined poverty line.

Table 5.6: Income Characteristics of Micronesian Migrants and Their Children, CMNI, 1998.

Income Characteristics	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Households	237	506	212	129	6	5	19	372
Median Income (Dollars)	13,388	21,047	13,374	17,999	12,499	46,249	14,166	21,666
Mean income (Dollars)	19,617	28,372	19,940	25,830	13,663	47,464	17,888	28,997
Families	197	457	181	117	4	5	12	335
Median Income (Dollars)	14,450	22,041	14,391	19,599	14,999	46,249	14,999	22,525
Mean income (Dollars)	21,354	29,732	21,632	27,158	16,969	47,464	18,615	30,366
Per Capita Income (in Dollars) [Excludes children of migrants]	5,339	9,882	4,806	9,619	2,276	12,372	9,871	9,918
Poverty Universe	1,750	1,191	1,499	289	74	18	177	884
Below Poverty Level	57.6	42.0	58.7	52.9	58.1	38.9	48.0	38.5
Below 50% of Poverty Level	23.4	14.5	23.8	21.5	32.4	22.2	16.4	12.1
Below 125% of Poverty Level	68.5	50.9	70.0	62.6	68.9	38.9	54.8	47.3
Below 185% of Poverty Level	82.2	72.0	83.0	81.3	78.4	55.6	77.4	69.2

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Migration Trends. Table 5.6 shows data on income and poverty for the CNMI in 1989, 1994 and 1997. The number of post-Compact households with income in 1990 was 543, which increased to 885 in 1995, but decreased to 237 in 1998 because of the post- and pre-Compact migrants were defined. Of these, the median household income decreased very slightly, from \$18,700 to \$18,500, if inflation is ignored, between 1990 and 1995, but decreased to \$13,388 in 1998.

As noted above, pre-Compact migrants had much higher incomes, so probably some persons who were identified previously as post-Compact, became pre-Compact in 1998 through self-identification. The mean household income also decreased throughout the period, even when inflation is not considered. The median and mean household incomes for the FSM migrants were about the same as for all Freely Associated States households.

Table 5.6. Income Characteristics, Post-Compact Migrants and Children, CNMI: 1990, 1995 and 1998

Income Characteristics	Total			FSM			RMI		
	1998	1995	1990	1998	1995	1990	1998	1995	1990
Households	237	885	543	212	668	505	45	32	
Median (dollars)	13,388	18,507	18,712	13,374	17,043	18,503	22,856	21,666	
Mean (dollars)	19,617	25,717	28,783	19,940	24,309	28,656	30,264	31,274	
Per capita income (\$)	5,339	2,705	1,534	4,806	2,363	1,584	1,171	526	
Poverty Universe	1,750	4,502	3,052	1,499	3,899	2,909	74	215	126
Below 50 % of poverty level(%)	23.4	16.6	18.3	23.8	17.6	18.5	32.4	9.3	15.1
Below poverty (%)	57.6	35.0	36.1	58.7	36.3	36.3	58.1	26.5	31.0
Below 125 % poverty level (%)	68.5	41.2	41.3	70.0	42.4	41.7	68.9	30.7	31.7
Below 185 % poverty level (%)	82.2	49.3	50.2	83.0	49.7	50.3	78.4	37.7	50.0

Sources: 1990 and 1995 Censuses of the CNMI and the 1997/8 Census of Micronesians

The per capita income for post-Compact Freely Associated States migrants was lower than for Guam's migrants. The per capita income of these migrants to the CNMI increased from \$1,500 in 1989 to \$2,700 in 1994 and \$5,339, again without regard to inflation. Hence, per capita income more than tripled during the 8 year period.

The number in the poverty universe increased from about 3,100 in 1990 to 4,500 in 1995 but decreased to 1,750 in 1998, again because of definitions of post- and pre-Compact migrants. The percent in poverty decreased slightly between 1989 and 1994, from 36 to 35 percent, but increased sharply to 58 percent in 1998.

CHAPTER 6

NUMBERS AND CHARACTERISTICS OF MICRONESIAN MIGRANTS IN HAWAII

6.1 Demography

The data for the State of Hawaii differ from those of Guam and the CNMI because census information is available from only one source – the 1997 Census of Micronesian Migrants to Hawaii. The 1990 U.S. Census collected information on Micronesians in Hawaii using items on Race and Ancestry; however, the U.S. Census data present several problems for this analysis. For example, the 1990 Census was collected for most of the population by self-enumeration; that is, the questionnaire arrived in the mail, was filled by the respondent and then was returned by mail. Most Micronesian respondents received a questionnaire asking them to choose from one of 17 selected racial categories and requesting a write-in entry. Most selected the closest category, “Other Asian and Pacific Islander”, but many then reported a general write-in category, such as “Pacific Islander” or “Micronesian”, rather than giving a specific state or country of origin, such as Chuukese or Marshallese. Thus, the 1990 Census data permit neither changes in the numbers of Micronesians nor assessments about their characteristics. For the analytical purposes of this report, only the 1997 Census of Micronesian Migrants to Hawaii will be used.

Table 6.1 shows some demographic characteristics of the Micronesian migrants and their children. The 1997 Census reported a total of 6,119 Micronesian migrants in Hawaii, including 610 pre-Compact migrants and 5,509 post-Compact migrants and children. Of the 5,509 post-Compact migrants, 60 percent were from the Federated States of Micronesia, 38 percent were from the Marshall Islands, and the remaining 2 percent were from Palau. Of the total post-Compact migrant category, 694, or approximately 11 percent, were the children of Freely Associated States-born persons.

Table 6.1: Demographic Characteristics of Micronesian Migrants and Children, Hawaii, 1997.

Characteristic	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Population	5,509	610	3,312	232	2,070	185	127	193
Males	52.2	50.3	54.8	66.4	48.0	35.7	53.5	45.1
Females	47.8	49.7	45.2	33.6	52.0	64.3	46.5	54.9
Sex Ratio	109.1	101.3	121.1	197.4	92.2	55.5	115.3	82.1
Median Age	21.8	33.3	22.9	33.1	20.0	29.6	21.1	38.8
Less than 15 years	29.8	3.6	27.3	0.9	35.1	8.1	7.1	2.6
15 to 29 years	47.1	33.8	48.1	31.0	43.8	42.7	74.8	28.5
30 to 44 years	15.4	40.3	17.5	54.7	12.2	31.9	12.6	31.1
45 to 59 years	5.2	17.2	4.7	12.5	6.0	13.5	5.5	26.4
60 years and over	2.5	5.1	2.4	0.9	2.9	3.8	0.0	11.4
Males 15+ Never Married	58.2	41.7	60.2	40.1	51.5	54.7	79.0	34.9
Females 15+ Never Married	49.6	32.2	47.7	25.6	49.5	39.6	83.9	29.4
Households	1,374	306	908	134	69	434	32	103
Persons per Household	4.0	2.1	3.6	1.8	4.8	2.6	3.5	2.0
Persons per Family	6.0	2.7	5.8	2.3	6.2	3.3	7.1	2.8

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Because males are more likely to migrate internationally than females, it is not unusual for a migrant community to be male oriented, especially in the initial stages of its establishment. This male dominance is especially likely if the primary motive for emigration is economic opportunity; because females tend to migrate either as dependents of male migrants or, if male migration precedes female migration, family-reunification flows subsequently. The main reason for Micronesian migration to Hawaii was either for employment or education (which can be seen as a precursor to employment). Thus, a pattern of male surpluses can be seen in the Micronesian community of Hawaii.

The sex ratio for the pre-Compact migrants was 101, with the number of males slightly exceeding the number of females in the population. Among the post-Compact migrants the ratio was 109, showing even more males than females. However, this pattern of high sex ratios did not hold for all Freely Associated States groups. For the Marshallese, the pre-Compact sex ratio was 56, showing about 2 females for each male, while the post-Compact sex ratio was 92, indicating a more balanced but still slightly female. The pre-Compact sex ratio of Palau was 82, which also demonstrated a surplus of females to males, but the post-Compact sex ratio increased to 115, indicating a surplus of males. The pre-Compact sex ratio of FSM was 197, indicating a large surplus of males. In the post-Compact FSM community, the sex ratio is more balanced at 121, but remains male-oriented and higher than the total average. The dominance of female migrants in both the pre- and post-Compact Marshallese groups is probably due to the dominance of non-economic reasons for migrating (e.g. as a spouse or dependent of a migrant, visits/vacations and medical reasons) in which females were more likely to participate.

The median age of the post-Compact migrants and their children was 21.8 years, while the median age of the pre-Compact migrants was 33.3 years, more than 11 years older than the post-Compact migrants. This age difference has two aspects. First, the pre-Compact migrants have been residents of Hawaii for a longer period than the post-Compact migrants. Second, the post-Compact migrants include all children of Freely Associated States-born persons who were not born in the Freely Associated States, which would lower the median age. Of the post-Compact migrants, the FSM migrants were the oldest (22.9 years), followed by the Palauans (21.1 years) and the Marshallese (20.0 years). Among the pre-Compact migrants, the Palauans were the oldest (38.8 years), followed by the FSM migrants (33.1 years) and the Marshallese (29.6 years).

Of the 5,509 post-Compact migrants to Hawaii, almost 30 percent were less than 15 years old while approximately half were between 15 and 29 years old, indicating that many migrants were coming as young families. The post-Compact Marshallese migrants had the largest percentage of children, with 35 percent less than 15 years old. Approximately 1 in every 4 FSM migrants were less than 15 years old, while this ratio drops to 1 in every 16 for Palauan post-Compact migrants. This low ratio may be the result of the relatively shorter period of post-Compact migration time Palauans had (3 years) compared to Marshallese and FSM migrants (10 years), which could have limited Palauan household formation in Hawaii. In fact, 75 percent of Palauan post-Compact migrants were 15 to 29 years old, compared to 45 percent of the Marshallese and 49 percent of the FSM post-Compact migrants. Less than 16 percent of all post-Compact migrants were 30 to 44 years, while less than 8 percent were 45 years or older.

With 73 percent of the total population below the age of 30, clearly, the Micronesian migrant community in Hawaii is a young population. The high proportion of never married pre- and post-Compact migrants reflects this young age structure. Approximately 42 percent of the adult pre- and 58 percent of the post-Compact males were never married, compared to 32 percent of the adult pre- and 50 percent of the post-Compact.

Household size in Hawaii was smaller than in Guam or in the CNMI. The average household size of the 1,374 post-Compact Freely Associated States households was 4.0 persons – 3.6 for the FSM households, 4.8 for the Marshall Islands, and 3.5 for the Palau households. The average family size was 6.0 persons -- 5.8 for the FSM households, 6.2 for the Marshall Islands, and 7.1 for the Palau households. As expected, because one-person households were not included in the calculation of average family size, average family size was larger than average household size.

6.2 Citizenship and Residency Status

Table 6.2 shows the citizenship status and place of residence one and five years ago of the Micronesian migrants and their children in Hawaii. Approximately 14 percent of the pre- and 11 percent of the post-Compact Freely Associated States migrants to Hawaii were U.S. citizens. Between 12 percent and 14 percent of all of the post-Compact migrants were citizens. In general, the proportion of post-Compact migrants was higher than the proportion of pre-Compact migrants, because the post-Compact category included all children of the Freely Associated States migrants born in the United States. However, pre-Compact Palauan migrants were the most likely (22 percent) of all groups to be U.S. citizens.

Table 6.2: Citizenship Status and Place of Residence 1 and 5 Years Ago of Micronesian Migrants and Children, Hawaii, 1997.

Characteristics	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Population	5,509	610	3,312	232	2,070	185	127	193
Population born 5 Years Ago or Before	88.1	99.7	87.2	100.0	88.8	100.0	97.6	99.0
Citizenship Status								
U.S. Citizen	13.6	10.8	14.3	5.6	12.5	5.9	11.8	21.8
Permanent Resident	48.4	55.4	39.0	42.7	64.8	82.2	23.6	45.1
Residency Status								
Current Residence, 5 Years Ago	22.3	50.0	22.6	49.1	22.0	55.1	19.4	46.1
Current Residence, 1 Year Ago	64.5	87.9	64.4	87.5	64.7	90.3	63.0	86.0
Outside Area, 5 Years Ago	57.1	10.7	54.4	9.1	60.1	5.4	76.6	17.8
Outside Area, 1 Year Ago	26.0	2.5	24.9	2.2	27.8	0.5	27.6	4.7

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Of the non-citizens, about 48 percent of the post-Compact migrants were permanent residents compared to 55 percent of the pre-Compact migrants. In each of the Freely Associated States groups, a higher proportion of pre-Compact migrants than post-Compact migrants were permanent residents, which reflects the longer settlement period experienced by the pre-Compact migrants. About 82 percent of the Marshallese, 45 percent of the Palauan and 43 percent of the FSM pre-Compact migrants were permanent residents. Among the pre-Compact migrants, 65 percent of the Marshallese, 39 percent of the FSM and 24 percent of the Palauan migrants were permanent residents.

Table 6.2 also shows information on the place of residence one and five years prior to the 1997 Census. Approximately 22 percent of the post-Compact and 50 percent of the pre-Compact migrants lived in the same residence in 1997 as they did in 1992. Not surprisingly, a larger proportion of post-Compact migrants (57 percent) lived outside Hawaii five years before than pre-Compact migrants (11 percent). Approximately 65 percent of the post-Compact migrants lived in the same residence in 1996 as they did in 1997, with only about 26 percent living outside of Hawaii in 1996. The largest groups of pre-Compact migrants (88 percent) lived in the same house one year prior as they did in 1997.

Post-Compact Palauan migrants were the most likely of all the Freely Associated States groups to have lived outside of Hawaii either one (28 percent) or five (77 percent) years earlier, which probably reflects the later Compact implementation date. The pre-Compact Marshallese were the most likely to have lived in the same house either one (90 percent) or five (55 percent) years earlier.

6.3 Reasons for Migrating

Table 6.3 shows the reasons for migrating by sex for both the pre- and post-Compact migrants. Even though the amount of migration from Palau, FSM and RMI has increased dramatically since the implementation of the Compact, the reasons given for emigration by both pre- and post-Compact migrants have remained basically unchanged.

Table 6.3: Reasons for Migrating by Sex for Pre- and Post-Compact Migrants Only, Hawaii, 1997.

Reason for Migrating	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Migrant Population	4,815	610	2,853	232	1,839	185	123	193
Employment	15.6	12.6	21.6	16.8	6.6	5.4	9.8	14.5
Spouse of Employed	3.6	11.1	2.3	7.3	5.7	16.2	2.4	10.9
Dependent of Employed	11.4	12.8	7.9	9.5	17.4	22.7	4.9	7.3
Family Subsistence	0.6	0.5	0.6	0.0	0.7	1.6	0.0	0.0
Family Business	0.2	0.7	0.1	0.0	0.3	0.0	0.8	2.1
Missionary Activities	1.1	0.0	0.3	0.0	2.4	0.0	0.0	0.0
Medical Reasons	6.8	2.5	5.0	1.7	9.8	3.2	4.1	2.6
Visiting or Vacation	10.9	4.6	9.1	3.0	14.3	5.4	2.4	5.7
School	49.8	55.2	53.1	61.6	42.9	45.4	75.6	57.0
Males	2,503	307	1,574	154	864	66	65	87
Employment	22.3	17.6	28.3	21.4	11.6	12.1	18.5	14.9
Spouse of Employed	0.5	1.3	0.1	0.0	1.3	3.0	0.0	2.3
Dependent of Employed	9.9	11.4	5.5	9.1	18.1	22.7	6.2	6.9
Family Subsistence	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Family Business	0.1	0.0	0.0	0.0	0.2	0.0	1.5	0.0
Missionary Activities	1.1	0.0	0.4	0.0	2.5	0.0	0.0	0.0
Medical Reasons	5.6	2.6	3.6	1.9	9.5	0.0	3.1	5.7
Visiting or Vacation	9.1	2.0	7.6	1.3	12.5	1.5	1.5	3.4
School	51.3	65.1	54.3	66.2	44.3	60.6	69.2	66.7
Females	2,312	303	1,279	78	975	119	58	106
Employment	8.3	7.6	13.4	7.7	2.3	1.7	0.0	14.2
Spouse of Employed	6.9	21.1	5.0	21.8	9.5	23.5	5.2	17.9
Dependent of Employed	13.1	14.2	10.7	10.3	16.8	22.7	3.4	7.5
Family Subsistence	1.1	1.0	1.0	0.0	1.2	2.5	0.0	0.0
Family Business	0.3	1.3	0.2	0.0	0.3	0.0	0.0	3.8
Missionary Activities	1.1	0.0	0.2	0.0	2.3	0.0	0.0	0.0
Medical Reasons	8.1	2.3	6.7	1.3	10.1	5.0	5.2	0.0
Visiting or Vacation	12.9	7.3	11.0	6.4	15.9	7.6	3.4	7.5
School	48.2	45.2	51.7	52.6	41.6	37.0	82.8	49.1

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

The largest groups of pre-Compact migrants left for schooling (55 percent), employment (13 percent) or as a spouse or dependent (11 percent and 13 percent, respectively). The three main reasons post-Compact migrants moved were schooling (50 percent), employment (16 percent) or as a spouse or dependent of an employed person (4 percent and 11 percent, respectively). Not surprisingly, between the pre- and post-Compact periods, the proportion emigrating for reasons of employment increased while the proportion emigrating for education declined. Spousal and dependent emigration also declined; however, spousal emigration experienced the greater decline, probably reflecting an increase in the percent of never married immigrants among post-Compact immigrants. The percent of post-Compact immigrants entering Hawaii for visits/vacations and medical reasons also increased. For visits/vacations, the percent increased from 5 percent to 11 percent; for medical reasons, the percent increased from 3 percent to 7 percent. These increases were probably the result of the immigration privileges associated with the Compact, which facilitates shorter-term, circular-type migration.

This pattern of change generally held for each of the migrant groups. For Palau, more pre-Compact migrants were in Hawaii than post-Compact migrants, possibly indicating a decline in the amount of Palauan immigration through time or a shift in preferred migrant destinations. Along with this decline, the reasons given for migration also changed. The percent of Palauans immigrating for reasons of employment or as either a spouse or a dependent of an employed person declined, but the percent immigrating for education increased. However, this pattern did not hold for both male and female immigrants. The proportion of male Palauans emigrating for employment and education increased, while the proportion of spousal and dependant migration declined. For females, the proportion emigrating for employment or as a spouse or a dependent declined, while the proportion emigrating for education increased, from 49 percent to 83 percent. In general, the main reason Palauans migrated to Hawaii was education, a pattern that intensified through time, especially for females.

Immigration from FSM increased dramatically between the pre- and post-Compact periods. In 1997, FSM migrants represented the largest Freely Associated States immigrant group in Hawaii. As the FSM migrant community increased through time, their reasons for migrating to Hawaii shifted. Compared to pre-Compact migrants, the percentage of post-Compact migrants emigrating for employment increased. The proportion of emigration for visits/vacations and for medical reasons also increased. However, migration for education and as a spouse or dependent of an employed person declined. While this pattern generally held for both men and women, some differences occurred. For example, while the proportion of males emigrating for education declined from 66 percent to 54 percent, the proportion of female migrants remained at 52 percent to 53 percent. Also, the proportion of males migrating as a spouse of an employed person remained unchanged at less than 1 percent while the proportion migrating as dependents declined. For females, the proportion migrating as a spouse declined from 22 percent to 5 percent, probably reflecting an increase in the number of never-married women emigrating from FSM for employment and education, while the proportion migrating as dependents remained unchanged at 10 percent to 11 percent. In general, the largest groups of emigrants from FSM moved to Hawaii for education. However, with the implementation of the Compact, the emphasis on migration for employment appears to have increased through time.

Immigration from RMI to Hawaii also increased dramatically between the pre- and post-Compact periods. Like the Palauan and FSM migrant communities, the proportion of RMI migrants coming to Hawaii for education declined while those coming for employment increased, but only slightly. Both dependent and especially spousal emigration declined, probably reflecting an increase in never-married migrants, while the proportion of migration for visits/vacations and for medical reasons increased, probably reflecting the liberalization of migration privileges in the post-Compact period. However, as with the other Freely Associated States states, males and females differed in their reasons for migrating in the pre- and post-Compact period. For example, the proportion of males emigrating for education declined from 61 percent to 44 percent, while the proportion of women increased from 37 percent to 42 percent. While the proportion of both males and females emigrating as a spouse or dependent of an employed person declined, the decline was more dramatic among women. For example, the proportion of females spousal migrants declined from 24 percent to 10 percent. In general, the main reason why RMI migrants came to Hawaii was education, but between the pre- and post-Compact periods, proportionately more migrants were entering Hawaii as visitors or vacationers and for medical reasons. The proportion of the RMI migrants entering Hawaii for employment remained stable.

6.4 Social Characteristics

Table 6.4 includes information about the social characteristics of both the pre- and post-Compact migrants and their children, including language spoken at home, school enrollment and educational attainment. About 22 percent of the post-Compact Freely Associated States migrants aged 5 years and over spoke English at home compared to 36 percent of the pre-Compact migrants. Of the post-Compact migrants, Palauans (30 percent) were the most likely to speak English at home, followed by migrants from FSM (25 percent) and the Marshalls (18 percent). Approximately 60 percent of the post-Compact Freely Associated States migrants spoke a language other than English more frequently at home, compared to only 40 percent of the pre-Compact migrants. Among post-Compact migrants, the Marshallese (74 percent) were the most likely to speak a language other than English at home, followed by FSM (50 percent) and Palauan (47 percent) migrants. Overall, the higher use of English at home by pre-Compact migrants probably reflects their longer assimilation and adaptation period in Hawaii.

Table 6.4: Language Use, School Enrollment and Educational Attainment of Micronesian Migrants and Children, Hawaii, 1997.

Characteristics	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Population	5,509	610	3,312	232	2,070	185	127	193
Persons 5+ Years	4,851	608	2,888	232	1,839	185	124	191
Language Use (5+ Years)								
Speak English at Home	22.1	35.5	24.5	35.8	17.8	35.1	29.8	35.6
Speak Other Language at Home More Frequently than English	59.0	40.1	50.0	34.1	73.9	49.7	46.8	38.2
School Enrollment								
Persons 3+ Years, Enrolled	1,714	103	896	19	753	38	65	46
Public Elementary School	40.4	16.5	34.0	10.5	50.6	28.9	9.2	8.7
Public High School	26.2	33.0	22.5	31.6	28.8	55.3	46.2	15.2
College/University	28.4	50.5	38.7	57.9	15.3	15.8	38.5	76.1
Educational Attainment (Cumulative Percent)								
Total Persons 25+ Years	2,066	470	1,369	199	664	112	33	159
No Education	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Grade 8 or Less	99.7	100.0	99.7	100.0	99.5	100.0	100.0	100.0
Some High School	83.5	86.4	85.8	92.5	78.5	82.1	90.9	81.8
High School Graduate	55.0	68.9	60.7	78.4	43.1	55.4	57.6	66.7
Some College/Two Year Degree	29.6	47.0	34.8	50.3	17.9	37.5	45.5	49.7
Bachelor's Degree	1.2	3.0	1.6	1.5	0.5	0.9	0.0	6.3
Graduate Degree	0.4	0.6	0.5	0.0	0.2	0.0	0.0	1.9
Males 25+ Years								
Total Persons	1,129	250	792	136	317	41	20	73
No Education	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Grade 8 or Less	99.5	100.0	99.5	100.0	99.4	100.0	100.0	100.0
Some High School	87.8	91.6	89.1	94.9	83.9	92.7	95.0	84.9
High School Graduate	60.1	78.4	63.5	85.3	50.8	75.6	75.0	67.1
Some College/Two Year Degree	34.5	55.6	38.6	57.4	23.0	53.7	55.0	53.4
Bachelor's Degree	1.3	2.0	1.8	0.7	0.3	2.4	0.0	4.1
Graduate Degree	0.4	0.8	0.5	0.0	0.0	0.0	0.0	2.7
Females 25+ Years								
Total Persons	937	220	577	63	347	71	13	86
No Education	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Grade 8 or Less	99.9	100.0	100.0	100.0	99.7	100.0	100.0	100.0
Some High School	78.3	80.5	81.1	87.3	73.5	76.1	84.6	79.1
High School Graduate	48.8	58.2	56.8	63.5	36.0	43.7	30.8	66.3
Some College/Two Year Degree	23.6	37.3	29.6	34.9	13.3	28.2	30.8	46.5
Bachelor's Degree	1.1	4.1	1.4	3.2	0.6	0.0	0.0	8.1
Graduate Degree	0.4	0.5	0.5	0.0	0.3	0.0	0.0	1.2

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

In 1997, 1,817 pre- and post-Compact migrants were three years and over and enrolled in school. Of those, 39 percent were enrolled in public elementary school, 27 percent in public high school and 30 percent in college. Of the total enrolled, 1,714, or 94 percent, were post-Compact Freely Associated States migrants. Of the post-Compact migrants enrolled in school, 52 percent were FSM migrants, 44 percent were Marshallese and 4 percent were Palauan. Most of those enrolled were attending either public elementary school (40 percent) or public high school (26 percent). Almost 500 post-Compact Freely Associated States migrants were attending college, either public or private.

Approximately 55 percent of post- and 69 percent of the pre-Compact migrants aged 25 years and over were high school graduates, had some college or a two year degree, or a bachelor's or graduate degree. Although the pre-Compact migrants had a lower proportion of migrants with only a high school degree (22 percent) when compared with post-Compact migrants (25 percent), pre-Compact migrants were more likely to have some college or a two-year degree (44 percent) than post-Compact migrants (28 percent). Compared to pre-Compact migrants, post-Compact migrants had a higher percentage of individuals with no education, grade 8 education or less and some high school. The differences between the pre- and post-migrant groups may be a result of the migration privileges associated with the Compact, which facilitated the emigration of a greater proportion of less-educated, and possibly less-skilled, Micronesians. Among each of the Freely Associated States groups, pre-Compact migrants were more likely to have graduated high school, had some college or a two year degree, or a bachelor's or graduate degree. Post-Compact FSM and Marshallese migrants had a higher proportion of migrants with no education, grade 8 or less or some high school, while the post-Compact Palauan migrants had a lower proportion of migrants with grade 8 education or less and a higher proportion with some high school.

Among both the pre- and post-Compact Freely Associated States migrants, a larger proportion of females than males had less than a high school graduate education. However, the difference between pre- and post-Compact migrants was greater for males than females. For example, 22 percent of pre-Compact and 40 percent of the post-Compact male migrants had less than a high school degree education, compared to 42 percent of pre-Compact and 51 percent of the post-Compact female migrants, indicating a larger proportional increase of less educated post-Compact males. Among post-Compact migrants, a lower proportion of females had some college or a two- or four-year degree; however, pre-Compact females were much more likely than males to have been college graduates. Generally speaking, pre-Compact males and females were better educated than their post-Compact counterparts.

6.5 Economic Characteristics

Table 6.5 shows labor force characteristics of the Micronesian migrants and their children aged 16 years and over. Of the 4,356 Freely Associated States migrants aged 16 years and over, 3,776, or 87 percent, were post-Compact migrants. Fully 45 percent of the post-Compact migrants aged 16 years and over were in the labor force, which was lower than the 58 percent of pre-Compact migrants that were in the labor force. In each of the Freely Associated States groups, labor force participation by post-Compact migrants was lower than the pre-Compact rate. This was especially true for the Marshallese, whose rate of 30 percent for the post-Compact migrants was lower than the 46 percent for the pre-Compact migrants. About half of the post-Compact FSM and Palauan migrants were in the labor force. The lower proportion of post-Compact labor force participation can also be seen in the total male and female migrants, but the difference is greater between the male pre- and post-Compact migrants. About 57 percent of post-Compact males were in the labor force compared to 31 percent of post-Compact females. Approximately 46 percent of Palauan and Marshallese adult males were in the labor force, compared to 63 percent of adult males from FSM. Not surprisingly, a lower percentage of females than males were in the labor force, a pattern that generally held for all Freely Associated States pre- and post-Compact migrant groups. Slightly over half of the post-Compact Palauan adult females were in the labor force, but only 39 percent of FSM and 16 percent of Marshallese adult females were in the labor force.

Table 6.5: Labor Force Characteristics of Micronesian Migrants and Children, Age 16 Years and Over, Hawaii, 1997.

Characteristics	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Persons 16+ Years	3,776	580	2,373	228	1,293	166	110	186
In the Labor Force	44.6	58.1	52.5	65.8	29.9	45.8	48.2	59.7
Unemployed	16.9	7.7	12.8	6.0	28.0	15.8	30.2	4.5
Worked During 1996	40.0	58.1	46.2	64.5	28.2	35.5	45.5	70.4
Worked Whole Year	19.7	37.6	23.7	49.1	12.2	18.1	21.8	40.9
Worked Full-Time	30.9	49.7	35.0	58.3	23.7	31.3	27.3	55.4
Worked Whole Year, Full-Time	16.1	33.3	18.9	44.7	10.9	17.5	17.3	33.3
Males 16+ Years	1,998	300	1,352	151	589	63	57	86
In the Labor Force	57.2	73.0	62.5	76.8	46.2	66.7	45.6	70.9
Unemployed	13.0	7.8	9.0	5.2	24.3	23.8	26.9	1.6
Worked During 1996	50.0	72.0	53.9	75.5	42.4	47.6	36.8	83.7
Worked Whole Year	24.7	47.0	28.4	55.6	16.8	27.0	17.5	46.5
Worked Full-Time	40.3	62.3	42.9	68.2	36.0	42.9	24.6	66.3
Worked Whole Year, Full-Time	20.9	40.7	23.6	50.3	15.3	25.4	15.8	34.9
Females 16+ Years	1,778	280	1,021	77	704	103	53	100
In the Labor Force	30.5	42.1	39.3	44.2	16.2	33.0	50.9	50.0
Unemployed	24.9	7.6	20.9	8.8	36.8	11.8	33.3	8.0
Worked During 1996	28.8	43.2	35.9	42.9	16.3	28.2	56.6	59.0
Worked Whole Year	14.1	27.5	17.4	36.4	8.4	12.6	26.4	36.0
Worked Full-Time	20.4	36.1	24.6	39.0	9.2	24.3	30.2	46.0
Worked Whole Year, Full-Time	10.7	25.4	12.6	33.8	7.2	12.6	18.9	32.0

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Among the post-Compact migrants, 17 percent were unemployed. Unemployment among post-Compact migrants was highest among the Palauans (30 percent), followed by the Marshallese (28 percent) and the migrants from FSM (13 percent). The proportion of unemployed was higher among the post-Compact migrants than among the pre-Compact group, a pattern that held for each of the Freely Associated States groups. The proportion of unemployed female post-Compact migrants (25 percent) was more than triple the proportion of unemployed female pre-Compact migrants (8 percent), possibly indicating unemployment affected Micronesian women more than men. Among the post-Compact female migrants, the Marshallese women had the highest proportion unemployed (37 percent), followed by Palauans (33 percent) and FSM (21 percent) women. The proportion of unemployed male post-Compact migrants was 13 percent, which is higher than 8 percent of unemployed male pre-Compact migrants. As with the women, among the post Compact-male migrants the Palauan men had the highest proportion of unemployed (27 percent), followed by 24 percent of the RMI and 9 percent of the FSM male migrants.

Generally speaking, pre-Compact migrants worked more than post-Compact migrants. About 58 percent of the pre-Compact migrants worked in 1996, with 38 percent working the whole year, 50 percent working full-time and 33 percent working full-time for the whole year. However, only 40 percent of the post-Compact migrants worked in 1996, with 20 percent working the whole year, 31 percent working full-time and 16 percent working full-time for the whole year. Of the Freely Associated States groups, the pre-Compact Palauan migrants were the most likely to have worked during the previous year (71 percent), but the FSM migrants were the most likely to have worked the whole year (49 percent), worked full-time (58 percent) and worked the whole year full-time(45 percent). The post-Compact Marshallese were the least likely to have worked in 1996, full-time and for the whole year. Approximately 53 percent of all male and 31 percent of all female migrants worked during 1996.

Occupational and Industrial Concentration Among Freely Associated States Migrants

Table 6.5a shows the major occupation groups for employed pre- and post-Compact migrants aged 16 years and older. The largest groups (70 percent) of the Freely Associated States migrants and their children were employed in one of two occupation categories: either agricultural, fishing and forestry (26 percent) or precision production and crafts (50 percent). This occupational concentration can be seen among both pre- and post-Compact migrants. However, the proportion of post-Compact migrants reporting an agricultural, forestry and fishing occupation was lower than the pre-Compact migrants (25 percent v. 28 percent), while the proportion reporting a precision production/craft occupation was higher (52 percent v. 45 percent).

Table 6.5a: Occupation of Micronesian Migrants and Their Children, Hawaii, 1997.

Occupation	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Employed Persons 16+ Years	1,401	311	1,086	141	278	64	37	106
Professional/Technical/Managerial	2.8	8.0	2.9	5.0	2.2	4.7	2.7	14.2
Clerical/Sales	1.6	2.9	1.7	4.3	1.1	3.1	2.7	0.9
Services	1.4	3.9	0.8	5.7	3.6	3.1	0.0	1.9
Agriculture/Forestry/Fishing	25.2	28.3	26.5	24.1	18.3	32.8	37.8	31.1
Precision Production/Crafts	51.7	44.7	51.7	46.8	52.5	45.3	45.9	41.5
Operators/Fabricators/Laborers	10.1	3.5	9.8	4.3	12.6	0.0	0.0	4.7
All Others	7.3	8.7	6.5	9.9	9.7	10.9	10.8	5.7
Employed Males 16+ Years	994	202	769	110	206	32	19	60
Professional/Technical/Managerial	2.9	6.4	3.4	5.5	1.0	6.3	5.3	8.3
Clerical/Sales	1.6	3.0	2.0	5.5	0.5	0.0	0.0	0.0
Services	1.1	5.4	0.7	6.4	2.9	6.3	0.0	3.3
Agriculture/Forestry/Fishing	13.5	16.3	12.9	14.5	15.0	25.0	21.1	15.0
Precision Production/Crafts	61.3	54.0	62.4	53.6	56.8	53.1	63.2	55.0
Operators/Fabricators/Laborers	13.3	5.0	12.9	4.5	16.0	0.0	0.0	8.3
All Others	6.3	9.9	5.9	10.0	7.8	9.4	10.5	10.0
Employed Females 16+ Years	407	109	317	31	72	32	18	46
Professional/Technical/Managerial	2.5	11.0	1.9	3.2	5.6	3.1	0.0	21.7
Clerical/Sales	1.7	2.8	1.3	0.0	2.8	6.3	5.6	2.2
Services	2.0	0.9	1.3	3.2	5.6	0.0	0.0	0.0
Agriculture/Forestry/Fishing	53.8	50.5	59.6	58.1	27.8	40.6	55.6	52.2
Precision Production/Crafts	28.3	27.5	25.6	22.6	40.3	37.5	27.8	23.9
Operators/Fabricators/Laborers	2.2	0.9	2.2	3.2	2.8	0.0	0.0	0.0
All Others	9.6	6.4	8.2	9.7	15.3	12.5	11.1	0.0

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

This pattern of occupation concentration can also be seen in each of the Freely Associated States groups. About 77 percent of the FSM migrants, 76 percent of the Palauans and 72 percent of the Marshallese reported occupations in either agricultural, fishing and forestry or precision production and crafts. Within these two categories, the largest groups (between 43 percent and 51 percent) reported an occupation in the precision production and craft category. This pattern generally held for each Freely Associated States pre- and post-Compact migrant groups.

However, male and female migrant groups differed in their patterns of occupational concentration. The largest groups of Freely Associated States migrant males (60 percent) were in a precision production and craft occupation, while the largest groups of females (53 percent) were in an agricultural, forestry or fishing occupation. This pattern generally held for both sexes in the total, pre- and post-Compact groups. However, among the RMI migrants, the largest groups of the total Marshallese (51 percent) and post-Compact (39 percent) Marshallese females reported a precision production and craft occupation rather than an agricultural, forestry and fishing occupation.

Within the agricultural, fishing and forestry occupation category, the largest groups of employed Micronesians in Hawaii worked in sales (66 percent), which represented about 21 percent of the total employed labor force. The remainder worked in general office occupations (e.g., secretaries, clerks, material handlers, etc.). Notable differences occurred between male and females. Only 47 percent of employed males in agricultural, fishing and forestry were in sales compared to 78 percent of employed females.

In the precision production and craft category, the largest groups of employed Micronesians worked in food and beverage preparation and service occupations (48 percent), which represented about 22 percent of the total employed labor force. Also, 16 percent of the employed Micronesians worked in farm and related agricultural occupations and 11 percent in cleaning and building service occupations (personal and professional). Again, notable differences occurred between men and women. The largest groups of Freely Associated States migrant males (48 percent) and females (50 percent) worked in food and beverage preparation and service occupations. However, 18 percent of the males reported a farm and related agricultural occupation compared to only 6 percent of the females. A larger proportion of male migrants (11 percent) worked in miscellaneous mechanic and repair occupations than female migrants (4 percent). Also, 7 percent the males reported a cleaning and building service occupation compared to 31 percent of the women.

Table 6.5b shows the major industry groups by Freely Associated States state for employed pre- and post-Compact migrants aged 16 years and older. The largest groups (70 percent) of the Freely Associated States migrants and their children were employed either in the retail trade (46 percent) or services (24 percent) industries. This pattern generally persisted among both the pre- and post-Compact and male and female migrants. However, a larger proportion of male post-Compact (17 percent) than pre-Compact migrants (7 percent) were in agriculture.

Table 6.5b: Industry of Micronesia Migrants and Their Children, Hawaii, 1997.

Industry	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Employed Persons 16+ Years	1,401	311	1,086	141	278	64	37	106
Agriculture	12.6	5.5	14.9	9.2	5.4	0.0	0.0	3.8
Mining	0.0	0.3	0.0	0.7	0.0	0.0	0.0	0.0
Construction	1.1	2.3	1.2	2.8	0.7	1.6	0.0	1.9
Manufacturing	2.4	3.5	2.3	3.5	3.2	4.7	0.0	2.8
Transportation/Communication	3.5	4.5	3.0	5.7	5.4	4.7	2.7	2.8
Wholesale Trade	0.2	3.2	0.0	0.0	1.1	3.1	0.0	7.5
Retail Trade	46.9	39.5	49.2	32.6	35.6	37.5	64.9	50.0
Finance/Insurance	0.7	0.6	0.7	0.0	0.7	0.0	0.0	1.9
Services	23.2	28.6	20.0	29.1	36.7	37.5	16.2	22.6
Public Administration	3.1	6.4	3.2	9.9	1.4	3.1	10.8	3.8
All Others	6.3	5.5	5.4	6.4	9.7	7.8	5.4	2.8
Employed Males 16+ Years	994	202	769	110	206	32	19	60
Agriculture	17.2	6.9	20.5	10.9	6.3	0.0	0.0	3.3
Mining	0.0	0.5	0.0	0.9	0.0	0.0	0.0	0.0
Construction	1.4	3.5	1.6	3.6	1.0	3.1	0.0	3.3
Manufacturing	3.0	4.5	2.9	4.5	3.9	9.4	0.0	1.7
Transportation/Communication	3.7	4.5	3.3	5.5	5.3	3.1	5.3	3.3
Wholesale Trade	0.3	3.5	0.0	0.0	1.5	0.0	0.0	11.7
Retail Trade	42.1	40.6	42.5	31.8	38.3	53.1	63.2	50.0
Finance/Insurance	0.6	0.0	0.5	0.0	1.0	0.0	0.0	0.0
Services	23.0	23.3	20.3	26.4	34.5	21.9	10.5	18.3
Public Administration	3.4	7.4	3.8	10.9	1.5	3.1	10.5	3.3
All Others	5.2	5.4	4.7	5.5	6.8	6.3	10.5	5.0
Employed Females 16+ Years	407	109	317	31	72	32	18	46
Agriculture	1.5	2.8	1.3	3.2	2.8	0.0	0.0	4.3
Mining	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Construction	0.2	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Manufacturing	1.0	1.8	0.9	0.0	1.4	0.0	0.0	4.3
Transportation/Communication	2.9	4.6	2.5	6.5	5.6	6.3	0.0	2.2
Wholesale Trade	0.0	2.8	0.0	0.0	0.0	6.3	0.0	2.2
Retail Trade	58.7	37.6	65.3	35.5	27.8	21.9	66.7	50.0
Finance/Insurance	1.0	1.8	1.3	0.0	0.0	0.0	0.0	4.3
Services	23.6	38.5	19.2	38.7	43.1	53.1	22.2	28.3
Public Administration	2.2	4.6	1.9	6.5	1.4	3.1	11.1	4.3
All Others	8.8	5.5	7.3	9.7	18.1	9.4	0.0	0.0

Source: Censuses of Micronesia Migrants to Hawaii, Guam and CNMI.

Among the Freely Associated States groups, retail trade employment dominated, with 54 percent of Palauan, 47 percent of the FSM migrants and 34 percent of Marshallese working in this industry. A greater proportion of post-Compact than pre-Compact Palauan and FSM migrants worked in the retail industry. The reverse was true for the Marshallese, which was partially due to the higher proportion of RMI women working in services. Conversely, a greater proportion of pre-Compact than post-Compact Palauan and FSM migrants worked in the service industry; the pre- and post-Compact proportions for the Marshallese were about the same.

About the same proportion of Palauan pre- and post-Compact men and women worked in retail. However, more FSM women than men and fewer Marshallese women than men worked in this industry. More Marshallese and Palauan women than men worked in services. About the same number of post-Compact male and female FSM migrants worked in services, but the proportion of pre-Compact women was higher than pre-Compact men.

Within the retail trade industry, the largest groups (69 percent) worked in eating and drinking establishments (which represented about 31 percent of the total employed) and 23 percent worked in food and general merchandise stores. The pattern of industry participation of men and women was similar. Approximately 66 percent of women and 70 percent of men worked in eating and drinking establishments, while about 28 percent of women and 20 percent of men worked in food and general merchandise stores.

Within the service industry, 33 percent of the Freely Associated States migrant laborers worked within the business services sector, which represented 8 percent of the total Micronesian labor force. About 14 percent worked in education services, while another 14 percent worked in hotels, rooming houses and other lodging places. The industry participation of men and women differed. About 39 percent of the males within this industry worked in business services compared to 22 percent of women. However, 19 percent of women worked in education services, compared to only 11 percent of men. Also, 20 percent of the women worked in hotels, rooming houses and other lodging places, compared to 11 percent of the men. About 11 percent of the Freely Associated States men in this industry worked in automotive repair, services and parking.

6.6 Income and Poverty

Table 6.6 shows the income characteristics of Micronesian migrants and their children, including household and family income, per capita income and poverty status. The median income is the mid-point value that divides the income distribution in half, with half of the distribution above and half below the mid-point. The mean income is the average of all of the income values. The 1,378 post-Compact households had a median income of about \$10,000, which was less than half of the median income of the 298 pre-Compact households, which was \$22,000. Part of this difference can be attributed to the longer period of time that the pre-Compact migrants have had to become financially established. The mean household incomes of the pre-Compact (\$16,000) and the post-Compact (\$30,000) was higher, indicating that at least a few of the households were doing very well. The Palauan pre- and post-Compact migrants had the highest median and mean household incomes; the FSM pre- and post-Compact migrants had the lowest. Mean incomes were higher than median incomes for all Freely Associated States groups except pre-Compact Marshallese..

Table 6.6: Income Characteristics of Micronesian Migrants and Their Children, Hawaii, 1997.

Income Characteristics	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Households	1378	298	910	128	432	71	36	99
Median Income (Dollars)	8,950	21,764	7,949	21,537	10,725	18,147	7,499	27,749
Mean income (Dollars)	15,886	28,985	15,695	32,549	16,537	17,912	12,902	32,318
Families	921	227	571	102	332	56	18	69
Median Income (Dollars)	14,740	23,332	14,727	25,951	14,406	18,332	21,666	26,153
Mean income (Dollars)	19,979	28,060	19,481	29,711	20,702	18,936	22,440	33,025
Per Capita Income (in Dollars)	3,759	13,622	4,213	17,629	2,977	6,770	4,840	15,372
Poverty Universe	5,498	610	4,000	232	2,479	185	126	193
Below Poverty Level	61.0	37.5	52.3	31.9	71.3	57.3	44.4	25.4
Below 50% of Poverty Level	38.7	24.4	36.5	27.2	37.8	29.7	29.4	16.1
Below 125% of Poverty Level	70.1	44.9	61.2	40.5	80.9	65.9	53.2	30.1
Below 185% of Poverty Level	84.6	61.3	78.8	60.8	91.2	79.5	75.4	44.6

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Generally speaking, the median and mean family incomes of the pre-Compact migrants were higher than those of the post-Compact migrants. For the pre-Compact migrants, the median household income was approximately \$24,000 and the mean income was \$30,000, which were higher than the median (\$15,000) and mean (\$21,000) post-Compact values. Among all the Freely Associated States groups, only the post-Compact Marshallese migrants had a higher mean (\$22,000) than the pre-Compact group (\$20,000).

Except for the Marshallese, the per capita income of pre-Compact migrants was much greater than the per capita incomes of post-Compact migrants. Per capita, again, is the amount obtained by dividing the sum of all of the income of a group by all of the members of that group. The per capita income of the post-Compact Freely Associated States migrants was about \$4,000 in 1996, compared to almost \$14,000 for the pre-Compact migrants. The difference for the FSM migrants was even greater, with the pre-Compact migrants averaging almost \$18,000; for the Marshallese, the pre-Compact migrants only averaged about \$7,000 per capita, still more than twice the amount of the post-Compact Marshallese migrants.

About 5,500 post-Compact and 600 pre-Compact migrants were in the poverty universe. Of these, 61 percent of the post-Compact migrants and 38 percent of the pre-Compact migrants were living below the poverty line. The FSM and Palau migrants were more likely to live above poverty than the Marshallese, but in the group least in poverty – the Palauan pre-Compact migrants, more than 1/4th were in poverty.

CHAPTER 7

MICRONESIAN MIGRANT HOUSES IN GUAM

The censuses and the surveys in Guam, the CNMI and Hawaii also provided information on housing conditions. Housing variables give information in themselves for planning, but also serve as social indicators. By considering these items by themselves, and in combination with other variables, government agencies can assess changing housing conditions, energy consumption, water and sewer distribution and use, and so forth.

7.1 General Housing Characteristics

Table 7.1 shows general housing characteristics of the Micronesian migrants in Guam. A total of 1,335 Micronesian households were enumerated by the 1997 Census of Micronesian Migrants in Guam, 979 post-Compact and 356 pre-Compact households – 931 post- and 139 pre-Compact FSM migrant households, 26 post- and 216 pre-Compact Palauan households, and 22 post- and one pre-Compact Marshallese households. Because of the small sample size, the information provided for the Marshallese households will not be divided into pre- and post-Compact categories, but will be collapsed into a single “all migrants” category.

Table 7.1: General Housing Characteristics, Micronesian Migrants in Guam, 1997.

Characteristic	Total		FSM		RMI	Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	All Migrants	Post-Comp. & Children	Pre-Comp.
Number of Housing Units	979	356	931	139	23	26	216
Persons in Housing Units	6,182	1,807	5,966	935	129	90	869
Persons per Housing Unit	6.3	5.1	6.4	6.7	5.6	3.5	4.0
Type of Housing							
House	52.4	67.1	53.0	59.0	30.4	50.0	72.7
Apartment	45.5	31.7	45.1	39.6	65.2	42.3	26.4
Other	2.1	1.1	1.9	1.4	4.3	7.7	0.9
Household Income (Median)	18,365	26,625	14,444	23,750	14,375	13,750	31,667
Tenure							
Own (with Mortgage)	0.1	2.5	0.1	0.7	0.0	0.0	3.7
Own (without Mortgage)	4.3	29.2	3.7	7.2	4.3	26.9	43.5
Rent	89.4	60.7	89.8	84.2	95.7	69.2	45.4
Occupy without Rent	6.2	7.6	6.4	7.9	0.0	3.8	7.4
Monthly Rent (Median)	626	675	626	670	680	600	677

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

The persons per housing unit provides a measure of household crowding and additional housing need. The average size of the Micronesian households in Guam ranged from less than 4 to almost 7 persons for all groups. On average, the post-Compact Micronesian households contained 6.3 persons, higher than the pre-Compact average of 5.1. The pre-Compact FSM households were the largest, averaging almost seven persons per household, while the post-Compact Palauan households were the smallest, averaging less than four persons per household.

Table 7.2: Type of Housing Construction Materials, Micronesian Migrants in Guam, 1997.

Characteristic	Total		FSM		RMI	Palau	
	Post-Comp & Children	Pre-Comp	Post-Comp & Children	Pre-Comp	All Migrants	Post-Comp & Children	Pre-Comp
Number of Housing Units	979	356	931	139	23	26	216
Material Used for Outside Walls							
Poured Concrete	27.9	38.8	27.7	23.0	30.4	30.8	49.1
Concrete Blocks	48.9	40.2	48.5	51.1	69.6	46.2	32.9
Metal	4.9	4.8	4.8	6.5	0.0	11.5	3.7
Wood	17.9	15.7	18.6	19.4	0.0	7.7	13.4
Other	0.4	0.6	0.3	0.0	0.0	3.8	0.9
Material Used for Roof							
Poured Concrete	73.3	74.7	72.5	69.1	100.0	80.8	78.2
Concrete Blocks	17.9	15.2	18.4	20.1	0.0	15.4	12.0
Metal	7.9	4.2	8.3	7.9	0.0	0.0	1.9
Wood	0.2	0.0	0.2	0.0	0.0	0.0	0.0
Other	0.7	5.9	0.6	2.9	0.0	3.8	7.9
Material Used for Foundation							
Concrete	82.4	87.6	82.1	87.1	100.0	80.8	88.0
Wood Pier/Pilings	15.5	9.8	16.2	12.9	0.0	3.8	7.9
Other	2.0	2.5	1.7	0.0	0.0	15.4	4.2

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI

Approximately 67 percent of the pre-Compact and 52 percent of the post-Compact migrant households lived in houses. A larger proportion of the total, FSM and Palauan pre-Compact than post-Compact migrant households lived in houses, which partially reflects the longer settlement period experienced by the pre-Compact migrants. The largest groups of Palauan households were pre-Compact households, and almost 1 in every 4 Palauan pre-Compact households lived in a house. However, the overwhelming largest groups of the Marshallese migrants arrived in the post-Compact period, and over 2/3rd of the Marshallese households lived in apartments.

Although most of Micronesian households lived in houses, the largest groups – approximately 89 percent of the pre-Compact and 61 percent of the post-Compact migrant households – rented their house or apartment rather than owned. Almost 96 percent of all Marshallese households rented compared to only 45 percent of the pre-Compact Palauan households. Median monthly rent was between \$600 and \$680 per month for all groups.

Pre-Compact migrant households were more likely than post-Compact households to own their own homes. At approximately 47 percent, the pre-Compact Palauan households were the most likely to own their own homes. Higher household incomes helps to explain why pre-Compact migrants were more likely than post-Compact migrants to own their own home. In general, pre-Compact migrant households had higher median incomes than post-Compact households. Pre-Compact median household incomes ranged between approximately \$14,000 to over \$18,000, while post-Compact median household incomes were approximately \$24,000 to over \$31,000. The pre-Compact Palauan households had the highest median income.

7.2 Structural Characteristics

Types of materials used for roofs, walls and foundations determine the structural composition of housing. The structural composition of the housing units can indicate the general level of housing quality. It can also indicate the overall socio-economic standing of the community that occupies the housing units. Table 7.2 shows the type of housing construction materials used for the walls, roofs and foundations of the Micronesian migrant housing units.

Table 7.3: Plumbing and Water Characteristics, Micronesian Migrants in Guam, 1997.

Characteristic	Total		FSM		RMI	Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	All Migrants	Post-Comp. & Children	Pre-Comp.
Number of Housing Units	979	356	931	139	23	26	216
Source of Water							
Public System Only	97.3	97.5	97.2	99.3	100.0	100.0	96.3
Public System and Cistern	0.4	1.1	0.4	0.0	0.0	0.0	1.9
Cistern, Tanks or Drums Only	1.1	0.3	1.2	0.0	0.0	0.0	0.5
Public Standpipe	0.1	0.8	0.1	0.0	0.0	0.0	1.4
Some Other Source	1.0	0.3	1.1	0.7	0.0	0.0	0.0
Water Supply							
Hot and Cold Piped Water	70.3	80.3	69.1	72.7	87.0	100.0	85.2
Inside Cold Piped Water Only	25.1	18.3	26.1	25.2	13.0	0.0	13.9
Outside Cold Piped Water Only	2.8	0.8	2.9	0.7	0.0	0.0	0.9
No Piped Water	1.8	0.6	1.9	1.4	0.0	0.0	0.0
Bathtub or Shower							
Bathtub or Shower	94.4	97.2	94.1	97.1	100.0	100.0	97.2
No Bathtub or Shower	5.6	2.8	5.9	2.9	0.0	0.0	2.8
Toilet							
Flush Toilet	95.9	97.2	95.8	97.1	95.7	100.0	97.2
Outhouse or Privy	1.9	2.8	2.0	2.9	0.0	0.0	2.8
Other or None	2.1	0.0	2.1	0.0	4.3	0.0	0.0
Sewage Disposal							
Public Sewer	86.4	89.6	85.8	89.9	95.7	100.0	89.4
Septic Tank or Cesspool	9.3	8.7	9.8	7.9	0.0	0.0	9.3
Other Means	4.3	1.7	4.4	2.2	4.3	0.0	1.4

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Walls. Over 75 percent of all Micronesian migrant housing units in Guam had walls constructed of either poured concrete or concrete blocks. Approximately 50 percent of Palauan pre-Compact housing units had poured concrete walls. For all groups except the pre-Compact Palauans, the largest groups of the housing units (between 40 percent and 70 percent) had walls constructed of concrete blocks. Less than 20 percent of all housing units had walls constructed of wood or other materials.

Roofs. Over 90 percent of all Micronesian migrant housing units had roofs constructed of either poured concrete or concrete blocks, with the largest groups (between 69 percent and 100 percent) living in housing units with poured concrete roofs. Less than 10 percent of the migrant housing units had roofs made of metal, wood or other materials.

Foundation. Over 80 percent of all Micronesian migrant housing units had concrete foundations. The proportion of housing units with wood foundations was between 0 percent to just over 16 percent for all groups, with the highest proportion occupied by post-Compact (16 percent) and pre-Compact (13 percent) FSM migrants. Less than 3 percent of the total housing units had foundations made of materials other than concrete or wood.

7.3 Plumbing and Water Characteristics

Data on the plumbing and water characteristics of households provide information on both housing quality and living conditions as well as the level of demand by consumers. Table 7.3 shows the plumbing and water characteristics of the Micronesian migrant housing units.

Table 7.4: Equipment and Facilities, Micronesia Migrants in Guam, 1997.

Characteristic	Total		FSM		RMI	Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	All Migrants	Post-Comp. & Children	Pre-Comp.
Number of Housing Units	979	356	931	139	23	26	216
Kitchen Facilities							
Inside Cooking Facilities	94.7	97.8	94.5	95.7	100.0	96.2	99.1
Outside Cooking Facilities	4.5	1.7	4.6	3.6	0.0	3.8	0.5
No Cooking Facilities	0.8	0.6	0.9	0.7	0.0	0.0	0.5
Fuel for Cooking							
Electricity	89.8	89.0	89.4	87.8	100.0	96.2	89.8
Gas	5.4	8.4	5.6	7.9	0.0	3.8	8.8
Kerosene	1.0	1.4	1.1	2.9	0.0	0.0	0.5
Wood	2.8	0.6	2.9	0.7	0.0	0.0	0.5
Other	0.2	0.0	0.2	0.0	0.0	0.0	0.0
Refrigerator							
Gas/Electric	93.4	97.5	93.1	94.2	100.0	96.2	99.5
No Refrigerator	6.6	2.5	6.9	5.8	0.0	3.8	0.5
Housing Indications							
Microwave Oven	33.9	63.2	33.6	43.2	26.1	50.0	76.4
Sink with Piped Water	95.6	98.0	95.4	95.7	100.0	100.0	99.5
Electric Power	97.5	98.6	97.4	96.4	100.0	100.0	100.0
Telephone	49.8	80.3	48.2	62.6	82.6	76.9	92.1
Radio	32.8	68.8	31.9	34.5	26.1	69.2	91.2
Television	76.8	90.4	76.2	82.0	87.0	92.3	95.8
Air Conditioning							
Central System	13.8	16.0	12.9	14.4	30.4	30.8	17.1
One or More Individual Units	17.3	38.8	16.5	21.6	26.1	38.5	49.5
None	68.9	45.2	70.6	64.0	43.5	30.8	33.3
Automobiles Available							
One or More Cars	70.8	87.1	70.2	84.2	82.6	80.8	88.9
No Car	29.2	12.9	29.8	15.8	21.7	19.2	11.1

Source: Censuses of Micronesia Migrants to Hawaii, Guam and CNMI.

Source of Water and Water Supply. Over 97 percent of all Micronesia migrant households used public water systems. Very few households relied on cistern, tanks or drums only, public standpipes or some other source for their water. The largest groups of Micronesia housing units had an inside water supply. Over 70 percent of all post-Compact and 80 percent of all pre-Compact households had both inside hot and cold piped water, while 25 percent of the post-Compact and 18 percent of the pre-Compact households had access to inside cold piped water only. Approximately 3 percent of the post-Compact FSM households had access to outside cold piped water only, while 2 percent of the post-Compact and just over 1 percent of the pre-Compact households did not have piped water.

Plumbing Facilities. The largest groups of the Micronesia housing units had either a bathtub or shower and a flush toilet – with a sink, these three pieces constitute “complete plumbing”. Over 94 percent of the post-Compact and 97 percent of the pre-Compact households had either a bathtub or shower. Approximately 6 percent of the post-Compact FSM and 3 percent of the pre-Compact FSM and Palauan households were without a bathtub or shower. About 96 percent of the post-Compact and 97 percent of the pre-Compact households had a flush toilet. Approximately 2 percent of the post-Compact FSM and 3 percent of the pre-Compact FSM and Palauan households had an outhouse or privy. Over 86 percent of all post-Compact and 90 percent of all pre-Compact households used public sewage disposal, while approximately 9 percent of all households used a septic tank or cesspool.

7.4 Equipment and Facilities

Table 7.4 shows the kitchen facilities and household equipment for the Micronesian migrant housing units. Over 95 percent of post-Compact and 98 percent of pre-Compact households had inside kitchen cooking facilities. Approximately 5 percent of the post-Compact and 4 percent of the pre-Compact FSM households had outside cooking facilities. Very few households (less than 1 percent) had no cooking facilities.

Over 98 percent of all Micronesian households in Guam were connected to electricity, and over 89 percent of all households used electricity as their fuel for cooking. Over 5 percent of the post-Compact and 8 percent of the pre-Compact households used gas for cooking. Few households used kerosene, wood or other cooking fuels. About 1/3rd of the post-Compact and 2/3rd of the pre-Compact migrant households had a microwave oven. In general, pre-Compact households were more likely to have a microwave oven than post-Compact households. The largest groups of Micronesian households also had either a gas or electric refrigerator. Less than 7 percent of the post-Compact and 3 percent of the pre-Compact migrants had no refrigerators. Most of the migrant households without refrigerators were from the FSM. Over 95 percent of all households had a sink with piped water.

Telephones, radios and televisions are important for transmitting information, especially in times of emergency or potential catastrophe. Approximately 50 percent of post-Compact and 80 percent of pre-Compact migrant households had telephones. Post-Compact FSM households (48 percent) were the least likely to have had a telephone while the pre-Compact Palauan households (92 percent) were the most likely. About one out of every three pre-Compact and two out of every three post-Compact households owned a radio (either battery or electric). The pre- and post-Compact Palauan households were the most likely to own radios. More households owned televisions than radios. Approximately 77 percent of the post-Compact and 90 percent of the pre-Compact migrant households had televisions. Again, the pre- and post-Compact Palauan households were the most likely to own televisions.

An increase in the number of air conditioning units can increase the demand for energy by consumers. However, the largest groups of all Micronesian households (63 percent) were not air-conditioned. Approximately 69 percent of the post-Compact and 45 percent of the pre-Compact households were not air-conditioned. Of the air-conditioned households, 14 percent of the post-Compact and 16 percent of the pre-Compact households had central air, while 17 percent of the post-Compact and 39 percent of the pre-Compact households had one or more individual units. The pre- and post-Compact Palauan households were the most likely to have air conditioning, either central air or individual units. Almost one in every two Palauan pre-Compact households had one or more individual air conditioning units.

Owning an automobile is important for transportation, but also is something of a status symbol. Since Guam still is developing its urban mass transit system, an automobile becomes basic transportation. Automobiles, while increasing personal mobility, also often become a financial burden as well as contribute to various kinds of pollution in an already fragile island environment. Most Micronesian households in Guam had one or more cars. About 71 percent of the post-Compact and 87 percent of the pre-Compact households had cars. Pre-Compact Palauan households were the most likely (89 percent) of all the groups to have a car.

CHAPTER 8

MICRONESIAN MIGRANT HOUSES IN THE CNMI

8.1 General Housing Characteristics

Table 8.1 shows general housing characteristics of the Micronesian migrants in the CNMI. A total of 743 Micronesian households were enumerated by the 1998 Census of Micronesian Migrants in the CNMI, which included 237 post-Compact and 506 pre-Compact households – 212 post- and 129 pre-Compact FSM households, 19 post- and 372 pre-Compact Palauan households and six pre- and five post-Compact Marshallese households. As with the data for Guam, because of the small sample size, the information provided for the Marshallese households will not be divided into pre- and post-Compact categories, but will be collapsed into a single ? all migrants? category.

Table 8.1: General Housing Characteristics, Micronesian Migrants in CNMI, 1998.

Characteristic	Total		FSM		RMI	Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	All Migrants	Post-Comp. & Children	Pre-Comp.
Number of Housing Units	237	506	212	129	11	19	372
Persons in Housing Units	1,111	2,322	1,024	660	52	58	1,639
Persons per Housing Unit	4.7	4.6	4.8	5.1	4.7	3.1	4.4
Type of Housing							
House	70.5	79.8	71.2	82.2	81.8	57.9	79.0
Apartment	28.7	19.8	27.8	17.1	18.2	42.1	20.7
Other	0.8	0.4	0.9	0.8	0.0	0.0	0.3
Household Income (Median)	14,115	20,929	11,944	21,250	16,250	21,250	23,125
Tenure							
Own (with Mortgage)	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Own (without Mortgage)	5.9	21.5	6.1	26.4	18.2	5.3	19.6
Rent	68.4	53.4	68.4	46.5	27.3	84.2	55.9
Occupy without Rent	25.7	22.7	25.5	26.4	54.5	10.5	21.5
Monthly Rent (Median)	250	291	245	242	425	263	306

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

The persons per housing unit can provide a measure of household crowding and additional housing needs. The average size of the Micronesian households for all groups was between 3 and 5 persons, but the average size of both the pre- and post-Compact households was between 4 and 5 persons. The post-Compact Palauan households were the smallest, averaging about 3 persons per household.

The largest groups of all Micronesian migrants lived in houses. Over 70 percent of the post-Compact and 80 percent of the pre-Compact households lived in houses. A larger proportion of the total, FSM and Palauan pre-Compact than post-Compact migrant households lived in houses. Pre-Compact FSM households were the most likely (82 percent) and the post-Compact Palauan households the least likely (60 percent) to live in houses.

Although most of the Micronesian households lived in houses, the largest groups rented their house or apartment rather than owned. Over 68 percent of the post-Compact and 53 percent of the pre-Compact migrants rented rather than owned. The proportion of households that rented differed among the migrant groups. Over 84 percent of the post-Compact Palauan households rented, but only 27 percent of the Marshallese households did. Median monthly rent was between \$250 and \$300 dollars. The Marshallese community paid the highest median rent (\$425).

A larger proportion of pre-Compact (22 percent) than post-Compact (6 percent) migrant households owned their own home, a difference that may reflect the longer period of settlement experienced by the pre-Compact migrants. About one in four pre-Compact FSM households owned their own home, but only about 5 percent of the post-Compact Palauan households did. The difference in the level of home ownership between pre- and post-Compact migrants may also reflect the differences in their median incomes. In general, pre-Compact migrant households had a higher median income than post-Compact households. Pre-Compact median household incomes ranged from approximately \$12,000 to just over \$21,000, while post-Compact median household incomes ranged from \$21,000 to just over \$23,000.

Unlike Guam and Hawaii, about one in every four post-Compact and one in every five pre-Compact Micronesian migrant households in the CNMI occupied a residence rent-free. The post-Compact Palauan households were the least likely (11 percent) to live rent-free; the Marshallese households were the most likely (55 percent).

8.2 Structural Characteristics

The type of material used for roofs, walls and foundations determine the structural composition of housing. The structural composition of the housing units indicates the general level of housing quality. It can also show the overall socio-economic standing of the community that occupies the housing units. Table 8.2 shows the type of housing construction material used for the walls, roofs and foundations of the Micronesian migrant housing units in the CNMI.

Table 8.2: Type of Housing Construction Materials, Micronesian Migrants in CNMI, 1998.

Characteristic	Total		FSM		RMI	Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	All Migrants	Post-Comp. & Children	Pre-Comp.
Number of Housing Units	237	506	212	129	11	19	372
Material Used for Outside Walls							
Poured Concrete	19.4	17.8	18.9	19.4	9.1	26.3	17.5
Concrete Blocks	38.0	39.9	37.3	40.3	54.5	42.1	39.5
Metal	20.3	21.5	21.2	20.9	36.4	5.3	21.5
Wood	22.4	20.4	22.6	19.4	0.0	26.3	21.0
Other	0.0	0.4	0.0	0.0	0.0	0.0	0.5
Material Used for Roof							
Poured Concrete	38.8	37.4	39.2	41.1	45.5	31.6	36.0
Concrete Blocks	58.2	60.3	57.5	55.8	54.5	68.4	61.8
Metal	2.1	1.6	2.4	1.6	0.0	0.0	1.6
Wood	0.4	0.2	0.5	0.0	0.0	0.0	0.3
Other	0.4	0.6	0.5	1.6	0.0	0.0	0.3
Material Used for Foundation							
Concrete	74.7	77.5	73.1	76.0	90.9	84.2	78.0
Wood Pier/Pilings	19.8	19.0	20.8	19.4	9.1	15.8	18.8
Other	5.5	3.6	6.1	4.7	0.0	0.0	3.2

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Walls. Over 57 percent of all Micronesian migrant housing units in the CNMI had walls constructed of either poured concrete or concrete blocks. The most common material used for walls was concrete blocks. About 38 percent of all post-Compact and 40 percent of all pre-Compact migrant households had concrete block walls. Approximately 20 percent of the post- and 22 percent of the pre-Compact housing units had walls constructed of metal, while approximately 22 percent of the post- and 20 percent of the pre-Compact housing units had walls constructed of wood.

Roofs. Over 97 percent of all Micronesian migrant housing units had roofs constructed of either poured concrete or concrete blocks, with the largest groups of all groups (between 55 percent and 68 percent) living in housing units using concrete blocks. Less than 3 percent of the migrant housing units had roofs made of metal, wood or other materials.

Foundation. Over 75 percent of all Micronesian migrant housing units had concrete foundations. The proportion of housing units with wood foundations was between 9 percent and 21 percent for all groups, with the highest proportion occupied by post-Compact (21 percent) and pre-Compact (19 percent) FSM migrants. Also, 6 percent of the post- and 5 percent of the pre-Compact FSM migrant households reside in houses with foundations made of materials other than concrete or wood.

8.3 Plumbing and Water Characteristics

Data on the plumbing and water characteristics of households provide information on both housing quality and living conditions as well as the level of demand by consumers. Table 8.3 shows the plumbing and water characteristics of the Micronesian migrant housing units.

Table 8.3: Plumbing and Water Characteristics, Micronesian Migrants in CNMI, 1998.

Characteristic	Total		FSM		RMI	Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	All Migrants	Post-Comp. & Children	Pre-Comp.
Number of Housing Units	237	506	212	129	11	19	372
Source of Water							
Public System Only	91.1	86.0	91.0	89.9	72.7	94.7	84.9
Public System and Cistern	6.3	11.7	6.1	6.2	27.3	5.3	13.2
Cistern, Tanks or Drums Only	2.5	2.0	2.8	3.1	0.0	0.0	1.6
Public Standpipe	0.0	0.2	0.0	0.0	0.0	0.0	0.3
Some Other Source	0.0	0.2	0.0	0.8	0.0	0.0	0.0
Water Supply							
Hot and Cold Piped Water	34.2	37.0	34.0	39.5	54.5	31.6	35.8
Inside Cold Piped Water Only	44.7	48.8	45.8	39.5	18.2	42.1	52.4
Outside Cold Piped Water Only	20.3	13.6	19.3	20.2	27.3	26.3	11.3
No Piped Water	0.8	0.6	0.9	0.8	0.0	0.0	0.5
Bathtub or Shower							
Bathtub or Shower	91.6	96.2	90.6	93.0	100.0	100.0	97.3
No Bathtub or Shower	8.4	3.8	9.4	7.0	0.0	0.0	2.7
Toilet							
Flush Toilet	84.8	81.8	84.9	82.2	100.0	78.9	81.5
Outhouse or Privy	12.7	16.4	12.7	14.7	0.0	15.8	17.2
Other or None	2.5	1.8	2.4	3.1	0.0	5.3	1.3
Sewage Disposal							
Public Sewer	45.6	35.6	47.2	35.7	45.5	21.1	35.8
Septic Tank or Cesspool	36.3	47.4	34.4	45.0	54.5	57.9	47.8
Other Means	18.1	17.0	18.4	19.4	0.0	21.1	16.4

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Source of Water and Water Supply. The largest groups of Micronesian migrant households used public water systems. Approximately 91 percent of the post-Compact and 86 percent of the pre-Compact used public water systems. Over 97 percent of all migrant households used either a public water system only or a public water system and a cistern. Less than 3 percent relied on cisterns, tanks or drums only, public standpipes or some other sources for their water. The largest groups of Micronesian housing units had an inside water supply. Over 34 percent of all post-Compact and 37 percent of all pre-Compact households had both inside hot and cold piped water, while 45 percent of the post-Compact and 49 percent of the pre-Compact households had access to inside cold piped water only. Approximately 20 percent of the post-Compact and 14 percent of the pre-Compact had access to outside cold piped water only, but less than 1 percent of the households of all groups did not have piped water.

Plumbing Facilities. The largest groups of the Micronesian housing units had either a bathtub or shower and a flush toilet. Over 92 percent of the post-Compact and 96 percent of the pre-Compact households had either a bathtub or shower. Over 9 percent of the post- and 7 percent of the pre-Compact FSM households and 3 percent of the pre-Compact Palauan households were without a bathtub or shower. Approximately 85 percent of the post- and 82 percent of the pre-Compact households had a flush toilet, while 13 percent of the post- and 16 percent of the pre-Compact households had an outhouse or privy. About 2 percent of all migrant households did not have a flush toilet or an outhouse/privy. Approximately 82 percent of the post- and 83 percent of the pre-Compact households used either the public sewer system or a septic tank or cesspool. About 46 percent of the post-Compact households used public sewer systems, while 47 percent of the pre-Compact households used a septic tank or cesspool.

8.4 **Equipment and Facilities**

Table 8.4 shows the kitchen facilities and household equipment for the Micronesian migrant housing units. Over 84 percent of the post- and 92 percent of the pre-Compact households had inside cooking facilities. Post-Compact households were more likely to have outside cooking facilities (15 percent) than pre-Compact migrants (8 percent). Over 27 percent of all Marshallese households had outside cooking facilities. Generally speaking, few migrant households were without cooking facilities. However, 2 percent of the pre-Compact FSM households did not have cooking facilities.

Table 8.4: Equipment and Facilities, Micronesian Migrants in CNMI, 1998.

Characteristic	Total		FSM		RMI	Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	All Migrants	Post-Comp. & Children	Pre-Comp.
Number of Housing Units	237	506	212	129	11	19	372
Kitchen Facilities							
Inside Cooking Facilities	84.0	91.9	84.9	87.6	72.7	84.2	93.3
Outside Cooking Facilities	15.2	7.5	14.2	10.1	27.3	15.8	6.7
No Cooking Facilities	0.8	0.6	0.9	2.3	0.0	0.0	0.0
Fuel for Cooking							
Electricity	44.7	39.5	47.6	45.7	45.5	15.8	37.1
Gas	49.8	53.8	47.2	49.6	54.5	73.7	55.4
Kerosene	3.8	5.7	3.3	1.6	0.0	10.5	7.3
Wood	0.8	0.2	0.9	0.8	0.0	0.0	0.0
Other	0.0	0.2	0.0	0.0	0.0	0.0	0.3
Refrigerator							
Gas/Electric	69.2	84.2	70.3	75.2	63.6	68.4	87.1
No Refrigerator	30.8	15.8	29.7	24.8	36.4	31.6	12.9
Housing Indications							
Microwave Oven	11.0	25.1	9.9	20.2	36.4	21.1	26.3
Sink with Piped Water	78.9	90.3	79.2	85.3	81.8	78.9	91.9
Electric Power	94.9	97.0	94.8	92.2	100.0	94.7	98.7
Telephone	22.4	49.6	21.7	41.1	36.4	31.6	52.4
Radio	57.0	79.8	56.1	69.0	72.7	63.2	83.6
Television	53.6	82.8	53.3	67.4	63.6	57.9	88.2
Air Conditioning							
Central System	3.0	5.3	2.4	3.1	18.2	5.3	5.9
One or More Individual Units	19.4	38.5	19.3	30.2	27.3	26.3	41.1
None	77.6	56.1	78.3	66.7	54.5	68.4	53.0
Automobiles Available							
One or More Cars	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Approximately 95 percent of all migrant households in the CNMI were connected to electricity, but a largest proportion of households used gas as their fuel for cooking. Approximately 45 percent of the post- and 40 percent of the pre-Compact households used electricity for cooking, while 50 percent of the post- and 54 percent of the pre-Compact households used gas. Approximately 4 percent of the post- and 6 percent of the pre-Compact migrant households used kerosene. Very few households used wood or another source of fuel for cooking.

Approximately 20 percent of all migrant households owned a microwave oven, but pre-Compact households were more likely to own a microwave oven (25 percent) than post-Compact households (11 percent). Although more migrant households owned either a gas or electric refrigerator, pre-Compact households (84 percent) were more likely than post-Compact households (69 percent) to own a refrigerator. About 1/3rd of all post-Compact migrant households did not have a refrigerator. Over 80 percent of the post-Compact and 90 percent of the pre-Compact households had a sink with piped water.

Telephones, radios and televisions are important for transmitting information, especially in times of emergency or potential catastrophe. However, many migrant households did not have phones. Pre-Compact households were more likely to own a telephone (50 percent) than post-Compact households (22 percent.) Post-Compact FSM households were the least likely (22 percent) while the pre-Compact Palauan households were the most likely (52 percent). The largest groups of migrant households owned a radio and a television. Again, pre-Compact households were more likely than post-Compact households to own a radio and a television. Only 57 percent of the post-Compact households owned radios compared to 80 percent of the pre-Compact households, and 54 percent of the post-Compact households owned televisions compared to 83 percent of the pre-Compact households. The pre-Compact Palauan households were the most likely of all groups to have a telephone, television and a radio.

An increase in the number of air conditioning units can increase the demand for energy by consumers. However, the largest groups of all Micronesian households (63 percent) were not air-conditioned. Approximately 78 percent of all post- and 56 percent of pre-Compact households were not air-conditioned. The pre-Compact households were more likely to be air conditioned than the post-Compact households. Of the air conditioned households, 3 percent of the post and 5 percent of the pre-Compact households had central air, while 19 percent of the post- and 39 percent of the pre-Compact households had one or more air conditioning units. The pre-Compact Palauan and the Marshallese households were the most likely of all groups to have air conditioning.

Owning an automobile is important for transportation, but also is something of a status symbol. Automobiles, while increasing personal mobility, also often become a financial burden as well as contribute to various kinds of pollution in an already fragile island environment. Unlike Guam and Hawaii, CNMI has no public transportation at all, so every migrant household in the CNMI had one or more cars.

CHAPTER 9

MICRONESIAN MIGRANT HOUSES IN THE STATE OF HAWAII

9.1 General Housing Characteristics

Table 9.1 shows general housing characteristics of the Micronesian migrants in Hawaii. A total of 1,676 Micronesian households were enumerated by the 1998 Census of Micronesian Migrants in Hawaii, 1,378 post- and 298 pre-Compact households – 910 post- and 128 pre-Compact FSM households, 36 post- and 99 pre-Compact Palauan households and 432 post- and 71 pre-Compact Marshallese households.

Table 9.1: General Housing Characteristics, Micronesian Migrants in Hawaii, 1997.

Characteristic	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Number of Housing Units	1,378	298	910	128	432	71	36	99
Persons in Housing Units	5,178	1,094	3,029	488	2,071	318	78	288
Persons per Housing Unit	3.8	3.7	3.3	3.8	4.8	4.5	2.2	2.9
Type of Housing								
House	29.5	39.3	25.6	39.1	37.3	52.1	33.3	30.3
Apartment	59.1	57.4	60.1	57.8	57.2	47.9	58.3	63.6
Other	11.4	3.4	14.3	3.1	5.6	0.0	8.3	6.1
Household Income (Median)	14,656	24,702	2,398	27,500	6,111	21,250	5,625	33,333
Tenure								
Own (with Mortgage)	0.9	7.4	0.4	6.3	1.9	8.5	0.0	8.1
Own (without Mortgage)	5.4	9.4	2.1	7.8	11.8	8.5	11.1	12.1
Rent	80.2	80.5	85.9	82.0	69.4	80.3	63.9	78.8
Occupy without Rent	13.6	2.7	11.5	3.9	16.9	2.8	25.0	1.0
Monthly Rent (Median)	616	689	602	645	636	679	719	757

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

The persons per housing unit can provide a measure of household crowding and additional housing need. The average size of the Micronesian households in Hawaii was between just over two to almost five persons for all groups. On average, the post-Compact Micronesian households contained 3.8 persons, which was slightly larger than the pre-Compact household average of 3.7 persons. The post-Compact Marshallese households were the largest, averaging almost five persons per household, while the post-Compact Palauan households were the smallest, averaging just over two persons per household.

Unlike in Guam and the CNMI, the largest groups of Micronesians households did not live in houses. Approximately 30 percent of the pre-Compact and 40 percent of the post-Compact households lived in houses. Pre-Compact Marshallese households were the most likely (52 percent) to live in houses. Most of the Micronesian households lived in apartments. Approximately 59 percent of the post- and 57 percent of pre-Compact households lived in apartments. Approximately 64 percent of the pre-Compact Palauan and 60 percent of the post-Compact FSM migrant households live in apartments.

The largest groups of all Micronesian migrant households rented rather than owned their apartment or house. Approximately 80 percent of both the post- and pre-Compact households rented rather than owned. The pre-Compact Palauans (12 percent) and post-Compact Marshallese (12 percent) were the most likely to own rather than rent, followed by post-Compact Palauan households. Median monthly rent was between \$600 and \$760 per month for all groups. Approximately 14 percent of all post-Compact migrants occupied their residences rent-free. Post-Compact migrants of all groups were more likely to live rent-free than pre-Compact migrants. Approximately 25 percent of the Palauan, 17 percent of the Marshallese and 12 percent of the FSM post-Compact migrant households pay no rent.

Median household incomes were significantly higher for the pre-Compact households than the post-Compact households. WALLY: FINISH THIS PARAGRAPH WHEN THE CORRECT INCOME DATA IS CALCULATED....AND CHECK THE INCOME VALUES FOR GUAM AND CNMI

9.2 Structural Characteristics

Types of materials used for roofs, walls and foundations determine the structural composition of housing. The structural composition of the housing units can indicate the general level of housing quality. It can also indicate the overall socio-economic standing of the community that occupies the housing units. Table 9.2 shows the type of housing construction material used for the walls, roofs and foundations of the Micronesian migrant housing units in the Hawaii.

Table 9.2: Type of Housing Construction Materials, Micronesian Migrants in Hawaii, 1997.

Characteristic	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Number of Housing Units	1,378	298	910	128	432	71	36	99
Material Used for Outside Walls								
Poured Concrete	43.2	29.2	43.0	29.7	45.1	39.4	25.0	21.2
Concrete Blocks	26.9	37.2	25.4	35.2	28.9	28.2	41.7	46.5
Metal	0.1	0.3	0.2	0.0	0.0	1.4	0.0	0.0
Wood	28.9	32.2	30.2	34.4	25.7	31.0	33.3	30.3
Other	0.9	1.0	1.2	0.8	0.2	0.0	0.0	2.0
Material Used for Roof								
Poured Concrete	48.4	51.3	56.8	53.9	31.5	38.0	38.9	57.6
Concrete Blocks	9.7	12.1	8.1	12.5	12.7	11.3	11.1	12.1
Metal	37.2	29.5	32.7	28.1	45.8	35.2	47.2	27.3
Wood	3.0	2.3	0.7	0.0	8.1	9.9	2.8	0.0
Other	1.7	4.7	1.6	5.5	1.9	5.6	0.0	3.0
Material Used for Foundation								
Concrete	80.6	82.9	79.5	78.1	82.4	87.3	88.9	85.9
Wood Pier/Pilings	19.1	17.1	20.3	21.9	17.1	12.7	11.1	14.1
Other	0.3	0.0	0.2	0.0	0.5	0.0	0.0	0.0

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Walls. The largest groups of the Micronesian housing units in Hawaii had walls constructed of either poured concrete or concrete blocks. Approximately 70 percent of the post- and 66 percent of the pre-Compact households lived in housing units with walls made of either poured concrete or concrete blocks. About 43 percent of post- and 29 percent of the pre-Compact housing units had poured concrete walls, but 27 percent of the post- and 37 percent of the pre-Compact housing units had concrete block walls. About 30 percent of all migrant households lived in housing units with walls made of wood. Less than 2 percent of households lived in houses with walls constructed of metal and other materials.

Roofs. The largest groups of all Micronesian migrant housing units had roofs constructed of either poured concrete or concrete blocks. The most common roof material for these housing units was poured concrete. Approximately 48 percent of the post-Compact and 51 percent of the pre-Compact households live in housing units with roofs constructed of poured concrete. The second most common roof material was metal. About 37 percent of the post-Compact and 30 percent of the pre-Compact households lived in housing units with roofs constructed of metal. Less than 5 percent of all migrant housing units had roofs made of wood or other materials, although use of these materials was more common among the pre-Compact than the post-Compact housing units.

Foundation. Approximately 81 percent of all Micronesian migrant housing units had concrete foundations. The proportion of housing units with wood foundations was between 11 percent and 22 percent, with the highest proportion occupied by the pre-Compact (22 percent) and post-Compact (20 percent) FSM households. Less than 1 percent of the total housing units had foundations made of materials other than concrete or wood.

9.3 Plumbing and Water Characteristics

Data on the plumbing and water characteristics of households provide information on both housing quality and living conditions as well as the level of demand by consumers. Table 9.3 shows the plumbing and water characteristics of the Micronesian migrant housing units.

Table 9.3: Plumbing and Water Characteristics, Micronesian Migrants in Hawaii, 1997.

Characteristic	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Number of Housing Units	1,378	298	910	128	432	71	36	99
Source of Water								
Public System Only	89.2	92.3	85.5	86.7	96.3	97.2	97.2	96.0
Public System and Cistern	1.2	1.0	0.7	1.6	2.5	1.4	0.0	0.0
Cistern, Tanks or Drums Only	6.3	5.4	9.1	9.4	0.9	1.4	0.0	3.0
Public Standpipe	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Some Other Source	3.1	1.3	4.5	2.3	0.2	0.0	2.8	1.0
Water Supply								
Hot and Cold Piped Water	95.6	98.0	95.9	95.3	94.7	100.0	100.0	100.0
Inside Cold Piped Water Only	0.1	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Outside Cold Piped Water Only	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
No Piped Water	4.3	2.0	4.1	4.7	5.1	0.0	0.0	0.0
Bathtub or Shower								
Bathtub or Shower	96.8	98.7	95.2	96.9	100.0	100.0	100.0	100.0
No Bathtub or Shower	3.2	1.3	4.8	3.1	0.0	0.0	0.0	0.0
Toilet								
Flush Toilet	88.8	92.3	84.7	88.3	96.5	95.8	97.2	94.9
Outhouse or Privy	2.1	1.7	3.2	3.9	0.0	0.0	0.0	0.0
Other or None	9.1	6.0	12.1	7.8	3.5	4.2	2.8	5.1
Sewage Disposal								
Public Sewer	88.2	90.3	83.8	82.0	96.5	97.2	97.2	96.0
Septic Tank or Cesspool	4.1	6.0	5.1	10.9	2.3	2.8	0.0	2.0
Other Means	7.8	3.7	11.1	7.0	1.2	0.0	2.8	2.0

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Source of Water and Water Supply. The largest groups of all Micronesian households used a public water system. Approximately 89 percent of the pre- and 92 percent of the post-Compact households used a public water system. Except for the FSM migrant households, few households use cistern, tanks or drums only or some other water source. Over 9 percent of both the pre- and post-Compact FSM households relied on cisterns, tanks and drums only for their water source, while 5 percent of the pre- and 3 percent of the post-Compact FSM households relied on some other source. Almost 3 percent of the post-Compact Palauan migrant households also relied on some other source of water. Of all the migrant households, only a few post-Compact FSM households relied on a public standpipe for their water.

The largest groups of all migrant households had inside hot and cold piped water. Approximately 96 percent of the pre- and 98 percent of the post-Compact migrants had inside hot and cold piped water. Approximately 4 percent of the post- and 5 percent of the pre-Compact FSM and 5 percent of the post-Compact Marshallese migrant households did not have piped water.

Plumbing Facilities. The largest groups of Micronesian housing units had either a bathtub or shower and a flush toilet. Approximately 97 percent of the post- and 98 percent of the pre-Compact migrant households had either a bathtub or shower. Almost 5 percent of the post-Compact FSM households did not have a bathtub or shower. About 89 percent of the post- and 92 percent of the pre-Compact migrant households had a flush toilet. About 3 percent of the post- and 4 percent of pre-Compact FSM households only had access to an outhouse or privy, while 12 percent of the post- and 8 percent of the pre-Compact FSM households only had access to other or no toilet facilities. Over 88 percent of all migrant households used public sewage disposal. About 5 percent of the pre- and 11 percent of the post-Compact FSM migrant households used a septic tank or a cesspool, but 11 percent of the post- and 7 percent of the pre-Compact FSM households used other sewage disposal means.

9.4 Equipment and Facilities

Table 9.4 shows the kitchen facilities and household equipment for the Micronesian migrant housing units in Hawaii. Over 93 percent of the post-Compact and 98 percent of the pre-Compact households had inside kitchen cooking facilities. Post-Compact households were more likely to have outside kitchen facilities than pre-Compact households. Approximately 17 percent of the Palauan, 9 percent of the Marshallese and 4 percent of the FSM post-Compact households had outside kitchen facilities. Few households (less than 2 percent) had no cooking facilities.

Table 9.4: Equipment and Facilities, Micronesian Migrants in Hawaii, 1997.

Characteristic	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Number of Housing Units	1,378	298	910	128	432	71	36	99
Kitchen Facilities								
Inside Cooking Facilities	93.0	98.0	94.5	99.2	90.5	98.6	83.3	96.0
Outside Cooking Facilities	5.6	1.7	3.7	0.0	8.6	1.4	16.7	4.0
No Cooking Facilities	1.5	0.3	1.8	0.8	0.9	0.0	0.0	0.0
Fuel for Cooking								
Electricity	84.2	86.6	81.1	88.3	90.0	94.4	91.7	78.8
Gas	14.1	13.1	17.0	10.9	8.3	5.6	8.3	21.2
Kerosene	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Wood	0.2	0.0	0.0	0.0	0.7	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Refrigerator								
Gas/Electric	91.1	96.6	90.5	98.4	91.9	95.8	94.4	94.9
No Refrigerator	8.9	3.4	9.5	1.6	8.1	4.2	5.6	5.1
Housing Indications								
Microwave Oven	42.2	66.8	44.1	63.3	35.9	57.7	69.4	77.8
Sink with Piped Water	94.7	97.0	96.2	96.1	91.7	100.0	94.4	96.0
Electric Power	97.0	99.7	95.5	99.2	100.0	100.0	100.0	100.0
Telephone	58.9	77.2	60.1	75.8	55.3	69.0	72.2	84.8
Radio	61.5	74.5	56.5	68.8	70.4	70.4	80.6	84.8
Television	80.3	90.9	82.2	89.1	75.2	90.1	91.7	93.9
Air Conditioning								
Central System	3.8	4.0	4.5	6.3	2.5	7.0	0.0	2.0
One or More Individual Units	13.6	13.4	14.1	13.3	13.0	9.9	8.3	16.2
None	82.7	82.6	81.4	82.8	84.5	83.1	91.7	81.8
Automobiles Available								
One or More Cars	42.7	60.4	39.9	64.1	48.8	54.9	41.7	59.6
No Car	57.3	39.6	60.1	35.9	51.2	45.1	58.3	40.4

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Approximately 98 percent of all Micronesian households in Hawaii were connected to electricity, and 84 percent of the pre- and 87 percent of the post-Compact migrant households used electricity as their fuel for cooking. About 14 percent of the post- and 13 percent of the pre-Compact households used gas as their fuel for cooking. Pre-compact Palauan households were the most likely to use gas (21 percent), followed by post-Compact FSM households (17 percent). Very few households (less than 1 percent) used kerosene, wood or other fuel sources for cooking. About 42 percent of the post- and 67 percent of the pre-Compact migrant households owned a microwave oven. In general, pre-Compact households were more likely to have a microwave oven than post-Compact households. The largest groups of all Micronesian households had either a gas or electric refrigerator. Less than 9 percent of the pre- and 4 percent of the post-Compact migrant households had not refrigerators. Over 95 percent of all households had a sink with piped water.

Telephones, radios and televisions are important for transmitting information, especially in times of emergency or potential catastrophe. Generally speaking, pre-Compact households were more likely than post-Compact households to have a telephone, radio and a television. Approximately 59 percent of the post- and 77 percent of the pre-Compact migrant households had a telephone. Pre-Compact Palauan households were the most likely to have a telephone (85 percent), while the post-Compact Marshallese households were the least likely (55 percent). About 62 percent of the post- and 75 percent of the pre-Compact migrant households owned radios. More households owned televisions than radios. Approximately 80 percent of the pre- and 91 percent of the post-Compact migrant households had televisions. Pre-Compact (94 percent) and post-Compact (92 percent) Palauan households were the most likely to own televisions.

An increase in the number of air conditioning units can increase the demand for energy by consumers. However, most Micronesian migrant households (83 percent) were not air-conditioned. About 13 percent of all households had one or more air conditioning units. Only about 4 percent of all households had central air conditioning.

Owning an automobile is important for transportation, but also is something of a status symbol. Automobiles, while increasing personal mobility, also often become a financial burden as well as contribute to various kind of pollution in an already fragile island environment. Approximately 43 percent of all pre- and 60 percent of all post-Compact migrant households had one or more cars. In general, post-Compact households were more likely to own a car than pre-Compact households. Pre-Compact FSM households were the most likely (64 percent) and post-Compact FSM households the least like to own a car.

CHAPTER 10

USE OF HEALTH SERVICES AND ENTITLEMENT PROGRAMS⁵

Introduction

This Chapter looks at the level of health care services the Micronesian migrants to CNMI, Guam and Hawaii. These receiving governments provide services directly through emergency rooms and walk-in clinics and in the form of programs, such as Food Stamps, Welfare and medically indigent programs. The data used here come from the health services parts of the census questionnaires for the Micronesian migrants to the CNMI, Guam, and Hawaii. As with the other Chapters of this report, we have divided the households and population into those who came prior to and those who came after compact implementation (including Palau's later compact launch in 1994).

Based on the responses, three general areas formed the guiding framework to view Micronesian residents use of government provided health care services, hence the demand on those respective governments. These include:

1. The first area is the type of health services Micronesians commonly used, followed by their prevalent health conditions, whether or not these conditions have effects on their ability to participate in the workforce.
2. The second area is where the migrants normally received care and through what specific government subsidized health plan.
3. The third area is the amount of welfare and food stamp dollars that the Micronesians used, before and after compact implementation.

Because of the very small numbers in some cases, more care than usual was used to protect anonymity of the respondents. Data for RMI migrant households in Guam and Saipan were suppressed; their household size in Hawaii was large enough, and so they were included. With these considerations and outline in mind, the flow of analysis follows for each of the receiving entities: Guam, the Commonwealth of the Northern Mariana Islands (CNMI) and the State of Hawaii.

10.1 GUAM

Health Status. The Micronesian Migrant censuses, like most censuses which ask about health status, required self definition. Hence, persons were considered "disabled" only if they considered themselves disabled. So, even if an outsider would look at a person and see a disability, that disability was only recorded if the respondent gave a response indicating disability. By the same token, persons who might not normally be considered disabled, would be recorded as disabled if they said they were.

The numbers of persons declaring disability are usually small, and these censuses are no exception. Out of the total 730 individuals who came before the compact, less than 2 percent had a permanent physical and mental health condition, compared to 1 percent after the compact (Table 10.1). Of the 696 individuals aged 16 years old and over who came to Guam before the compact and 1.4 percent of them, due to their condition, were limited from fully performing a job. More than 4,000 of the post-Compact 16 years olds were in this category and only 1 percent could not fully perform their job. Out of the 696 pre-Compact individuals, only 1 percent were prevented from holding a job, due to some form of physical, mental or health condition disability. Less than one percent of the post-Compact folks could not have a job due to their disability. Even fewer could not take care of their own personal needs.

5 Marcus Samo, of the Micronesian Seminar and the FSM National Health Services, wrote the first draft of this section as part of the OIA technical assistance training program. The views expressed here do not necessarily reflect those of the Micronesian Seminar or the FSM National Government

Table 10.1: Health Status of Micronesian Migrants and Children, Guam, 1997.

Health Status	Total		FSM		RMI	Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	All Migrants	Post-Comp. & Children	Pre-Comp.
Total Migrant Population	6,550	730	6,325	270	125	102	458
Permanent Physical/Mental Health Condition	1.0	1.8	1.0	1.9	0.8	0.0	1.7
Persons 16+ Years	4,144	696	3,997	252	70	79	442
Physical/Mental/Other Health Condition that:							
Limits Kind/Amount of Work at a Job	0.7	1.4	0.7	1.6	1.4	0.0	1.4
Prevents Working at a Job	0.5	1.0	0.5	1.6	1.4	0.0	0.5
Prevents Taking Care of Own Personal Needs	0.3	0.7	0.4	1.2	0.0	0.0	0.5

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Types of Health Services Used. Of the 1,335 household units occupied by at least one Freely Associated State (FAS) migrant in 1997, about 57 percent of pre-Compact migrants received some type of health care services compared to about 74 percent of the post-Compact migrants (Table 10.2)⁶.

Out of these household units, 1,070 belonged to FSM migrants. About 73 percent of the pre-Compact FSM migrant households reported having used health services compared to 76 percent of the post-Compact migrant households. For the RMI, 96 percent of the households used health services, since Guam had too few RMI households to divide into pre- and post-Compact households. Palauans were much less likely to use health services than the Marshallese or the FSM migrants. Only 27 percent of the post-Compact Palau migrant households used any health service compared to 47 percent of the post-Compact migrant households.

Micronesian migrants used the emergency room more than any other type of health care service, regardless of whether the householder arrived before or after the compact. About 24 percent of the post-Compact and 8 percent of the pre-Compact migrant households used emergency rooms in the year before the enumeration. High emergency room use among these migrants could be because many they did not have health insurance. Also, for those who had insurance, many might have feared that their premiums might increase if they actually received care. Health care costs are covered in the regular expenditures Chapter.

About 11 percent of the post-Compact migrant households used public health nurses compared to 5 percent of the pre-Compact households. Similarly, 16 percent of the post-Compact and 8 percent of the pre-Compact households used immunization clinics. Only a few households used the Southern Regional Medical Center and the old age and blind programs. It is not clear what the “other” health services includes, but most likely these are contacts with regular doctors and nurses.

⁶ Caution should be used when generalizing health services patterns among the Freely Associated States migrants since the size of their household units and the date their compacts were enacted varied considerably.

Table 10.2: Health Services Used, Micronesian Migrants and Children, Guam, 1997.

Health Services Used	Total		FSM		RMI	Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	All Migrants	Post-Comp. & Children	Pre-Comp.
Total Migrant Households	979	356	931	139	23	26	216
Total, Some Health Services	74.7	57.6	75.5	73.4	95.7	26.9	47.2
Out-Patient Visits:							
Emergency Rooms	24.0	8.4	24.1	17.3	52.2	0.0	2.3
Public Health Nurses	11.4	5.3	11.6	12.2	21.7	0.0	0.5
Immunization Clinics	16.2	7.6	16.4	14.4	30.4	0.0	2.8
CHC (Southern Regional Medical Center)	3.2	1.1	3.3	2.9	0.0	0.0	0.0
Old Age/Blind Program	0.6	0.0	0.6	0.0	0.0	0.0	0.0
Any Other Medical	72.9	56.2	73.7	69.8	95.7	26.9	47.2
Insurance:							
Women, Infant and Children (WIC)	12.9	5.9	13.0	13.7	21.7	0.0	0.9
Medicare	14.8	5.9	15.1	12.9	17.4	0.0	1.4
MIP	11.7	4.8	12.0	10.8	17.4	0.0	0.5

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Table 10.2 also shows that larger proportions of post- than pre-Compact migrant households used the Women, Infant and Children (WIC) program, Medicare, and the Medically Indigent Program (MIP). About 13 percent of the post-Compact households used the WIC program during the year compared to 6 percent of the pre-Compact migrant households. Similarly, 15 percent of the post-Compact and 6 percent of the pre-Compact migrant households received medicare, and 12 percent of the post-Compact and 5 percent of the pre-Compact migrant households received MIP. These figures seem to show that as the migrant households become part of the community, they develop financial resources, and no longer are as dependent on these insurance programs.

Entitlement Program Services Received: Food Stamps and Welfare. This section looks at Micronesian migrant householder users of entitlement programs. We look at use of food stamps and welfare as two of the services Guam provides to U.S. citizens and was providing to persons from the Freely Associated States.

For food stamps, about 1/6th of the post-Compact migrant households had used food stamps during the month before enumeration, compared to less than 1/12th of the pre-Compact migrant households (Table 10.3). The percents were higher for the FSM and RMI migrants, lower for those from Palau. The median amount of food stamps for the month was \$288 for the post-Compact households and \$380 for the pre-Compact households.

Table 10.3: Amount of Food Stamps Received, Micronesian Migrants and Children, Guam, 1997.

Food Stamps Received	Total		FSM		RMI	Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	All Migrants	Post-Comp. & Children	Pre-Comp.
Total Migrant Households	979	356	931	139	23	26	216
With food stamps	163	28	159	22	4	0	22
Percent with Food Stamps	16.6	7.9	17.1	15.8	17.4	0.0	10.2
Median	\$288	\$380	\$282	\$360	\$400	\$0	\$360
Mean	\$304	\$351	\$302	\$338	\$381	\$0	\$338

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Fewer households were on welfare than used food stamps. About 12 percent of the post-Compact Micronesian migrant households on Guam received welfare in the month before enumeration compared to 5 percent of the pre-Compact migrant households (Table 10.4). RMI residents were more likely to receive welfare payments, Palauans much less likely. The median payment for post-Compact households was about \$400, compared to about \$450 for the pre-Compact households.

Table 10.4: Amount of Welfare (AFDC) Received, Micronesian Migrants and Children, Guam, 1997.

Welfare Received	Total		FSM		RMI	Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	All Migrants	Post-Comp. & Children	Pre-Comp.
Total Migrant Households	979	356	931	139	23	26	216
Total with Welfare	113	19	109	13	4	0	6
Percent with Welfare	11.5	5.3	11.7	9.4	17.4	0.0	2.8
Median	\$394	\$450	\$387	\$525	\$467	\$0	\$433
Mean	\$439	\$420	\$438	\$432	\$458	\$0	\$394

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

10.2 SAIPAN

Health Status. As on Guam, very few Micronesian migrants reported having disabilities. Less than 2 percent of the post-Compact and somewhat more than 2 percent of the pre-Compact migrants reported a permanent physical or mental health condition at the time of the enumeration on Saipan (Table 10.5). Of those 16 years and over, less than one percent of the post-Compact migrants reported health conditions that would limit the kind or amount of work at a job, would prevent them from working at a job at all, or would prevent them from taking care of their own personal needs. The results for the pre-Compact migrants were similar, with 1.6 percent having a limitation for the kind or amount of work to be done, one percent being prevented from working at a job, and less than one person prevented from taking care of own personal needs.

Table 10.5: Health Status of Micronesian Migrants and Children, CNMI, 1998

Health Status	Total		FSM		RMI	Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	All Migrants	Post-Comp. & Children	Pre-Comp.
Total Migrant Population	1,755	1,192	1,503	289	92	178	885
Permanent Physical/Mental Health Condition	1.7	2.4	1.7	3.1	2.2	1.7	2.3
Persons 16+ Years	936	1,085	796	278	20	110	790
Physical/Mental/Other Health Condition that:							
Limits Kind/Amount of Work at a Job	0.9	1.6	0.6	1.8	0.0	2.7	1.5
Prevents Working at a Job	0.4	1.0	0.3	0.7	0.0	1.8	1.1
Prevents Taking Care of Own Personal Needs	0.5	0.6	0.4	0.4	0.0	1.8	0.8

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Types of Health Services Used. Out of the 506 pre-Compact migrant households, 68 percent used some type of health services provided by the government through its public health clinics and programs (Table 10.6). Only 48 percent of the 237 post-Compact households used these services. The data also shows that a significant proportion of the migrants frequently used government provided services for their newborns and children, which was also higher after the compact as opposed to before, except in the case of Palauan migrants. However, only a few received services from the old age and blind program. About 1/10th of the migrant households used maternal and child health programs, but less than one percent used old age and blind programs.

Table 10.6: Health Services Used, Micronesian Migrants and Children, CNMI, 1998

Health Services Used	Total		FSM		RMI	Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	All Migrants	Post-Comp. & Children	Pre-Comp.
Total Migrant Households	237	506	212	129	11	19	372
Total, Some Health Services	48.1	68.0	45.8	51.9	72.7	68.4	73.4
Out-Patient Visits:							
Maternal and Child Health	9.7	9.5	9.9	6.2	0.0	10.5	10.8
Prenatal Programs	8.9	6.7	9.4	3.9	0.0	5.3	7.8
Children in for Check-ups	12.2	19.0	13.2	13.2	9.1	5.3	21.0
Old Age/Blind Programs	0.8	0.6	0.9	0.0	0.0	0.0	0.8
Any Other Medical	27.0	37.7	24.5	27.9	63.6	42.1	40.9
Insurance:							
Women, Infant and Children (WIC)	21.5	24.3	20.8	20.9	9.1	31.6	25.8
Medicare	10.5	13.2	10.8	11.6	0.0	10.5	14.0
Medically Indigent (MIP)	3.4	3.8	2.8	0.8	0.0	10.5	4.8

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

How the Micronesian migrants were accessing government provided health care services can be understood through the following breakdown: 24 percent out of the 506 pre-Compact migrant households receive WIC, 13 percent on Medicare or Medicaid and 4 percent were on MIP. Out of the 237 post-Compact households, 22 percent were on WIC, 11 percent on Medicare and Medicaid and only 3 percent on MIP.

The data seem to suggest that the proportion of migrants with some form of physical, mental and health conditions who came to CNMI, regardless of age, was less among the post-Compact migrants, compared to the pre-Compact, except in Palau's case

Table 10.7: Amount of Food Stamps Received, Micronesian Migrants and Children, CNMI, 1998

Food Stamps Received	Total		FSM		RMI	Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	All Migrants	Post-Comp. & Children	Pre-Comp.
Total Migrant Households	237	506	212	129	11	19	372
Total with Food Stamps	37	81	35	29	0	0	51
Percent with Food Stamps	15.6	16.0	16.5	22.5	27.3	0.0	13.7
Median	\$264	\$288	\$258	\$231	\$250	\$0	\$321
Mean	\$276	\$315	\$274	\$262	\$265	\$0	\$348

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Entitlement Program Services Received: Food Stamps and Welfare. Unlike Guam, only a small number of the migrants in CNMI received foods stamp assistance: 16 percent of both the pre-Compact and post-Compact households. The median for the post-Compact households was \$264 for the month before enumeration, compared to \$288 for the pre-Compact households. Of course, the total number of households is barely more than 100 so it is difficult to discuss the long term implications of these numbers.

Only 4 Micronesian migrant households received any welfare payments (and these were probably associated with migration from Guam.) We present the figures only to give the full picture for comparative purposes.

Table 10.8: Amount of Welfare (AFDC) Received, Micronesian Migrants and Children, CNMI, 1998.

Welfare Received	Total		FSM		RMI	Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	All Migrants	Post-Comp. & Children	Pre-Comp.
Total Migrant Households	237	506	212	129	6	19	372
Total with Welfare	1	3	1	1	0	0	2
Percent with Welfare	0.4	0.6	0.5	0.8	0.0	0.0	0.5
Median	\$51	\$150	\$51	\$51	\$0	\$0	\$300
Mean	\$12	\$195	\$12	\$1	\$0	\$0	\$292

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

10.3 STATE OF HAWAII

Health Status. The data for Hawaii also show a generally healthy migrant population. Less than 2 percent of the post-Compact migrants and about 2.5 percent of the pre-Compact migrants reported having permanent physical or mental health conditions (Table 10.9). Pre-compact Palauans had the highest rate, at 3.6 percent, followed by post-Compact RMI households, at 2.9 percent.

The numbers of disabled persons 16 years and over were also low. About 1.8 percent of post- and 2.1 percent of the pre-Compact migrants had a physical or mental health condition that limited the kind or amount of work they could do at a job. Only about one percent of the adult migrants had a disability that prevented working at a job, and one percent or less had a disability preventing taking care of their own personal needs.

Table 10.9: Health Status of Micronesian Migrants and Children, Hawaii, 1997

Health Status	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Migrant Population	5,509	610	3,312	232	2,070	185	127	193
Permanent Physical/Mental Health Condition	1.9	2.5	1.3	2.2	2.9	1.6	2.4	3.6
Persons 16+ Years	3,776	580	2,373	228	1,393	166	110	186
Physical/Mental/Other Health Condition that:								
Limits Kind/Amount of Work at a Job	1.8	2.1	1.1	0.9	2.9	0.6	1.8	4.8
Prevents Working at a Job	1.4	1.2	0.6	0.4	2.6	0.6	0.9	2.7
Prevents Taking Care of Own Personal Needs	0.7	1.0	0.2	0.4	1.6	0.6	0.0	2.2

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Types of Health Services Used. About 69 percent of the post-Compact Micronesian migrant households and 74 percent of the pre-Compact households used some health services during the year before enumeration. Pre-Compact FSM migrants were the mostly likely to use these services in Hawaii, while post-Compact Palauans were the least likely to use health services.

Table 10.10: Health Services Used, Micronesian Migrants and Children, Hawaii, 1997

Health Services Used	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Migrant Households	1,378	298	910	128	432	71	36	99
Total, Some Health Services	69.4	73.5	69.3	77.3	71.3	70.4	47.2	70.7
Out-Patient Visits:								
Emergency Rooms	9.9	8.7	14.7	13.3	0.5	4.2	0.0	6.1
Public Health Nurses	10.4	5.0	12.4	4.7	6.5	5.6	5.6	5.1
Immunization Clinics	13.6	11.4	14.5	10.9	12.7	19.7	0.0	6.1
CHC (Lanikila Health Center)	11.2	7.4	14.7	10.9	4.2	0.0	5.6	8.1
STD/AIDS Service	0.4	0.3	0.7	0.8	0.0	0.0	0.0	0.0
Any Other Medical	54.9	63.1	57.7	70.3	49.8	46.5	47.2	65.7
Insurance:								
Women, Infant and Children (WIC)	9.9	6.7	9.1	11.7	12.5	7.0	0.0	0.0
Medicare	7.5	7.7	9.3	10.9	4.2	2.8	0.0	7.1
QUEST	24.7	21.5	21.8	22.7	32.4	35.2	5.6	10.1

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Table 10.10 shows the types of and where the Micronesian migrants commonly use health care services. Overall, greater proportions of the post-Compact migrant households than pre-Compact migrant households used emergency rooms (10 percent compared to 9 percent), public health nurses (10 percent vs 5 percent), clinics services (14 vs 11 percent), and Lanikila Health Center (11 percent vs 7 percent).

Post-Compact migrant households were more likely to use WIC, Medicare and Medicaid or QUEST than pre-Compact migrant households, except for Medicare and Medicaid (where the proportions were about the same). Almost 1/4th of the post-Compact households used the QUEST program compared to 1/5th of the pre-Compact households.

Table 10.11: Amount of Food Stamps Received, Micronesian Migrants and Children, Hawaii, 1997

Food Stamps Received	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Migrant Households	1378	298	910	128	432	71	36	99
Total with Food Stamps	191	26	119	14	72	12	0	0
Percent with Food Stamps	13.9	8.7	13.1	10.9	16.7	16.9	0.0	0.0
Median	\$231	\$314	\$213	\$450	\$264	\$186	\$0	\$0
Mean	\$275	\$481	\$262	\$716	\$298	\$208	\$0	\$0

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Entitlement Program Services Received: Food Stamps and Welfare. About 14 percent of the post-Compact Micronesian migrant households had received food stamps in the month before enumeration, compared to about 9 percent of the post-Compact households. None of the Palauan households received food stamps. Marshall Islands households were more likely to be using food stamps than those from the FSM. The median amount of food stamps used by post-Compact households in the month before the census was \$231 compared to \$314 for the pre-Compact households.

In Hawaii, the same number (and probably the same households) of pre-Compact households were on welfare as were using food stamps – 9 percent of the units. More of the post-Compact households were on welfare, 18 percent of all post-Compact households. The median amount for the month before enumeration was \$531 for post-Compact households and \$633 for pre-Compact households.

Table 10.12: Amount of Welfare (AFDC) Received, Micronesian Migrants and Children, Hawaii, 1997

Welfare Received	Total		FSM		RMI		Palau	
	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.	Post-Comp. & Children	Pre-Comp.
Total Migrant Households	1378	298	910	128	432	71	36	99
Total with Welfare	251	26	152	13	99	12	0	1
Percent with Welfare	18.2	8.7	16.7	10.2	22.9	16.9	0.0	1.0
Median	\$531	\$633	\$492	\$925	\$586	\$400	\$0	\$350
Mean	\$597	\$905	\$555	\$1,448	\$662	\$367	\$0	\$300

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI.

Conclusion

Clearly the level of health services the Micronesian migrants in Guam, Saipan and Hawaii consumed is relatively high. In Saipan, this made up of 68 percent of the entire migrant population before the compact and 48 percent after the compact. The services commonly used include maternal and child health care such as prenatal/postpartum, immunization, follow-up for children and services for the old age and blind. About 16 percent of the pre-Compact migrants were on food stamps. In general there seems to be decrease in the level of health care services the Micronesian migrants consumed in Saipan, compared to the other two areas. The reason is not fully understood at this point, but one may attribute it to the seemingly slow post-Compact settlement in Saipan by the Micronesian migrants.

The pattern of migrant health care utilization in Guam is different from the other two areas, Saipan and Hawaii. It is different in that it not receives more influx of migrants after the compact but it also provides more health care services to these migrants through its entitlement programs. Almost 75 percent of the entire 979 post-Compact migrant households received health care services, compared to 57 percent of the pre-Compact migrant households.

Hawaii also receives more migrants following the implementation of the compact of free association with the U.S. However, the proportion of the Micronesian migrant household who actually used health care services after the compact is less compared to before the compact. This is a striking difference, especially when a great proportion of these migrants were on the entitlement program list.

CHAPTER 11

REGULAR AND DAILY EXPENDITURES

All three Micronesian censuses asked questions about expenditures. These expenditures were divided into three types of expenditures: major expenditures, regular expenditures, and weekly expenditures. Major expenditures include purchases of large items like appliances, health services, car purchases, weddings and funerals, and so forth. Regular expenditures include utility bills, mortgage or rent payments, credit card bills, etc.

REGULAR EXPENDITURES

Guam. Table 11.1 shows general regular household expenditures for Micronesian migrants and their children for Guam in 1997. Some of the items were collected on a monthly basis, like mortgage payments, rent, utilities, and loan payments. Others were collected on an annual basis, like money spent on weddings, funerals, church, and so forth. Of the 1,344 households reporting at least one regular household expenditure, 983 (73 percent) were Post-Compact units, and the other 351 were pre-Compact units.

The figures are presented by post- and pre-Compact households, so readers wanting to obtain averages for all Micronesian migrants can either refer back to the detailed tables or note that the post-Compact houses contributed about 3/4th to the total. Hence, while about 9 in every 10 of the post-Compact households paid rent, this was true for only 6 in 10 of the pre-Compact households. The average would be about 8 in 10, since the post-Compact households made a larger contribution.

On the other hand, all households in Guam made some utility payments, although some of them had more amenities than others. Almost all units paid for electricity and water, but only half of the post-Compact households had telephone bills compared to 4 in 5 of the pre-Compact migrants. Because a television is needed to have cable connection, only 3 in 10 of the post-Compact migrants had cable compared to about 2 in 5 of the pre-Compact migrants.

Among other regular expenditures, about 65 percent of the post-Compact households had vehicle payments, mostly loan payments, compared to 74 percent of the pre-Compact households. These figures show, perhaps, that time is required to establish a settled life, and then to buy a vehicle (and start making loan payments on it).

Finally, 73 percent of the post-Compact households and 56 percent of the pre-Compact households had "other" major regular expenditures. Of these, the largest number of households had family responsibilities (63 percent of the post-Compact and 49 percent of the pre-Compact households), Church (62 percent and 41 percent, respectively), and funerals (60 percent and 45 percent, respectively).

Table 11.1: General Regular Household Expenditures, Micronesia Migrants and their Children, Guam, 1997
 [Percentage of all migrant households in category]

General Regular Expenditures	Total		FSM		RMI		Palau	
	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-
Total Migrant Households	983	351	934	136	22	1	27	214
Housing	89.4	62.7	89.8	84.6	95.5	100.0	70.4	48.6
Mortgage/Loan Payments	0.0	2.6	0.0	0.7	0.0	0.0	0.0	3.7
Rent	89.4	60.1	89.8	83.8	95.5	100.0	70.4	44.9
Insurance	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.9
Vehicles	65.1	74.4	65.2	77.9	77.3	100.0	51.9	72.0
Loan Repayments	43.6	31.9	44.0	52.2	54.5	100.0	22.2	18.7
Registration and Insurance	63.7	72.1	63.8	74.3	72.7	100.0	51.9	70.6
Drivers' Licenses	45.7	27.9	45.7	52.2	72.7	100.0	22.2	12.1
Utility Costs	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Electricity	97.6	98.6	97.4	96.3	100.0	100.0	100.0	100.0
Water	99.5	99.7	99.5	99.3	100.0	100.0	100.0	100.0
Telephone	49.9	80.3	48.3	62.5	86.4	0.0	77.8	92.1
Gas/Kerosene	9.5	9.1	9.6	9.6	9.1	0.0	3.7	8.9
Cable TV	29.4	41.6	29.1	39.0	36.4	0.0	33.3	43.5
Other Utilities	3.1	0.6	3.2	0.7	0.0	0.0	0.0	0.5
Other Major Regular Expenses	73.3	56.1	74.1	69.9	95.5	100.0	29.6	47.2
Weddings	49.7	30.2	50.3	42.6	72.7	100.0	11.1	22.0
Funerals	60.5	44.7	61.6	62.5	72.7	100.0	18.5	33.2
Fiestas	38.6	25.6	39.3	38.2	50.0	100.0	3.7	17.3
Family Responsibilities	63.2	49.0	63.7	64.0	86.4	100.0	25.9	39.3
Church	62.5	41.0	63.5	61.8	77.3	100.0	14.8	27.6
Remittances Sent Overseas	37.8	30.8	37.6	38.2	81.8	100.0	11.1	25.7
Remittances Sent Locally	13.6	20.8	13.6	18.4	22.7	100.0	7.4	22.0
Membership Fees	4.0	6.3	4.0	10.3	9.1	0.0	0.0	3.7

Source: Censuses of Micronesia Migrants to Hawaii, Guam and CNMI

Table 11.2 shows the average amounts for the households having general regular household expenditures. The average expenditures, of more than \$14,000 were about the same for post-Compact and pre-Compact households, although the expenditures varied by Freely Associated State. Pre-Compact FSM households had higher than average expenditures, Marshall Islands households also had higher average expenditures, but Palau households had lower average expenditures. It is important that only households having at least one expense in the categories listed are included, and that the averages are for these households only. Households not having any expense, or not having any expense for a particular category, are *not* included in the denominator or numerator.

The average annual rent for post-Compact households was \$6,920 (about \$575 per month), and for pre-Compact households was \$7,391 (about \$615 per month). Rent was slightly higher for the Marshallese and the Palauans than for those from the FSM, but these rents did not represent actual housing conditions. Utilities costs were running about \$2,245 (about \$187 per month) for the post-Compact migrants and \$2,605 (about \$217 per month) for the pre-Compact migrants. The biggest average costs were for electricity (\$89 per month for the post-Compact and \$103 per month for the pre-Compact households) and water. The average household paid more than \$400 per year for telephone service, and a similar amount for Cable TV.

Loan payments for vehicles was the largest single expense listed. The average post-Compact household was paying about \$9,200 (\$766 per month) on loan payments for all vehicles compared to \$17,177 (\$1,431 per month) for the pre-Compact housing units. Average vehicle insurance costs were about \$900 per year.

The average post-Compact household on Guam spent \$1,542 for other major expenditures compared to \$1,666 for the pre-Compact households. The largest single amounts for the categories listed were \$514 for funerals for the post-Compact migrants and \$526 for the pre-Compact migrants and \$490 for remittances sent overseas for post-Compact migrants and \$529 for pre-Compact migrants.

While remittances sent overseas obviously only benefit Guam's economy if the receiving families buy goods produced on Guam, all of the other major expenditures occurred on Guam. Most of these expenditures benefited Guam's general economy since the households used goods and services produced on Guam.

Table 11.2: General Regular Household Expenditures, Micronesian Migrants and their Children, Guam, 1997
[Average Amounts in U.S. Dollars]

General Regular Expenditures	Total		FSM		RMI		Palau	
	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-
Total Migrant Households	14,167	14,426	14,251	19,882	16,503	16,882	9,345	10,946
Housing	6,920	7,612	6,872	7,232	8,343	8,343	7,444	8,020
Mortgage/Loan Payments	0	12,531	0	12,000	0	0	0	12,597
Rent	6,920	7,391	6,872	7,190	8,343	8,343	7,444	7,612
Insurance	0	1,250	0	0	0	0	0	1,250
Vehicles	7,041	8,210	7,202	12,485	4,712	4,712	2,880	5,288
Loan Repayments	9,194	17,177	9,372	17,295	5,432	5,432	4,486	17,292
Registration and Insurance	898	866	896	944	933	933	957	812
Drivers' Licenses	42	32	43	36	29	29	17	22
Utility Costs	2,245	2,605	2,227	2,624	2,727	2,727	2,455	2,598
Electricity	1,064	1,244	1,048	1,172	1,448	1,448	1,302	1,289
Water	808	774	808	841	829	829	804	732
Telephone	412	458	427	710	240	240	241	350
Gas/Kerosene	595	559	578	430	1,200	1,200	960	647
Cable TV	401	448	403	445	368	368	377	449
Other Utilities	728	300	728	360	0	0	0	240
Other Major Regular Expenses	1,542	1,666	1,532	1,995	2,251	2,251	524	1,363
Weddings	323	386	323	549	346	346	167	193
Funerals	514	526	510	593	759	759	186	451
Fiestas	199	179	202	238	79	79	500	99
Family Responsibilities	360	317	363	439	350	350	129	191
Church	187	300	189	257	148	148	113	366
Remittances Sent Overseas	490	529	470	489	944	944	187	571
Remittances Sent Locally	329	350	329	300	387	387	175	383
Membership Fees	190	364	183	151	320	320	0	738

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI

Table 11.3 looks at other purchases and expenditures made by the Micronesian migrant households on Guam in the year before enumeration. Almost 85 percent of the post-Compact households and 58 percent of the pre-Compact households bought at least one appliance or furniture in the year before enumeration. Not all purchase categories are shown in the text table, so refer to the basic tables at the end for more details. The largest category in terms of numbers of households purchasing was kitchen utensils (70 percent of the post-Compact migrants and 42 percent of the pre-Compact migrant households.) The second largest was a television, purchased by 63 percent of the post-Compact households, and 32 percent of the pre-Compact households. Almost half of the post-Compact households also bought a video cassette player (VCR).

About 28 percent of the post-Compact households paid for health or other insurance compared to 22 percent of the pre-Compact households. The Marshallese were the most likely to have health or other insurance, the Palauans were least likely.

Almost half of the pre-Compact households bought a vehicle in the 12 months before enumeration compared to about 1/3rd of the pre-Compact units. About half of all the FSM households bought a vehicle in the year before the census. Almost 2/3rd of the Marshallese bought a vehicle compared to only about 1/4th of the Palauan units. While loan payments were covered in the previous section, by a fluke of the questionnaire, they were included again here, with lower results, probably because respondents had already responded earlier.

About half of the post-Compact households had at least one member who took an off-island trip during the year before the census, compared to about 3/10th of the pre-Compact households. The FSM households were the most likely to leave the island during the year, the Palauan and Marshallese household members were less likely to travel.

The most expensive purchase, as expected, was for a vehicle – about \$12,700 for post-Compact households, and \$15,800 for pre-Compact units. Palauans spent somewhat more for vehicles than the FSM and Marshallese households.

Table 11.3: Major Household Expenditures by Type, Micronesian Migrants and their Children, Guam, 1997
[Percentage of all migrant households in category]

Major Household Expenditures	Total		FSM		RMI		Palau	
	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-
Total Migrant Households	979	356	934	136	22	1	27	214
Consumer Durables	84.6	57.6	85.0	84.6	90.9	100.0	51.9	41.6
Stove/Range	12.4	9.0	13.0	19.1	0.0	0.0	0.0	2.8
Microwave Oven	6.8	10.4	6.6	14.0	13.6	0.0	7.4	8.4
Refrigerator	9.2	7.3	9.5	14.0	4.5	0.0	0.0	3.7
Kitchen Utensils	70.1	41.9	69.9	61.8	90.9	100.0	48.1	29.9
Washing Machine	27.0	14.6	27.9	30.1	13.6	100.0	0.0	4.7
Television	63.4	32.0	63.8	54.4	77.3	100.0	29.6	18.2
Video Player	47.8	20.2	48.3	41.2	63.6	100.0	11.1	7.0
Radio	39.1	20.5	39.2	33.1	54.5	100.0	18.5	12.6
Cassette Player	19.1	15.4	18.8	20.6	18.2	0.0	25.9	12.6
CD Player	7.0	4.8	6.7	5.9	13.6	0.0	11.1	4.2
Sewing Machine	9.5	8.4	9.7	16.9	9.1	0.0	0.0	3.3
Kitchen Furniture	25.1	10.1	25.6	20.6	22.7	0.0	7.4	3.7
Bedroom Furniture	25.0	12.6	25.7	25.0	13.6	0.0	7.4	5.1
Lounge Furniture	18.9	7.3	19.5	14.0	4.5	0.0	7.4	3.3
Carpets and Rugs	4.7	13.8	4.0	10.3	22.7	0.0	14.8	16.4
Health/Insurance	28.4	22.2	28.5	36.0	40.9	0.0	11.1	14.0
Construction/Home Repair	3.4	2.8	3.3	4.4	9.1	0.0	0.0	1.9
Vehicle	47.5	32.6	47.8	49.3	63.6	100.0	18.5	22.4
Off-Island Travel	49.8	29.5	51.2	52.9	18.2	100.0	22.2	15.0
Airfare	49.3	29.5	50.6	52.9	18.2	100.0	22.2	15.0
All Loan Payments	29.4	17.1	29.6	33.8	45.5	100.0	7.4	6.5
Vehicle	27.4	14.3	27.6	29.4	40.9	100.0	3.7	4.7
Other Loans	2.7	3.4	2.7	5.1	4.5	0.0	0.0	2.3
Credit Cards	0.7	1.1	0.6	1.5	0.0	0.0	3.7	0.9
Other Expenses	1.7	4.5	1.8	2.2	0.0	0.0	0.0	6.1

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI

The average expense for all appliance and furniture purchases was about \$2,000 for both the pre- and post-Compact households. The three most expensive purchases for each group were refrigerators, washing machines, and bedroom furniture. Construction and home repair costs came to about \$800 for the migrant households.

Health and other insurance ran about \$1,142 for the post-Compact migrants compared to \$1,351 for the pre-Compact households. The costs were somewhat higher for the FSM households, and lower for the Palauan units. Post-Compact households spent about \$1,210 on off-island travel compared to \$1,334 for the pre-Compact units.

Table 11.4: Major Household Expenditures by Type, Micronesian Migrants and their Children, Guam, 1997
[Average Amounts in U.S. Dollars]

Major Household Expenditures	Total		ESM		RMI		Palau	
	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-
Total Migrant Households								
Consumer Durables	2,040	2,055	2,071	2,911	1,740	1,700	708	954
Stove/Range	228	280	228	237	0	0	0	469
Microwave Oven	282	200	286	214	297	0	130	186
Refrigerator	481	671	484	662	270	0	0	693
Kitchen Utensils	306	210	314	281	172	150	108	118
Washing Machine	556	540	556	542	550	400	0	545
Television	443	414	445	487	459	600	218	271
Video Player	336	333	337	369	326	300	215	199
Radio	265	229	266	303	287	250	148	106
Cassette Player	298	275	302	314	206	0	246	236
CD Player	442	351	451	524	397	0	298	197
Sewing Machine	265	230	262	248	398	0	0	173
Kitchen Furniture	270	266	272	279	238	0	125	221
Bedroom Furniture	785	574	790	621	813	0	188	430
Lounge Furniture	298	308	298	373	500	0	200	132
Carpets and Rugs	229	114	260	260	144	0	54	56
Health/Insurance	1,142	1,351	1,160	1,643	942	0	213	875
Construction/Home Repair	793	756	838	539	95	0	0	1,082
Vehicle	12,723	15,794	12,637	15,427	13,929	16,000	17,060	16,302
Off-Island Travel	1,210	1,334	1,215	1,289	1,123	430	879	1,456
Airfare	867	965	869	940	948	280	696	1,044
All Loan Payments	368	403	367	401	439	350	127	416
Vehicle	357	401	354	404	457	350	243	393
Other Loans	218	333	215	322	285	0	0	350
Credit Cards	667	43	777	13	0	0	10	72
Other Expenses	445	1,321	445	2,517	0	0	0	1,045

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI

CNMI. The next set of tables shows similar general regular expenditures information for the CNMI. We will look only at the total Freely Associated States households because the numbers reporting were small – only 237 post-Compact and 506 pre-Compact households. Of those about 69 percent of the post-Compact and 54 percent of the pre-Compact households paid rent. As on Guam, all units paid for some utilities. Almost all units paid for electricity and water. Less than 1 in 4 of the post-Compact households paid a telephone bill, compared to exactly half of the pre-Compact units. Only about 1/3rd of the post-Compact units paid for cable TV compared to almost 2/3rd of the pre-Compact units.

About 40 percent of the post-Compact and 56 percent of the pre-Compact households had vehicle payments. About 1/3rd of the post-Compact and 2/5th of the pre-Compact households had vehicle loan payments.

Finally, about 60 percent of the post-Compact and 65 percent of the pre-Compact households had other major regular expenditures. The largest categories for the post-Compact migrant households were church (38 percent of the units), family responsibilities (36 percent) and funerals (34 percent). For the pre-Compact households, the largest categories were the same, but the order changed: funerals (46 percent), family responsibilities (44 percent), and church (35 percent).

Table 11.5: General Regular Household Expenditures, Micronesian Migrants and their Children, CNMI, 1998.
[Percentage of all migrant households in category]

General Regular Expenditures	Total		ESM		RMI		Palau	
	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-
Total Migrant Households	237	506	213	126	6	5	18	375
Housing	68.8	55.9	68.5	47.6	16.7	40.0	88.9	58.9
Mortgage/Loan Payments	0.0	2.4	0.0	0.8	0.0	0.0	0.0	2.9
Rent	68.8	53.6	68.5	46.8	16.7	40.0	88.9	56.0
Insurance	0.0	1.2	0.0	0.8	0.0	0.0	0.0	1.3
Vehicles	40.5	55.7	41.3	51.6	50.0	80.0	27.8	56.8
Loan Repayments	32.1	39.1	32.4	42.1	33.3	60.0	27.8	37.9
Registration and Insurance	35.4	48.0	36.6	40.5	50.0	80.0	16.7	50.1
Drivers' Licenses	25.7	31.8	26.8	34.1	16.7	40.0	16.7	30.9
Utility Costs	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Electricity	94.9	97.0	94.8	92.1	100.0	100.0	94.4	98.7
Water	100.0	99.8	100.0	99.2	100.0	100.0	100.0	100.0
Telephone	22.4	50.0	21.6	41.3	16.7	60.0	33.3	52.8
Gas/Kerosene	50.6	55.7	48.4	54.0	66.7	40.0	72.2	56.5
Cable TV	32.9	65.2	32.4	45.2	50.0	60.0	44.4	72.0
Other Utilities	0.8	0.4	0.9	0.8	0.0	0.0	0.0	0.3
Other Major Regular Expenses	60.3	65.0	62.0	55.6	50.0	80.0	44.4	68.0
Weddings	25.7	25.3	27.2	24.6	16.7	20.0	11.1	25.6
Funerals	34.2	45.7	35.7	38.1	16.7	40.0	22.2	48.3
Fiestas	10.1	15.0	10.3	18.3	0.0	20.0	11.1	13.9
Family Responsibilities	36.3	43.7	36.2	34.9	50.0	60.0	33.3	46.4
Church	38.0	35.0	39.4	37.3	33.3	60.0	22.2	33.9
Remittances Sent Overseas	28.7	22.5	30.0	22.2	16.7	60.0	16.7	22.1
Remittances Sent Locally	7.2	5.7	8.0	5.6	0.0	0.0	0.0	5.9
Membership Fees	1.3	4.0	0.9	1.6	0.0	20.0	5.6	4.5

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI

Table 11.6 shows the average expenditures for these items. The average expenditures were much less than on Guam, with the averages of \$5,644 for post-Compact and \$7,006 for pre-Compact households. Average annual rents were \$3,280 (about \$273 per month) for the post-Compact migrants and \$3,544 (about \$295 per month) for the pre-Compact migrant households. The average post-Compact household paid about \$62 per month for electricity compared to \$83 for the pre-Compact migrants. Migrant households paid more than \$500 per year for telephone use and about \$400 per year for Cable TV.

Car loan repayments were the largest of the itemized expenditures. The average monthly vehicle payment was \$345 for the post-Compact migrant households and \$394 for the pre-Compact migrants.

The post-Compact migrants spent an average of about \$1,000 for other major regular expenditures compared to \$1,434 for the pre-Compact households. The average pre-Compact household sent more than \$1,000 per year in overseas remittances compared to about \$600 for the average post-Compact household. The second largest category was funerals, with pre-Compact households spending an average of \$620 compared to the \$380 for the post-Compact households.

Table 11.6: General Regular Household Expenditures, Micronesian Migrants and their Children, CNMI, 1998
[Average Amounts, in U.S.Dollars]

General Regular Expenditures	Total		ESM		RMI		Palau	
	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-
Total Migrant Households	5,644	7,006	5,629	6,044	4,719	9,238	6,131	7,299
Housing	3,280	3,712	3,303	3,594	7,200	7,200	2,822	3,740
Mortgage/Loan Payments	0	7,088	0	15,600	0	0	0	6,314
Rent	3,280	3,544	3,303	3,386	7,200	7,200	2,822	5,383
Insurance	0	830	0	280	0	0	0	940
Vehicles	3,573	3,679	3,503	3,907	3,141	3,141	5,064	3,607
Loan Repayments	4,143	4,736	4,105	4,475	4,152	4,152	4,670	4,841
Registration and Insurance	335	410	321	329	373	373	657	431
Drivers' Licenses	19	19	19	18	17	17	17	19
Utility Costs	1,318	1,941	1,300	1,836	1,482	1,482	1,479	1,968
Electricity	754	996	751	1,032	610	610	839	975
Water	242	290	249	339	210	210	181	274
Telephone	546	517	474	506	2,400	2,400	794	519
Gas/Kerosene	227	295	236	305	180	180	173	294
Cable TV	367	395	373	384	284	284	348	397
Other Utilities	180	1,200	180	240	0	0	0	2,160
Other Major Regular Expenses	1,024	1,434	989	855	927	927	1,651	1,576
Weddings	301	424	298	499	30	30	530	400
Funerals	377	621	331	334	500	500	1,213	690
Fiestas	287	84	181	95	0	0	1,450	81
Family Responsibilities	304	385	328	250	50	50	124	413
Church	189	221	170	78	1,025	1,025	168	265
Remittances Sent Overseas	590	1,014	582	362	50	50	933	1,233
Remittances Sent Locally	423	438	423	192	0	0	0	516
Membership Fees	83	769	35	35	0	0	180	888

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI

Table 11.7 shows that about 2/5th of the post-Compact households bought appliances or furniture during the 12 months preceding the enumeration compared to about half of the pre-Compact households. The distribution of appliances bought was quite different from Guam's distribution. About 17 percent of the post-Compact households bought televisions in the year before the census – the largest single appliance. Television (at about 1/4th of the units) was the second largest for the pre-Compact migrants, with video cassette players (VCRs) being first at about 2/3rd of the units.

More than 42 percent of the post-Compact households and almost 64 percent of the pre-Compact households paid for health or other insurance. About 2/5th of all the migrant units bought a vehicle in the year before the enumeration. And, about 38 percent of the post-Compact households and 47 percent of the pre-Compact units had at least one member of the household taking a trip in the year before enumeration.

Table 11.7: Major Household Expenditures by Type, Micronesian Migrants and their Children, CNMI, 1998.
[Percentage of all migrant households in category]

Major Household Expenditures	Total		FSM		RMI		Palau	
	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-
Total Migrant Households	237	506	213	126	6	5	18	375
Consumer Durables	39.2	48.8	41.3	46.8	0.0	60.0	27.8	49.3
Stove/Range	15.6	10.1	16.9	12.7	0.0	20.0	5.6	9.1
Microwave Oven	2.5	5.1	2.3	6.3	0.0	20.0	5.6	4.5
Refrigerator	11.4	18.4	11.7	14.3	0.0	0.0	11.1	20.0
Kitchen Utensils	8.4	18.0	8.9	12.7	0.0	0.0	5.6	20.0
Washing Machine	4.2	7.5	4.7	4.0	0.0	60.0	0.0	8.0
Television	17.3	23.9	17.8	25.4	0.0	20.0	16.7	23.5
Video Player	11.0	65.8	11.3	17.5	0.0	0.0	11.1	9.3
Radio	6.3	8.3	6.6	7.1	0.0	0.0	5.6	8.8
Cassette Player	9.7	9.1	10.8	10.3	0.0	20.0	0.0	8.5
CD Player	2.5	2.8	2.3	3.2	0.0	0.0	5.6	2.7
Sewing Machine	2.1	2.2	2.3	1.6	0.0	0.0	0.0	2.4
Kitchen Furniture	4.6	11.9	5.2	6.3	0.0	0.0	0.0	13.9
Bedroom Furniture	4.6	13.0	5.2	5.6	0.0	0.0	0.0	15.7
Lounge Furniture	2.1	4.9	2.3	4.0	0.0	0.0	0.0	5.3
Carpets and Rugs	2.1	2.4	2.3	2.4	0.0	0.0	0.0	2.4
Health/Insurance	42.2	63.6	42.3	43.7	50.0	80.0	38.9	70.1
Construction/Home Repair	3.4	6.1	2.8	3.2	0.0	0.0	11.1	7.2
Vehicle	40.5	40.3	32.4	39.7	16.7	40.0	11.1	40.5
Off-Island Travel	38.0	47.2	39.4	40.5	16.7	80.0	27.8	49.1
Airfare	38.0	46.4	39.4	40.5	16.7	80.0	27.8	48.0
All Loan Payments	26.2	48.8	25.8	38.9	33.3	80.0	27.8	51.7
Vehicle	19.4	34.4	19.7	27.0	33.3	40.0	11.1	36.8
Other Loans	10.1	20.4	9.4	14.3	0.0	40.0	22.2	22.1
Credit Cards	0.8	2.8	0.5	0.0	16.7	20.0	0.0	3.5
Other Expenses	19.8	27.1	18.3	19.0	50.0	80.0	27.8	29.1

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI

The average post-Compact household in the CNMI spent about \$1,300 on appliances and furniture in the year before the census, compared to \$1,600 for the pre-Compact households (Table 11.8). Among the most substantial purchases were refrigerators (an average of \$606 for post- and \$705 for pre-Compact households), washing machines (\$632 and \$481), bedroom furniture (\$473 and \$615), and televisions (\$512 and \$439).

Post-Compact households spent about \$900 per year on health and other insurance compared to about \$1,200 for the pre-Compact households. All households spent about \$1,100 on construction and home repairs. The post-Compact households spent about \$1,500 on off-island travel in the year before the census compared to about \$1,200 for the pre-Compact households – all but about \$300, in each case, was for airfare.

The data on vehicles seem skewed by the Post-Compact Palauans. It is not clear whether this is a data error, or Palauans buy extremely inexpensive cars. For the FSM migrants, the average vehicle bought in the year before the census cost \$12,300 for the post- and \$14,500 for the pre-Compact migrants.

Table 11.8: Major Household Expenditures by Type, Micronesian Migrants and their Children, CNMI, 1998
[Average Amounts, in U.S.Dollars]

Major Household Expenditures	Total		ESM		RMI		Palau	
	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-
Total Migrant Households								
Consumer Durables	1,305	1,627	1,329	1,403	0	876	185	1,705
Stove/Range	156	403	160	277	0	20	34	457
Microwave Oven	305	279	296	259	0	350	17	293
Refrigerator	606	705	617	849	0	475	75	671
Kitchen Utensils	281	271	294	370	0	35	75	250
Washing Machine	632	481	632	446	0	0	30	482
Television	512	439	529	410	0	292	88	447
Video Player	353	267	350	292	0	388	35	252
Radio	187	314	172	292	0	399	33	320
Cassette Player	430	294	430	244	0	0	32	315
CD Player	200	351	180	508	0	299	10	289
Sewing Machine	265	221	265	175	0	0	9	232
Kitchen Furniture	367	401	367	301	0	0	52	417
Bedroom Furniture	473	615	473	550	0	0	59	623
Lounge Furniture	317	586	317	267	0	0	20	666
Carpets and Rugs	116	128	116	270	0	0	9	81
Health/Insurance	913	1,174	930	808	1,182	580	263	1,234
Construction/Home Repair	1,057	1,093	1,385	2,093	0	73	27	945
Vehicle	3,573	15,298	12,279	14,524	14,000	6,250	152	15,504
Off-Island Travel	1,469	1,208	1,483	1,234	3,812	769	184	1,187
Airfare	1,101	931	1,113	979	3,000	529	180	922
All Loan Payments	373	389	386	311	348	230	194	409
Vehicle	301	379	303	329	346	229	138	394
Other Loans	303	271	329	224	0	174	83	275
Credit Cards	983	150	1,962	0	4	0	13	158
Other Expenses	972	1,260	933	929	880	1,338	109	1,334

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI

Hawaii. The last set of tables shows general regular household expenditures for the State of Hawaii. Hawaii had 1,374 post-Compact and 306 pre-Compact households in the 1997 Census having some regular expenditure. About 4/5th of the households declared an amount spent on rent. As in Guam and the CNMI, all households paid for some utilities. In Hawaii, almost all of the households paid for electricity and water. About 3/5^{ths} of the post- and 4/5^{ths} of the pre-Compact households paid telephone bills, and about 3 in 10 of the post- and 6 in 10 of the pre-Compact units paid for cable TV.

Because of Hawaii's generally good public transportation, fewer households were buying vehicles and making car payments. Only 17 percent of the post-Compact and 28 percent of the pre-Compact households were making loan repayments at the time of the enumeration.

About 2/3rd of the post- and 3/4th of the pre-Compact households had other major regular expenditures during the year before the enumeration. About half of the units contributed to church activities. Other large contributions were made to family responsibilities (49 percent of the post- and 57 percent of the pre-Compact households), remittances sent overseas (32 percent and 41 percents), and funerals (31 percent and 45 percent).

Table 11.9: General Regular Household Expenditures, Micronesia Migrants and their Children, Hawaii, 1997

General Regular Expenditures	Total		ESM		RMI		Palau	
	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-
Total Migrant Households	1,374	306	908	134	434	69	32	103
Housing	81.2	85.3	86.5	86.6	71.0	88.4	71.9	81.6
Mortgage/Loan Payments	0.9	6.5	0.7	6.0	1.4	8.7	0.0	5.8
Rent	80.3	78.8	85.8	80.6	69.6	79.7	71.9	75.7
Insurance	0.4	4.6	0.1	5.2	1.2	4.3	0.0	3.9
Vehicles	29.1	50.7	27.2	59.0	32.7	42.0	34.4	45.6
Loan Repayments	17.2	27.8	17.1	38.1	18.2	20.3	9.4	19.4
Registration and Insurance	25.8	48.4	23.7	56.7	29.5	40.6	34.4	42.7
Drivers' Licenses	17.5	29.4	15.1	21.6	22.1	37.7	21.9	34.0
Utility Costs	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Electricity	97.0	99.7	95.5	99.3	100.0	100.0	100.0	100.0
Water	99.9	100.0	99.8	100.0	100.0	100.0	100.0	100.0
Telephone	58.8	77.8	60.2	75.4	55.1	71.0	68.8	85.4
Gas/Kerosene	24.5	19.0	30.0	23.9	13.1	8.7	21.9	19.4
Cable TV	29.0	60.5	30.3	47.8	25.3	66.7	43.8	72.8
Other Utilities	0.2	0.3	0.0	0.0	0.7	0.0	0.0	1.0
Other Major Regular Expenses	68.2	74.5	63.2	74.6	78.8	85.5	65.6	67.0
Weddings	19.9	28.1	18.8	39.6	23.5	26.1	3.1	14.6
Funerals	30.7	45.1	30.8	47.0	31.1	37.7	21.9	47.6
Fiestas	26.4	26.8	22.9	29.1	35.0	33.3	9.4	19.4
Family Responsibilities	48.8	57.2	49.2	67.2	49.8	53.6	21.9	46.6
Church	51.3	49.0	46.3	61.2	63.8	59.4	25.0	26.2
Remittances Sent Overseas	31.6	41.2	37.3	49.3	20.3	40.6	21.9	31.1
Remittances Sent Locally	19.7	23.2	18.4	26.1	8.5	30.4	9.4	14.6
Membership Fees	8.8	19.6	8.5	17.9	9.7	11.6	6.3	27.2

Source: Censuses of Micronesia Migrants to Hawaii, Guam and CNMI

The post-Compact households spent an average of \$12,600 on these expenditures, about 2/3rd of the \$18,700 spent by the pre-Compact households (Table 11.10). Post-Compact households paid an average monthly rent of \$603 compared to an average of \$714 for the pre-Compact households. Those few households with mortgages had an average payment of about \$1,000 per month. Average monthly utility costs ran about \$270 per month. The households paid about \$90 per month for electricity, \$65 for water, and \$110 or so for telephone bills. Cable TV charges were another \$45 per month.

Post-Compact households spent about \$1,640 for the year for other major regular expenditures compared to \$2,100 for the pre-Compact households. The largest category of individual other major expense was “remittances sent overseas” – both post- and pre-Compact households sent an average of more than \$900 overseas during the year before enumeration. The second largest expense was funerals -- \$720 for post- and \$640 pre-Compact households.

Table 11.10: General Regular Household Expenditures, Migrants & Children, Hawaii, 1997
[Average Amounts, in U.S.Dollars]

General Regular Expenditures	Total		ESM		RMI		Palau	
	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-
Total Migrant Households	12,587	18,702	13,230	20,587	11,393	14,083	10,549	19,343
Housing	7,305	8,898	7,113	8,619	7,669	8,855	8,983	9,316
Mortgage/Loan Payments	11,625	11,945	13,676	11,417	9,574	13,292	0	11,304
Rent	7,238	8,569	7,063	8,344	7,559	8,288	8,983	9,079
Insurance	3,675	1,313	200	1,043	7,370	1,527	0	1,625
Vehicles	8,419	12,668	11,784	13,240	3,084	3,427	1,726	16,310
Loan Repayments	11,771	20,562	15,896	18,916	4,028	4,936	2,600	35,698
Registration and Insurance	1,632	1,109	2,078	1,069	936	1,082	1,017	1,196
Drivers' Licenses	22	22	22	26	22	17	13	22
Utility Costs	3,082	3,303	2,964	3,287	3,340	3,725	2,946	3,040
Electricity	1,179	1,060	1,094	1,126	1,362	1,202	983	880
Water	863	697	855	688	885	999	769	507
Telephone	1,299	1,410	1,203	1,406	1,522	1,637	1,251	1,288
Gas/Kerosene	633	670	597	707	795	670	681	611
Cable TV	544	537	534	531	583	454	425	593
Other Utilities	480	240	0	0	480	0	0	240
Other Major Regular Expenses	1,637	2,087	1,436	2,717	2,025	1,266	838	1,875
Weddings	350	434	175	435	646	709	30	104
Funerals	716	637	475	900	1,223	305	593	474
Fiestas	431	425	323	519	585	543	103	107
Family Responsibilities	370	413	386	558	347	254	53	264
Church	300	368	163	461	515	306	65	178
Remittances Sent Overseas	923	930	813	897	1,285	373	1,671	1,486
Remittances Sent Locally	406	483	303	591	895	307	100	478
Membership Fees	298	612	351	159	208	337	108	1,080

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI

Table 11.11 shows the distribution for other expenditures for the Hawaii migrants. About half of the post-Compact migrants and about 6/10th of the pre-Compact migrants bought appliances or furniture in the year before the census. As before, television was the priority purchase in most cases, with about 3 in every 10 households purchasing at least one in the year before the census. About 1/4th of the units purchased a radio, and similar numbers purchased video cassette recorders (VCRs).

About 27percent of the post- and 47 percent of the pre-Compact migrants paid for health or other insurance during the year. Similarly, 23 percent of the post-Compact migrant households purchased at least one vehicle in the year before the census compared to about 37 percent of the pre-Compact migrant households. And, about 29 percent of the post-Compact households had at least one member on off-island travel at some point in the year compared to about 33percent of the pre-Compact households.

Table 11.11: Major Household Expenditures by Type, Micronesian Migrants and their Children, Hawaii, 1997

Major Expenditures	Total		ESM		RMI		Palau	
	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-
Total Migrant Households	1,374	306	908	134	434	69	32	103
Consumer Durables	51.7	60.8	49.2	64.2	56.9	63.8	53.1	54.4
Stove/Range	2.5	3.6	1.2	2.2	5.3	10.1	0.0	1.0
Microwave Oven	9.9	19.0	10.0	17.9	9.4	21.7	12.5	18.4
Refrigerator	2.8	4.2	2.4	1.5	3.7	11.6	0.0	2.9
Kitchen Utensils	2.6	30.7	29.4	34.3	19.1	24.6	31.3	30.1
Washing Machine	5.8	13.4	4.7	11.9	8.3	20.3	3.1	10.7
Television	29.7	30.7	28.4	37.3	34.3	42.0	3.1	14.6
Video Player	22.8	28.1	21.3	34.3	27.0	37.7	9.4	13.6
Radio	24.0	24.5	22.7	32.1	27.4	33.3	15.6	8.7
Cassette Player	15.6	17.6	18.8	21.6	8.8	13.0	15.6	15.5
CD Player	5.8	9.5	5.7	2.2	5.8	10.1	9.4	18.4
Sewing Machine	17.2	7.5	6.1	7.5	8.3	15.9	6.3	1.9
Kitchen Furniture	16.7	16.3	16.6	23.1	13.4	13.0	3.1	9.7
Bedroom Furniture	19.7	17.6	21.6	24.6	15.7	14.5	18.8	10.7
Lounge Furniture	8.4	12.1	9.0	17.2	7.4	10.1	3.1	6.8
Carpets and Rugs	6.2	10.8	6.3	13.4	5.3	7.2	15.6	9.7
Health/Insurance	27.2	47.4	28.9	50.7	22.8	44.9	40.6	44.7
Construction/Home Repair	1.2	5.9	1.0	3.7	1.2	11.6	9.4	4.9
Vehicle	22.7	37.3	19.4	41.0	30.0	44.9	18.8	27.2
Off-Island Travel	28.8	33.0	22.0	28.4	42.2	50.7	40.6	27.2
Airfare	28.6	33.0	21.7	28.4	42.2	50.7	40.6	27.2
All Loan Payments	10.5	22.9	9.5	20.9	12.4	18.8	12.5	28.2
Vehicle	5.5	6.9	5.7	10.4	5.1	2.9	6.3	4.9
Other Loans	2.6	7.5	3.0	7.5	1.6	2.9	6.3	10.7
Credit Cards	5.5	15.7	4.1	9.7	8.1	14.5	9.4	24.3
Other Expenses	9.4	19.9	8.7	18.7	9.7	13.0	25.0	26.2

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI

Table 11.12 shows that the average post-Compact household in Hawaii spent about \$1,115 on appliances and furniture in the year before the census. The average pre-Compact households spent about \$300 more, or about \$1,407 during the year. The most expensive purchases were for refrigerators (\$571 for the post- and \$619 for the pre-Compact households), bedroom furniture (\$346 and \$530), and stove or range (\$340 and \$407).

Post-Compact households spent an average of about \$900 on health and other insurance compared to the \$1100 spent by pre-Compact households. About \$1,500 was spent on construction and home repairs (somewhat more for the pre-Compact households). And, post-Compact households spent about \$1,700 on off-island travel compared to \$1,900 for pre-Compact households.

But, as in the other areas, the largest single expense was when a household bought a car in the year before the census. Post-Compact households spent an average of \$8,022 on a vehicle in the year before the census compared to \$9,604 for pre-Compact households.

Table 11.12: Major Household Expenditures by Type, Migrants and their Children, Hawaii, 1997.
[Average Amounts, in U.S.Dollars]

Major Expenditures	Total		ESM		RMI		Palau	
	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-
Total Migrant Households								
Consumer Durables	1,115	1,407	1,084	1,229	1,171	2,169	1,115	1,082
Stove/Range	340	407	369	504	313	421	0	20
Microwave Oven	124	172	108	132	154	213	159	190
Refrigerator	571	619	615	756	511	242	0	450
Kitchen Utensils	154	169	143	211	197	306	84	67
Washing Machine	346	314	314	241	383	1,065	350	432
Television	294	348	263	247	349	422	150	541
Video Player	209	189	199	176	224	205	203	202
Radio	188	226	181	189	203	297	145	224
Cassette Player	193	147	194	136	188	121	194	182
CD Player	200	175	229	358	151	93	97	176
Sewing Machine	208	228	168	350	197	150	1,500	50
Kitchen Furniture	175	202	171	173	182	354	400	153
Bedroom Furniture	346	530	366	550	286	741	408	275
Lounge Furniture	223	440	172	359	356	814	200	334
Carpets and Rugs	142	201	135	130	183	695	29	80
Health/Insurance	918	1,132	906	1,424	980	538	700	1,100
Construction/Home Repair	1,495	1,666	1,420	2,206	249	2,169	3,800	322
Vehicle	8,022	9,604	7,446	7,267	8,650	12,229	11,300	11,289
Off-Island Travel	1,656	1,905	1,867	2,549	1,445	1,561	1,380	1,462
Airfare	1,358	1,559	1,510	2,260	1,196	1,114	1,327	1,165
All Loan Payments	613	907	418	1,446	951	495	257	570
Vehicle	280	445	273	561	300	111	271	255
Other Loans	192	291	163	397	336	220	86	207
Credit Cards	801	988	470	2,204	1,212	578	105	519
Other Expenses	464	517	589	694	283	1,051	176	175

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI

Daily Expenditures

As noted before the 1997 Censuses of Micronesian Migrants to Guam and Hawaii, and the 1998 Census of Micronesian Migrants to the CNMI looked at both “positive” and “negative” impact. Part of the positive impact appears in purchases, both for use in the receiving Area as well as products bought in the receiving Area and sent back to the sending area. We have already discussed regular and major purchases. Here we will discuss short-term purchases – those made in the two weeks before the census. These items always include food purchases, and often also include other short-term items like entertainment, clothing, sports activities, etc.

In most Household Income and Expenditures Surveys these items are collected in a “diary”. A diary is usually a pamphlet the household keeps for a week or two weeks, with the family recording on a daily basis what they purchase as they purchase the items. Usually, the item is recorded, as well as the quantity of the item, the size, and the amount of the total purchase. For the Micronesian Migrant Censuses, however, the retrospective method used for the regular and major expenditures was also used for the “diary” items.

Administering traditional diaries is relatively expensive and time consuming. Enumerators must explain to respondents how to fill the diaries, and then must periodically check to make certain the diaries are being properly filled, finally returning to the selected household at the end of the period to pick up the diaries. The diaries are then coded and keyed, with the information used to develop, or redevelop, the market basket for the Consumer Price Index. Since the Micronesian Migrant Censuses needed only inferential information – no Consumer Price Index would be developed – we used the retrospective method. Each householder reported items purchased in the two weeks before the enumerator’s visit, the quantities purchased, the sizes, and the amounts for the various items. These were not reported on an individual basis, but were grouped to include *all* purchases by *all* household members. Obviously, because of the numbers of persons, the reference periods, and memory lapses, these quantities and amounts are only rough estimates. Nonetheless, they give inferential information about positive contributions of Micronesians to the economies of Guam, CNMI, and Hawaii.

Guam. Table 11.13 shows the percentage of households by pre- and post-Compact migration and Freely Associated State for Guam. Altogether, this sample included 979 post-Compact [and children] households and 356 pre-Compact households. Once again, the definition of pre- and post-Compact *households* is based on the year of entry of the Householder in each case, no matter when the other household members migrated to Guam.

As table 11.13 shows, 97 percent of the post-Compact households reported making at least one purchase in the two weeks before the Census. The fact that 3 percent of the households did not report making purchases, of course, does not mean that they did make any purchases, only that they did not report making any purchases. Recall is part of the problem, but it is also true that the questionnaires were long and involved, and some respondents were weary, either because they were concerned about possible “relationships” with Immigration and Naturalization Service personnel, or fears of other uses of the data. About 90 percent of the pre-Compact households reported at least one purchase.

As expected, most purchases were for food of all kinds – meat, rice, and fish, with lesser numbers reported buying “junk” food. More than 1 in 3 of the households bought alcohol products in the two weeks before enumeration, more than 2 in 5 bought cigarettes, and about 1 in 5 bought betel nuts. More than 1 in every 4 units spent money on entertainment, but only about 1 in 10 for sports activities.

Table 11.13: Two Week Household Expenditures, Micronesian Migrants and their Children, Guam, 1997
 [Percentage of all migrant households in category]

Daily Expenditures	Total		FSM		RMI		Palau	
	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-
Total Migrant Households	979	356	934	136	22	1	27	214
Total Expenditures	97.0	90.2	98.0	100.0	95.5	100.0	51.9	86.0
Meat and Chicken	96.7	88.8	97.6	99.3	95.5	100.0	51.9	84.1
Fresh Fish	80.1	43.8	82.1	70.6	54.5	100.0	18.5	27.6
Frozen or Canned Fish and Meat	92.8	83.4	93.6	91.9	95.5	100.0	51.9	79.9
Rice	94.4	69.7	95.7	95.6	95.5	100.0	33.3	54.7
Milk. Juices. Fruits and Vegetable	76.4	68.5	76.8	74.3	90.9	100.0	40.7	66.4
Sodas and Soft Drinks	75.7	64.3	76.3	68.4	81.8	100.0	37.0	63.1
Snacks of All Kinds	69.5	60.7	69.8	66.2	86.4	100.0	33.3	58.4
All Other Foods	56.5	48.9	57.2	54.4	68.2	100.0	14.8	46.3
Beer, Wine and Liquor	38.8	24.4	39.2	28.7	27.3	0.0	29.6	22.4
Cigarettes	42.4	49.4	42.6	32.4	27.3	0.0	40.7	61.7
Betel Nuts, Lime, Etc.	17.0	39.0	16.5	14.7	9.1	0.0	37.0	55.6
Clothing (Including Shoes)	72.2	39.3	73.0	64.0	81.8	100.0	25.9	24.3
Other Goods	60.1	49.2	60.5	61.0	81.8	100.0	18.5	42.5
Entertainment	26.7	27.8	27.1	28.7	9.1	0.0	22.2	28.0
Sports Activities	12.0	8.4	12.3	12.5	9.1	0.0	0.0	6.1

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI

Table 11.14 shows the average expenditures for the items listed in Table 11.13. On average, the 1,000 Post-Compact households spent about \$500 on daily items in the two weeks before enumeration, compared to about \$300 for the pre-Compact households. Again, these values depend on memory over the two-week period as well as differential spending patterns. Post-Compact migrants, for example, spent more, on average, on clothes than pre-Compact households, probably because they were still getting established, and therefore had greater needs (although this was really only true for the FSM households – the Palauans and Marshallese showed the opposite pattern).

As expected, the largest expenditures were for food (total food items) and clothing. However, the average post-Compact migrant household spent \$65 for alcohol, more than \$50 for cigarettes, and about \$30 for betel nuts and accompanying lime and leaf.

Table 11.14: Two Week Household Expenditures, Micronesian Migrants and their Children, Guam, 1997
 [Average Amounts in U.S. Dollars]

Daily Expenditures	Total		FSM		RMI		Palau	
	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-
Total Migrant Households								
Total Expenditures	475	305	482	416	388	355	155	223
Meat and Chicken	63	49	63	72	74	39	22	32
Fresh Fish	47	36	48	50	32	20	12	13
Frozen or Canned Fish and Meat	50	33	50	50	35	50	17	21
Rice	23	21	24	21	18	14	11	21
Milk, Juices, Fruits and Vegetable:	28	24	28	32	20	18	15	18
Sodas and Soft Drinks	18	48	19	19	15	8	11	68
Snacks of All Kinds	25	17	25	23	34	25	8	12
All Other Foods	60	33	61	47	30	20	18	23
Beer, Wine and Liquor	65	37	66	62	67	0	19	17
Cigarettes	53	22	54	38	26	0	16	16
Betel Nuts, Lime, Etc.	28	24	28	21	25	0	19	24
Clothing (Including Shoes)	172	141	174	170	136	150	63	92
Other Goods	16	10	17	10	8	11	7	9
Entertainment	50	25	52	35	12	0	9	19
Sports Activities	72	43	72	58	43	0	0	24

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI

CNMI. Table 11.15 shows information shown in Table 11.13, but this time for the CNMI. For the CNMI, the 1998 Census found 237 post-Compact migrant households, and 506 Pre-Compact households. As in Guam, most of the households made purchases in the two weeks before the enumeration. Again, most households made food purchases, primarily meat, canned fish and meat, and rice, with fewer purchases of “junk food”. Households in the CNMI were about as likely to purchase alcohol as those on Guam – about 1 in 3 – and were much more likely to purchase cigarette products and betel nuts. The Saipan migrants were less likely to buy clothes – only about 1/3rd made these purchases, and to spend money on entertainment, about 1 in 10 compared to about 1 in 4 on Guam.

Table 11.15: Two Week Household Expenditures, Micronesian Migrants and their Children, CNMI, 1998.
[Percentage of all migrant households in category]

Daily Expenditures	Total		FSM		RMI		Palau	
	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-
Total Migrant Households	237	506	213	126	6	5	18	375
Total Expenditures	95.8	97.0	95.8	96.0	100.0	100.0	94.4	97.3
Meat and Chicken	89.9	91.9	90.1	90.5	83.3	100.0	88.9	92.3
Fresh Fish	61.6	52.8	62.4	62.7	83.3	40.0	44.4	49.6
Frozen or Canned Fish and Meat	87.3	88.3	87.8	87.3	83.3	100.0	83.3	88.5
Rice	86.5	87.9	86.4	85.7	100.0	100.0	83.3	88.5
Milk, Juices, Fruits and Vegetables	75.1	81.8	76.1	77.8	66.7	100.0	66.7	82.9
Sodas and Soft Drinks	66.7	65.2	67.1	70.6	66.7	80.0	61.1	63.2
Snacks of All Kinds	59.5	66.6	60.6	68.3	66.7	100.0	44.4	65.6
All Other Foods	36.7	31.6	37.1	29.4	66.7	60.0	22.2	32.0
Beer, Wine and Liquor	32.9	30.6	31.5	24.6	0.0	0.0	61.1	33.1
Cigarettes	58.6	67.8	58.2	50.0	33.3	20.0	72.2	74.4
Betel Nuts, Lime, Etc.	37.6	65.4	34.7	42.1	16.7	20.0	77.8	73.9
Clothing (Including Shoes)	43.0	31.0	45.1	39.7	16.7	60.0	27.8	27.7
Other Goods	13.1	22.5	14.1	17.5	0.0	60.0	0.0	23.7
Entertainment	7.2	11.5	7.5	15.1	0.0	0.0	5.6	10.4
Sports Activities	1.3	2.4	1.4	0.8	0.0	0.0	0.0	2.9

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI

Table 11.16 shows that, on average, Saipan migrants, spent less on daily items than did the Guam migrants. In general, Marshallese spent more on food items than did FSM migrants, and Palauans generally spent less. On the other hand, Palauans spent more on alcohol, cigarettes, and betel nuts than the FSM migrants, but Marshallese spent much less (and no amounts reported for alcohol purchases at all).

Table 11.16: Two Week Household Expenditures, Micronesian Migrants and their Children, CNMI, 1998
[Average Amounts, in U.S.Dollars]

Daily Expenditures	Total		ESM		RMI		Palau	
	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-
Total Migrant Households								
Total Expenditures	282	372	277	324	584	795	231	383
Meat and Chicken	58	69	59	67	74	97	44	69
Fresh Fish	30	34	28	35	78	107	27	32
Frozen or Canned Fish and Mea	37	66	37	48	66	64	23	72
Rice	21	21	20	22	57	52	18	21
Milk. Juices. Fruits and Veaeatbl	28	30	28	30	73	111	15	28
Sodas and Soft Drinks	16	40	15	20	65	56	8	48
Snacks of All Kinds	31	22	31	19	74	49	12	22
All Other Foods	25	38	24	51	69	76	11	33
Beer, Wine and Liquor	44	40	43	45	0	0	52	39
Cigarettes	34	52	34	31	20	47	34	57
Betel Nuts, Lime, Etc.	42	41	41	33	10	84	49	43
Clothing (Including Shoes)	82	127	75	136	900	437	57	113
Other Goods	24	16	25	25	5	4	0	15
Entertainment	12	55	12	28	0	0	6	67
Sports Activities	22	77	22	25	0	0	0	81

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI

Hawaii. About 80 percent of the of the post- Compact and 82 percent of the pre-Compact households in Hawaii made daily purchases in the two week reporting period (Table 11.17). The most frequently reported items for the post-Compact migrants were meat and chicken, rice, sodas and soft drinks, and milk, juices, and fruits. Almost all households in the pre-Compact group who reported purchases, bought meat, and large percentages also bought milk, juice and fruits, rice, and most other food items. Fewer than half of all units bought fresh fish.

Table 11.17: Two Week Household Expenditures, Micronesian Migrants and their Children, Hawaii, 1997

Diary Expenditures	Total		ESM		RMI		Palau	
	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-
Total Migrant Households	1,374	306	908	134	434	69	32	103
Total Expenditures	80.4	82.0	76.3	85.1	88.9	87.0	81.3	74.8
Meat and Chicken	69.9	79.4	67.6	85.1	74.9	82.6	68.8	69.9
Fresh Fish	44.9	54.9	47.7	62.7	40.1	47.8	31.3	49.5
Frozen or Canned Fish and M	60.6	68.3	60.1	80.6	61.3	75.4	62.5	47.6
Rice	65.4	75.2	64.4	84.3	68.0	76.8	59.4	62.1
Milk. Juices. Fruits and Veaeat	64.3	76.5	63.0	81.3	66.6	76.8	71.9	69.9
Sodas and Soft Drinks	65.4	65.4	65.7	73.9	65.9	73.9	46.9	48.5
Snacks of All Kinds	59.8	67.3	58.7	77.6	61.8	68.1	65.6	53.4
All Other Foods	41.8	47.7	50.1	61.9	23.5	34.8	53.1	37.9
Beer, Wine and Liquor	32.7	35.6	39.3	47.0	17.7	33.3	46.9	22.3
Cigarettes	31.4	42.5	36.5	40.3	19.4	31.9	50.0	52.4
Betel Nuts, Lime, Etc.	14.7	20.9	19.6	13.4	1.6	2.9	53.1	42.7
Clothing (Including Shoes)	60.2	60.5	60.6	70.9	60.4	63.8	46.9	44.7
Other Goods	33.2	48.7	33.7	53.7	31.3	50.7	43.8	40.8
Entertainment	32.8	40.2	34.1	45.5	30.0	39.1	31.3	34.0
Sports Activities	12.2	11.1	13.9	17.9	8.3	2.9	18.8	7.8

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI

About 3 out of 5 migrant households made clothing purchases during the two weeks covered.

About 1/3rd of the migrant households in Hawaii bought alcoholic beverages. Another 1/3rd bought cigarettes during the reporting period. About 1/7th of the post-Compact units and about 1/5th of the pre-Compact units bought betel nuts. About 1 in 3 post-Compact units had entertainment expenditures, compared to 2 in 5 of the pre-Compact units. About 1 in 10 migrant units participated in paid sporting activities.

Table 11.18 shows the actual expenditures for the daily items in Hawaii. The average post-Compact household reported spending \$324 for food during the two weeks, compared to \$419 for the pre-Compact households. The weekly expenditures were higher for the FSM residents, lower for the Marshallese and the Palauans.

As before, the greatest food expenditures were for meat – about \$77 for the post-Compact households, and \$88 for the pre-Compact units. Marshallese and pre-Compact FSM migrant households spent more than average on meat products, Palauans and post-Compact FSM migrant households spent less. Smaller amounts were spent on other food products, in general. The post-Compact households spent slightly less than \$100 for clothing compared to more than \$120 for the pre-Compact migrants.

Post-Compact households spent an average of \$55 on alcoholic beverages during the two weeks, compared to \$48 for the pre-Compact households. Lesser amounts were spent on cigarettes and betel nut. And, pre-Compact migrant households spent more on entertainment and sports activities.

Table 11.18: Two Week Household Expenditures, Micronesian Migrants and their Children, Hawaii, 1997
[Average Amounts, in U.S.Dollars]

Diary Expenditures	Total		ESM		RMI		Palau	
	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-	Post & Ch	Pre-
Total Migrant Households								
Total Expenditures	324	419	351	528	277	381	305	288
Meat and Chicken	77	88	66	96	99	109	45	60
Fresh Fish	27	39	29	45	22	32	29	34
Frozen or Canned Fish and Meat	30	32	27	38	29	26	122	26
Rice	18	16	18	22	17	13	7	9
Milk, Juices, Fruits and Vegetables	24	31	21	39	29	26	21	21
Sodas and Soft Drinks	26	25	30	26	20	36	10	12
Snacks of All Kinds	13	19	13	26	13	13	11	13
All Other Foods	39	35	39	46	41	22	14	20
Beer, Wine and Liquor	55	48	58	54	52	38	15	42
Cigarettes	34	33	36	49	25	22	19	22
Betel Nuts, Lime, Etc.	33	46	33	79	39	23	29	34
Clothing (Including Shoes)	97	122	99	128	95	112	57	120
Other Goods	15	18	18	26	9	10	11	9
Entertainment	25	46	27	37	21	91	12	27
Sports Activities	29	60	25	72	27	20	135	32

Source: Censuses of Micronesian Migrants to Hawaii, Guam and CNMI

Conclusions. It is important to remember that the Micronesian censuses obtained the daily expenditures reported here through recall over a two-week period, which is not the best method of data collection. However, we did not have funding to collect expenditures on a daily basis. The usual effect of longer term recall is that respondents tend to forget items bought during the period, decreasing both the percentage of units reporting items, and, to a lesser extent, average costs.

Nonetheless, it is clear that Micronesian migrant households made many purchases for basic items – food, clothing, and entertainment – and that almost of all of these purchases benefited the respective economies of Guam, CNMI, and Hawaii. We have not yet linked income with expenditures to see the relationship between income levels and purchases.

CHAPTER 12

INCOME AND EXPENDITURES

We look at the relationship between the Micronesian Migrant income and expenditures in this Chapter. Table 12.1 shows aggregate income for the Micronesian migrants in the year before the census – 1996 for Hawaii and Guam migrants, 1997 for the CNMI migrants. We determined the aggregate income, by multiplying the per capita incomes previously derived for the basic tables by the number of persons in the group. Hence, the aggregate income is not the sum of all household incomes because persons who were not either migrants themselves or the children of migrants were included in neither the numerator nor the denominator. That is, the figure of \$71 million in table 12.1 is the total income for all Micronesian migrants and their children, and does not include the income of anyone else in the housing unit. Income is from all sources, although for Micronesian migrants, the primary source of income was wages and salaries; see the copies of the questionnaire in the appendices and the definitions appearing in Appendix B.

Table 12.1. Aggregate Income, Micronesian Migrants, Hawaii, Guam, and CNMI: 1997/8
[Amounts in US Dollars]

Group	Total	Hawaii 1997	Guam 1997	CNMI 1998
Freely Associated State				
Total	70,614,720	29,016,298	23,339,680	18,250,771
FSM	45,158,835	18,042,504	19,428,870	7,691,264
RMI	8,011,752	7,414,440	274,750	322,092
Palau	17,434,539	3,562,240	3,636,640	10,236,690
Post-Compact and Children	45,579,652	20,711,692	18,400,418	6,470,407
FSM	36,614,252	13,951,773	17,754,074	4,911,510
RMI	6,526,944	6,162,375	264,705	99,356
Palau	2,437,176	595,320	382,713	1,459,310
Pre-Compact	25,026,288	8,309,420	4,936,260	11,779,344
FSM	8,542,009	4,089,928	1,672,380	2,779,891
RMI	1,485,225	1,252,450	10,080	222,696
Palau	14,997,504	2,966,796	3,253,632	8,777,430

Sources: Censuses of Micronesian Migrants to Guam, Hawaii, and CNMI

The aggregate income for all Micronesian migrants in the 1997/8 Censuses was about \$71 million in the calendar year before the census. The figures included \$29 million for Micronesians living in Hawaii, \$23 million for those living on Guam, and \$18 million for those living in the CNMI. Post-Compact migrants (and the few children with income) contributed about \$46 million to the total, compared to about \$25 million for the pre-Compact migrants. Only in CNMI did pre-Compact migrants make a larger contribution -- \$12 million for the pre-Compact migrants compared to \$6 million for the post-Compact migrants.

Since they are by far the largest group, FSM migrants had the largest aggregate incomes – about \$45 million, compared to \$8 million for the Marshallese, and \$17 million for the Palauans. FSM migrants made more in the aggregate in Hawaii and Guam, but Palauans, at \$10 million, were the “richest” group in the CNMI.

Table 12.2 shows the per capita incomes for these aggregate incomes. In most cases, these per capita incomes came directly from the basic tables, and were obtained by determining total income amounts for all persons in the group or category, and then dividing by the total persons in the group or category. However, in some cases we had to determine the per capita income from the aggregate data, which was done by dividing the determined aggregate income for a group, by the members in that group.

Table 12.2. Per Capita Income, Micronesian Migrants, Hawaii, Guam, and CNMI: 1997/8
[Amounts in US Dollars]

Group		Hawaii	Guam	CNMI
Freely Associated State	Total	1997	1997	1998
Total	\$4,320	\$4,742	\$3,206	\$6,193
FSM	\$3,785	\$5,091	\$2,946	\$4,292
RMI	\$3,241	\$3,288	\$2,198	\$3,501
Palau	\$8,973	\$11,132	\$6,494	\$9,630
Post-Compact and Children	\$3,300	\$3,760	\$2,809	\$3,687
FSM	\$3,287	\$4,212	\$2,807	\$3,268
RMI	\$2,879	\$2,977	\$2,152	\$1,343
Palau	\$5,988	\$4,688	\$3,752	\$8,198
Pre-Compact	\$9,884	\$13,622	\$6,762	\$9,882
FSM	\$10,799	\$17,629	\$6,194	\$9,619
RMI	\$7,245	\$6,770	\$5,040	\$12,372
Palau	\$9,764	\$15,372	\$7,104	\$9,918

Sources: Censuses of Micronesian Migrants to Guam, Hawaii, and CNMI
The per capita income for all Micronesian migrants was \$4,320 in the year before the enumeration. This value was determined by aggregating income from all sources, and dividing by all persons who were either post- or pre-Compact migrants, or children of these migrants. The per capita income for Hawaii was higher, at \$4,742, even higher for the CNMI (\$6,193), but lower for Guam (\$3,206). These figures, because they are per capita and therefore “per person”, are not organized by family or household. If the data were aggregated by household, the figures might be different.

Pre-Compact migrants (at \$9,884) had per capita incomes about three times as large as the post-Compact migrants (\$3,300). The difference was greater for Hawaii, smaller for Guam. Some of this great difference has to do with the few pre-Compact migrants in these areas – these migrants likely came early on, established themselves, and had moved into better paying positions by the time of the censuses.

Palauan migrants had the highest per capita incomes (almost \$9000), followed by FSM migrants (\$3,800), and the Marshallese (\$3,200). As expected, pre-Compact migrants in each group had much higher incomes than post-Compact migrants.

Expenditures

Although we have not been able to develop tables this year to look at the absolute relationship between income and expenditures, we can look in more detail at the relationships among the expenditure items. As shown in Table 12.3, the Micronesian migrants spent about \$88 million in the 12 months before the censuses [mid-1997 for Hawaii and Guam, mid-1998 for CNMI], but with some exceptions. For example, sometimes respondents used calendar years rather than the 12 months before the Census, and, for the daily expenditures, we multiplied the reported amounts by 26 to make them “annual” amounts, like the other items.

It is important to remember that all of these expenditures are based on recall – sometimes that recall is excellent, with respondents almost certain to remember that they purchased a vehicle or refrigerator, some times the recall will be less certain, like expenditures for weddings, funerals, alcohol or cigarettes. Also, the better method for collecting daily expenditures, as noted previously, is by diary, but that was not possible for these censuses.

Hawaii and Guam migrants spent about the same amount – about \$38 million for Hawaii migrants, and \$37 million for Guam migrants. The migrants in the CNMI reported spending about \$14 million in the year before the census. The FSM migrants spent the most in the three areas – more than \$61 million – compared to about \$15 million for the Palauans and \$11 million for the Marshallese. The Marshallese spent \$10 million in Hawaii, but only small amounts in Guam and the CNMI, because the Marshallese population was small in those areas. More than half of the FSM spending was in Guam, and more than the half of the Palauan expenditures occurred in the CNMI.

As expected, because they were more numerous, post-Compact migrants (at \$60 million) had more aggregate expenditures than pre-Compact migrants (\$27 million). The post-Compact migrants had greater expenditures in Hawaii (\$29 million compared to \$9 million for the pre-Compact migrants), Guam (\$28 million vs \$8 million), but in the CNMI, the pre-Compact migrants had \$10 million in expenditures compared to \$3 million for the post-Compact migrants.

Almost all of this difference was due to the Palauans, whose pre-Compact migrants had \$14 million in the three areas compared to \$1 million for the post-Compact migrants – of course, Compact implementation for Palau came much later. The post-Compact FSM migrants had \$50 million in expenditures compared to \$11 million for the pre-Compact migrants. For the Marshallese, the post-Compact migrants had \$9 million in expenditures compared to about \$2 million for the pre-Compact migrants.

Table 12.3. Aggregate Expenses, Micronesian Migrants, Hawaii, Guam & CNMI: 1997/8
[Amounts in US Dollars]

Group		Hawaii	Guam	CNMI
FAS	Total	1997	1997	1998
Total	87,583,537	37,761,801	36,728,101	13,093,635
FSM	61,447,923	24,211,079	32,158,621	5,078,223
RMI	11,164,799	10,202,963	655,888	305,948
Palau	14,970,815	3,347,759	3,913,592	7,709,464
Post-Compact	60,380,574	28,559,674	28,396,951	3,423,949
FSM	50,025,696	19,519,836	27,444,877	3,060,983
RMI	9,193,745	8,436,312	627,296	130,137
Palau	1,161,133	603,526	324,778	232,829
Pre-Compact	27,202,963	9,202,127	8,331,150	9,669,686
FSM	11,422,227	4,691,243	4,713,744	2,017,240
RMI	1,971,054	1,766,651	28,592	175,811
Palau	13,809,682	2,744,233	3,588,814	7,476,635

Sources: Micronesian Censuses

Table 12.4 shows the per capita expenditures for the same migrant groups. Except for the CNMI, the aggregate and per capita expenditures were greater than the aggregate and per capita incomes. Per capita expenditures for all Micronesian Migrants were \$5,358, with the expenditures for Hawaii being greater, and those for Guam and the CNMI being lower.

Table 12.4. Per Capita Expenses, Micronesian Migrants, Hawaii, Guam and CNMI: 1997/8

Group		Hawaii	Guam	CNMI
FAS	Total	1997	1997	1998
Total	\$5,358	\$6,171	\$5,045	\$4,443
FSM	\$5,150	\$6,832	\$4,876	\$2,834
RMI	\$4,517	\$4,525	\$5,247	\$3,326
Palau	\$7,705	\$10,462	\$6,989	\$7,253
Post-Compact	\$4,371	\$5,184	\$4,335	\$1,951
FSM	\$4,491	\$5,894	\$4,339	\$2,037
RMI	\$4,055	\$4,076	\$5,100	\$1,759
Palau	\$2,853	\$4,752	\$3,184	\$1,308
Pre-Compact	\$10,744	\$15,085	\$11,413	\$8,112
FSM	\$14,440	\$20,221	\$17,458	\$6,980
RMI	\$9,615	\$9,549	\$14,296	\$9,767
Palau	\$8,991	\$14,219	\$7,836	\$8,448

Sources: Micronesian Censuses

Palauans had the highest per capita expenditures, at \$7,700, followed by the FSM migrants (\$5,150), and the Marshallese (\$4,500). Expenditures were lowest for the FSM and Marshallese migrants in the CNMI, highest for the Palauans in Hawaii.

As before, pre-Compact migrants had much greater per capita expenditures than post-Compact migrants. FSM pre-Compact migrants in Hawaii and Guam had the highest per-capita expenditures, followed by pre-Compact Marshallese in Guam and Palauans in Hawaii. All of the post-Compact expenditures were lower, because the populations were larger, providing a better base.

Table 12.5 shows the relationship of the expenditures to income. Because many of the items – like vehicles or large appliances – require small up-front amounts, but long term payments, or are irregular but large – like funerals or weddings – it is not surprising that expenditures are greater than incomes. Also, memory may play a role here, if respondents remember some items costing more than they actual did.

On average, Micronesians had about \$1.46 in expenditures for every \$1 in income, based on these figures. As noted, these figures are estimates, for both income and expenditures, and this should be taken into account when trying to analyze the results. The FSM migrants had the most skewed ratio, the Palauans the least. Also, values were most skewed for Guam. In the CNMI, incomes actually exceeded expenditures; this reporting may be partly due to better recall, but it may also be due, at least in part, to the large number of pre-Compact migrants who did not have the start-up expenditures of the post-Compact migrants.

Table 12.5. Ratio of Expenditures to Income, Micronesian Migrants, Hawaii, Guam & CNMI: 1997

Group		Hawaii	Guam	CNMI
Freely Associated State	Total	1997	1997	1998
Total	1.46	1.43	1.91	0.94
FSM	1.58	1.44	2.00	0.86
RMI	1.61	1.58	3.16	1.11
Palau	1.07	1.05	1.31	0.98
Post-Compact and Children	1.53	1.50	1.86	0.66
FSM	1.58	1.49	1.86	0.80
RMI	1.61	1.55	3.11	1.45
Palau	0.54	1.13	1.07	0.17
Pre-Compact	1.33	1.24	2.06	1.09
FSM	1.59	1.24	3.44	0.99
RMI	1.62	1.71	4.42	0.96
Palau	1.15	1.03	1.34	1.12

Sources: Censuses of Micronesian Migrants to Guam, Hawaii, and CNMI

We can also look at some individual categories to see the relationships among the Micronesian Migrants expenditures by type. Of the \$88 million in Micronesian Migrant expenditures, about \$20 million was for housing, and about \$19million were for food in the year before the Census (Table 12.6). In the aggregate, housing costs were the largest category in Hawaii, but food was more in Guam and in the CNMI.

Table 12.6. Aggregate Expenditures by Type, Micronesian Migrants

Hawaii, Guam, and CNMI: 1997/8

[Amounts in US Dollars]

Expenditure	Total	Hawaii	Guam	CNMI
		1997	1997	1998
Total	87,583,537	37,761,801	36,728,101	13,093,635
Housing	19,817,334	10,475,162	7,757,020	1,585,152
Vehicles	13,309,204	5,279,439	6,649,283	1,380,482
Utilities	9,660,744	5,245,560	3,120,828	1,294,356
Funerals, Church, etc	4,068,060	2,009,854	1,439,959	618,247
Consumer durables	3,687,968	1,054,324	2,110,524	523,120
Health/Insurance	1,401,237	507,590	424,351	469,296
Off island travel	1,999,666	848,203	730,504	420,959
Food	19,252,896	6,981,910	8,063,068	4,207,918
Alcohol	1,756,170	779,532	724,438	252,200
Tobacco	1,744,548	487,812	667,524	589,212
Betel nuts	907,296	248,352	206,752	452,192
Clothing	7,075,692	2,671,916	3,668,704	735,072
All others	2,902,722	1,172,147	1,165,146	565,429

Sources: Censuses of Micronesian Migrants to Hawaii, Guam, and CNMI

Table 12.7. Per Capita Expenditures by Type, Micronesian Migrants
Hawaii, Guam, and CNMI: 1997/8
[Amounts in US Dollars]

Expenditure	Total	Hawaii 1997	Guam 1997	CNMI 1998
Total	5,358	6,171	5,045	4,443
Housing	1,212	1,712	1,066	538
Vehicles	814	863	913	468
Utilities	591	857	429	439
Funerals, Church, etc	249	328	198	210
Consumer durables	226	172	290	178
Health/Insurance	86	83	58	159
Off island travel	122	139	100	143
Food	1,178	1,141	1,108	1,428
Alcohol	107	127	100	86
Tobacco	107	80	92	200
Betel nuts	56	41	28	153
Clothing	433	437	504	249
All others	178	192	160	192

Sources: Censuses of Micronesian Migrants to Hawaii, Guam, and CNMI

Table 12.7 shows per capita expenditures for each of the three areas. As before, costs were highest for housing and food, each averaging about \$100 per month per person – which, of course, is why so many people live together in a unit. Vehicle expenditures averaged more than \$800 per person per year, while the average person paid about \$600 per year in utilities. Per capita expenditures on clothes were more than \$400 per year.

As before, Hawaii expenditures were highest for Hawaii, lowest for CNMI. While the pattern of expenditures was similar for Guam and Hawaii, the CNMI differed considerably. Per capita expenditures for food in the CNMI were about \$300 more than in Guam or Hawaii, even though the amount of all per capita expenditures was much lower in the CNMI. Housing, on the other had, was much cheaper in the CNMI, than in the other areas – about half of the per capita costs in Guam, and about 1/3rd of those for Hawaii.

Table 12.8. Percentage of Expenditures by Type, Micronesia Migrants
Hawaii, Guam, and CNMI: 1997/8
[Amounts in US Dollars]

Expenditure	Total	Hawaii 1997	Guam 1997	CNMI 1998
Total	87,583,537	37,761,801	36,728,101	13,093,635
Percent	100.0	100.0	100.0	100.0
Housing	22.6	27.7	21.1	12.1
Vehicles	15.2	14.0	18.1	10.5
Utilities	11.0	13.9	8.5	9.9
Funerals, Church, etc	4.6	5.3	3.9	4.7
Consumer durables	4.2	2.8	5.7	4.0
Health/Insurance	1.6	1.3	1.2	3.6
Off island travel	2.3	2.2	2.0	3.2
Food	22.0	18.5	22.0	32.1
Alcohol	2.0	2.1	2.0	1.9
Tobacco	2.0	1.3	1.8	4.5
Betel nuts	1.0	0.7	0.6	3.5
Clothing	8.1	7.1	10.0	5.6
All others	3.3	3.1	3.2	4.3

Sources: Censuses of Micronesia Migrants to Hawaii, Guam, and CNMI

Finally, Table 12.8 shows the percentage distribution of these same expenditures items. As noted above, more than 1/5th of the expenditures went for housing and another 1/5th went for food. The percentage for housing in Hawaii was more than 1/4th of all the expenditures, but was only about 1/8th of all expenditures in the CNMI. On the other hand, CNMI migrants spent about 1/3rd of the expenditures on food, skewing most of the other expenditures – Hawaii migrants spent about 14 percent for vehicles, compared to 18 percent for Guam, but only 10 percent for the CNMI.

Table 12.9 shows aggregate expenditures by type for post- and pre-Compact migrants disaggregated.

Table 12.9. Aggregate Expenditures by Type, Post- and Pre-Compact Migrants, Hawaii, Guam, and CNMI: 1997/8
[Amounts in US Dollars]

Expenditure	Post-Compact Migrants				Pre-Compact Migrants			
	Total	Hawaii 1997	Guam 1997	CNMI 1998	Total	Hawaii 1997	Guam 1997	CNMI 1998
Total	60,379,974	28,559,674	28,396,351	3,423,949	27,203,563	9,202,127	8,331,750	9,669,686
Housing	14,769,642	8,152,746	6,082,308	534,588	5,047,692	2,322,416	1,674,712	1,050,564
Vehicles	8,216,877	3,367,502	4,506,360	343,015	5,092,327	1,911,937	2,142,923	1,037,467
Utilities	6,753,672	4,234,932	2,206,344	312,396	2,907,072	1,010,628	914,484	981,960
Funerals, Church, et	2,792,390	1,534,077	1,111,843	146,470	1,275,670	475,777	328,116	471,777
Consumer durables	2,603,146	792,645	1,689,165	121,336	1,084,822	261,679	421,359	401,784
Health/Insurance	752,364	343,461	317,610	91,293	648,873	164,129	106,741	378,003
Off island travel	1,378,378	655,774	590,400	132,204	621,288	192,429	140,104	288,755
Food	12,979,408	5,426,616	6,440,746	1,112,046	6,273,488	1,555,294	1,622,322	3,095,872
Alcohol	1,373,918	644,124	640,354	89,440	382,252	135,408	84,084	162,760
Tobacco	1,066,962	375,544	568,802	122,616	677,586	112,268	98,722	466,596
Betel nuts	388,440	171,600	120,120	96,720	518,856	76,752	86,632	355,472
Clothing	5,458,700	2,084,550	3,157,206	216,944	1,616,992	587,366	511,498	518,128
All others	1,846,077	776,103	965,093	104,881	1,056,645	396,044	200,053	460,548

Sources: Censuses of Micronesia Migrants to Hawaii, Guam, and CNMI

Table 12.10. Per Capita Expenditures by Type, Post- and Pre-Compact Migrants, Hawaii, Guam, and CNMI: 1997/8
[Amounts in US Dollars]

Expenditure	Post-Compact Migrants				Pre-Compact Migrants			
	Total	Hawaii 1997	Guam 1997	CNMI 1998	Total	Hawaii 1997	Guam 1997	CNMI 1998
Total	4,371	5,184	4,335	1,951	10,744	15,085	11,413	8,112
Housing	1,069	1,480	929	305	1,994	3,807	2,294	881
Vehicles	595	611	688	195	2,011	3,134	2,936	870
Utilities	489	769	337	178	1,148	1,657	1,253	824
Funerals, Church, et	202	278	170	83	504	780	449	396
Consumer durables	188	144	258	69	428	429	577	337
Health/Insurance	54	62	48	52	256	269	146	317
Off island travel	100	119	90	75	245	315	192	242
Food	940	985	983	634	2,478	2,550	2,222	2,597
Alcohol	99	117	98	51	151	222	115	137
Tobacco	77	68	87	70	268	184	135	391
Betel nuts	28	31	18	55	205	126	119	298
Clothing	395	378	482	124	639	963	701	435
All others	134	141	147	60	417	649	274	386

Sources: Censuses of Micronesia Migrants to Hawaii, Guam, and CNMI

Table 12.11 shows the percent distribution for the selected expenditures for post- and pre-Compact migrants in the three areas. As noted, housing was the biggest single expense for the post-Compact expenditures (at 1/4th of all expenditures) – an even larger percentage for Hawaii – but food was the largest expenditure for the pre-Compact migrants (again, about 1/4th of all expenditures – and about 1/3rd for the CNMI).

For the post-Compact migrants, food constituted the second largest expenditure, at 1/5th of the total, followed by vehicle and utilities expenditures. These same four categories were also the largest for the pre-Compact migrants, although the order differed somewhat – the pre-Compact migrants spent a larger percentage of their expenditures on vehicles [about 50 percent more, based only on the percentage distribution.] Post-Compact migrants – those arriving in the areas more recently – spent a larger percentage of their expenditures (9 percent) than the pre-Compact migrants (6 percent). And, smaller, but significant amounts, were spent on traditional regular expenditures like funerals and church activities, as well as consumer durables.

Table 12.11. Percent of Expenditures by Type, Post- and Pre-Compact Migrants, Hawaii, Guam, and CNMI: 1997/8
[Amounts in US Dollars]

Expenditure	Post-Compact Migrants				Pre-Compact Migrants			
	Total	Hawaii 1997	Guam 1997	CNMI 1998	Total	Hawaii 1997	Guam 1997	CNMI 1998
Total	60,379,974	28,559,674	28,396,351	3,423,949	27,203,563	9,202,127	8,331,750	9,669,686
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Housing	24.5	28.5	21.4	15.6	18.6	25.2	20.1	10.9
Vehicles	13.6	11.8	15.9	10.0	18.7	20.8	25.7	10.7
Utilities	11.2	14.8	7.8	9.1	10.7	11.0	11.0	10.2
Funerals, Church, et	4.6	5.4	3.9	4.3	4.7	5.2	3.9	4.9
Consumer durables	4.3	2.8	5.9	3.5	4.0	2.8	5.1	4.2
Health/Insurance	1.2	1.2	1.1	2.7	2.4	1.8	1.3	3.9
Off island travel	2.3	2.3	2.1	3.9	2.3	2.1	1.7	3.0
Food	21.5	19.0	22.7	32.5	23.1	16.9	19.5	32.0
Alcohol	2.3	2.3	2.3	2.6	1.4	1.5	1.0	1.7
Tobacco	1.8	1.3	2.0	3.6	2.5	1.2	1.2	4.8
Betel nuts	0.6	0.6	0.4	2.8	1.9	0.8	1.0	3.7
Clothing	9.0	7.3	11.1	6.3	5.9	6.4	6.1	5.4
All others	3.1	2.7	3.4	3.1	3.9	4.3	2.4	4.8

Sources: Censuses of Micronesia Migrants to Hawaii, Guam, and CNMI

Table 12.12. Remittances Sent Overseas, Micronesian Migrants, Hawaii, Guam & CNMI: 1997/8
[Amounts in US Dollars]

Expenditure	Total	Hawaii 1997	Guam 1997	CNMI 1998
Total	87,583,537	37,761,801	36,728,101	13,093,635
Overseas remittances	912,847	517,572	239,576	155,699
Percent	1.04	1.37	0.65	1.19
Post-Compact	60,380,574	28,559,674	28,396,951	3,423,949
Overseas remittances	622,991	400,431	182,441	40,119
Percent	1.03	1.40	0.64	1.17
Pre-Compact	27,202,963	9,202,127	8,331,150	9,669,686
Overseas remittances	289,856	117,141	57,135	115,580
Percent	1.07	1.27	0.69	1.20

Sources: Censuses of Micronesian Migrants

Table 12.12 shows the amount of remittances sent overseas and the percentage of all expenditures that these remittances made up in the year before the census. Almost \$1million was sent overseas from all three areas, or about one percent of the total expenditures for the three areas and the three groups. About \$500 thousand dollars was sent from Hawaii, more than \$200 thousand from Guam, and about \$150,000 from the CNMI. Post-Compact migrants in Hawaii and Guam sent more, in dollar amounts than pre-Compact migrants, but in CNMI, thepre-Compact migrants sent more. While this pattern also held for overseas expenditures as a proportion of all expenditures in Hawaii and CNMI, for Guam, although the amount for pre-Compact migrants was less, the amount sent constituted a slightly higher percent than for the comparable post-Compact expenditures.

Conclusions. Here we have shown some evidence that Micronesian migrants contribute to the economies of Hawaii, Guam, and the CNMI by their expenditures. Since expenditures were higher than incomes, some installment buying is clearly taking place, which also benefits the receiving economies, although the extent is difficult to measure. [As noted previously, sometimes recall is a problem, but the amounts reported are still large, even given some memory inflation.]

Micronesians pay rent, invest in vehicles, by food and clothing, as well as alcohol, tobacco, and betel nuts. Of course, some of them also use social and education services. We cannot measure these completely here because of the recurring nature of many of the contacts, particularly for social services, but the contact agencies can also contribute to better elucidation of the relationship of the contacts, and so the relative negative impact of the migration.

CHAPTER 13

IMPACT ON THE FEDERATED STATES OF MICRONESIA⁷

Until now, we have focussed on the impact of the Micronesian migration on Guam, the CNMI, and the State of Hawaii. However, the Federated States of Micronesia, Palau, and the Marshall Islands also are feeling considerable impact as many of the educated minds and bodies of citizens who could be assisting in economic development in the sending areas are removed by migration. This Chapter looks at the impact of the migration on the Federated States of Micronesia, and the next Chapter looks at the impact on Palau.

The FSM has experienced migration movements for the last 50 years. In the early days, FSM migrants went to Guam mainly on student visas to attend the University of Guam. For Saipan, most early migrants to CNMI were employees of the Trust Territory of the Pacific Islands (TTPI) government, as well as a few students attending the nursing school in Saipan. After the implementation of the Compact of Free Association, most migrants went to Guam and CNMI to find jobs. Migration to Hawaii only started recently.

The first significant emigration from the FSM began in the years following the implementation of the Compacts of Free Association in 1986, as hundreds of FSM citizens left for Guam and the Commonwealth of the Northern Mariana Islands (CNMI). Micronesians had settled in Hawaii and the mainland United States even before implementation, but always sporadically and in small numbers. The emigration was not surprising since all three Freely Associated States have relatively high population growth, limited natural and other resources, and few jobs. The beginnings of the outflow were first noted in an article that appeared three years after compact implementation (Hezel and McGrath 1989). In subsequent years a growing body of literature documents the migration and describes the evolution of migrant communities on Guam (for example, Rubinstein 1990, 1993; Rubinstein and Levin 1992; Connell 1991; Smith 1994; Hezel and Levin 1996).

7 Rosina Edwin, Statistician in the FSM National Government's Office of Planning and Statistics, wrote the first draft of this section. She wrote the section as part of Office of Insular Affairs' training program in Washington and does not necessarily represent the position of the FSM National Government.

Table 1.3. FSM born residing on Guam, in Hawaii, and in the CNMI by State of Origin: various years

Date	Total	Chuuk	Pohnpei	Yap	Kosrae
Guam					
1988 (Sept)	1,700	1,100	300	150	150
1990 (Apr)	2,944	1,843	662	303	136
1990 (Sept)	2,973	2,143	377	318	135
1992 (Sept)	4,954	3,587	866	309	192
1997 (July)	5,489	4,294	774	225	196
CNMI					
1990 (April)	1,754	1,063	522	152	17
1993 (July)	2,261	1,119	717	376	49
1995 (Sept)	2,111	1,128	621	307	55
1998 (June)	1,255	817	284	119	35
Hawaii					
1997 (July)	3,024	1,298	902	178	636

Sources: Hezel and McGrath 1989; USBC 1992; unpublished survey of FSM migrants on Guam, September 1990; University of Guam 1992; CNMI 1994; CNMI 1997; unpublished data from Micronesian Censuses of Guam, Saipan, and Hawaii.

Preliminary results from the 1997 Census of Micronesian migrants to Guam show about [WALLY] FSM-born residing on Guam (up from 5,000 in 1992), 3,024 in Hawaii, and 1,255 in the CNMI. Figure 1 visually represents the size of the FSM-born community in Guam, the CNMI and Hawaii between 1988 and 1997. Hezel and Levin (1996) plotted the growth of the migrant community on Guam during the first years after compact implementation using four sets of data. The 1997 Census of Micronesian migrants to Guam is the fifth data set. Data from the 1997 Censuses of Hawaii and Guam and the 1998 Census of Micronesian Migrants to the CNMI are reported in this paper.

The first data set was a 1988 household survey and recorded 1,700 FSM persons. Estimates of the size of the migrant populations for each state were extrapolated from the sample on the basis of the ratio of the known number of college students to the total number of migrants (Hezel and McGrath, 1989:49-51). The second set of figures, which recorded all residents of Guam who had been born in the FSM, was the 1990 census, showing 2,944 FSM persons (Rubinstein and Levin 1992). The third set of data is derived from a household survey conducted by Father Kenneth Hezel, the head of the Catholic Micronesian Ministry program, about September 1990, counting 2,973, included infants born on Guam as well as those born abroad (and may show an undercount of Pohnpeians). The fourth set of figures comes from the census of migrants to Guam from the FSM and the Marshall Islands which used mid-1992 as the reference date. A trained staff of Micronesian interviewers, funded by the Office of Insular Affairs, counted almost 5,000 from the FSM (University of Guam 1992).

For the CNMI, we have four data points: the 1990 Census, the 1993 OIA-funded survey of Micronesians (CNMI 1994), the 1995 CNMI census, and the 1998 Census of Micronesian Migrants. The 1990 data are taken from the U.S. decennial census. The data for 1993 come from a household survey done by the CNMI Central Statistics Division. The 1995 Census data also were collected by the Central Statistics Division in a census funded by the CNMI Legislature to obtain a mid-decade complete count. Although the figures are lower than for 1993, they are probably within statistical acceptability; the 1993 survey used all Micronesian enumerators which inevitably produces better results ? the 1995 Census probably counted all of the Micronesians, but probably not at the same level of specificity. In the CNMI, the FSM born increased by 29 percent, from 1,754 to 2,261, between 1990 and 1993 (and remained at that level in 1995). The 1998 data appear in this paper.

The FSM population on Guam has grown rapidly, but not as alarmingly so as some seem to think, and in recent years, partly because of changes in Guam's and the FSM's economies, and changes in the way Welfare is administered, the flow has slowed considerably. Early, wildly exaggerated guesses in the Guam press were shown by Rubinstein to be groundless, but his own 1991 figure of "5,500 Micronesian migrants in Guam" with an "increase by roughly one thousand per year" (Rubinstein 1991:2), while an honest guess, is still inflated. Rubinstein's figures would yield an FSM-born population of over 8,000 by the end of 1994, a figure that is widely quoted by Guam government authorities in addressing the issue of post-Compact immigration (for example, Territory of Guam 1995). For various reasons, the rate of increase has diminished in recent years. It seems that many migrants who previously came to Guam, either went on to Hawaii and the U.S. mainland, or went to these latter places directly from Micronesia.

The explanation for the outflow of Micronesians, at least in its earliest years, is simple. Micronesia-born persons, disappointed by the lack of employment at home, left in search of the many jobs available in Hawaii, Guam and the CNMI. These islands were enjoying an economic boom fueled by a surge in Japanese tourists. Guam was the preferred destination of the FSM migrants, but some moved to Saipan to join relatives and take work in its expanding garment industry, and others to Hawaii (particularly from the Marshalls) for schooling and jobs. The proximity of Guam and Saipan to the FSM islands and Hawaii to the Marshalls allowed migrants to visit their home islands frequently. Some migrant laborers maintained such close social bonds with their families and communities that they were virtually commuters (Rubinstein and Levin 1992:351). Those who left had the freedom to return home permanently, with little or no rupture of kinship ties, if personal circumstances demanded. The Compacts, with their free-entry provisions, removed the last immigration barricade. At the same time, the Compacts signaled the beginning of the reduction of the large U.S. subsidies to which Micronesians had become accustomed since the 1960s. So, it was that island peoples who had never experienced a sizable outflow of population, peoples once described as possessing a "homing instinct," initiated their tentative, purposeful migration northward (Hezel and Levin 1989:43).

Total Population. The data in Table 13.1 below show that while the FSM residents increased as expected, migrants to Guam also increased, especially in the younger age groups. The total of "FSM born" increased from about 113,000 in the 1992 to 1994 time period to about 120,000 in the 1997-1998 period. Within the FSM, it is important to note that the data are for all persons, so U.S. expatriates, Asians, and others are included, but their numbers are very small and will not substantially affect the totals. The data for Guam and CNMI are supposed to include only FSM born, which also causes problems in interpretation, particularly in the CNMI when several generations of resident FSM "citizens" have lived. At this point, third generation Micronesian migrants are living in CNMI, and these persons do not show up in the figures presented here. Of course, no one knows whether these persons consider themselves of FSM or of CNMI. Hence, the large decrease in the FSM born for the CNMI may be partly an artifact of the dying out or return migration of older FSM born in the CNMI, and perhaps being more than replaced by young children being born to "FSM" parents who have never themselves lived in the FSM. We have not yet developed techniques of analysis to determine how to statistically handle these individuals or their families.

The data for the 1993 Survey of Micronesian Migrants to the CNMI seem to show a data aberration in the highest age group; it looks like persons with age "not stated" have been combined with those 75 years and over, so these data should be used with caution. We will be checking on the editing for this survey.

Table 13.1. Population distribution by Age, FSM-born in FSM, Guam and the CNMI: 1992 to 1998

Age	1992 to 1994				1997 and 1998			
	Total	FSM 94	Guam 92	CNMI 93	Total	FSM 98	Guam 97	CNMI 98
Total	112,699	105,506	4,932	2,261	119,887	111,500	6,595	1,792
0 to 4	16,307	15,854	214	239	16,442	15,380	833	229
5 to 9	15,951	15,330	396	225	15,565	14,532	777	256
10 to 14	15,315	14,749	350	216	17,548	16,727	626	195
15 to 19	13,045	12,251	578	216	15,812	15,001	624	187
20 to 24	10,190	8,828	1,060	302	10,319	9,160	964	195
25 to 29	8,133	7,063	813	257	8,301	7,184	914	203
30 to 34	7,476	6,598	614	264	6,982	6,193	629	160
35 to 39	6,554	6,079	326	149	6,018	5,426	459	133
40 to 44	5,391	5,071	213	107	6,177	5,802	297	78
45 to 49	3,768	3,579	138	51	5,374	5,089	212	73
50 to 54	2,331	2,219	81	31	3,062	2,944	90	28
55 to 59	2,194	2,105	60	29	1,986	1,898	70	18
60 to 64	2,052	1,985	45	22	2,094	2,034	47	13
65 to 69	1,446	1,395	44	7	1,476	1,428	34	14
70 to 74	1,242	1,229	-	13	1,156	1,141	12	3
75 + yrs	1,304	1,171	-	133	1,575	1,561	7	7
Median	22.0	17.8	24.4	23.9	20.3	18.0	22.3	20.7

Sources: 1994 FSM Census, 1998 FSM HIES, 1992 & 1997 Guam Surveys, 1993 & 1998 CNMI Surveys

Median Age. The median age for all FSM born in the three areas – the FSM, Guam, and the CNMI – decreased by about 2 years over the approximately 5 year period. This decrease is not expected as fertility rates around the world continue to decline, and the FSM is no exception. However, while the median age in the FSM remained at about 18 years, low by world standards and showing continued high fertility, the median ages of the migrants were somewhat higher. The median ages for both Guam and the CNMI decreased by more than 2 years during the period, probably showing increased migration of young people for schooling.

Table 13.2 shows the age distribution for the three areas and the two time periods for males only. Males should similar age distributions and median ages as the whole population.

Table 13.2. Age distribution for Males, FSM-born in FSM, Guam and the CNMI: 1992 to 1998

Age	1992 to 1994				1997 and 1998			
	Total	FSM 94	Guam 92	CNMI 93	Total	FSM 98	Guam 97	CNMI 98
Total	57,779	53,923	2,801	1,055	59,834	55,575	3,374	885
0 to 4	8,458	8,211	131	116	8,034	7,496	416	122
5 to 9	8,389	8,051	226	112	8,134	7,596	403	135
10 to 14	7,811	7,534	173	104	9,404	8,985	314	105
15 to 19	6,811	6,431	279	101	7,813	7,419	305	89
20 to 24	5,045	4,321	599	125	5,280	4,722	468	90
25 to 29	4,078	3,496	480	102	3,805	3,215	500	90
30 to 34	3,833	3,311	393	129	3,393	2,989	324	80
35 to 39	3,338	3,077	188	73	2,961	2,648	254	59
40 to 44	2,855	2,661	138	56	3,036	2,847	149	40
45 to 49	2,025	1,930	69	26	2,539	2,378	123	38
50 to 54	1,162	1,101	47	14	1,520	1,466	42	12
55 to 59	1,077	1,033	32	12	904	857	36	11
60 to 64	1,049	1,018	23	8	1,058	1,032	21	5
65 to 69	692	668	23	1	676	658	13	5
70 to 74	576	567	-	9	602	597	5	-
75 + yrs	580	513	-	67	675	670	1	4
Median	22.1	17.5	24.9	23.8	20.6	18.3	22.1	21.3

Sources: 1994 FSM Census, 1998 FSM HIES, 1992 & 1997 Guam Surveys, 1993 & 1998 CNMI Surveys

Similarly, table 13.3 shows numbers and median ages for females in the three areas during the two time periods. The female median ages were about the same as the males for all three areas and both time periods. In most populations, female median ages are usually higher the male medians because of higher male mortality, but the situation found for the small FSM populations seen here is not unlikely.

Table 13.3. Age distribution for Females, FSM-born in FSM, Guam and the CNMI: 1992 to 1998

Age	1992 to 1994				1997 and 1998			
	Total	FSM 94	Guam 92	CNMI 93	Total	FSM 98	Guam 97	CNMI 98
Total	55,690	52,353	2,131	1,206	60,053	55,925	3,221	907
0 to 4	7,849	7,643	83	123	8,408	7,884	417	107
5 to 9	7,562	7,279	170	113	7,431	6,936	374	121
10 to 14	7,504	7,215	177	112	8,144	7,742	312	90
15 to 19	6,234	5,820	299	115	7,999	7,582	319	98
20 to 24	5,145	4,507	461	177	5,039	4,438	496	105
25 to 29	4,055	3,567	333	155	4,496	3,969	414	113
30 to 34	3,643	3,287	221	135	3,589	3,204	305	80
35 to 39	3,216	3,002	138	76	3,057	2,778	205	74
40 to 44	2,536	2,410	75	51	3,141	2,955	148	38
45 to 49	1,743	1,649	69	25	2,835	2,711	89	35
50 to 54	1,169	1,118	34	17	1,542	1,478	48	16
55 to 59	1,117	1,072	28	17	1,082	1,041	34	7
60 to 64	1,003	967	22	14	1,036	1,002	26	8
65 to 69	754	727	21	6	800	770	21	9
70 to 74	666	662	-	4	554	544	7	3
75 + yrs	1,494	1,428	-	66	900	891	6	3
Median	22.1	17.7	24.7	23.9	20.8	18.6	21.9	21.8

Sources: 1994 FSM Census, 1998 FSM HIES, 1992 & 1997 Guam Surveys, 1993 & 1998 CNMI Surveys

Table 13.4. Males per 100 Females by Age Group, FSM-born in FSM, Guam and the CNMI: 1992 to 1998

Age	1992 to 1994				1997 and 1998			
	Total	FSM 94	Guam 92	CNMI 93	Total	FSM 98	Guam 97	CNMI 98
Total	104	103	131	87	100	99	105	98
0 to 4	108	107	158	94	96	95	100	114
5 to 9	111	111	133	99	109	110	108	112
10 to 14	104	104	98	93	115	116	101	117
15 to 19	109	110	93	88	98	98	96	91
20 to 24	98	96	130	71	105	106	94	86
25 to 29	101	98	144	66	85	81	121	80
30 to 34	105	101	178	96	95	93	106	100
35 to 39	104	102	136	96	97	95	124	80
40 to 44	113	110	184	110	97	96	101	105
45 to 49	116	117	100	104	90	88	138	109
50 to 54	99	98	138	82	99	99	88	75
55 to 59	96	96	114	71	84	82	106	157
60 to 64	105	105	105	57	102	103	81	63
65 to 69	92	92	110	17	85	85	62	56
70 to 74	86	86	...	225	109	110	71	-
75 + yrs	39	36	...	102	75	75	17	133

Sources: 1994 FSM Census, 1998 FSM HIES, 1992 & 1997 Guam Surveys, 1993 & 1998 CNMI Surveys

The sex ratio is the number of males in a population for each 100 females. The value of 104 in Table 13.4 for the total of the 1992 to 1994 period means that the total population had 104 males for each 100 females, so was slightly more male. The ratio decreased to 100 in the second period, showing even numbers of each sex. FSM and Guam showed decreases in the sex ratio over the period, the CNMI showed an increase, while remaining skewed female.

Marital Status. Table 13.5 shows changing numbers and percentages for the populations 15 years and over during the two time periods. The percentage of never married males remained about the same in the FSM itself over the 5 years, but a much larger percentage of the “newer” migrants were never married. The percentage of never married adult males on Guam increased from 26 percent to 43 percent during the period, and the percentage for CNMI increased from 21 percent to 38 percent. Again, some of the explanation may be the emigrants and immigrants, who partially offset each had different profiles, but part is real.

For the females, the percentage of never married in the FSM, remained about the same, but those in Guam and the CNMI showed a very different pattern than the males. About half of the adult females in these two areas were never married in the early 1990s, but by the late 1990s, a much larger percentage were married, either because they married in the receiving areas, or came as part of a family unit.

Table 13.5. Marital Status, FSM-born in FSM, Guam and the CNMI: 1992 to 1998

Marital Status	1992 to 1994				1997 and 1998			
	Total	FSM 94	Guam 92	CNMI 93	Total	FSM 98	Guam 97	CNMI 98
Males, 15+ yrs	31,184	30,127	612	445	36,096	32,888	2,586	622
Never married	12,655	12,403	158	94	14,512	13,165	1,109	238
Percent	40.6	41.2	25.8	21.1	40.2	40.0	42.9	38.3
Now married	16,594	16,362	133	99	20,237	18,441	1,427	369
Separated	570	379	98	93	432	400	24	8
Widowed	780	599	93	88	616	601	12	3
Divorced	585	384	130	71	299	281	14	4
Females, 15+ yrs	31,972	29,446	1,708	818	38,199	35,036	2,470	693
Never married	11,430	10,201	862	367	13,403	12,225	906	272
Percent	35.8	34.6	50.5	44.9	35.1	34.9	36.7	39.2
Now married	16,966	15,802	763	401	20,743	18,944	1,420	379
Separated	667	626	33	8	589	512	57	20
Widowed	2,204	2,178	16	10	2,704	2,620	66	18
Divorced	705	639	34	32	760	735	21	4

Sources: 1994 FSM Census, 1998 FSM HIES, 1992 & 1997 Guam Surveys, 1993 & 1998 CNMI Surveys

Fertility. Unfortunately the 1998 FSM Household Income and Expenditure did not include fertility questions so the impact on fertility cannot be displayed for the FSM-born in the FSM and total as a whole (Table 13.6). However, in the earlier part of the decade, we see that older women, those with clearly completed fertility, were having as many as 6 children, on average, over their reproductive life spans.

The number of children born to FSM women in Guam and CNMI decreased between the two periods. For every age group in CNMI, the average number of children ever born decreased. Part of the explanation could be selective migration of women with fewer children, who could more readily travel, partly real decline occurred to better care for and educate a smaller number of offspring.

Table 13.6. Children Born per Woman by Age of Woman, FSM-born in FSM, Guam and the CNMI: 1992 to 1998

Age of Woman	1992 to 1994				1997 and 1998			
	Total	FSM 94	Guam 92	CNMI 93	Total	FSM 98	Guam 97	CNMI 98
15 to 19	0.1	0.1	-	0.3	...	...	0.1	0.1
20 to 24	0.7	0.8	0.3	1.0	...	...	0.5	0.5
25 to 29	2.0	2.1	1.2	1.9	...	...	1.3	1.1
30 to 34	3.4	3.5	2.7	2.5	...	...	2.0	1.8
35 to 39	4.7	4.7	4.1	3.7	...	...	3.3	3.0
40 to 44	5.6	5.7	5.3	6.3	...	...	4.2	3.4
45 to 49	6.3	6.3	6.3	4.8	...	...	4.5	2.9

Sources: 1994 FSM Census, 1998 FSM HIES, 1992 & 1997 Guam Surveys, 1993 & 1998 CNMI Surveys

Language spoken at home. Table 13.7 shows the distribution of languages reported to be spoken at home during the two periods. Unfortunately, the FSM decided not to collect information on language spoken at home in the 1998 Household Income and Expenditures Survey, so only information for Guam and CNMI can be used for trend analysis.

These data are tabulated only for persons 5 years and over. During the first of the two periods, about 4 percent of the populations reported speaking English only at home – about 4 percent in the FSM, but a slightly smaller percentage in Guam, and a much larger percentage – 15 percent – in the CNMI.

By the second period, about 5 years later, the percentages for Guam and the CNMI jumped considerably – to 16 percent for Guam and 19 percent for CNMI. Part of the difference, at least for Guam, is that 1992 was at the height of the FSM (particularly Chuukese) migration to Guam, and by 1997, many of the Micronesians had assimilated somewhat into English speaking for jobs, schooling, and interaction. By 1998, about 1 in every 5 Micronesians Migrants to the CNMI spoke only English at home.

Table 13.7. Language, FSM-born in FSM, Guam and the CNMI: 1992 to 1998

Language	1992 to 1994				1997 and 1998			
	Total	FSM 94	Guam 92	CNMI 93	Total	FSM 98	Guam 97	CNMI 98
Total	96,332	89,652	4,739	1,941	7,325	...	5,762	1,563
Speak English	4,127	3,699	139	289	1,206	...	909	297
Percent	4.3	4.1	2.9	14.9	16.5	...	15.8	19.0
Other language	92,205	85,953	4,600	1,652	6,119	...	4,853	1,266
Percent	100.0	100.0	100.0	100.0	100.0	...	100.0	100.0
Chuukese	52.9	51.8	75.3	50.8	80.0	...	84.5	63.1
Pohnpeian	25.7	26.7	13.9	8.6	9.2	...	7.3	16.3
Ping./Mokilese	0.2	0.0	0.1	12.5	0.1	...	0.1	0.3
Polynesian	1.6	1.7	0.7	0.7	0.0	...	0.0	0.0
Kosraean	7.0	7.2	4.0	1.3	3.2	...	3.4	2.2
Yapese	6.1	6.2	4.2	7.1	3.1	...	2.4	5.6
Yap Outer Is	4.3	4.3	1.8	9.2	2.9	...	2.0	6.4
Other Language	2.2	2.2	0.0	9.7	1.5	...	0.4	6.1

Sources: 1994 FSM Census, 1998 FSM HIES, 1992 & 1997 Guam Surveys, 1993 & 1998 CNMI Surveys

For those who did not speak English at home, the majority spoke Chuukese, as would be expected since about half of FSM's population remains Chuukese. However, while about half of the non-English speakers spoke Chuukese in the CNMI in 1993 (and about 5 in 8 in 1998), about 3 in every 4 of the non-English speakers in Guam spoke Chuukese and more than 4 in 5 in 1997. These figures show a preference of Chuukese for Guam, where they have relatives from the early migration, and the advantage of the so-called "turn around" flights on Continental Air Micronesia to stay in close touch with their home land (and continued speaking of Chuukese at home.)

Table 13.8 Educational Attainment, FSM-born in FSM, Guam and the CNMI: 1992 to 1998

Educational Attainment	1992 to 1994				1997 and 1998			
	Total	FSM 94	Guam 92	CNMI 93	Total	FSM 98	Guam 97	CNMI 98
Total 25+ yrs	43,079	38,494	2,339	2,246	44,134	40,633	2,771	730
Cumulative percent:								
None	99.9	100.0	97.6	100.0	100.0	100.0	100.0	100.0
Elementary school	78.4	77.2	94.3	82.8	95.9	95.8	96.8	97.0
High school, not grad	48.1	46.9	64.3	52.8	51.4	49.7	69.4	74.7
HS graduate	32.3	31.8	47.1	24.8	32.8	31.4	50.3	44.8
Some college	18.0	18.2	24.2	7.7	18.6	18.4	22.3	15.8
AA/AS occupational	9.9	10.7	4.1	0.9	9.8	10.2	5.6	6.3
AA/AS academic	7.0	7.6	3.0	0.6	6.9	7.2	3.2	4.0
Bachelor's degree	4.3	4.7	2.4	0.6	3.5	3.7	2.0	2.5
Grad/Prof degree	1.5	1.6	0.6	0.2	0.7	0.8	0.2	0.5

Sources: 1994 FSM Census, 1998 FSM HIES, 1992 & 1997 Guam Surveys, 1993 & 1998 CNMI Surveys

Notes: Sum is sometimes not 100 percent because of "unknown educational attainment".

Educational Attainment. Table 13.8 shows change in educational attainment for persons 25 years and over between the two periods for the three areas. The percentages are cumulative so the figure of 32.3 percent for high school graduates in the 1992 to 1994 period means that about 1 in 3 FSM born had at least a high school diploma. That is, a person could have *more* education than high school graduate, but not less. The percentage of high school graduates did not increase during the period, perhaps reflecting a stagnant education system in the FSM. The percentage of high school graduates on Guam increased slightly during the 5 years to about half, while the percentage in the CNMI jumped by 20 percentage points, perhaps because of the relative accessibility of jobs and better acceptance of Micronesians in the CNMI than Guam.

The percentage of persons with at least a Bachelor's degree decreased during the period, perhaps reflecting increased migration of higher educated Micronesians to Hawaii and the U.S. Mainland. For the CNMI, the percentage college graduates increased from less than one percent to 2.5 percent, again, probably reflecting better working conditions.

Males, as expected, had higher educational attainment than females (Tables 13.9 and 13.10). About 41 percent of the males in the first period were high school graduates compared to 39 percent in the second period, showing a slight decline. The percentage high school graduates increased for Guam, from 48 percent to 54 percent while CNMI saw a larger jump, from 28 percent to 53 percent. The fact that more than half the male emigrants had high school diplomas bodes well for them, as they are likely to get better jobs, but not for the FSM which loses some of its better educated individuals to other areas.

Table 13.9 Male Educational Attainment, FSM-born in FSM, Guam and the CNMI: 1992 to 1998

Educational Attainment	1992 to 1994				1997 and 1998			
	Total	FSM 94	Guam 92	CNMI 93	Total	FSM 98	Guam 97	CNMI 98
Males, 25+ yrs	21,822	19,375	1,398	1,049	21,172	19,360	1,468	344
Cumulative percent:								
None	99.9	100.0	97.2	100.0	100.0	100.0	100.0	100.0
Elementary school	82.4	81.4	94.8	83.2	97.5	97.5	97.5	98.0
High school, not grad	57.5	57.0	66.9	55.5	57.4	55.8	73.2	81.4
HS graduate	40.9	41.1	48.5	28.3	38.9	37.5	54.4	52.9
Some college	24.5	25.2	25.3	10.7	24.0	24.0	25.4	21.2
AA/AS occupational	14.1	15.5	4.3	1.5	13.5	14.0	6.8	9.9
AA/AS academic	10.2	11.2	3.4	1.1	10.0	10.6	4.1	6.1
Bachelor's degree	6.6	7.2	2.5	1.1	5.4	5.7	2.5	4.7
Grad/Prof degree	2.5	2.8	0.9	0.4	1.1	1.2	0.3	1.2

Sources: 1994 FSM Census, 1998 FSM HIES, 1992 & 1997 Guam Surveys, 1993 & 1998 CNMI Surveys

Notes: Sum is sometimes not 100 percent because of "unknown educational attainment".

Male college graduates showed a slightly different pattern. The percentage of male college graduates decreased during the period, from 7 percent to 5 percent, with FSM showing roughly the same decrease. The percentage for Guam remained about the same, at 2.5 percent, while CNMI showed a large increase in male college graduates, from 1 percent in the first period, to almost 5 percent in the second.

The female patterns differed from the males, as well. Table 13.10 shows that less than 1 in every 4 FSM born adult females was a high school graduate as measured during the first period. The percentage increased somewhat between the two periods. Also, the percentage for FSM increased for females during the period, to about 1 in every 4 females. Almost half of the adult females on Guam were high school graduates in both periods, while the percentage for CNMI increased from 22 percent in the first period to 38 percent in the second period. These movements showed, again, the attractiveness of the move to CNMI (or, alternatively, that selective “outmigration” from Saipan during the period included more less educated adults.)

Table 13.10 Female Educational Attainment , FSM-born in FSM, Guam and the CNMI: 1992 to 1998

Educational Attainment	1992 to 1994				1997 and 1998			
	Total	FSM 94	Guam 92	CNMI 93	Total	FSM 98	Guam 97	CNMI 98
Females, 25+ yrs	21,257	19,119	941	1,197	22,962	21,273	1,303	386
Cumulative percent:								
None	99.9	100.0	98.3	99.2	99.9	99.9	100.0	100.0
Elementary school	74.4	73.0	93.5	82.4	94.3	94.2	95.9	96.1
High school, not grad	38.5	36.7	60.5	50.5	45.8	44.2	65.0	68.7
HS graduate	23.4	22.4	45.1	21.7	27.1	25.8	45.7	37.6
Some college	11.3	11.2	22.5	5.1	13.6	13.3	18.8	10.9
AA/AS occupational	5.5	5.9	3.9	0.4	6.5	6.7	4.3	3.1
AA/AS academic	3.8	4.1	2.6	0.2	4.0	4.2	2.1	2.1
Bachelor's degree	2.0	2.1	2.1	0.2	1.8	1.8	1.4	0.5
Grad/Prof degree	0.4	0.4	0.3	0.0	0.4	0.4	0.2	0.0

Sources: 1994 FSM Census, 1998 FSM HIES, 1992 & 1997 Guam Surveys, 1993 & 1998 CNMI Surveys

Notes: Sum is sometimes not 100 percent because of "unknown educational attainment".

The percentage of female college graduates remained about the same in the two periods – about 2 percent of the adult females. The percentages in the three areas also didn’t change very much.

Labor Force Participation. The labor force participation rates of FSM residents and migrants for both sexes increased between the two periods. Less than half of persons 16 years and over were in the labor force during the first period, but this figure increased to about 3 in every 5 by the second period. Even in the FSM, during the time of the third step-down in Compact funding, about 3 in every 5 potential workers were in the labor force. The rate for Guam was about the same as for the FSM, the rate in the CNMI was slightly higher.

As expected, males had higher labor force participation rates than females, but the difference decreased slightly between the two periods – from about 24 percentage points (56 percent for males and 32 percent for females in the first period, to 71 percent for males and 50 percent for females in the second period). Again, the rates in the three areas followed the average fairly closely.

Occupations. Table 13.12 shows the distribution of major occupational categories for the FSM born employed population (16years and over) for the two periods in the three areas. About 1 in every 3 employed persons during the first period were working as technicians, in sales, or administrative support, but this figure decreased to about 1 in 4 during the second period. In both cases, though, this category was largest.

Table 13.12. Occupation, FSM-born in FSM, Guam and the CNMI: 1992 to 1998

Occupation	1992 to 1994				1997 and 1998			
	Total	FSM 94	Guam 92	CNMI 93	Total	FSM 98	Guam 97	CNMI 98
Employed, 16+yrs	21,911	18,918	2,185	808	33,720	30,911	2,188	621
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Managers and Profess	14.8	16.3	2.7	11.3	17.6	18.8	2.9	8.4
Tech, sales, admin	31.4	33.7	13.9	25.2	26.3	27.2	15.7	21.3
Service	16.3	13.9	39.3	9.7	17.4	15.8	42.2	12.6
Farm, fish	6.7	7.2	4.2	1.2	2.5	2.4	4.1	0.8
Crafts	12.1	13.0	5.5	7.2	10.6	11.0	7.4	2.1
Oper., fabr, labor	18.0	15.8	31.3	35.1	24.8	24.7	18.8	50.6
Unknown (incl AF)	0.7	0.0	3.2	10.3	0.7	0.1	8.9	4.3

Sources: 1994 FSM Census, 1998 FSM HIES, 1992 & 1997 Guam Surveys, 1993 & 1998 CNMI Surveys

The greatest change was seen in the category for “operators, fabricators, and laborers” which increased from about 18 percent to almost 25 percent during the period. The increase was particularly large for the FSM (from 16 percent to 25 percent) and CNMI (35 percent to 51 percent), while Guam saw a decrease in this category (from 31 percent to 19 percent). More than half of the CNMI employed in 1998 were in this one category. By 1997, more than 2 in every 5 of Guam’s FSM-born employed were in service occupations.

For the males, during the first period, about even numbers were working in “technical, sales, and administrative support” occupations and as “operators, fabricators, and laborers” (Table 13.13). By the second period, the percentage working as operators increased while the percentage in technical fields decreased, but these remained the two largest categories. About 1/3rd of the males in the CNMI in the first period were operators, fabricators, and laborers, but this increased to half during the second period; the percentage for FSM increased during the period, while the percentage for Guam decreased considerably.

Table 13.13. Occupation for Males, FSM-born in FSM, Guam and the CNMI: 1992 to 1998

Occupation	1992 to 1994				1997 and 1998			
	Total	FSM 94	Guam 92	CNMI 93	Total	FSM 98	Guam 97	CNMI 98
Employed males, 16+	14,893	12,961	1,488	444	20,798	19,062	1,384	352
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Managers and Profess	16.1	17.8	2.8	14.0	18.7	20.0	3.4	9.4
Tech, sales, admin	22.6	24.0	10.4	22.7	21.0	21.7	11.8	17.9
Service	14.1	12.2	31.2	11.3	16.3	15.1	33.8	13.1
Farm, fish	8.7	9.3	5.6	1.8	2.8	2.6	5.9	1.4
Crafts	15.3	16.5	8.0	5.6	12.6	12.9	11.3	3.7
Oper., fabr, labor	22.5	20.2	39.0	34.5	28.0	27.7	26.1	49.7
Unknown (incl AF)	0.6	0.0	3.0	10.1	0.7	0.1	7.7	4.8

Sources: 1994 FSM Census, 1998 FSM HIES, 1992 & 1997 Guam Surveys, 1993 & 1998 CNMI Surveys

Finally, Table 13.14 shows the changing occupational distribution for females. About half of the females in the first period were in technical, sales, and administrative support occupations, but only 1/3rd of them were in this category in the second period. Almost all of the change was accounted for by the increase in the percentage of female operators, fabricators, and laborers. More than half of the females workers in the CNMI in 1998 were operators and laborers, and more than half of those in Guam in 1997 were in service occupations.

Table 13.14. Occupation for Females, FSM-born in FSM, Guam and the CNMI: 1992 to 1998

Occupation	1992 to 1994				1997 and 1998			
	Total	FSM 94	Guam 92	CNMI 93	Total	FSM 98	Guam 97	CNMI 98
Employed Females 16+	7,018	5,957	697	364	12,922	11,849	804	269
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Managers and Profess	11.9	13.3	2.7	8.0	15.8	17.0	2.1	7.1
Tech, sales, admin	49.9	54.6	21.4	28.3	34.9	36.0	22.3	25.7
Service	21.0	17.7	56.5	7.7	19.2	16.8	56.7	11.9
Farm, fish	2.5	2.8	1.0	0.5	2.0	2.2	0.9	0.0
Crafts	5.2	5.6	0.1	9.1	7.5	8.1	0.6	0.0
Oper., fabr, labor	8.5	6.1	14.6	36.0	19.8	20.0	6.3	51.7
Unknown (incl AF)	0.9	0.0	3.6	10.4	0.8	0.0	11.1	3.7

Sources: 1994 FSM Census, 1998 FSM HIES, 1992 & 1997 Guam Surveys, 1993 & 1998 CNMI Surveys

Remittances. After several years of population outflow, we have begun to see the first clear sign of monetary remittances – return of financial sums to FSM. The 1994 FSM census has provided us with our first measure of the magnitude of remittances to Micronesia. In the FSM as a whole, 3,290 households, or 14.7 percent of all households in the nation, reported receiving remittances (Table 4.6b). Remittances reported everywhere in the FSM totaled \$1.26 million – about \$400 per house for those reporting remittances income – constituting nearly 15 percent of the total income of the households reporting them, according to the 1994 FSM census. Remittances appear to have become a significant source of income for families remaining in the FSM.

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Table 4.6b. Remittances from Abroad Received in FSM: 1994

Remittances	Total	Chuuk	Pohnpei	Yap	Kosrae
Total households	22,423	9,904	7,779	2,632	2,108
Reporting remittances	3,290	2,831	260	68	131
Amount of remittances	\$1,260,000	\$952,750	\$196,200	\$41,725	\$69,325
Average for houses reporting	\$383	\$337	\$755	\$614	\$529

Source: FSM 1995

In Chuuk, the most populous state with the most depressed economy, remittances have had a particularly great impact. About 29 percent of households, or twice that of the FSM as a whole, reported receiving remittances. The total dollar figure put on the remittances Chuukese received in 1994 was about \$950,000, more than three-quarters of the total reported remittances for the FSM, and, even at that, probably greatly under-reported.

Housing. As noted previously, the 1994 Census and the surveys provided information on housing conditions. Housing variables give information in themselves for planning, but also serve as social indicators. By considering these items by themselves, and in combination with other variables, government agencies can assess changing housing conditions, energy consumption, water and sewer distribution and use, and so forth.

Table 13.15. Housing. FSM-born in FSM, Guam and the CNMI: 1992 to 1998

Housing	1992 to 1994				1997 and 1998			
	Total	FSM 94	Guam 92	CNMI 93	Total	FSM 98	Guam 97	CNMI 98
Total Units	16,269	15,230	599	440	16,641	15,230	1,070	341
Public system water	24.2	19.5	99.0	88.2	31.0	25.0	97.5	90.6
Inside tub/shower	18.9	14.9	91.0	57.3	N/A	N/A	89.3	62.8
Public sewer	15.2	11.7	87.8	36.8	N/A	N/A	86.4	42.8
Hot/cold water	6.6	4.4	58.1	13.6	N/A	N/A	69.5	36.1
Cold water only	43.6	43.4	40.2	56.1	N/A	N/A	28.6	63.0
No flush toilet	68.3	71.5	6.2	41.8	N/A	N/A	1.9	2.6
Electricity	58.0	55.9	93.5	80.9	61.4	58.1	97.3	93.8
Electric stove	13.0	9.3	80.3	48.9	N/A	N/A	89.2	46.9
Refrigerator	28.7	25.6	87.6	57.3	N/A	N/A	93.3	72.1
Television	34.1	31.9	73.1	55.9	28.5	24.5	76.9	58.7
Radio	52.3	50.8	79.5	65.2	N/A	N/A	32.2	61.0
Air conditioner	7.0	5.9	23.0	22.5	N/A	N/A	30.3	26.1
Telephone	30.1	29.3	49.4	33.9	38.6	38.1	50.1	29.0
No car	79.4	83.7	12.2	24.1	N/A	N/A	27.9	0.0

Sources: 1994 FSM Census, 1998 FSM HIES, 1992 & 1997 Guam Surveys, 1993 & 1998 CNMI Surveys

For the FSM born, the number of units in the three areas “increased” only very slightly between the two periods. The increase was so small because the 1998 FSM Household Income and Expenditures Survey used a sample of housing units from the 1994 Census, but controlled the weights so that the same number of units appeared in each case. So the figure for number of housing units in the FSM remained at 15,320, while the number of units on Guam increased, and the number of units with FSM-born householders in the CNMI decreased. The CNMI decrease probably reflects some older people returning to the FSM as retired persons, their units taken over by CNMI-born children or other relatives, and perhaps there was some real return migration as well.

The 1998 FSM survey requested little housing information, so trend analysis is very difficult. One of the problems with multiple advisors, both at one time, and over time, is that different advisors seek different information. While the variables obtained for the HIES are the ones needed to develop the market basket, the FSM government loses the opportunity to see change in the other housing variables. Of those variables collected, the proportion of units connected to the public water system increased from 1 in 5 to 1 in 4 (a large increase, but it is important to remember that housing units constructed in the period between 1994 and 1998 are excluded from the sample). The percentage of units with electricity increased from 56 percent to 58 percent between 1994 and 1998, the percentage reporting having a television actually decreased from 32 percent to 25 percent, while those with a telephone increase from 29 percent to 38 percent.

The 25 percent of FSM-born units in 1998 connected to the public water system in the FSM was still far below those who moved to Guam (98 percent in 1997) and the CNMI (91 percent in 1998). Similarly, the percentage with electricity (58 percent in the FSM), was far exceeded by the 97 percent for Guam in 1997 and the 94 percent for CNMI in 1998. More than 3/4th of the Guam units had a television as did almost 2/5th of those in the CNMI compared to the 1/4th for FSM. But, according to the 1997/1998 data, the FSM residents were more likely to have a telephone than the FSM-born in the CNMI, but both were much less likely to have a phone than the Guam resident FSM born.

We have previously discussed the within-area housing changes for Guam and the CNMI, so the reader can refer to the respective chapters for more detailed information.

Conclusions. The FSM born migration continues, although probably not as rapidly as in the late 1980s and early 1990s. Conditions in the FSM have improved somewhat, but the government still needs to continue to work to provide improved education, social, and housing conditions to keep its population in the FSM.

CHAPTER 14

IMPACT ON THE REPUBLIC OF PALAU 8

Introduction

The Republic of Palau and the United States implemented the Compact of Free Association (“the Compact”), in October, 1994. The Compact grants Palau’s citizens free access to the United States and its territories, opening a new and unique chapter in Palauan migration. Before the Compact, Palauans were only allowed into the United States for schooling, but not for employment. Here we will look at some of the characteristics of the migrants, and compare them with the Palauans who remained in Palau.

The first significant emigration from the Republic of Palau began in the years before the implementation of the Compact with the United States of America in 1994, as hundreds of Palau citizens left for Guam, the Commonwealth of the Northern Mariana Islands, Hawaii, the U.S. mainland, and the military. The recently completed Office of Insular Affairs surveys apparently show that the numbers in Guam and the CNMI decreased in the years after Compact implementation. After Compact implementation, new opportunities in the labor market and education became available in the US Mainland, and also back in Palau. These migrants seem to have moved with the new flow of opportunities, and left Guam and CNMI. The influx of the Compact funds, Palau’s small natural growth, and more positive living and working conditions probably caused movements to the US Mainland, Hawaii and Palau itself. After the Compact, those who left had the freedom to move back and forth due to the removal of immigration barriers by the Compact. At the same time, 1994 was the beginning of the reduction of the large US subsidies to which Palau had become accustomed to since the 1960s.

Unfortunately, although the 1995 Census tried to collect simultaneous data on Palauan emigrants, much of the collected data were ambiguous. In order to compare the collected 1995 data with outside sources, we used two sources: the 1997 Census of Micronesians on Guam and the 1998 Survey of Micronesian Migrants to the CNMI. We compare these data with the 1990 Censuses of Palau, Guam and CNMI. These data shed light not only the differences between the immigrants and the Palauans who remained in Palau, but also the differences between the migrants to Guam and CNMI.

The 1997 Census showed that 560 persons born in the Republic of Palau had migrated to Guam, and the 1998 Survey showed 1,063 Palau-born persons having migrated to the CNMI. The number of persons born in Palau who migrated to Guam decreased by 1,233 in 1990 (1990 Guam Census), to 560 in 1997 (1997 Census of Micronesians, Guam). The number of Palau-born migrants to CNMI decreased by 1,407 in 1990 (1990 CNMI Census), to 1,063 in 1998 (Survey of Micronesian Migrants, CNMI).

The numbers do not show the exact number of Palauans living in Guam and the CNMI, as those who were born in Guam and CNMI to Palauan migrants were not included. This is because we want to show only the migration trend from Palau to Guam and the CNMI.

Demography

8 Kyonori Tellames, Statistician in the Republic of Palau’s Office of Planning and Statistics, wrote the first draft of this section. The section was written as part of Office of Insular Affairs training in Washington and does not necessarily represent the position of the Government of the Republic of Palau.

The earliest Palau migrants to Guam and CNMI were predominantly young people, mostly males, in search of jobs. Many of the original households were inherently unstable, composed of several young men in their twenties or thirties working at low-paying jobs and pooling their income to cover rent and other expenditures. In the absence of a viable authority structure and generational depth, such "peer-group households," as Rubinstein terms them, were continually "dissolving and reforming, with new arrivals coming in, others moving out" (Rubinstein 1993:260). These households inevitably follow the immigration model found so often around the world, as two generation and later multi-generation households have been forming. What is somewhat surprising is the rapidity of the change. Where other migrant communities in other places take a generation or two to form nuclear families, even with many loosely related kin and friends, the process has been slowed down considerably in the Palauan case. Rubinstein noted (1993:260-1) that in recent years household members are being selected according to kinship principles seen in the home populations, with grandparents and other older people being added, giving the household important generational depth. The Palau case was in fact in complete contrast to this.

Age and Sex Distribution. Table 14.1 shows age distributions among residents in the Republic of Palau and migrants to Guam and the CNMI before and after the Compact implementation. The median age — the point where half the population is older and half is younger — was 23.6 years for Palau residents and about 24 years for migrants in 1990. After Compact implementation (1997 for Guam and 1998 for CNMI), the median age for the Palauan migrants went up to 37.6 years for Guam and 32.1 years for the CNMI. These high values indicate that second and third generation migrants were giving birth to children outside of Palau, and very few Palau-born young migrants were emigrating to Guam or the CNMI.

Table 14.1. Population distribution by Age, 1990/95 Palauans & Palau-born in Guam & CNMI: 1997/98

Age	1990				1995 to 1998			
	Total	Palau	Guam	CNMI	Total	Palau 95	Guam 97	CNMI 98
Total	14,961	12,321	1,233	1,407	14,099	12,476	560	1,063
0 to 4	1,472	1,391	23	58	1,553	1,514	9	30
5 to 9	1,432	1,355	28	49	1,402	1,335	17	50
10 to 14	1,574	1,411	48	115	1,369	1,291	8	70
15 to 19	1,597	1,342	107	148	1,177	1,073	21	83
20 to 24	1,330	934	178	218	1,101	935	61	105
25 to 29	1,353	1,002	150	201	1,114	917	66	131
30 to 34	1,238	920	133	185	1,187	963	73	151
35 to 39	1,114	848	145	121	1,100	918	49	133
40 to 44	826	623	103	100	961	782	60	119
45 to 49	641	499	86	56	768	633	56	79
50 to 54	535	408	75	52	543	456	37	50
55 to 59	436	348	59	29	454	401	27	26
60 to 64	436	358	54	24	375	321	31	23
65 to 69	347	312	22	13	339	307	28	4
70 to 74	277	241	12	24	282	263	13	6
75 + yrs	353	329	10	14	374	367	4	3
Median	23.3	23.6	24.2	23.6	29.9	25.5	37.6	32.1

Source: 1990 and 1995 Palau Censuses, 1997 Guam and 1998 CNMI Surveys of Micronesians

In the early years of the migration, the distribution of the ages by sex probably differed considerably, but by the time of the surveys and the census, the distributions were about the same, and about the same as for the total population (Tables 14.2 and 14.3).

Table 14.2. Age distribution for males, 1990/95 Palauans & Palau-born in Guam & CNMI: 1997/98

Age	1990				1995 to 1998			
	Total	Palau	Guam	CNMI	Total	Palau 95	Guam 97	CNMI 98
Total	7,531	6,339	526	666	7,188	6,405	257	526
0 to 4	745	703	15	27	809	788	4	17
5 to 9	742	695	15	32	712	686	6	20
10 to 14	829	746	22	61	723	677	6	40
15 to 19	834	722	42	70	640	583	10	47
20 to 24	688	500	81	107	601	519	30	52
25 to 29	709	553	62	94	558	470	33	55
30 to 34	624	490	49	85	628	523	35	70
35 to 39	560	455	60	45	594	490	25	79
40 to 44	424	335	42	47	506	421	23	62
45 to 49	311	249	35	27	399	335	27	37
50 to 54	254	201	29	24	254	221	12	21
55 to 59	209	164	34	11	204	181	11	12
60 to 64	194	156	23	15	171	146	16	9
65 to 69	155	139	10	6	139	125	12	2
70 to 74	124	112	3	9	119	110	6	3
75 + yrs	129	119	4	6	131	130	1	-
Median	22.6	22.6	22.5	22.6	25.4	24.5	35.9	32.3

Source: 1990 and 1995 Palau Censuses, 1997 Guam and 1998 CNMI Surveys of Micronesians

Table 14.3. Age distribution for Females, 1990/95 Palauans & Palau-born in Guam & CNMI: 1997/98

Age	1990				1995 to 1998			
	Total	Palau	Guam	CNMI	Total	Palau 95	Guam 97	CNMI 98
Total	7,430	5,982	707	741	6,911	6,071	303	537
0 to 4	727	688	8	31	744	726	5	13
5 to 9	690	660	13	17	690	649	11	30
10 to 14	745	665	26	54	646	614	2	30
15 to 19	763	620	65	78	537	490	11	36
20 to 24	642	434	97	111	500	416	31	53
25 to 29	644	449	88	107	556	447	33	76
30 to 34	614	430	84	100	559	440	38	81
35 to 39	554	393	85	76	506	428	24	54
40 to 44	402	288	61	53	455	361	37	57
45 to 49	330	250	51	29	369	298	29	42
50 to 54	281	207	46	28	289	235	25	29
55 to 59	227	184	25	18	250	220	16	14
60 to 64	242	202	31	9	204	175	15	14
65 to 69	192	173	12	7	200	182	16	2
70 to 74	153	129	9	15	163	153	7	3
75 + yrs	224	210	6	8	243	237	3	3
Median	24.1	23.6	25.9	24.5	28.0	26.6	39.3	31.9

Source: 1990 and 1995 Palau Censuses, 1997 Guam and 1998 CNMI Surveys of Micronesians

The median age for males in Palau was about a year younger than for the females. The median ages for males and females were about the same in the CNMI, and males were more than 3 years younger than females on Guam, which could reflect a selective migration of both sexes to Guam.

Probably the most striking measure of the contrast between migrants to Guam and the CNMI is in the dependency ratio — that is, the number of dependent children and elderly for every 100 workers. While Guam's dependency ratio was 16 dependents for every 100 workers, the ratio was 18 in the CNMI. Guam's dependency ratio went up by 3 from the 1990 Census, but CNMI's went down by six. The dependency ratio has almost evened out, compared to 1990 when Guam's dependency ratio was 13 and CNMI 24 for every 100 workers.

Sex Ratio. The 1995 Census showed about 106 males for every 100 females in the Republic of Palau. The overall ratio for migrants to Guam was 85. In the CNMI however, the overall ratio almost evened out, with 98 males per 100 females. The higher proportion of women in both Guam and the CNMI might be attributed in part to higher paying jobs made accessible by the implementation of the Compact, and a better chance for women to move up the "corporate ladder" in Guam and the CNMI.

Table 14.4. Males per 100 Females by Age Group, 1990/95 Palauans & Palau-born in Guam & CNMI: 1997/98

Age	1990				1995 to 1998			
	Total	Palau	Guam	CNMI	Total	Palau 95	Guam 97	CNMI 98
Total	101	106	74	90	104	106	85	98
0 to 4	102	102	188	87	109	109	80	131
5 to 9	108	105	115	188	103	106	55	67
10 to 14	111	112	85	113	112	110	300	133
15 to 19	109	116	65	90	119	119	91	131
20 to 24	107	115	84	96	120	125	97	98
25 to 29	110	123	70	88	100	105	100	72
30 to 34	102	114	58	85	112	119	92	86
35 to 39	101	116	71	59	117	114	104	146
40 to 44	105	116	69	89	111	117	62	109
45 to 49	94	100	69	93	108	112	93	88
50 to 54	90	97	63	86	88	94	48	72
55 to 59	92	89	136	61	82	82	69	86
60 to 64	80	77	74	167	84	83	107	64
65 to 69	81	80	83	86	70	69	75	100
70 to 74	81	87	33	60	73	72	86	100
75 + yrs	58	57	67	75	54	55	33	-

Source: 1990 and 1995 Palau Censuses, 1997 Guam and 1998 CNMI Surveys of Micronesians

For Guam, the surplus of females appeared at almost every age group, peaking at 55 males per 100 females for the age group 5 to 9 years and, 48 for ages 40 to 44 and 33 for ages 75 years and over. The same was true for CNMI with 67 males per 100 females for the age group 5 to 9 years and, 64 for the 60 to 64 year age group. With new and better job opportunities available for women in Guam and the CNMI, this migration trend is not surprising.

Marital Status. Marital status of migrants is also an important way of looking at the migration trends. Usually, it is easier for unmarried persons to migrate, but after the implementation of the Compact, migration may have been coming to a standstill, with some migrants moving out of Guam and the CNMI. The percentage of never married Palau-born adult males in Palau, Guam, and the CNMI decreased from 44 percent in 1990 to 30 percent during the 1995-1998 period (Table 14.5). The percent never married decreased in all three areas, indicating earlier age at first marriage and/or more marriage to non-Palauans causing the percentage who have never married to decline considerably. The percentage of never married females decreased as well, from 32 percent in 1990 to 27 percent in the 1995-1998 (females tend to marry younger than males so female percentages never married usually are less than males.)

The percentage married for males and females in Guam went up to 67 percent and 64 percent respectively from the 1990 Census count, while CNMI went up to 58 and 53 percent respectively for males and females. Percent married for Palau increased to 54 and 55 percent, respectively, showing little change from the 1990 Census. These data indicate that a certain percentage who migrated to Guam and the CNMI before Compact implementation married and probably had children, and did not move back. But the single migrants might be moving out of Guam and the CNMI, as they need not settle down – this migration is easiest.

Table 14.5. Marital Status, 1990/95 Palauans & Palau-born in Guam & CNMI: 1997/98

Marital Status	1990				1995 to 1998			
	Total	Palau	Guam	CNMI	Total	Palau 95	Guam 97	CNMI 98
Males, 15+ yrs	5,215	4,195	474	546	4,944	4,254	241	449
Never married	2,293	1,841	194	258	1,946	1,700	74	172
Percent	44.0	43.9	40.9	47.3	39.4	40.0	30.7	38.3
Now married	2,611	2,089	255	267	2,700	2,279	162	259
Separated	110	99	2	9	82	74	1	7
Widowed	81	71	5	5	86	79	1	6
Divorced	120	95	18	7	130	122	3	5
Females, 15+ yrs	5,268	3,969	660	639	4,831	4,082	285	464
Never married	1,678	1,202	212	264	1,293	1,069	62	162
Percent	31.9	30.3	32.1	41.3	26.8	26.2	21.8	34.9
Now married	2,724	2,104	335	285	2,689	2,263	181	245
Separated	134	99	15	20	122	93	3	26
Widowed	526	430	43	53	530	482	27	21
Divorced	206	134	55	17	197	175	12	10

Source: 1990 and 1995 Palau Censuses, 1997 Guam and 1998 CNMI Surveys of Micronesians

Fertility. By age 49, most women have completed their families. The data on children ever born in the 1995 census showed that the average woman in Palau aged 45 to 49 had had 3.8 children. This was also the value for the migrant females of this age group in the CNMI; however, women of this age group residing in Guam had fewer children, only 2.8, on average. Similarly, at ages 40 to 44 years, the average for Guam of 2.2 was between 1.5 and 1 child less than for Palau and for migrants to the CNMI. This was also true for all age groups, as Guam migrants consistently had fewer children than those in the Republic of Palau and the Commonwealth of the Northern Mariana Islands.

Table 14.6. Children Born per Woman by Age of Woman, 1990/95 Palauans & Palau-born in Guam & CNMI: 1997/98

Age of Woman	1990				1995 to 1998			
	Total	Palau	Guam	CNMI	Total	Palau 95	Guam 97	CNMI 98
Total	1.8	1.8	2.0	2.1	1.7	2.0	1.5	2.0
15 to 19	0.1	0.1	0.1	0.1	0.1	0.1	-	0.1
20 to 24	0.7	0.8	0.6	0.8	0.6	0.8	0.2	0.6
25 to 29	1.4	1.6	1.4	1.6	1.1	1.5	0.9	1.4
30 to 34	2.1	2.2	2.2	2.6	1.8	2.3	1.5	2.1
35 to 39	3.0	3.3	2.7	3.4	2.4	2.8	2.1	2.9
40 to 44	3.7	3.8	3.8	4.3	3.0	3.7	2.2	3.1
45 to 49	4.4	4.6	4.3	4.4	3.5	3.8	2.8	3.8

Source: 1990 and 1995 Palau Censuses, 1997 Guam and 1998 CNMI Surveys of Micronesians

While the average female migrant to Guam aged 20 to 24 years had about 0.2 children, the average migrant to the CNMI had 0.6 children, while Palau had 0.8 children for women of this age group. The average for women 25 to 29 years in Palau and CNMI had about 1.5 children per woman compared to only 0.9 on Guam. Once again, fewer women with children were migrating out of Palau, proving once again that the migration trend is now reversing.

Social Characteristics

Language. The percentage of the total Palauan population speaking only English at home has increased considerably during the decade, boding well for Palau's economic development (although this rapid change is also cautionary – Palauans wanting to maintain their identity as Palauans almost certainly want their children to be bilingual.) Only 2 percent of the combined Palauan population in 1990 spoke only English at home, compared to more than 9 percent in the 1995-1998. While less than one percent of Palau's population in 1990 spoke only English by 1995 the figure was more than 8 percent. Similarly the for Guam, the proportion increased from 1 in 8 to 1 in 4 in the short period, and for CNMI, from more than 2 percent to more than 14 percent, all large increases in a short period. Some of the increase, however, might be attributed to different enumeration techniques, since the 1990 censuses in Guam and CNMI were collected by non-Palauans, all of the other were collected by Palauan enumerators, so it is difficult to assess how this might have affected the results.

Table 14.7. Language, 1990/95 Palauans & Palau-born in Guam & CNMI: 1997/98

Language	1990				1995 to 1998			
	Total	Palau	Guam	CNMI	Total	Palau 95	Guam 97	CNMI 98
Total	13,489	10,930	1,210	1,349	12,546	10,962	551	1,033
Speak English	252	74	145	33	1,184	907	130	147
Percent	1.9	0.7	12.0	2.4	9.4	8.3	23.6	14.2
Palauan	12,725	10,718	937	1,070	10,893	9,723	401	769
Percent	94.3	98.1	77.4	79.3	86.8	88.7	72.8	74.4
Other language	512	138	128	246	469	332	20	117
Chamorro	240	1	76	163	51	-	1	50
Asian	93	47	24	22	32	31	-	1
Other Language	179	90	28	61	386	301	19	66

Source: 1990 and 1995 Palau Censuses, 1997 Guam and 1998 CNMI Surveys of Micronesians

All of the areas also saw decreases in the percentages primarily speaking Palauan at home [whether or not they also spoke English or another language as well.] The percentage for Palauans in the three areas decreased from 94 percent in 1990 to about 87 percent in 1995-1998. For this last period, about 89 percent of Palauans in Palau spoke their own language compared to 73 percent for Guam and 74 percent for the CNMI. In this same period, those who stated languages other than English and Palauan were about 3 percent for Palau, 4 percent for Guam, and 11 percent for the CNMI. Chamorro was the dominant language for this group. These are migrants who had been living in Guam and CNMI prior to the Compact implementation, and could have married to persons of Chamorro descent.

Educational Attainment. The usual measures of educational attainment are numbers and percentages of high school graduates and college graduates with bachelor's degrees. By these measures, Palauans showed considerable advancement during the 1990s. The percentage of high school graduates for Palauans in the three areas increased from 54 percent in 1990 to 59 percent in 1995-1998 (Table 14.8). The data in this table show cumulative percentages, that is the 54 percent figure for 1990 is for persons who were *at least* high school graduates, even if they had *more* education. Even in 1990, more than half of Palau's population 25 years and over in Palau were high school graduates; by 1995, 56 percent of the population was in this category. Similarly, the percentage high school graduates increased in Guam from 64 to 73 percent during the period, and in the CNMI, from 67 percent to 79 percent. While these figures look good for Palauans in Guam and CNMI seeking jobs, it is also true that these individuals are not in Palau assisting in the country's economic development.

Table 14.8 Educational Attainment of persons age 25 & over, 1990/95 Palauans & Palau-born in Guam & CNMI: 1997/98

Educational Attainment	1990				1995 to 1998			
	Total	Palau	Guam	CNMI	Total	Palau 95	Guam 97	CNMI 98
Total, (25+ yrs)	7,556	5,888	849	819	7,497	6,328	444	725
None	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Elementary	97.8	97.8	96.3	99.0	96.4	95.8	99.8	99.4
High School	68.2	64.8	79.2	81.2	75.5	72.9	88.1	90.6
HS graduate	53.9	50.5	64.3	67.4	59.1	55.9	72.7	79.0
Some college	27.4	27.0	31.4	25.9	32.7	32.7	45.3	24.3
AA/AS occup	16.6	17.6	10.5	15.9	19.1	19.9	16.2	13.5
AA/AS academic	11.4	11.7	8.2	12.7	13.2	13.7	12.4	8.7
Bachelor's degree	7.9	8.0	7.1	8.3	8.5	8.7	9.7	6.2
Grad/prof degree	1.4	1.3	1.4	1.8	1.4	1.3	2.0	1.2

Source: 1990 and 1995 Palau Censuses, 1997 Guam and 1998 CNMI Surveys of Micronesians

Table 14.9 Educational Attainment of Males, 1990/95 Palauans & Palau-born in Guam & CNMI: 1997/98

Educational Attainment	1990				1995 to 1998			
	Total	Palau	Guam	CNMI	Total	Palau 95	Guam 97	CNMI 98
Males, 25+ yrs	3,693	2,973	351	369	3,703	3,152	201	350
None	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Elementary	98.1	98.0	97.7	99.7	97.8	97.5	99.5	99.4
High School	72.2	69.6	84.3	82.1	79.7	77.5	90.5	93.7
HS graduate	58.2	54.8	72.6	71.5	62.7	59.6	79.1	80.9
Some college	31.0	31.0	36.2	25.5	34.9	35.4	49.8	22.0
AA/AS occup	18.6	19.6	13.4	14.9	20.0	21.3	17.9	10.3
AA/AS academic	11.8	12.0	10.5	10.6	12.9	13.7	13.4	4.6
Bachelor's degree	8.4	8.4	9.1	8.1	8.5	8.9	10.0	3.7
Grad/prof degree	1.8	1.7	2.0	2.7	1.8	1.7	3.0	1.1

Source: 1990 and 1995 Palau Censuses, 1997 Guam and 1998 CNMI Surveys of Micronesians

Palau is fortunate to have its own two-year college – Palau Community College (PCC) – and access to the University of Guam, Guam Community College, and the College of the Northern Mariana Islands. However, the percentage of college graduates did not change very much during the 1990s, with the percentage increase only from 7.9 percent to 8.5 percent. The percentages for Palau and Guam increased somewhat, while the percentage for CNMI decreased. Since Guam’s percentage is higher than Palau’s, if percentage of college graduates is a measure of the “Brain Drain”, we see that there exists a drain of highly educated persons from Palau, while still a small percentage, but growing.

For males, the percentage of high school graduates increased from 58 percent in 1990 to 63 percent in the 1995-1998 period (Table 14.9). All three areas showed increases in the percentage of high school graduates, with about 4 in every 5 adults in Guam and the CNMI being high school graduates. As expected, the percentage of male college graduates was larger than for females or for the total population. About 8.4 percent of the Palauan population in the three areas were college graduates in 1990 compared to 8.5 percent in 1995-1998. The percentage decrease for Palauan college graduates males in the CNMI was considerable, while the other two areas showed slight increases. Since the data set for CNMI was small, it is difficult to tell whether the decline is real, or the result of reporting problems.

Table 14.10 Educational Attainment of Females, 1990/95 Palauans & Palau-born in Guam & CNMI: 1997/98

Educational Attainment	1990				1995 to 1998			
	Total	Palau	Guam	CNMI	Total	Palau 95	Guam 97	CNMI 98
Females, 25+ yrs	3,863	2,915	498	450	3,794	3,176	243	375
None	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Elementary	97.4	97.6	95.4	98.4	94.9	94.0	100.0	99.5
High School	64.4	60.0	75.5	80.4	71.3	68.3	86.0	87.7
HS graduate	49.8	46.2	58.4	64.0	55.6	52.2	67.5	77.3
Some college	24.0	23.0	28.1	26.2	30.4	30.0	41.6	26.4
AA/AS occup	14.7	15.5	8.4	16.7	18.1	18.6	14.8	16.5
AA/AS academic	11.1	11.3	6.6	14.4	13.5	13.7	11.5	12.5
Bachelor's degree	7.4	7.6	5.6	8.4	8.6	8.5	9.5	8.5
Grad/prof degree	1.0	0.9	1.0	1.1	1.0	0.9	1.2	1.3

Source: 1990 and 1995 Palau Censuses, 1997 Guam and 1998 CNMI Surveys of Micronesians

For the females, the percentage of high school graduates increased from about half in 1990 to 56 percent in 1995-1998 (Table 14.10). As before, the percentages increased for each of the three areas during the time period. Also, the percentage of college graduates increased from 7.4 percent in 1990 to 8.6 percent in the 1995-1998 period. Palau and Guam saw increases in the percent college graduates, while the percentage remained about the same in the CNMI.

These data show that the outflow of migrants to Guam and the CNMI really can be called a “brain drain” in the usual sense of that term, that educated persons who could be in Palau involved in the country’s economic and social development are elsewhere. They also confirm that those Palauans with the best degrees, and thus the brightest prospects for employment, may emigrate for better employment and pay. Those who left home may be those most likely to enroll in school or enter the labor pool where pay is substantially better than those in Palau.

Economic activity

Labor Force Participation. The United States and Palau measure whether people 16 years and over are in the labor force. If someone is working for pay, or actively looking for a job, they are considered part of the labor force, but if they are in school or doing housework or doing only subsistence work or retired, they are not part of the labor force. Unlike educational attainment, however, labor force participation depends on current economic conditions. So, fluctuations in the Asian economies (and the tourists they send), or the U.S., or Compact funding levels, all affect the labor force in Palau and Palauans in Guam and the CNMI.

With all of this, partly because of Compact implementation, and increased numbers and proportions of high school graduates, the percent of Palauans in the labor force for the three areas increased from 55 percent in 1990 to 60 percent in 1995-1998 (Table 14.11). The percentage in the labor force increased considerably in Palau, decreased on Guam, and stayed about the same in the CNMI. About 59 percent of Palau’s population 16 years and over in 1995 were in the labor force, compared to about 54 percent for Guam migrants and 69 percent for the CNMI.

As expected, males had higher labor force participation rates than females. About 64 percent of Palauan males 16 years and over in 1990 were in the labor force compared to 68 percent in 1995-1998. The females increased from 47 percent to 51 percent during the same period. The percentages for the three areas showed similar increases and decreases as the total, although the decrease for females in the CNMI was greater, perhaps having to do with work in the garment factories.

Again, the data on labor force participation, while extremely susceptible to the whims of inflation/deflation and recession/expansion of the major powers like the United States and Japan, also can show real change. These data may be showing some back migration to Palau after the implementation of the Compact. The 2000 Censuses for Palau, Guam, CNMI, and the United States will allow a snapshot similar to the 1990 Census data, so the labor force participation of all Palauans at the same time can be determined.

Table 14.11. Labor Force Participation, 1990/95 Palauans, Palau-born in Guam & CNMI: 1997/98

Labor Force Participation	1990				1995 to 1998			
	Total	Palau	Guam	CNMI	Total	Palau 95	Guam 97	CNMI 98
Total, 16+ yrs	10,146	7,874	1,118	1,154	9,542	8,121	521	900
In labor force	5,624	4,161	648	815	5,715	4,815	279	621
Percent	55.4	52.8	58.0	70.6	59.9	59.3	53.6	69.0
Males, 16+ years	5,047	4,045	468	534	4,806	4,127	238	441
In labor force	3,249	2,503	339	407	3,284	2,781	163	340
Percent	64.4	61.9	72.4	76.2	68.3	67.4	68.5	77.1
Females, 16+ years	5,099	3,829	650	620	4,736	3,994	283	459
In labor force	2,375	1,658	309	408	2,431	2,034	116	281
Percent	46.6	43.3	47.5	65.8	51.3	50.9	41.0	61.2

Source: 1990 and 1995 Palau Censuses, 1997 Guam and 1998 CNMI Surveys of Micronesians

Occupation. The number of employed Palauans decreased during the decade, from about 7,000 in 1990 to about 5,000 in the 1995 to 1998 period (Table 14.12). For Palau, and persons are included, but for Guam and CNMI, only persons born in Palau were included, so Palauans who were the children or grandchildren of Palau born, but not Palau born themselves, were not included. Hence, the numbers do not reflect the reality of all Palauans, but do satisfy the criteria needed for Impact reporting. What is likely to be happening, is that some Palau-born become of retirement and retire, and are replaced by persons born on Guam and CNMI, but still Palauan, and therefore not included here.

However, even in Palau, the number of employed Palauans decreased from 5,599 to 4,300 (23 percent), probably indicating that the work force of Palauans was decreasing because non-Palauans were doing more of the work, and some Palauans were leaving for other areas (not Guam and the CNMI) and, perhaps, the U.S. military. The numbers of Palau born workers in both Guam and the CNMI decreased during the period.

Table 14.12. Occupation, 1990/95 Palauans & Palau-born in Guam & CNMI: 1997/98

Occupation	1990				1995 to 1998			
	Total	Palau	Guam	CNMI	Total	Palau 95	Guam 97	CNMI 98
Employed, 16+yrs	6,969	5,599	602	768	5,159	4,330	268	561
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Managers and Profess	22.2	24.0	13.0	16.3	29.0	31.5	17.2	15.7
Tech, sales, admin	23.7	21.6	28.7	35.0	28.5	27.8	21.6	37.1
Service	20.8	19.8	32.1	19.5	15.7	14.9	29.9	15.2
Farm, fish	5.4	6.4	0.7	1.7	6.4	7.5	0.7	0.7
Crafts	15.5	16.8	12.0	8.5	7.8	7.8	11.6	5.7
Oper., fabr, labor	12.4	11.4	13.6	19.0	12.2	10.6	14.6	23.2
Unknown (incl AF)	0.0	0.0	0.0	0.0	0.5	0.0	4.5	2.5

Source: 1990 and 1995 Palau Censuses, 1997 Guam and 1998 CNMI Surveys of Micronesians

The largest category of Palauan workers in 1990 was “technical, sales, and administrative support” occupations (24 percent), although closely “followed” by “managers and professionals” (22 percent), and service workers (21 percent). By the 1995-1998 period, “managers and professionals” (29 percent) took a very slight lead over “technical, sales, and administrative support” (28 percent), while a much smaller percentage were doing sales jobs (16 percent). The first two categories are the traditional “white collar” jobs – many are government jobs – so it is not surprising that so many Palauans in Palau are in these categories.

For Guam, the largest category in both 1990 and 1997 was service occupations, with technical, sales, and administrative occupations following. For Saipan, technical, sales, and support occupations were first throughout the 1990s, but the percentage in service occupations decreased during the decade while the percentage working as “operators, fabricators, and laborers” increased.

The number of males also decreased during the decade (Table 14.13). The largest category for males was crafts (construction) in 1990, about 1 in 4 of the employed males, while this category decreased to only about 1 in 8 for the late 1990s. The percentage of males “managers and professionals” increased during the decade, from 1 in 5 in 1990 to 1 in 4 in 1995-1998. The percentages in “technical, sales, and administrative support” and service occupations also increased during the decade.

Table 14.13. Occupation for Males, 1990/95 Palauans & Palau-born in Guam & CNMI: 1997/98

Occupation	1990				1995 to 1998			
	Total	Palau	Guam	CNMI	Total	Palau 95	Guam 97	CNMI 98
Employed males, 16+	4,240	3,542	318	380	2,978	2,512	157	309
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Managers and Profess	20.4	21.9	12.6	12.9	24.9	27.2	17.8	10.0
Tech, sales, admin	14.6	13.3	21.4	20.3	18.8	18.0	12.7	29.1
Service	14.2	13.1	18.2	20.8	15.6	14.9	22.9	17.5
Farm, fish	8.2	9.4	1.3	3.4	8.7	10.2	1.3	1.0
Crafts	24.5	25.6	22.3	16.3	12.6	12.6	17.8	9.7
Oper., fabr, labor	18.2	16.7	24.2	26.3	18.8	17.2	22.9	29.8
Unknown (incl AF)	0.0	0.0	0.0	0.0	0.5	0.0	4.5	2.9

Source: 1990 and 1995 Palau Censuses, 1997 Guam and 1998 CNMI Surveys of Micronesians

As noted, the largest category for Palau males was crafts in 1990, but the largest category in 1995 was managers and professionals (27 percent). For Guam, the largest categories in 1990 were “operators, fabricators, and laborers” (24 percent) and crafts (22 percent), but in 1997, “operators” remained (23 percent), but second was service occupations (also 23 percent). “Operators, fabricators, and laborers” (26 percent) was also the largest category for the CNMI Palauans in 1990 (because of the garment industry), but by 1998, while “operators” continued high (30 percent), and almost equal number were in “technical, sales, and administrative support” occupations.

The number of employed Palauan females decreased considerably in all three geographical areas during the 1990s. The total employed females went from 2,729 to 2,181, a decrease of 20 percent. Both Guam and CNMI showed very large decreases in numbers as well, but part of the decrease may be attributed to the definition of a Palauan – that the female would have had to be born in Palau to be included here (Table 14.14).

For Palauan females, the largest category in both 1990 and 1995-1998 was technical, sales, and administrative support occupations. The percentage increased from 38 percent in 1990 to 42 percent in the 1995 to 1998 period. The percentage of females working as managers and professionals increased from 25 percent to 34 percent during the period (moving from third to second position), while those in service occupations decreased from 31 percent to 16 percent.

Table 14.14. Occupation for Females, 1990/95 Palauans & Palau-born in Guam & CNMI: 1997/98

Occupation	1990				1995 to 1998			
	Total	Palau	Guam	CNMI	Total	Palau 95	Guam 97	CNMI 98
Employed Females 16+	2,729	2,057	284	388	2,181	1,818	111	252
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Managers and Profess	25.1	27.8	13.4	19.6	34.5	37.3	16.2	22.6
Tech, sales, admin	37.9	35.8	37.0	49.5	41.6	41.4	34.2	46.8
Service	31.1	31.3	47.5	18.3	15.9	15.0	39.6	12.3
Farm, fish	1.0	1.3	0.0	0.0	3.2	3.7	0.0	0.4
Crafts	1.4	1.7	0.4	0.8	1.2	1.2	2.7	0.8
Oper., fabr, labor	3.5	2.1	1.8	11.9	3.1	1.5	2.7	15.1
Unknown (incl AF)	0.0	0.0	0.0	0.0	0.5	0.0	4.5	2.0

Source: 1990 and 1995 Palau Censuses, 1997 Guam and 1998 CNMI Surveys of Micronesians

For Palau itself, the percentage distribution did not differ much from the total since so many of the Palauans were living in Palau. Almost half the Guam females were in service occupations in 1990, but this decreased to about 2 in 5 in 1997. The largest category for CNMI females in both years was “technical, sales, and administrative support”, which was about half of the employed females in each case.

Housing

The 1990 Censuses, 1995 Palau census and the surveys in Guam and the CNMI provided information on housing conditions in their respective areas. Housing variables give information directly for planning, but also serve as social indicators. By considering these items by themselves, and in combination with other variables, government agencies can assess changing housing conditions, energy consumption, water and sewer distribution and use, and so forth. Total Palauan occupied units (based on “race” of the householder) decreased from 4,095 to 3,816 during the period. This decrease was partly due to changes in the population because of the definition of a Palauan household – if the Palauan householder was at least one generation removed from Palau, his or her housing unit did not appear here. The data also a decrease in the number of households in Palau, but this is probably due to some consolidation of households, particularly movements of individuals from the States to the South and North of Koror into Koror itself. In the 1995-1998 period, Palau had 3,183 housing units compared to the 242 units in Guam and 391 units in the CNMI.

Table 14.15. Materials for Walls and Roof, 1990/95 Palauans, Palau-born in Guam & CNMI: 1997/98

Housing	1990				1995 to 1998			
	Total	Palau	Guam	CNMI	Total	Palau 95	Guam 97	CNMI 98
WALL MATERIALS:								
Total	4,095	3,312	411	372	3,816	3,183	242	391
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Poured concrete	7.1	4.1	29.0	9.7	10.8	7.2	47.1	17.9
Concrete blocks	27.4	22.4	48.7	48.7	28.0	26.0	34.3	39.6
Metal	39.5	45.1	11.9	20.2	26.2	28.5	4.5	20.7
Wood	25.4	27.9	9.2	21.5	29.8	32.2	12.8	21.2
Other	0.5	0.4	1.2	0.0	5.2	6.1	1.2	0.5
ROOF MATERIALS:								
Total	4,095	3,312	411	372	3,816	3,183	242	391
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Concrete	19.1	10.5	70.1	39.8	18.8	12.2	78.5	35.8
Metal	77.9	86.8	24.8	57.8	71.6	77.3	12.4	62.1
Wood	1.6	1.3	3.2	2.4	2.5	2.6	1.7	1.5
Thatch	0.6	0.7	0.5	0.0	1.8	2.1	0.0	0.3
Other	0.8	0.8	1.5	0.0	5.4	5.8	7.4	0.3

Source: 1990 and 1995 Palau Censuses, 1997 Guam and 1998 CNMI Surveys of Micronesians

About 26 percent in Palau in 1990 had either poured concrete or concrete block walls compared to 77 percent of those on Guam and 58 percent of those in the CNMI (Table 14.15). While the CNMI’s percentage didn’t change in the 1990s, Guam continued to increase to 81 percent, but Palau’s increase was greater, to about 33 percent in 1995. Houses with metal roofs showed the decreases for Palau and Guam, so households were able to build concrete structures (or, in the case of Guam, move into these better structures), and this phenomenon was partly based on better jobs and higher incomes, partly as a result of Compact implementation.

Type of roof, however, showed less change, showing, perhaps a lag in movement to more substantial materials among Palauans in the three areas. The large number of “other” in the 1995-1998 data, though, makes trend analysis difficult. The percentage of metal roofs remains high, which while generally protecting from the elements, are no match from some of the region’s major typhoons.

As noted, knowledge about housing conditions is essential in planning, and also in determining how best to serve the people living in them. As we can see, the living standards of the Palauan migrants in Guam and the CNMI, especially Guam, seem to exceed the living standards of those in Palau, based on just these two variables. With more highly educated and professional Palauans migrating out of Palau to Guam and the CNMI, it is not surprising that living standards in Palau are lower.

Conclusion

The migration from Palau seems to have been slowing considerably since 1990, at least to Guam and the CNMI. In view of the continued low fertility in the Republic of Palau, emigration will maintain Palau's low level of "natural" growth – that is, the out-migration balances the increase from fertility (almost no one dies in Palau.) Students looking for better education will certainly continue to travel.

Over the first few years of the Compact period, the number of migrants to Guam and the CNMI has been dropping steadily. In all likelihood, these numbers will not increase in the near future, taking into account the Asian economic crisis affecting the economies of Guam and the CNMI.

The data from the 1997 and 1998 surveys reveal some pronounced differences between the Republic of Palau's migrant communities on Guam and the Commonwealth of the Northern Mariana Islands, and of the resident population in Palau. The households in Guam and the CNMI were rapidly shrinking, showing fewer and fewer dependents -- children, women and the elderly -- and were evidently breaking up, as opposed to regular households. Drops in employment rates are expected over time if the number of migrants decreases, with migrants opting to return to Palau or not emigrating at all.

As we look at all the indicators as provided by the 1997 Survey of Micronesian Migrants in Guam and the 1998 CNMI Survey of Micronesians, we see that the tide of migration *may be* reversing. Except for a large number of highly educated Palauans, as seen in their occupation and educational attainment, a large number of migrants seem to have returned back to Palau.

This is a stark contrast to what was previously believed. After the implementation of the Compact of Free Association with the United States of America, a lot of people believed, especially some Guam bureaucrats, that a lot of Palauans would migrate to Guam and the CNMI, even the state of Hawaii. The survey done in Hawaii may not be complete, and in any case this is the first survey so we don't have any trends, so data from Hawaii appear in this chapter. The surveys were done in order to study the impact of the migration, in the belief that the Compact implementation would create an all out migration into the US Insular Areas of Guam and CNMI and the state of Hawaii. The surveys seem to show that there *was* an impact, but in reverse.

The data on the short period between the 1990 Census and the surveys on Guam and the CNMI a few years later are less significant for the numbers they report than for the trends they reveal. Not only are the extent and rate of the Republic of Palau's population outflow more precisely defined, but the changing patterns of household composition and other features of life in the migrants' destinations are taking clearer shape.

CHAPTER 15

PROJECTIONS

Projections based on the 1990 Census. Under the terms of the Compacts of Free Association, the Federal government measures the impact of the migration of Micronesians to Guam, CNMI, and the other U.S. Areas as a *result of the Compact itself*. That is, any migration resulting from the “free entry” provision of the Compact would be included, but any migration which would have occurred even if there had been no Compact – for example, migration for schooling, or because a person is married to a U.S. citizen – is to be excluded. Unfortunately, no data exist to differentiate these two groups. Even when our surveys include “reason for migration” it is difficult to assess the underlying reasons for migration (as was seen in the earlier Chapters on reason for migration for each of the three receiving areas.)

The data in Table 15.1 illustrate the problem. This table uses data from the 1990 Decennial censuses of Guam and the CNMI to show numbers of persons born in the Freely Associated States and arriving in Guam or the CNMI before the Census. The data are divided into two groups – those arriving in years up to and including 1986 (pre-Compact), and those arriving in 1987 through April 1, 1990 (post-Compact). About 7,600 persons arrived in these areas from the Freely Associated States; about 3,200 arrived before Compact implementation, and about 4,400 arrived afterward. These data include people born in Palau; since Palau’s Compact was not implemented until 1994, the 1,000 persons arriving between 1987 and 1990 were considered.

Table 15.1. Year of entry by Freely Associated States: 1990

Year of Entry	Total	Federated States of Micronesia	Republic of Marshall Islands	Republic of Palau
Total	7,612	4,781	191	2,640
Before 1987	3,210	1,493	92	1,625
Percent	42.2	31.2	48.2	61.6
1987 to 1990	4,402	3,288	99	1,015
Guam	4,285	2,964	88	1,233
Before 1987	1,550	679	25	846
Percent	36.2	22.9	28.4	68.6
1987 to 1990	2,735	2,285	63	387
CNMI	3,327	1,817	103	1,407
Before 1987	1,660	814	67	779
Percent	49.9	44.8	65.0	55.4
1987 to 1990	1,667	1,003	36	628

Source: Unpublished 1990 Census data

Table 15.1 also shows that for the FSM and RMI, about 1,600 persons reported arriving before Compact implementation and continuing residence until the 1990 Census, about 1/3rd of the FSM born and about half of the RMI born. The two countries showed markedly different migration patterns: only 23 percent of the FSM born and 28 percent of the RMI born on Guam arrived before the Compact implementation compared to 45 percent of the FSM born in the CNMI and fully 65 percent of the Marshalls born. Hence, the Marshall Islands, which experienced little net migration to these Areas in any case, experienced about the same amount of migration pre- and post-Compact.

Clearly, this was not the case for the FSM. About 3,300 FSM born persons migrated to Guam and the CNMI between 1987 and 1990, about 1,000 per year. About 2/3rds of the migration was to Guam, and the rest to the CNMI. Because of the strong flow, it is likely that Compact implementation was the impetus to the migration.

However, the data for Palau seem to obscure the issue. Even without the Compact, Palauans continued to migrate to Guam and the CNMI, although the percentages were lower (although a larger proportion of Palauans moved to the CNMI “Post-Compact” than did Marshallese). As noted, about 1,000 Palauans moved to Guam and the CNMI between 1987 and 1990, about 1/3rd to Guam and about 2/3rd to CNMI – the CNMI apparently accepted Palau born as “U.S.” after the Covenant was implemented.

Table 15.2 shows similar data from the 1997/8 Censuses of Micronesian Migrants to Hawaii, Guam, and the CNMI. About 10 percent of the migrants (excluding persons born in Hawaii, Guam or the CNMI, respectively), reported coming to the respective Areas before Compact Implementation (that is, Implementation for FSM and the Marshall Islands in late 1986.)

Table 15.2. Pre- and Post-Compact Migration, Hawaii, Guam and CNMI: 1997 and 1998

Place and Period	Total	FSM	RMI	Palau
Total	13,977	9,893	2,192	1,892
Pre-Compact	2,532	791	205	1,536
Percent	18.1	8.0	9.4	81.2
Post-Compact	11,445	9,102	1,987	356
Hawaii 1997	5,425	3,085	2,024	316
Pre-Compact	610	232	185	193
Percent	11.2	7.5	9.1	61.1
Post-Compact	4,815	2,853	1,839	123
Guam 1997	6,176	5,524	107	545
Pre-Compact	730	270	2	458
Percent	11.8	4.9	1.9	84.0
Post-Compact	5,446	5,254	105	87
CNMI 1998	2,376	1,284	61	1,031
Pre-Compact	1,192	289	18	885
Percent	50.2	22.5	29.5	85.8
Post-Compact	1,184	995	43	146

Sources: Censuses of Micronesian Migrants to Hawaii, Guam, and :

The percentages for Hawaii, Guam, and the CNMI for the 3 Micronesian countries combined were remarkably similar. For the individual countries, however, we see some differences: more than half of the Palauan migrants arrived in Guam before Compact Implementation for FSM and the Marshalls compared to about 2 in 5 for Hawaii. Only 3 percent of the Marshallese to Guam were pre-Compact compared to 9 percent for Hawaii.

Table 15.3 shows projected levels of migrants if the number of migrants at the time of Compact implementation is used as a base, and the number arriving in the 4 years following the implementation is used for subsequent 4 year intervals. This progression is a *very crude* linear extrapolation and should not be used in isolation by planners and policy makers. Nonetheless, the numbers are revealing because, if late-1980s trends did continue, more than 20,000 Freely Associated States persons would be living in Guam and the CNMI in the early 21st century.

Table 15.3. Estimates/Projections for FAS populations: 1987 to 2002

Year of Entry	Federated States of			Palau
	Total	Micronesia	Marshall Islands	
Total				
Before 1987	3,210	1,493	92	1,625
1990	7,612	4,781	191	2,640
1994	12,014	8,069	290	3,655
1998	16,416	11,357	389	4,670
2002	20,818	14,645	488	5,685
Guam				
Before 1987	1,550	679	25	846
1990	4,285	2,964	88	1,233
1994	7,020	5,249	151	1,620
1998	9,755	7,534	214	2,007
2002	12,490	9,819	277	2,394
CNMI				
Before 1987	1,660	814	67	779
1990	3,327	1,817	103	1,407
1994	4,994	2,820	139	2,035
1998	6,661	3,823	175	2,663
2002	8,328	4,826	211	3,291

Source: Unpublished 1990 Census data

Note: Estimates based on pre- and post-Compact 1990 populations.

In looking at these numbers, it is important to remember that the pool of migrants is not infinite. Therefore, while it looks like the number of Micronesian migrants could increase indefinitely, only some Micronesians could afford to make the move – financially, socially, and/or culturally. The data do not reflect return migration for those who went to Guam or the CNMI but returned to Micronesia before the 1990 Census and would not return to Guam or the CNMI. Nor do the data account for possible economic development within the Micronesian areas which might encourage increased return migration and decreased out migration.

CNMI based on the 1995 Census. Similar linear projections were made for the 1995 Census of the CNMI, for the CNMI only. As Table 15.4 shows, the flow of Micronesian born would be greater under both assumptions – the current migration rate in the right hand columns (based on the average of the three years preceding the 1995 Census) or a reduced migration rate in the left hand columns. In both cases, the migration at the time of the 1995 Census was probably unusual for the long term since CNMI is in the middle of a migration boom. This boom started in the late 1980s and continued into the 1990s, which encouraged many skilled and unskilled workers to come to the CNMI to work in the garment factories, in construction, and in other industries.

Table 15.4. Estimates of FAS born in CNMI, based on 1995 Census: 1986 to 2001

Year	Estimates Using 8 Percent Annual Immigration				Estimates Using 16 Percent Annual Immigration			
	Total	FSM	RMI	Palau	Total	FSM	RMI	Palau
1986	1,039	534	37	468	1,039	534	37	468
1987	1,194	622	44	528	1,194	622	44	528
1988	1,563	723	45	595	1,363	723	45	595
1989	1,643	878	49	716	1,643	878	49	716
1990	1,940	1,048	64	828	1,940	1,048	64	828
1991	2,165	1,188	64	913	2,165	1,188	64	913
1992	2,456	1,366	68	1,022	2,456	1,366	68	1,022
1993	2,774	1,545	77	1,152	2,774	1,545	77	1,152
1994	3,210	1,811	105	1,294	3,210	1,811	105	1,294
1995	3,865	2,141	130	1,594	3,865	2,144	130	1,594
1996	4,178	2,314	141	1,723	4,491	2,488	151	1,852
1997	4,516	2,502	152	1,063	5,219	2,891	176	2,152
1998	4,882	2,705	164	2,014	6,064	3,359	204	2,501
1999	5,278	2,924	178	2,177	7,047	3,903	237	2,906
2000	5,705	3,160	192	2,353	8,188	4,536	275	3,377
2001	6,167	3,416	207	2,544	9,515	5,271	320	3,924

Source: Unpublished 1995 Census data

Hawaii. Table 15.5 shows estimated and projected Micronesian migrants in Hawaii, based on 1990 census data. To make these estimates, we divided data on year of entry to the United States into two groups:

1. Persons recording they arrived before 1987 (before the implementation of the Compacts in the FSM and the Marshall Islands), and
2. Persons arriving between 1987 and April, 1990, when the decennial census took place.

These data provide two “points” which were the basis of the extrapolation for 1994, 1998, and 2002. The data, of course, show an increase for all three country’s migrants.

Table 15.5. Estimates of Micronesians in Hawaii: 1987 to 2002

Freely Associated State	Before					
	1987	1990	1994	1997	1998	2002
Total	773	1,615	4,181	6,744	9,310	11,873
Palau	177	319	403	486	570	653
Marshall Islands	191	345	1,409	2,472	3,536	4,599
FSM	405	951	2,369	3,786	5,204	6,621

Source: Unpublished 1990 Census and 1997 Survey data

Notes: 1987 and 1990 data from 1990 Census, other data interpolated/extrapolated

Since the FSM resident population is largest, it also produces the largest numbers of migrants (increasing to about 2,600 in 2002 by these crude projections). Palau’s migrant population in Hawaii is predicted to be about 750, and the Marshalls should have about 800. As noted above, almost no Marshallese migrate to Guam or CNMI, and we have not been able to measure migration to California and the rest of the mainland yet, but the potential migration to Hawaii is large relative to the sending population of about 60,000 for that time period.

CHAPTER 16

CONCLUSIONS

The migration rates from the Micronesian countries vary depending on the islands' economies and their relative closeness to Guam, the CNMI, and Hawaii. The migration rate to Guam and the CNMI may be diminishing, partially taken up by increased migration to Hawaii, particularly from the FSM and the Marshall Islands. During the first years of the Compact period, the average annual migrant outflow was about 1,000 persons per year, or 1 percent of the FSM resident population per year. This flow to Guam, at least, seems to have diminished considerably in recent years.

Census items show that the traffic to Guam and the CNMI is not one-way; with considerable back migration occurring, that is, return of emigrants to their original home. Indeed, much of the appeal of Guam and the CNMI for many FSM migrants, in contrast to Hawaii (except for Kosraeans, and now Pohnpeian) or the mainland United States, is the ease and little expense of a return trip to the home island. The extent of back migration has yet to be adequately measured, however.

The data from the 1992 and 1993 surveys, the 1995 CNMI Census, and the 1997/8 Censuses of Micronesian Migrants reveal some pronounced differences among the Micronesian migrant communities in Guam, CNMI, and Hawaii. In the early years of the migration, single individuals migrated. In recent years, the households were filling out with dependents – women, children, and the elderly – and were evidently well on their way to full reconstitution as normal Micronesian households. Although the relative economies of the sending and receiving areas play a big role in the migration -- drops in employment rates among migrants and the possible increase in the number of those who do not speak English suggest that more migrants could choose not to enter the labor force. We can expect that in future years the size and pattern of the migrant households will likely look – statistically, at least – much more like other households in Guam, the CNMI, and Hawaii.

A comparison of the educational achievement of migrants with the resident FSM population, as an example, explodes the myth of a "brain drain" from the FSM since the implementation of the Compact. Contrary to what we read in the academic and popular press, the FSM is not being deprived of its most valuable human resources through migration. The best educated of FSM born, those with college degrees, generally stayed home to take their pick of the jobs on their own islands. Meanwhile, the unemployed high school graduates without the skills or educational attainment to compete for jobs at home left to take advantage of the job markets in Guam, the CNMI, and Hawaii. By and large, they took jobs having little appeal for local people and lack the background to advance beyond these entry-level occupations. Far from being a "brain drain", emigration is an escape valve for excess bodies in the labor pool -- that is, those who would be unemployable at home.

The total income earned by migrants in Guam, the CNMI, and Hawaii is increasing rapidly. These incomes represent substantial sums of money, especially given the present feeble condition of the sending countries' economies. The remittances that were recorded in 1994 for the Federated States of Micronesia signaled for the first time a change in direction of the dollar tide, and the 1997/8 confirm the findings -- money has at last begun to flow inward rather than outward and the remittances of \$1.26 million in 1993 have increased since.

The data on the short period between the 1990 census and the censuses in Guam, the CNMI, and Hawaii are less significant for the numbers they record than for the trends they reveal. Not only are the extent and rate of the migrant outflow more precisely defined, but the changing patterns of household composition and other features of life in the migrants' destinations are taking clearer shape. The census data offer us a surer base from which to project migration and its attendant consequences on the sending countries and the emigrant destinations.

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