

# **Current CNMI Labor Force Participation and Unemployment**

Based on the 2016 CNMI Health Survey



## **Central Statistics Division Department of Commerce**

Report written in collaborative efforts between the Central Statistics Division

and Dr. Michael J. Levin

June 3, 2016

## ACKNOWLEDGEMENTS

This was the first survey of its kind which collects information on both Behavioral Risks and Non-Communicable Diseases conducted in the region therefore; the lessons learned from this Health Survey will serve as a model for the rest of our partners and colleagues in the Pacific Region.

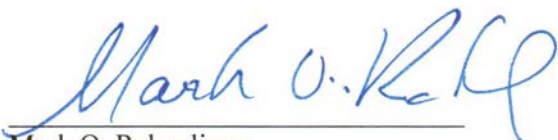
The Department of Commerce would like to thank the following offices and individuals that were instrumental in making this important report possible through partnership and collaborations. The Commonwealth Healthcare Corporations (CHCC) CEO Mrs. Esther Muna, Mr. Glenn Manglona of the Community Guidance Center (CGC) and the wonderful team from the Bureau of Non-Communicable Disease (NCD) led by Mrs. Becky Robles for funding and collaborations, Ms. Patricia Coleman of the Northern Marianas College CREES Program. Their diligence, hard work and willingness to compromise on many of the hard issues confronted by the Health Survey team made all the difference and proved that teamwork and collaborations are some of the key components to a successful project like this.

Many thanks to Dr. Michael J. Levin for his expertise and assistance in every phase of the survey and for making this report possible. My office is confident and satisfied with the help and assistance of Dr. Michael J. Levin who was contracted by CHCC to work alongside Commerce-Central Statistics Division (CSD) team on all phases of the survey, including training, data editing and tabulations and report write up. With over 30 years of work in survey and census processing and countless other demographic reports he has written, my office is very confident in publishing this short Demographic report.

A special mention also goes to Rota and Tinian Resident Directors for the Commerce Offices and all our survey field staff on Saipan, Rota and Tinian for their hard work and diligence in the field getting us the data, and to our great team of office workers who worked hard and diligently to make sure the data from the field is clean, coded and entered.

I also want to acknowledge the hard work put forth by the Central Statistics Division (CSD) from the planning stages to the completion of this project and of course this project would not have been possible without the collaborations and cooperation between the many government agencies and offices who took part in processing of survey staff hiring on all 3 islands.

And last but not the least, a huge thank you to all survey respondents on Saipan, Rota and Tinian who took time out of their busy schedules to participate and provide the needed data for this important project.



Mark O. Rabauliman  
Department of Commerce, Secretary

## INTRODUCTION

In early 2016, the Central Statistics Division, CNMI Department of Commerce, with the Commonwealth Healthcare Corporation (CHCC), carried out the 2016 CNMI Health Survey. The focus was on Behavioral Risks and Non-Communicable Diseases. But, because the CNMI is not included in any of the Federally mandated Stateside surveys (Current Population Survey, Survey of Income and Program Participation, American Community Survey, it is not able to collect continuing labor force employment and unemployment on a sample basis. Hence, when surveys are collected for other reasons, items on educational attainment and economic activities are usually collected. The items on the questionnaires come close to the U.S. Census Bureau and Department of Labor recommendations, but, because of limitations of time and space, cannot follow all of them.

As part of the 2016 survey, a roster of household members was collected. The data included relationship to the householder, sex, age, ethnicity, citizenship, education, and economic activity. The item on economic activity requested whether the adult was working for pay, self-employed, not working but looking for work, and “not economically active” categories. The labor force participation rate then was the percentage of all adults who were either working for pay or self-employed or not working but looking for work. Persons doing only subsistence activities were not included. The unemployment rate was obtained by dividing those not working but looking for work by those in the labor force. While this procedure does not duplicate what is usually done in the United States, it provides a close approximation of the actual situation in the CNMI.

## RESULTS

Table 1 shows economic activity of persons 16 years and over in the sample selected for the 2016 CNMI Health Survey. The sample was obtained through random selections separately for Saipan, Rota, and Tinian. About 900 households were selected on Saipan, and more than 100 each for Tinian and Rota. The results were then inflated using weights derived on the basis of the 2010 Census data. While the 2010 Census showed about 53,000 in the CNMI, evidence shows that the population has decreased since that time. Since the Census Bureau does not collect any surveys in the CNMI, and provides data collection activities only once every 10 years, the Central Statistics Division can only estimate the current population size. The current estimate is about 50,000.

About 35,000 people in the CNMI were 16 years and older in early 2016. Of those, about 24,000 or about 69 percent, were in the labor force – that is, about 20,000 were working for pay, about 700 were self-employed, and about 3,300 were unemployed. The unemployment rate was 13.8 percent by these measures. As Table 1 and Figure 1 show, the percentage in the labor force increased from the new workers to the 30 to 44 year old group, and then decreased slightly in the next group, to decreasing rapidly for the older population. The unemployment was almost 1 in every 4 people 16 to 29 years old in 2016, but decreased for the older potential workers (Figure 2).

As would be expected, males had higher participation rates, and lower unemployment rates than the females. About 2 in 10 of the males 16 to 29 were unemployed compared to about 3 in 10 of the females.

Current CNMI Labor Force Participation and Unemployment

Table 1. Employment Status by Age and Sex, CNMI: 2016

[Population aged 16 years and over]

Island Ethnicity	Total	In the Labor Force						Not in labor force
		Total	Percent	Employed		Unemployed		
				For Pay	Self-employ	Number	Percent	
Total	34,831	24,109	69.2	20,076	716	3,317	13.8	10,700
16 - 29 years	8,365	4,970	59.4	3,787	51	1,132	22.8	3,378
30 - 44 years	9,130	7,232	79.2	6,180	101	951	13.1	1,897
45 - 59 years	12,483	9,644	77.3	8,350	277	1,017	10.5	2,834
60 - 74 years	4,249	2,189	51.5	1,720	254	215	9.8	2,060
75 years or more	605	74	12.2	40	34	0	0.0	531
Male								
Total	17,916	13,631	76.1	11,647	429	1,555	11.4	4,280
16 - 29 years	4,593	2,885	62.8	2,314	17	554	19.2	1,709
30 - 44 years	4,077	3,653	89.6	3,189	79	385	10.5	425
45 - 59 years	6,690	5,623	84.1	4,944	164	515	9.2	1,061
60 - 74 years	2,211	1,413	63.9	1,159	152	102	7.2	798
75 years or more	345	57	16.5	40	17	0	0.0	288
Female								
Total	16,915	10,479	62.0	8,430	288	1,761	16.8	6,419
16 - 29 years	3,771	2,086	55.3	1,473	34	579	27.8	1,669
30 - 44 years	5,053	3,580	70.8	2,991	22	567	15.8	1,472
45 - 59 years	5,793	4,020	69.4	3,405	113	502	12.5	1,773
60 - 74 years	2,038	777	38.1	561	102	114	14.7	1,262
75 years or more	260	17	6.5	0	17	0	0.0	243

Source: 2016 CNMI Health Survey

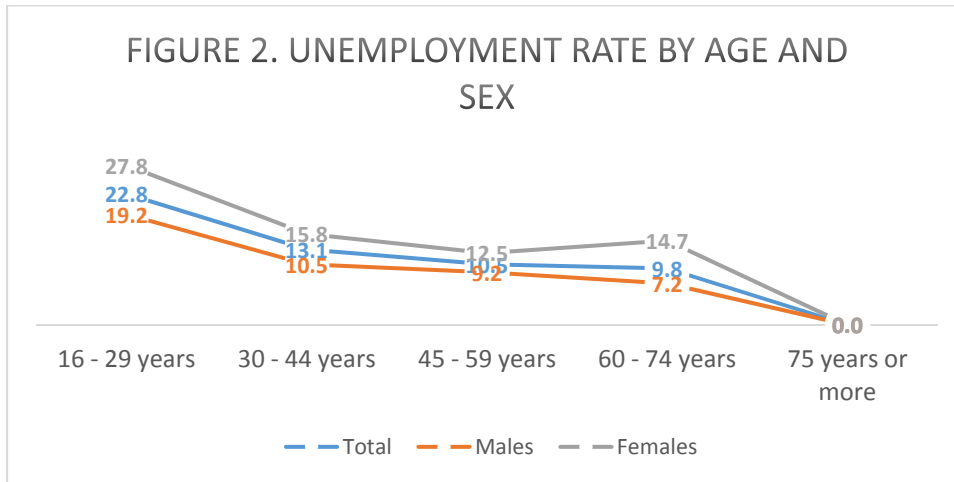
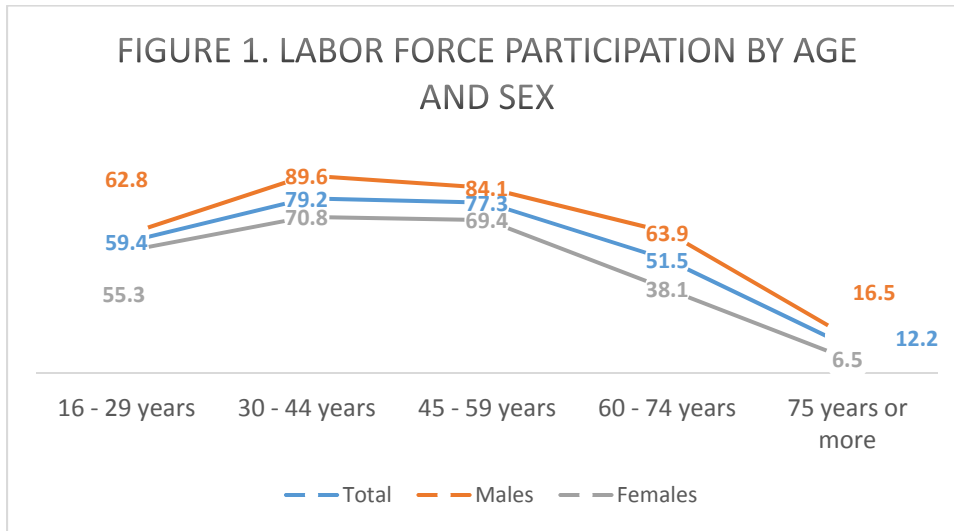


Table 2 and Figures 3 and 4 show the distribution of economic activities by island and sex. The numbers vary slightly from table to table because of the sampling weights. While about 69 percent of the adults on Saipan were in the labor force compared to 69 percent on Tinian, but 77 percent on Rota. About 76 percent of the males and 61 percent of the female adults on Saipan were in the labor force compared to 73 and 66 percent, respectively, on Tinian, and 83 and 71 percent on Rota.

While about 14 percent of the adult on Saipan were unemployed by the definition of the survey, this compared to about 16 percent on Tinian and 12 percent on Rota. All of these are relatively high figures, showing the continuing struggle in CNMI's economy. About 12 percent of the males on Saipan and 17 percent of the females were unemployed, compared to 9 percent of the males on both Tinian and Rota, but 22 percent of the females on Tinian and 15 percent of the females on Rota.

Current CNMI Labor Force Participation and Unemployment

Table 2. Employment Status by Sex and Island, CNMI: 2016

[Population aged 16 years and over]

Employment Status	Total				Male				Female			
	Total	Saipan	Tinian	Rota	Total	Saipan	Tinian	Rota	Total	Saipan	Tinian	Rota
Total	34,831	31,932	1,682	1,218	17,916	16,543	753	620	16,915	15,388	928	598
Percent in Labor Force	69.2	68.9	69.1	76.8	76.1	76	72.9	82.7	62	61.4	66.1	70.6
Employed for wages	20,076	18,327	975	775	11,647	10,718	496	433	8,430	7,609	479	342
Self-employed	716	662	6	48	429	391	6	32	288	272	0	16
Out of work looking	3,317	3,023	181	112	1,555	1,461	47	48	1,761	1,563	134	64
Percent unemployed	13.8	13.7	15.6	12	11.4	11.6	8.6	9.4	16.8	16.6	21.9	15.2
Out of work not looking	4,187	3,941	199	48	1,700	1,631	58	11	2,487	2,310	140	37
Homemaker	1,900	1,851	6	43	51	51	0	0	1,849	1,800	6	43
Retired	1,647	1,410	146	91	1,076	934	99	43	570	476	47	48
Unable to work	2,937	2,684	152	101	1,430	1,342	35	53	1,507	1,342	117	48
NA	23	17	6	0	6	0	6	0	17	17	0	0

Source: 2016 CNMI Health Survey

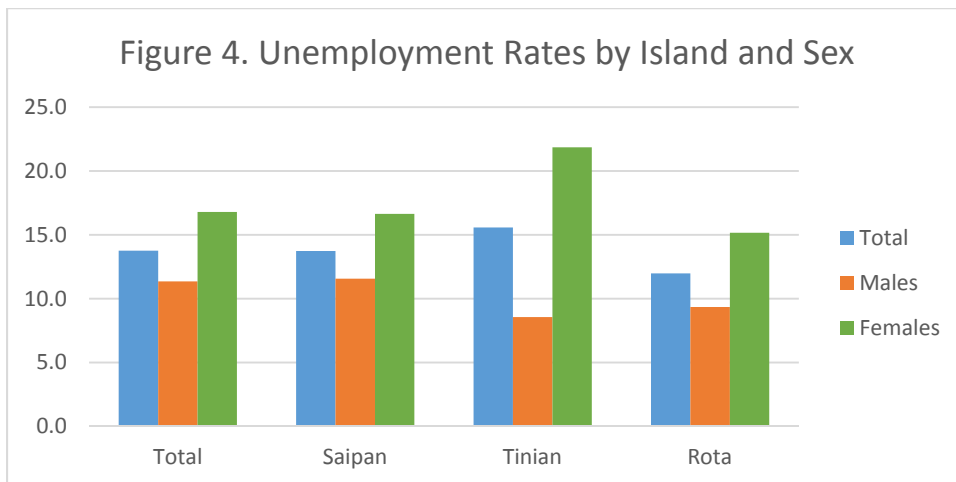
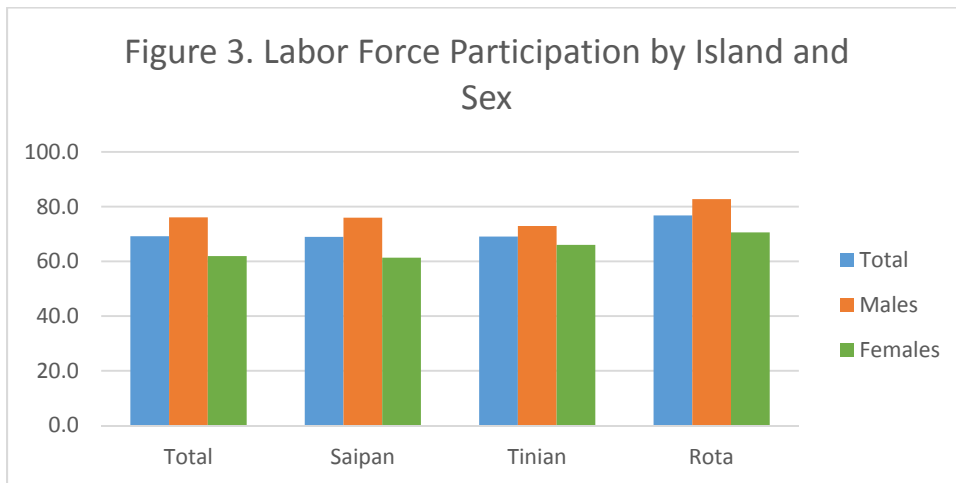


Table 3 and Figure 5 shows labor force participation by 5 year age group. These figures fluctuate. The youngest potential workers are only getting into the market place, and so have low labor force participation. The rates of labor force participation were general high until about age 55, and then dropped off.

Similarly, the youngest age group had the highest unemployment rate – about 1 in 3 were unemployed. The rate for those 20 to 24 was also high, and then it decreased somewhat. But only age 40 were they 13 percent or less, so rates were generally high.

Table 3. Employment Status by Island and Age, CNMI: 2016  
[Population aged 16 years and over]

Island Age	Total	In the Labor Force						Not in Labor Force
		Total	Percent	Employed		Unemployed		
				For Pay	Self-employ	Number	Percent	
Total	34,831	24,109	72.8	20,076	716	3,317	13.8	10,723
16 - 19 years	3,356	753	42.1	498	17	238	31.6	2,602
20 - 24 years	2,802	2,344	83.7	1,671	17	656	28	458
25 - 29 years	2,207	1,873	84.9	1,618	17	238	12.7	333
30 - 34 years	2,309	1,800	78	1,471	34	295	16.4	509
35 - 39 years	3,065	2,441	79.6	1,984	22	435	17.8	624
40 - 44 years	3,755	2,992	79.7	2,726	45	221	7.4	764
45 - 49 years	4,930	4,127	83.7	3,606	91	430	10.4	804
50 - 54 years	4,339	3,488	80.4	3,070	96	322	9.2	852
55 - 59 years	3,213	2,029	63.1	1,674	90	265	13.1	1,184
60 - 64 years	2,201	1,318	59.9	1,069	135	114	8.6	884
65 years and over	2,523	923	49.4	685	136	102	11.1	1,600
Saipan total	31,932	22,012	72.3	18,327	662	3,023	13.7	9,920
16 - 19 years	3,074	714	41.5	476	17	221	31	2,361
20 - 24 years	2,667	2,225	83.4	1,580	17	628	28.2	442
25 - 29 years	1,987	1,682	84.7	1,444	17	221	13.1	306
30 - 34 years	2,055	1,580	76.9	1,291	34	255	16.1	476
35 - 39 years	2,803	2,208	78.8	1,800	17	391	17.7	595
40 - 44 years	3,414	2,701	79.1	2,480	34	187	6.9	714
45 - 49 years	4,501	3,788	84.2	3,312	85	391	10.3	714
50 - 54 years	3,941	3,194	81	2,820	85	289	9	748
55 - 59 years	2,972	1,852	62.3	1,529	85	238	12.9	1,122
60 - 64 years	2,021	1,189	58.8	968	119	102	8.6	833
65 years and over	2,498	884	48.8	629	153	102	11.5	1,615
Tinian total	1,682	1,162	74.2	975	6	181	15.6	521
16 - 19 years	175	36	62.1	18	0	18	50	140
20 - 24 years	82	70	85.4	64	0	6	8.6	12
25 - 29 years	128	117	91.4	99	0	18	15.4	12
30 - 34 years	163	140	85.9	105	0	35	25	23
35 - 39 years	134	105	78.4	82	0	23	21.9	29
40 - 44 years	181	151	83.4	128	0	23	15.2	29
45 - 49 years	274	211	77	187	6	18	8.5	64
50 - 54 years	228	135	59.2	117	0	18	13.3	94
55 - 59 years	134	88	65.7	76	0	12	13.6	47
60 - 64 years	105	70	66.7	58	0	12	17.1	35
65 years and over	77	41	61.7	41	0	0	0	36
Rota total	1,218	935	83	775	48	112	12	283
16 - 19 years	107	5	31.3	5	0	0	0	101
20 - 24 years	53	48	90.6	27	0	21	43.8	5
25 - 29 years	91	75	82.4	75	0	0	0	16
30 - 34 years	91	80	87.9	75	0	5	6.3	10
35 - 39 years	128	127	99.2	101	5	21	16.5	0
40 - 44 years	160	140	87.5	118	11	11	7.9	21
45 - 49 years	155	128	82.6	107	0	21	16.4	26
50 - 54 years	171	161	94.2	134	11	16	9.9	10
55 - 59 years	107	90	84.1	69	5	16	17.8	16
60 - 64 years	75	59	78.7	43	16	0	0	16
65 years and over	79	21	79.7	21	0	0	0	58

Source: 2016 CNMI Health Survey

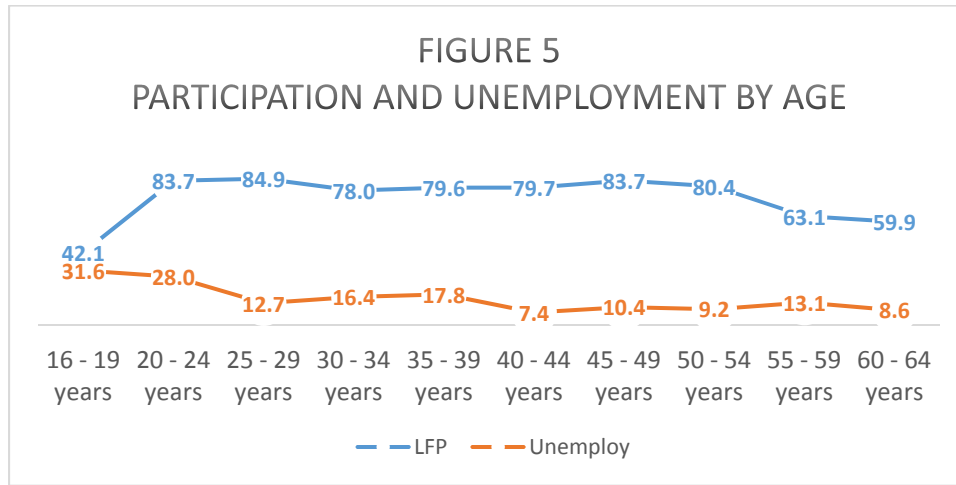


Table 4 and Figure 6 show labor force participation and unemployment by citizenship. About 57 percent of the adults born in the CNMI were in the labor force, compared to 69 percent for the whole adult population. Those born in other U.S. areas were about 71 percent, compared to 64 percent for the naturalized citizens. But while 69 percent of the non-citizen permanent residents were in the labor force, fully 88 percent... about 7 in every 8 of the temporary residents were.

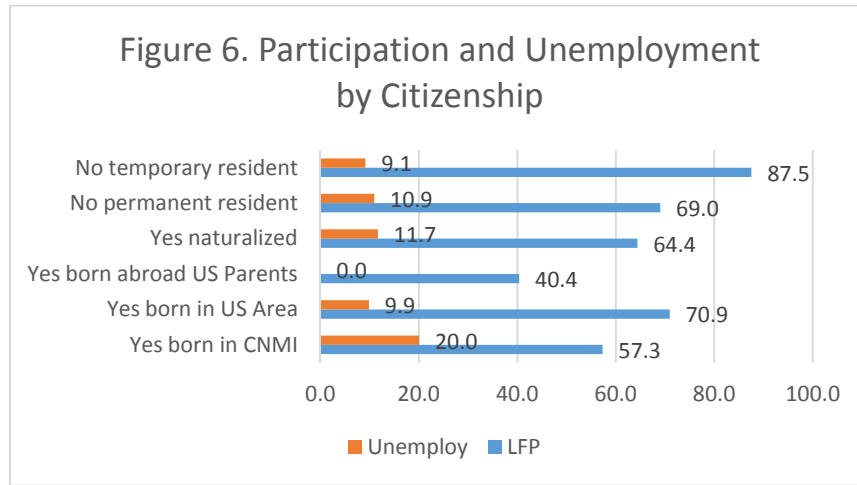
About 1 in every 5 of the CNMI born were unemployed, compared to about 1 in 10 of other U.S. citizens. Also about 1 in 10 of the non-citizens were unemployed.

Table 4. Employment Status by Citizenship, CNMI: 2016  
[Population aged 16 years and over]

Island Citizenship	Total	In the Labor Force						Not in the Labor Force
		Total	Percent	Employed		Unemployed		
				For Pay	Self-employ	Number	Percent	
Total	34,831	24,109	69.2	20,076	716	3,317	13.8	10,723
Yes born in CNMI	16,692	9,564	57.3	7,388	260	1,916	20	7,129
Yes born in US Area	1,043	740	70.9	633	34	73	9.9	303
Yes born abroad US Parents	208	84	40.4	84	0	0	0	124
Yes naturalized	1,809	1,165	64.4	1,001	28	136	11.7	644
No permanent resident	3,459	2,388	69	1,991	136	261	10.9	1,072
No temporary resident	11,619	10,168	87.5	8,979	259	930	9.1	1,451

Source: 2016 CNMI Health Survey





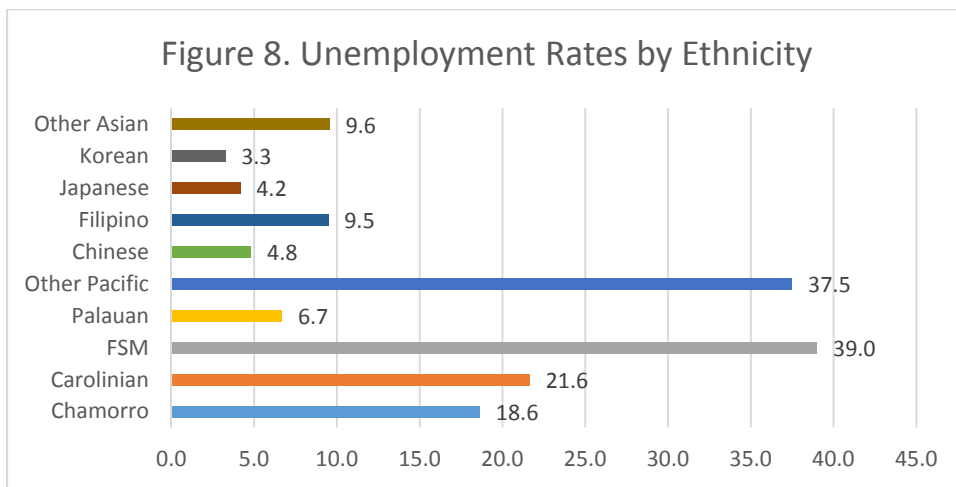
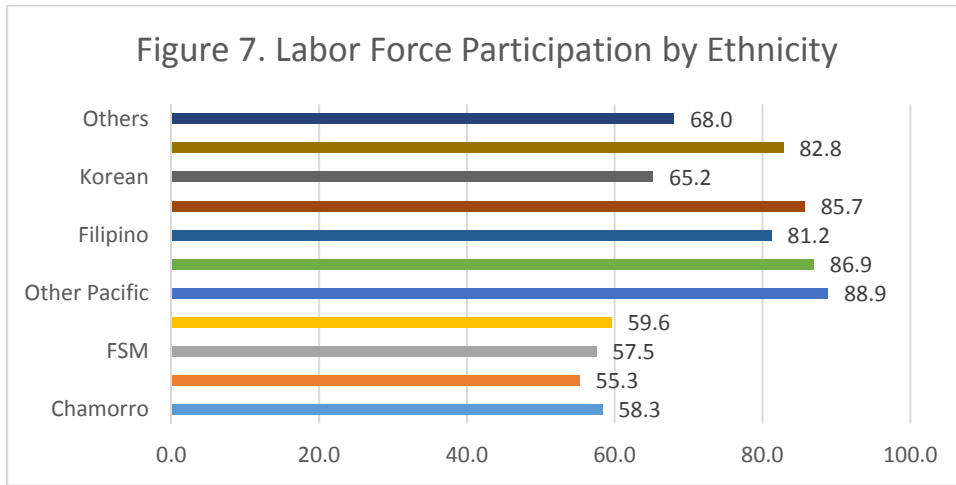
About 3 out of every 5 Chamorro adults were in the labor force (Table 5 and Figures 7 and 8). However, about 4 in every 5 of the Filipinos were in the labor force compared to more than 80 percent of other Asian groups (except Koreans). Pacific Islanders, particularly Carolinians and those from the Freely Associated States, were less likely to be in the labor force.

While about 19 percent of the Chamorro adults were unemployed compared to 22 percent of the Carolinians and 39 percent of those from the Federated States of Micronesia, about 38 percent of the “Other Pacific Islanders” were unemployed, but they were very few in number. While about 10 percent of the Filipinos and “Other Asians” were unemployed, the percentages for other groups were much lower.

Table 5. Employment Status by Ethnicity, CNMI: 2016  
[Population aged 16 years and over]

Island Ethnicity	Total	In the Labor Force						Not in labor force
		Total	Percent	Employed		Unemployed		
				For Pay	Self-employ	Number	Percent	
Total	34,831	24,109	69.2	20,076	716	3,317	13.8	10,723
Chamorro	11,424	6,664	58.3	5,213	209	1,242	18.6	4,760
Carolinian	3,125	1,728	55.3	1,337	17	374	21.6	1,398
FSM	1,970	1,133	57.5	674	17	442	39	838
Palauan	854	509	59.6	475	0	34	6.7	346
Other Pacific	153	136	88.9	85	0	51	37.5	17
Chinese	1,218	1,059	86.9	923	85	51	4.8	159
Filipino	13,186	10,711	81.2	9,498	197	1,016	9.5	2,476
Japanese	476	408	85.7	340	51	17	4.2	68
Korean	799	521	65.2	436	68	17	3.3	278
Other Asian	921	763	82.8	651	39	73	9.6	158
Others	707	481	68	447	34	0	0	226

Source: 2016 CNMI Health Survey



Finally, Table 6 shows employment status by Educational Attainment for the islands. Less than half of those with less than a high school diploma were in the labor force, and between 1/5<sup>th</sup> and 1/3<sup>rd</sup> of them were unemployed. About 3 in every 4 of those who were high school graduates were in the labor force, with about 15 percent unemployed. The values for “in the labor force” were higher for more educated residents, and unemployment rates were lower. No one with more than a Bachelor’s degree was unemployed at the time of the survey. Figures 9 and 10 show these graphically.

Figures 11 and 12 show the percent of high school and college graduates for the different employment statuses. While about 82 percent of adult population were high school graduates, this was true for almost 9 in 10 of those in the labor force. Even the unemployed were fairly well educated, with almost 4 in 5 being at least high school graduates. Only 65 percent of those not in the labor force were high school graduates, showing the value of at least high school education.

Figure 12 shows about 15 percent of the population were college graduates. About 18 percent of those in the labor force were in this category, with 19 percent of those working for pay, and 31 percent of the self-employed. Only 7 percent of the unemployed were college graduates, a somewhat smaller percentage than those not in the labor force.

Current CNMI Labor Force Participation and Unemployment

Table 6. Employment Status by Island and Education, CNMI: 2016  
 [Population aged 18 years and over]

Island Ethnicity	Total	In the Labor Force						Not in labor force
		Total	Percent	Employed		Unemployed		
				For Pay	Self-employ	Number	Percent	
Total	32,942	23,974	72.8	19,975	699	3,300	13.8	8,971
Less than 9th grade	2,139	978	45.7	769	0	209	21.4	1,161
Some high school	3,558	1,620	45.5	1,020	79	521	32.2	1,938
High school diploma or GED	14,927	11,429	76.6	9,476	232	1,721	15.1	3,500
Percent	82.4	88.9	...	90.7	88.8	77.9	...	65.1
Some college/AA degree	7,359	5,690	77.3	4,894	174	622	10.9	1,669
Bachelor's degree	4,154	3,656	88	3,265	164	227	6.2	498
Percent	14.7	17.5	...	18.8	30.8	6.9	...	7.4
Post graduate work	176	142	80.7	108	34	0	0	34
Post graduate degree	527	391	74.2	374	17	0	0	136
Saipan								
Education								
Total	30,250	21,876	72.3	18,225	645	3,006	13.7	8,373
Less than 9th grade	2,055	934	45.5	730	0	204	21.8	1,122
Some high school	3,295	1,495	45.4	951	68	476	31.8	1,800
High school diploma or GED	13,622	10,378	76.2	8,628	221	1,529	14.7	3,244
Percent	82	88.6	...	90.4	89.6	77.4	...	64.7
Some college/AA degree	6,607	5,061	76.6	4,331	153	577	11.4	1,546
Bachelor's degree	3,907	3,448	88.3	3,074	153	221	6.4	459
Percent	15.1	18	...	19.3	31.6	7.4	...	7.5
Post graduate work	153	119	77.8	85	34	0	0	34
Post graduate degree	510	374	73.3	357	17	0	0	136
Tinian								
Education								
Total	1,565	1,162	74.2	975	6	181	15.6	404
Less than 9th grade	41	18	43.9	18	0	0	0	24
Some high school	204	93	45.6	58	0	35	37.6	111
High school diploma or GED	841	672	79.9	543	6	123	18.3	170
Percent	84.3	90.5	...	92.2	100	81.2	...	66.6
Some college/AA degree	304	234	77	216	0	18	7.7	70
Bachelor's degree	140	111	79.3	105	0	6	5.4	29
Percent	11.2	12.6	...	14.4	0	3.3	...	7.2
Post graduate work	23	23	100	23	0	0	0	0
Post graduate degree	12	12	100	12	0	0	0	0
Rota								
Education								
Total	1,127	935	83	775	48	112	12	192
Less than 9th grade	43	26	60.5	21	0	5	19.2	15
Some high school	59	33	55.9	11	11	11	33.3	26
High school diploma or GED	465	378	81.3	304	5	69	18.3	85
Percent	91	93.5	...	95.6	77.1	85.7	...	77.6
Some college/AA degree	449	395	88	347	21	27	6.8	53
Bachelor's degree	107	96	89.7	85	11	0	0	11
Percent	9.9	10.8	...	11.6	22.9	0	...	5.7
Post graduate degree	5	5	100	5	0	0	0	0

Source: 2016 CNMI Health Survey

Figure 9. Labor Force Participation by Education

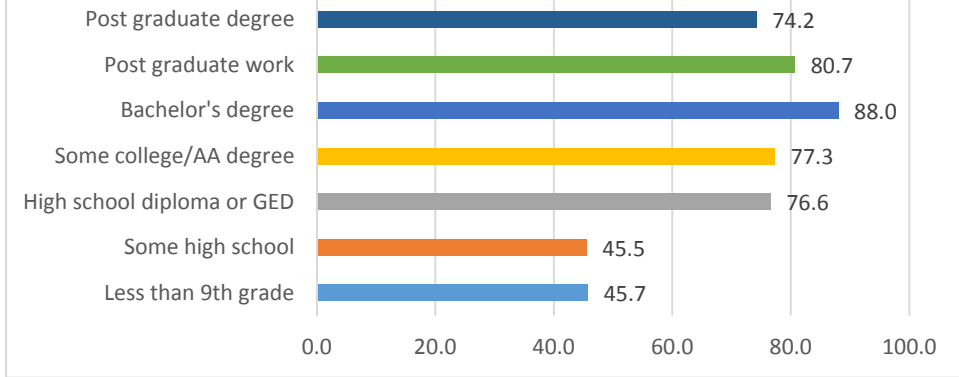


Figure 10. Unemployment Rates by Education

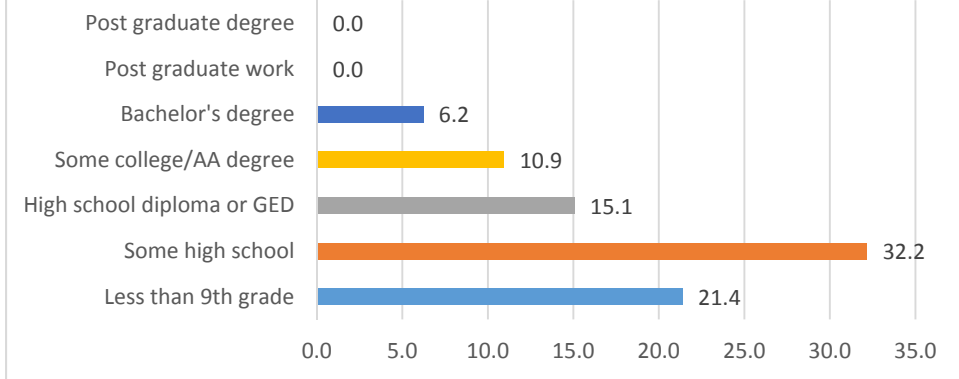
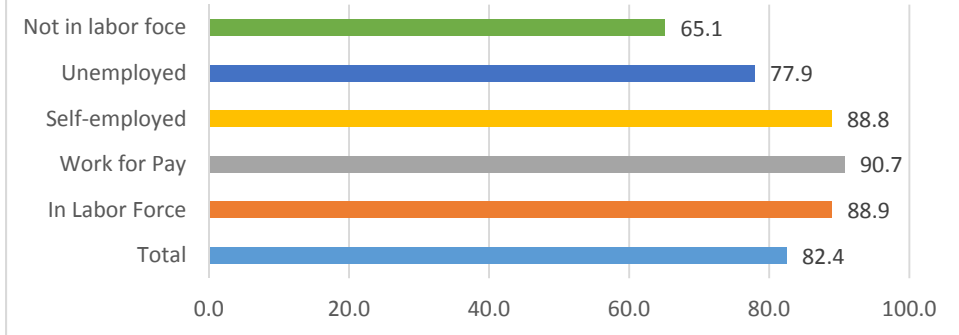
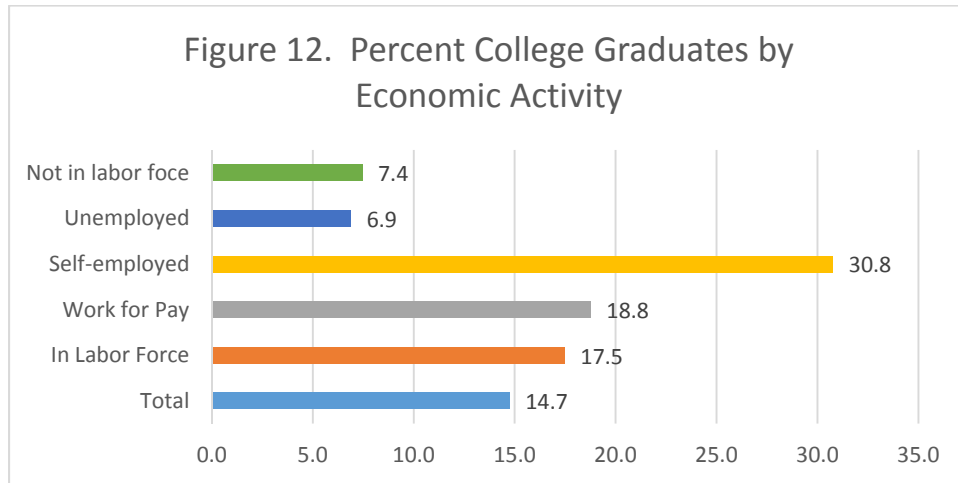


Figure 11. Percent High School Graduates by Economic Activity





## CONCLUSIONS

While the 2016 CNMI Health Survey was not set up to obtain labor force data, the sample was random and large enough on all the 3 islands to obtain consistent data, as shown here in the tables and figures. While the CNMI has reasonable labor force participation, its unemployment rates by sex, by age, by ethnicity, and by education remain higher than those found in the United States. As noted, the States have continuing labor force surveys to assist in economic planning; the Island Areas are not included in these surveys and so must find the funds and expertise to carry out the surveys and process the results. The next collection will be the 2016 CNMI Household Income and Expenditures Survey which will begin soon.