

MAPS AND GRAPHS – EXPLORING THE U.S. ISLAND TERRITORIES THROUGH CENSUS DATA TEACHER VERSION

Subject Level:

High School History

Grade Level:

9-10

Approx. Time Required:

45-60 minutes

Learning Objectives:

- Students will be able to analyze census data to identify the demographic characteristics of populations in different U.S. island territories.
- Students will be able to make inferences about how the census data could be used by local leaders.

Activity Description

Students will examine data from the 1990–2010 censuses — and U.S. Census Bureau projections for 2010–2020 — on population changes in the U.S. island territories to make observations about the populations’ demographics and to make inferences about the purpose of such data.

Suggested Grade Level:

9–10

Approximate Time Required:

45–60 minutes

Learning Objectives:

- Students will be able to analyze census data to identify the demographic characteristics of populations in different U.S. island territories.
 - Students will be able to make inferences about how the census data could be used by local leaders.
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Topics:

- Population change
- U.S. island territories

Skills Taught:

- Drawing conclusions
 - Examining data in graphs
 - Making inferences
 - Reading maps
-

Materials Required

- The student version of this activity, 9 pages; it contains images that should be printed in color.
- Colored pencils

Activity Items

The following items are part of this activity. Items, their sources, and any relevant instructions for viewing them online appear at the end of this teacher version.

- Item 1: Map of the Caribbean Area
- Item 2: Map of the Pacific Area
- Item 3: Change in Population for U.S. Island Areas: 1990–2020
- Item 4: Population by Race and Ethnic Origin by Island Area for Pacific Islands: 2010
- Item 5: Age and Sex Structure for U.S. Island Areas: 2000 and 2010

For more information to help you introduce your students to the Census Bureau, read "[*Census Bureau 101 for Students*](#)." This information sheet can be printed and passed out to your students as well.

Standards Addressed

See charts below. For more information, read

[*Overview of Education Standards and Guidelines Addressed in Statistics in Schools Activities*](#)."

Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects

Standard	Strand	Cluster
ELA-LITERACY.RH.9-10.7 Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text.	RH 9–10 - History/ Social Studies	Integration of Knowledge and Ideas

UCLA National Standards for History: U.S. History Content Standards

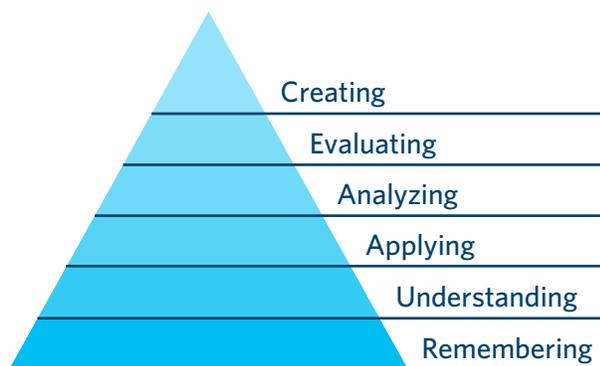
Era	Standard
10 - Contemporary United States (1968 to the Present)	Standard 2: Economic, social, and cultural developments in contemporary United States

UCLA National Standards for History: Historical Thinking Standards

Standard	Description
Standard 2: Historical Comprehension	Utilize visual and mathematical data . Students will examine graphs of census data to understand changes in the U.S. island territories’ populations over time and to make inferences about the data.

Bloom’s Taxonomy

Students will **analyze** census data on population change in U.S. island territories between 1990 and 2020 (projected).



Teacher Notes

Before the Activity

Students must understand the following key terms:

- **Apportionment** - a way to determine how many members each state gets in the U.S. House of Representatives, using the proportion of each state's population to the total U.S. population
- **Demographics** - information about human population characteristics (e.g., age, race, and sex)
- **Territory** - an area of land belonging to or controlled by a government
- **Protectorate** - a small country controlled and protected by a larger country

Teachers should ask students what other land areas, aside from the 50 states and the District of Columbia, are controlled by the United States. Teachers should then ask students if they have ever visited or lived in any of these land areas.

Teachers could enhance this activity by showing students detailed maps of the U.S. island territories.

During the Activity

Teachers will lead students through the activity as a part of a class discussion.

After the Activity

Teachers should continue the class discussion and assign an exit slip (on which students would write a response to a question teachers pose) to summarize what students learned. Teachers could ask:

- What did you observe in the data that confirmed what you already knew about the U.S. island territories?
- What did you observe in the data that surprised you?
- What questions do you still have about the data?

Extension Idea

- Teachers could have students read the source document for the graphs in this activity (www2.census.gov/geo/pdfs/reference/GARM/Ch7GARM.pdf) to learn more about the U.S. island territories and how their populations are measured by the Census Bureau.

Student Activity

Click [here](#) to download a printable version for students.

Activity Items

The following items are part of this activity and appear at the end of this student version.

- Item 1: Map of the Caribbean Area
- Item 2: Map of the Pacific Area
- Item 3: Change in Population for U.S. Island Areas: 1990–2020
- Item 4: Population by Race and Ethnic Origin by Island Area for Pacific Islands: 2010
- Item 5: Age and Sex Structure for U.S. Island Areas: 2000 and 2010

Student Learning Objectives

- I will be able to analyze census data to identify the demographic characteristics of populations in different U.S. island territories.
- I will be able to make inferences about how the census data could be used by local leaders.

1. Review **Item 1: Map of the Caribbean Area** and **Item 2: Map of the Pacific Area** then color the U.S. island territories with a red colored pencil.

Students should color all of the following areas:

Caribbean area map:

- **Puerto Rico**
- **U.S. Virgin Islands**

Pacific area map:

- **American Samoa**
- **Guam**
- **Northern Mariana Islands**

2. Looking at the two maps, what challenges do you think the United States faces in controlling its territories, which are referred to as protectorates?

Student answers will vary but could include the financial expense and difficulty associated with protecting and controlling areas that are far away.

3. What do you think the United States gains from having these areas as protectorates?

Student answers will vary but could include that the United States gains access to resources in those areas or that the island territories in the Pacific, specifically, have military value for the United States.

4. Use **Item 3: Change in Population for U.S. Island Areas: 1990-2020** to answer the following questions.

- a. Which island area saw the greatest change (including both increases and decreases) in its population from 1990 to 2000? What about from 2000 to 2010? Support your answer with specific data from the item.

The Commonwealth of the Northern Mariana Islands saw the greatest population change (a 60 percent increase) from 1990 to 2000. From 2000 to 2010, it also saw the greatest change (an over 20 percent decrease).

- b. What do you think could explain these population changes?

Student answers will vary depending on their level of knowledge about the area. Teachers could discuss with students that the Northern Mariana Islands saw a population increase between 1990 and 2000 because many people moved there from other countries to work in the garment industry. Although it was technically a U.S. territory during that time, U.S. immigration laws were neither applied nor followed on the islands. Once the United States began enforcing immigration laws on the Northern Mariana Islands, factories closed and people who had moved there illegally were forced out.

5. Imagine you were a local leader in the island area(s) you named in question 4 to answer the following questions and prompts.

a. How do you think these population changes would affect the economy?

Student answers will vary but could include a need for more schools and hospitals or for more investment in transportation to support a larger population, as well as an overabundance of resources when the population declined. Fluctuations in tax revenue caused by population changes may also have occurred.

b. What is the projected change in your population for 2010–2020? Explain how you could use this information to plan for the future. Support your answer with specific data from the item.

The population of the Northern Mariana Islands is expected to increase between 2010 and 2020. Student explanations will vary but could include beginning to adjust infrastructure in anticipation of this growth (e.g., by reallocating funds to spend on infrastructure or by increasing tax revenue).

6. Use **Item 4: Population by Race and Ethnic Origin by Island Area for Pacific Islands: 2010** to answer the following questions and prompts.

a. Record your observations and questions about the data, being sure to note details that surprise or intrigue you.

Student observations will vary but could include that “white” is not the majority ethnicity or race listed for any island territory or that some ethnic or racial groups include multiple nationalities (e.g., the nine nationalities composing “Native Hawaiian and Other Pacific Islander”). Student questions will vary but could include how the level of diversity on the islands differs from that of the mainland United States or if Guam is more heavily populated than American Samoa or the Northern Mariana Islands.

b. Which Pacific island territory appears to be the most racially diverse? Support your answer with specific data from the item.

In comparison with the other areas in the graph, Guam’s population includes the greatest number of different ethnic origins and races: six versus four in American Samoa and the Northern Mariana Islands.

7. Use **Item 5: Age and Sex Structure for U.S. Island Areas: 2000 and 2010** to answer the following questions and prompts.

a. Record your observations and questions about the data.

Student observations will vary but could include that the Northern Mariana Islands saw significant changes in both its male and female populations from 2000 to 2010 or that all four areas saw population increases among people 50 and older from 2000 to 2010. Student questions will vary but could include why the population in the Northern Mariana Islands decreased from 2000 to 2010, particularly among people 24–34.

- b. Of the four island area populations shown, which had the largest percentage of people 14 and younger?

American Samoa

- c. Which island area had the largest percentage of people older than 60? Why do you think this was the case?

U.S. Virgin Islands; student explanations will vary but could include that people from the United States moved there in retirement.

8. Explain how the socioeconomic needs of a country with a younger population are different from those of a country with an older population.

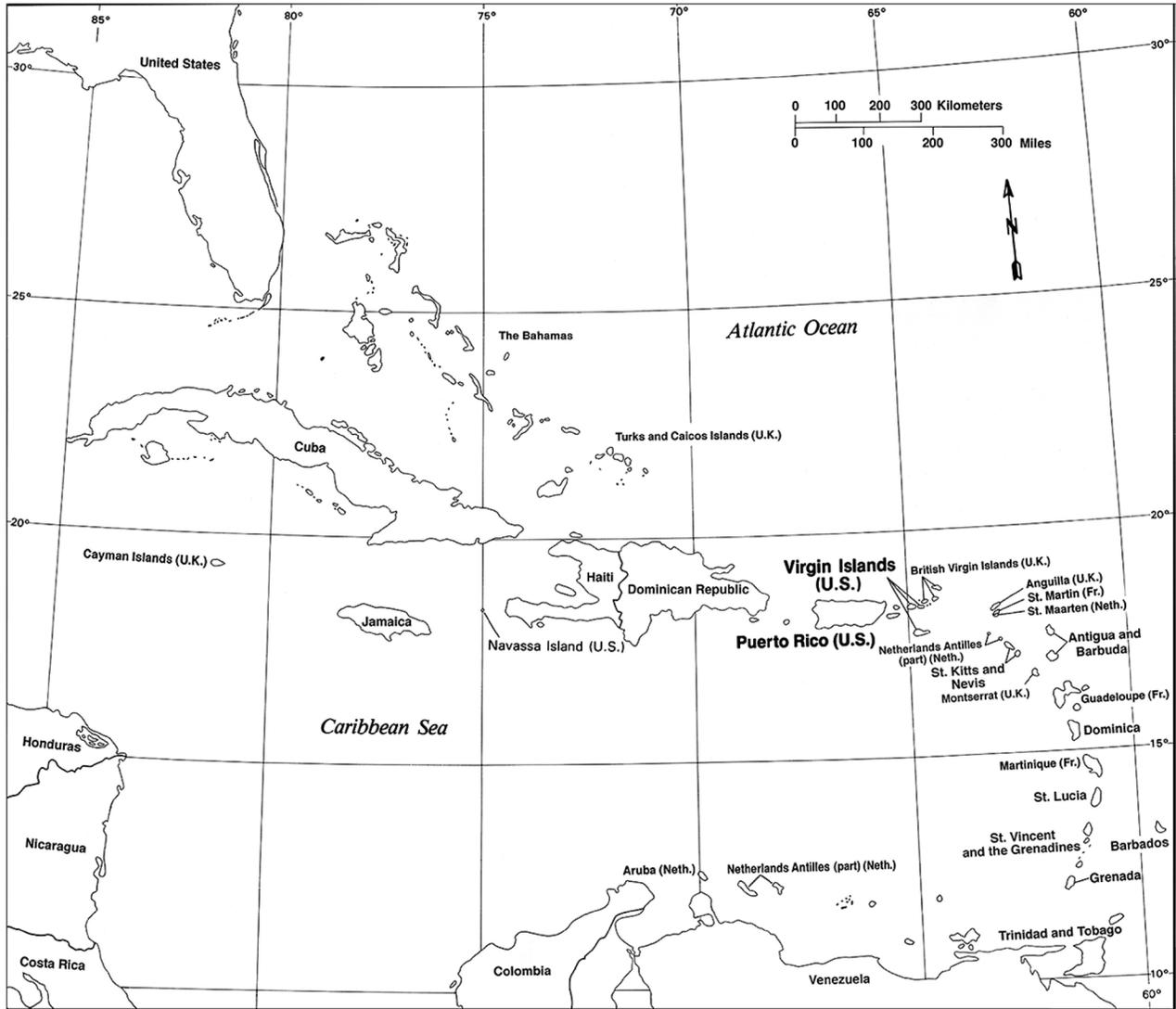
Student answers will vary, but could include that a country with younger residents usually invests more in schools and day care, whereas a country with older residents might more heavily consider health care and the medical infrastructure because of its aging population.

9. In 1790, the U.S. Congress authorized a decennial census (a once-a-decade count of the U.S. population) to determine the apportionment of seats in the U.S. House of Representatives. However, the U.S. island territories are not represented in Congress, even today. Using what you learned in this activity, the items, and your background knowledge, explain why — if not for congressional representation — the Census Bureau still counts the island areas' populations.

Student answers will vary but should include that the purpose of the census has evolved since 1790, even within the United States, and that our country can use the information to allocate necessary and appropriate resources. Students should use specific data from the items to support their reasoning.

Item 1: Map of the Caribbean Area

Figure 7-1. Caribbean Area

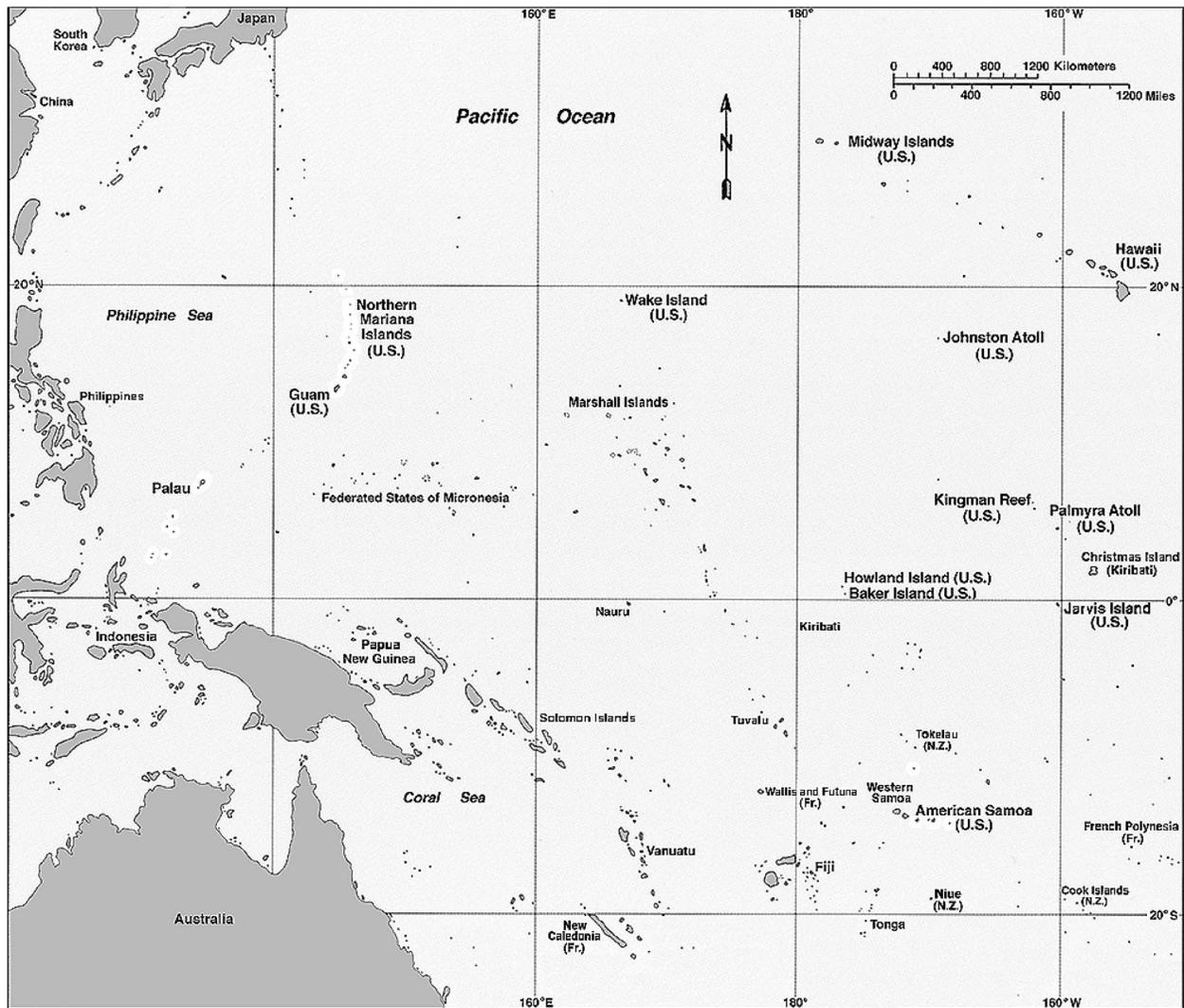


www2.census.gov/geo/pdfs/reference/GARM/Ch7GARM.pdf

To view the map online, click on the link above and go to Page 6.

Item 2: Map of the Pacific Area

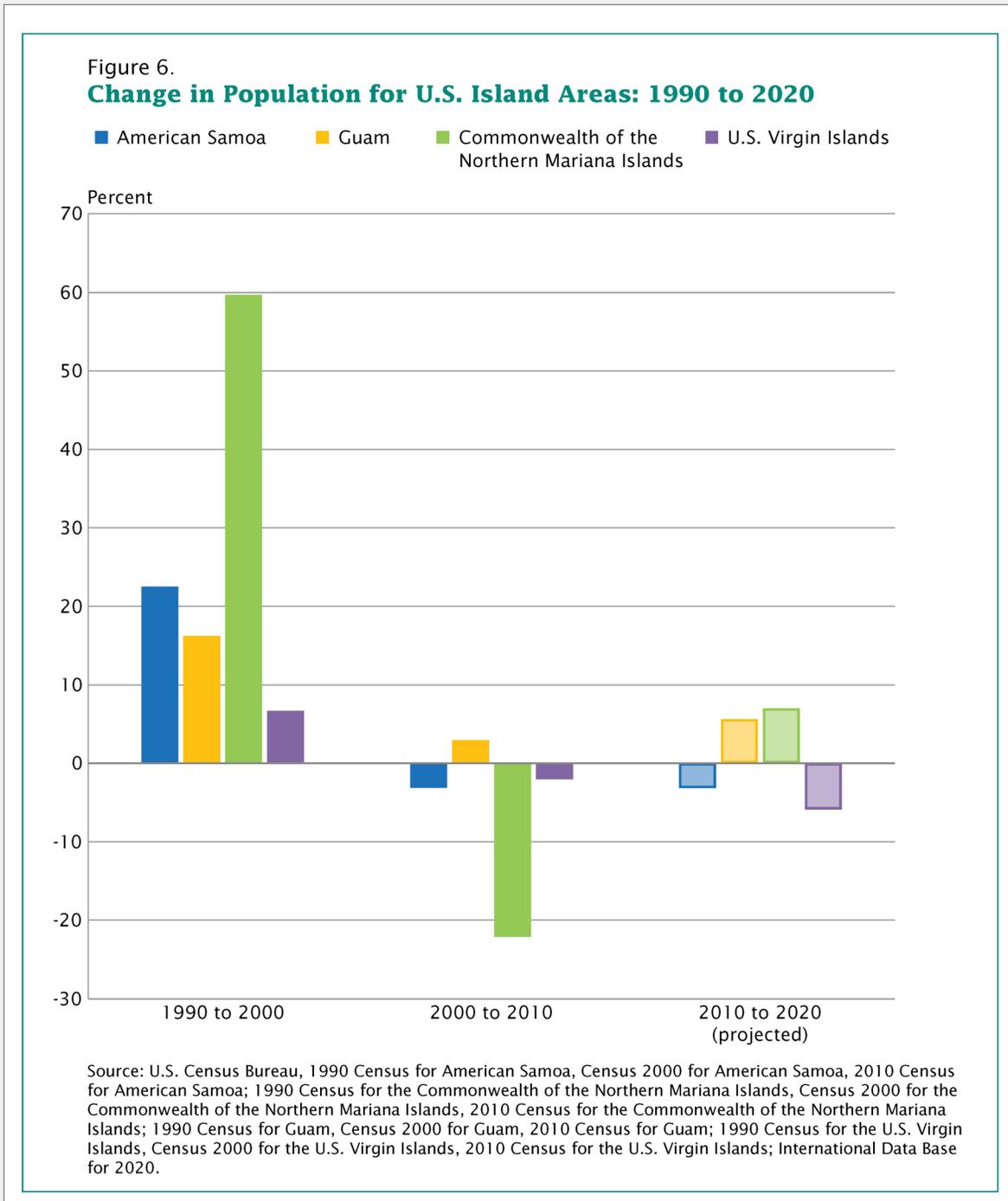
Figure 7-2. Pacific Area



www2.census.gov/geo/pdfs/reference/GARM/Ch7GARM.pdf

To view the map online, click on the link above and go to Page 7.

Item 3: Change in Population for U.S. Island Areas: 1990-2020

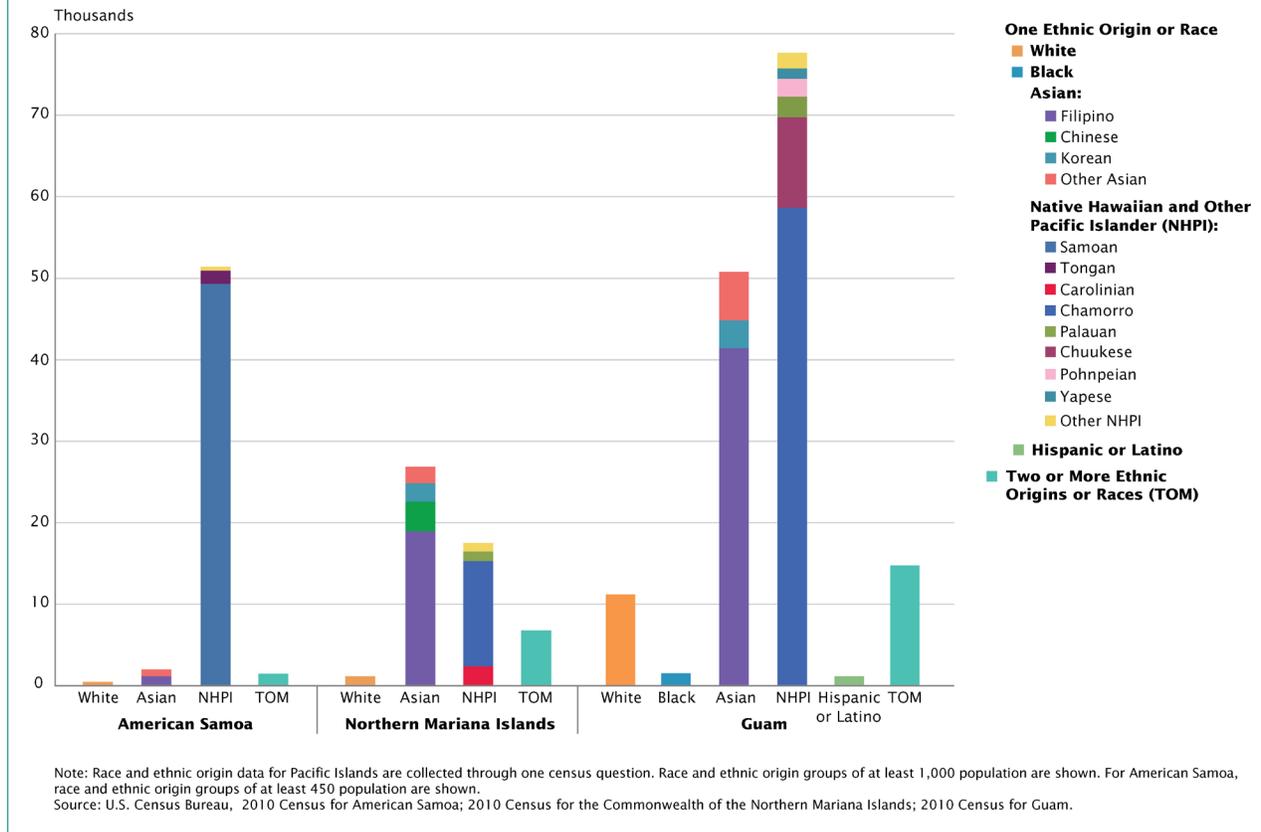


www.census.gov/content/dam/Census/library/publications/2015/demo/p23-213.pdf

To view the graphs online, click on the link above and go to Page 10.

Item 4: Population by Race and Ethnic Origin by Island Area for Pacific Islands: 2010

Figure 10. Population by Race and Ethnic Origin by Island Area for Pacific Islands: 2010



U.S. Census Bureau

Recent Population Trends for the U.S. Island Areas: 2000 to 2010 - 17

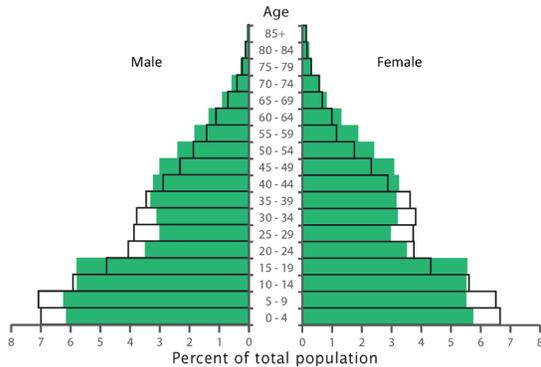
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To view the graphs online, click on the link above and go to Page 17.

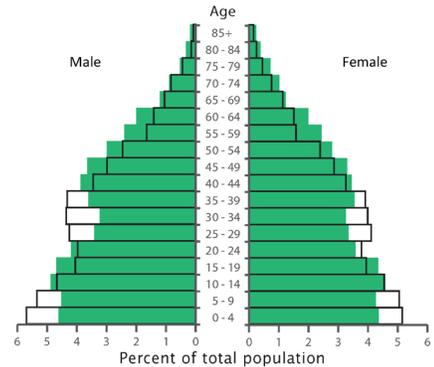
Item 5: Age and Sex Structure for U.S. Island Areas: 2000 and 2010

Figure 15.
Age and Sex Structure for U.S. Island Areas: 2000 and 2010

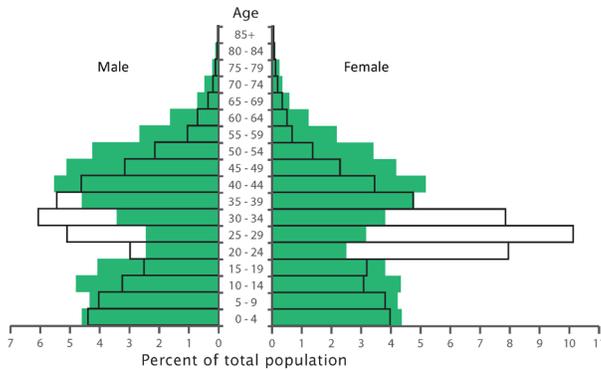
American Samoa



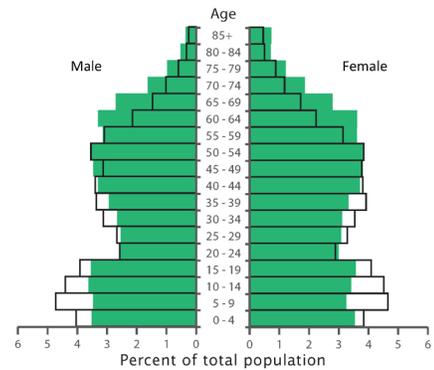
Guam



Commonwealth of the Northern Mariana Islands



U.S. Virgin Islands



Source: U.S. Census Bureau, Census 2000 for American Samoa and the 2010 Census for American Samoa; Census 2000 for the Commonwealth of the Northern Mariana Islands and the 2010 Census for the Commonwealth of the Northern Mariana Islands; Census 2000 for Guam and the 2010 Census for Guam; Census 2000 for the U.S. Virgin Islands and the 2010 Census for the U.S. Virgin Islands.

www.census.gov/content/dam/Census/library/publications/2015/demo/p23-213.pdf

To view the graphs online, click on the link above and go to Page 22.