

TO: Sherry Courtland, Bob Marx, Susan Miskura, Paul Powell, and
Paula Schneider

FROM: Betty Blom *BB*
Program and Policy Development Office

DATE: 03/27/91

*Guam
Sul*

NOTICE OF LEGISLATIVE ACTION

S 692 -- Establishment of the Commonwealth of Guam

SPONSOR Johnston (D-LA)

INTRODUCED ON 03/19/91

DESCRIPTION &
EFFECT

S. 692 would establish the Commonwealth of Guam. The bill would require that the Guam legislature and OMB use census data and other reliable information sources in reviewing and revising the funding level of the annual Federal payment to the Commonwealth of Guam.

CURRENT
STATUS

Referred to the Senate Committee on Energy and Natural Resources 3/19/91.

ADMINISTRATION
POSITION

cc: Etchison, Freije, Heelen, Hirschfeld, M. Levin, Miller, Gregg,
Lacy, Sadosky, Blom, PPDO Files, S. 692



UNITED STATES DEPARTMENT OF COMMERCE
Bureau of the Census
Washington, D.C. 20233

*1000 Guam
Sul*

April 17, 1991

TRIP REPORT
AGANA, GUAM
February 15-March 25, 1991

THOMAS L. ONDRA *2/10*
Computer Applications Branch
International Statistical Programs Center

Trip Purpose and Summary

At the request of the Department of Interior (DOI) and the Bureau of Planning (BOP), Government of Guam, Thomas Ondra traveled to Agana, Guam to present a workshop on the Integrated Microcomputer Processing System (IMPS).

IMPS Workshop

Nine representatives from six government agencies attended the workshop. Representatives from each of the agencies brought their own applications to develop. See Attachment III for a list of the different applications.

The workshop began by having the participants develop data dictionaries for their respective applications. CENTRY programs were then created to enter data. After the participants entered data, Ondra demonstrated QUICKTAB on some of these applications. Participants then ran their own QUICKTAB applications.

When the Data Dictionary and CENTRY portions of training were completed, the CONCOR segment of training began. Participants wrote simple CONCOR programs to edit their data. One of the participants also used CONCOR to generate forms.

CENTS training was introduced as the final portion of the workshop. Participants were asked to design a table and create a table shell using CENTS PREP and PREVIEW. Once the table shells were created, CENTS TAL was introduced and the participants wrote the TAL programs. The TAL programs were then run against data entered using the CENTRY programs written for the workshop. By the end of the workshop, participants were able to produce their basic applications.

Workshop participants varied widely in their data processing experience, some with only data entry experience to some with fairly extensive data processing experience. The level of development of the applications varied because of the diverse backgrounds of the participants. Ondra strongly recommends additional technical assistance to finalize these applications and develop procedures for their implementation.

Most of the applications were not well defined prior to the workshop. Few of the participants had table or edit specifications. Additional technical assistance is recommended to develop edit and table specifications for these applications.

Upon completion of the workshop, Joseph Ada, Governor of Guam, presented certificates to the participants.

Request for Future Workshops and Technical Assistance

Since space for the workshop was limited, not all government agencies were invited. Several agencies contacted Tony Palomo of the Department of Interior (DOI) and requested that another IMPS workshop be conducted in the near future so that additional agencies could attend. For future IMPS workshops, all participants should be familiar with the microcomputer and basic DOS functions such as the creation and use of directories, COPY, and other basic commands. If this is not possible, an introduction to DOS should be taught prior to introducing IMPS.

Because of the inexperience of many of the participants with general data processing concepts and systems design, Ondra recommends further technical assistance to ensure proper completion of their IMPS applications and development of operational procedures for production processing. This assistance should focus on follow-up for applications created during this workshop and systems analysis with the agencies using IMPS. To assist with edit specifications and table design, Ondra also recommends technical assistance by ISPC subject-matter specialists. The specific subject-matter areas should be clearly defined prior to the technical assistance.

Attachments

cc: Odessa Mitchell	Department of Interior, Washinton, D.C.
Susan Ham	Bureau of Planning, Agana, Guam
Peter Barcinas	Department of Commerce, Agana, Guam
Tony Palomo	Department of Interior, Agana Guam
Flores Street	Department of Interior, Agana, Guam
Paula Schneider	Chief, Population Division
✓ Michael Levin	Population Division
Phillip Fulton	Population Division
Lourdes Flaim	Decennial Planning
Patricia Berman	Decennial Planning
Eugene Cagle	Acting Chief, Public Information Office
Elizabeth Schoenecker	AID/ST/POP

ATTACHMENT I
PERSONS CONTACTED

Joseph Ada, Governor of Guam

BUREAU OF PLANNING

Susan Ham, Planner IV

DEPARTMENT OF INTERIOR

Tony Palomo, Field Representative

ATTACHMENT II
IMPS Workshop Participants

BUREAU OF PLANNING

P.O. Box 2950, Agana, Guam 96910

Menace J. Guerrero, Planner

DEPARTMENT OF COMMERCE

590 S. Marine Drive, Suite 601, Tamuning, Guam 96911

Cindy Naval, Planner IV
Terry Guerrero, Statistical Clerk

DEPARTMENT OF LABOR

P.O. Box 9970, Tanuning, Guam 96931

Alan Wang, Administrator Res. & Stat.
Mary Ann S. Mendiofa, Data Control

DEPARTMENT OF PUBLIC HEALTH AND SOCIAL SERVICES

Box 2816, Agana, Guam 96910

Gil Suguitan, Computer Operator II
Maggie Murphy, Administrative Assistant

GUAM POLICE DEPARTMENT

287 W. O'Brian, Agana, Guam 96910

Dee B. San Nicolos, Statistical Clerk

UNIVERSITY OF GUAM

UOG Station, Mangilao, Guam 96923

Seymour Payne, Computer Lab Specialist

ATTACHMENT III Applications

Bureau of Planning (BOP)

The BOP focused on using data from the Current Labor Force Survey (CLFS) to tabulate immigration data. They are especially interested in the impact of the Compact of Free Association on migration patterns to Guam.

CLFS is a continuing survey done on a quarterly basis. A questionnaire already exists. Tables for this application are not yet designed and edit specifications are not yet written.

BOP is also interested in using data keyed in with SPSS and dBASE and processing it with IMPS.

Department of Commerce (DOC)

The DOC application is using data from immigration cards collected at the ports of entry to analyze immigration and visitor patterns. Table and edit specifications need to be written.

Department of Labor (DOL)

The Department of Labor is using data from the CLFS to produce labor statistics. During the workshop, they based their applications on currently existing tables. However, formalized edit and table specifications should be prepared. They also used CONCOR to produce control forms used for the CLFS.

Department of Public Health and Social Services (DPHSS)

The DPHSS application is producing tabulations for births, marriages, and other vital statistics. Their workshop applications were based on currently existing tables. No formalized edit or table specifications exist for these applications. Specifications need to be prepared.

Guam Police Department (GPD)

GPDs application is using IMPS to enter data from crime reports and arrest reports and using this data to produce various tables and reports. They are also interested in being able to select specific offense and arrest reports and print information from these. A combination of IMPS and a database system may be the best way to complete this application. However, further analysis needs to be done. GPD currently utilizes an IBM S/36 for its main data processing needs, together with some IBM PC's.

University of Guam (UOG)

The University of Guam's application is primarily a student registration system. UOG would like to link student grades, course selection, etc., and to produce various tables. Most of this type of application would be best handled using a relational data base. The application is not well defined and systems analysis needs to be done.

Software makes gathering stats easier Government agencies will be given 5-week course on new program

By LIZ AVANAR
Daily News Staff

Statistical information about Guam's current labor market will be in easy reach after government representatives complete a five-week technical training course, according to U.S. Interior representatives.

Government agencies are advancing their computer capabilities through software provided by the International Statistical Programs Center and the U.S. Census Bureau, according to Tom Ondra, international technical advisor from Washington, D.C.

Representatives from the Department of Labor, Department of Commerce, Bureau of Planning, Guam Police Department, Department of Public Health and Social Services, and the University of Guam are being trained using computer software to obtain the specific and detailed tabulations they want, Ondra said.

The International Statistical Programs Center developed the IBM PC compatible software for processing census and surveys for various nations, Ondra said.

In turn, the center designed the integrated microcomputer processing system software to

be used for data entry, data editing, review and correction, and cross tabulations, the ability to produce statistical tables.

The same technical assistance being given to those on Guam was also provided to nations in West Africa, the Philippines and other island nations in Micronesia, he said.

Members of the training group said their departments are designing programs to gather, for example, intensive labor statistics and the number of births, marriages, divorces and deaths on Guam. Other uses for the program are to track migration in and out of Guam as well as unemployment rates.

The data can be compiled within two days to two months, depending on the complexity of the information, he said.

The technical assistance was offered by the U.S. Department of the Interior, said Tony Palomo, Interior representative. The \$27,000 pilot project is being funded by the Interior and is one of many projects being funded through the federal agency.

Ondra said the group would complete their training by next week.



Manuel / Daily News Staff
Tom Ondra, international technical advisor from Washington D.C., is on Guam to help provide computer training for government workers.

True Blue friends that skipped
out of paying?

Let us help you collect at
no cost to you.

Call

AAA COLLECTION AGENCY

at 472-8496 or 6827
P.O. BOX EY - Agaña Guam 96910

Thank You

to our neighborhood friends who are honoring the spouses of Operation Dessert Storm, this Sunday, at the St. Patrick's Day Hospitality Merienda, 3 p.m. - 6 p.m. in the Plaza de Espana Park, Agaña,

THIS IS A FIRST IN A SERIES OF SALUTES!



Mike Levin
FYI

SETBISION MAMPLANEHA

GOVERNMENT OF GUAM
AGANA, GUAM 96910

Spain
General

SEP 11 1991

From: Susan Ham
Bureau of Planning
Government of Guam
FAX (671) 477-1812

cc: P. Berman
P. Fulton
L. Nory
B. Starke

To: Marie Argana
Data User Services Division
Bureau of the Census
Fax: (301) 763-4597

Dear Ms. Argana:

I understand that proposed Congressional budget cuts will greatly impact on 1990 census products that have not yet been released. As you know, because we are not included in total U.S. counts, no data products have been released for Guam or for any of the other Pacific Outlying Areas. As you know, our first and only printed report is scheduled for distribution by early CY 1992, with the computer files to be available later in the year.

1970 census results were contained within one thin volume of frequencies; 1980 tabulations were better (four thin volumes, plus two STFs), but still lacked such basics as population by race. We have been unable to use Census data to determine the total minority population on Guam since 1960. 1990 census products were developed to represent the most comprehensive set of census data ever compiled for Guam: including a 254 page set of tabulations, STF 1, STF 3, and a PUMS file (for the first time). No evaluations, supplementary or subject reports, or post enumeration survey were planned for Guam.

I realize that tough choices need to be made in determining what products may have to be eliminated because of budgetary considerations. However, Guam cannot afford to lose ANY of the few products we have been pursuing over the course of a decade. ALL of our data products are irreplaceable and will be needed for local planning purposes and for research.

Please keep in mind the needs of the Pacific Outlying Areas when considering the value of various data products to be released during FY 1992 that may be affected by budget cuts. It would be greatly appreciated by those of us in the Pacific who are still waiting for the release of our data.

Susan Ham
SUSAN HAM



JUL 2 1991



UNITED STATES DEPARTMENT OF COMMERCE
Bureau of the Census
Washington, D.C. 20233

ADMINISTRATIVELY RESTRICTED

Guam
gml

STSD 1990 DECENNIAL CENSUS MEMORANDUM SERIES, #KK-17

MEMORANDUM FOR Thomas C. Walsh
Chief, International Statistical Programs Center

From: *JH* John H. Thompson
Chief, Statistical Support Division

Subject: Summary of Results of Distortion Analysis for
Guam

This memorandum is administratively restricted. Only the persons on the distribution list are to have access to this memorandum.

"Document deemed to be confidential under Title 13 U.S.C. and shall not be distributed under penalty of law."

The disclosure avoidance procedure that is being implemented for the 1990 Census of the Pacific Islands is similar to the blanking and imputation procedure used for sample data in the stateside census. There are some concerns relating to the distortion caused by using this procedure in the Pacific Islands as it is being used in the stateside census. Of particular concern are the definitions of "small" areas and the percentage of data items to be blanked. The purpose of this memorandum is to provide the definitions of small areas and the blanking percentage for Guam.

These definitions are as follows:

100 Percent Equivalent Data

- Small Block = 1 or 2 occupied housing units
- Housing Data Blanking Percentage = 25%
- Housing Data Take Every = 4
- Person Data Blanking Percentage = 33.3%
- Person Data Take Every = 3

Sample Equivalent Data (Housing and Person Items)

- Small Block Group = 10 or fewer Occupied HUs
- Blanking Percentage = 25%
- Take Every = 4

There are only eight 100 percent equivalent data items eligible for blanking for the Pacific Islands. Five of these data items are housing items while the remaining three are person items.

¹Distortion analyses for the remaining three Pacific Island areas have been completed and documented in the April 9, 1991, memorandum from John Thompson to Thomas Walsh, subject: "Summary of Results of Distortion Analysis for the Commonwealth of the Northern Mariana Islands, Palau, and American Samoa."

The definitions stated above ensure that one housing item and one person item are blanked for every form in the disclosure avoidance sample.

The attachment to this memorandum provides some summary information from our distortion analysis. A more detailed memorandum documenting the analysis will be issued in the future. Any questions regarding this analysis should be directed to Alfredo Navarro or Larry Bates of my staff on 763-4196.

cc:	P. Fulton	(POP)	L. Norry	(HHES)
	J. Ingold	"	B. Downs	"
	M. Levin	"	H. Woltman <i>AW</i>	"
	P. Anderson	(ISPC)	R. Griffin <i>R.A.</i>	(STSD)
	M. Stroot	"	A. Navarro	" <i>[Signature]</i>
	D. Stoudt	(DOD)	L. Bates	" <i>[Signature]</i>
	P. Berman	(DPLD)		
	C. Landman	"		

Attachment Summary Information for Disclosure Avoidance for Guam

100 Percent Equivalent Data Disclosure Avoidance

SUMMARY INFORMATION

Geographic Area	:	BNAs	Places
Small Block Definition	:	2	2
Blanking Percentage	:	33.3%	33.3%
Total Number of Forms	:	31373	18964
Number of Forms Partially Blanked	:	453	246
Percentage of Forms Partially Blanked:	:	1.44%	1.30%
Percentage of Blanking (1 item)	:	0.48%	0.43%
Initial Imputation Rate	:	5.00%	5.00%
Final Imputation Rate	:	5.48%	5.43%
Relative Increase in Imputation Rate	:	9.61%	8.64%
Number of Areas	:	1135	620
Number of Small Areas	:	141	57
Percentage of Small Areas	:	12.42%	9.19%

Sample Equivalent Data Disclosure Avoidance

SUMMARY INFORMATION

Geographic Area	:	BNAs	Places
Small Block Group Definition	:	10	10
Blanking Percentage	:	25.0%	25.0%
Total Number of Forms	:	31373	18964
Number of Forms Partially Blanked	:	321	193
Percentage of Forms Partially Blanked:	:	1.02%	1.02%
Percentage of Blanking (1 item)	:	0.26%	0.25%
Initial Imputation Rate	:	11.50%	11.50%
Final Imputation Rate	:	11.76%	11.75%
Relative Increase in Imputation Rate	:	2.22%	2.21%
Number of Areas	:	244	152
Number of Small Areas	:	7	3
Percentage of Small Areas	:	2.87%	1.97%

Mike



2023-3
~~VJE~~
Graw

UNITED STATES DEPARTMENT OF COMMERCE
Bureau of the Census
Washington, D.C. 20233

OCT 16 1989

1990 CENSUS OF OUTLYING AREAS
DPLD TR MEMORANDUM FOR OUTLYING AREAS NO. 3

MEMORANDUM FOR Distribution List

From: Susan M. Miskura *SM*
Chief, Decennial/Planning Division

Subject: Table Review for 1990 Census of Outlying Areas
Forms (Guam)

Copies of the following 1990 Census of Outlying Areas public-use form(s) are scheduled for table review in Room 3517, FB-3 starting on 10/17/89 and ending on 10/18/89:

Form Number

Description

D-3300 GU

1990 Census Education Project
(GUAM)

Your Division's representative should carefully review each form and have the authority to approve the form for your division. Please review answer categories and presence of key stroke numbers. A clearance form will be provided at the time of the table review for sign off by your division representative. This will be the last opportunity for reviewing the item(s) above before going to print.

If you have any questions, please contact Gladys Davis on 763-4285.

Distribution List:

Charles Jones	(DIR)	cc: J. Swanson	(CPO)
Peter Bounpane		R. Bitzer	(FLD)
Joseph Mancias	(CPO)	D. Althouse	
Stanley Matchett	(FLD)	A. Cosner	(ASD)
John Thompson	(STSD)	P. Clark	(DPD)
Arnold Jackson	(DOD)	K. Newman	(BUD)
Michael Garland	(ASD)	D. Dalzell	(DOD)
Walter Odom	(PSD)	D. Stoudt	
Paula Schneider	(POP)	M. Reed	
Leonard Norry	(HHES)	E. Dove	(PSD)
C. Thomas DiNenna	(TSD)	P. Fulton	(POP)
Joe Harris	(DPD)	J. Ingold	
Susan Miskura	(DPLD)	B. Downs	(HHES)
		C. Young	
		L. Schlueter	(ISPC)
		P. Anderson	
		A. Berlinger	(TSD)
		D. Hirschfeld	(GEO)
		R. Lewis	(AGR)
		J. Aso	(STSD)
		A. Stephenson	(DPLD)
		R. Brown	
		P. Berman	
		B. Bartram	
		L. Flaim	
		A. Paez	
		B. Hill	
		G. Davis	
		R. Cavanaugh	
		J. Fowler	
		J. Belton	
		J. Buckley-Ess	
		K. Kniffen	

1990 Census Education Project

Guam



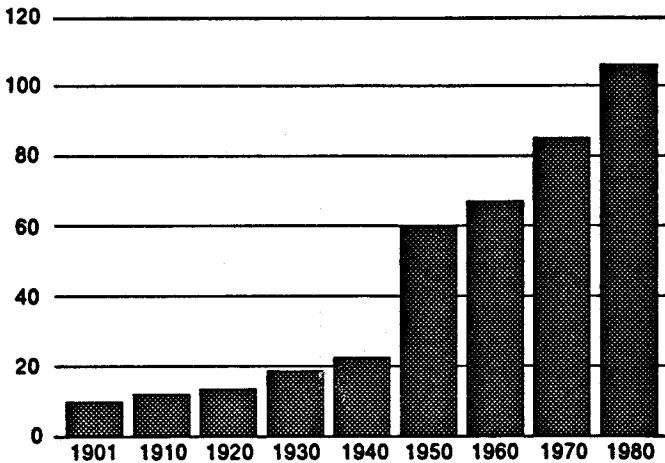
CENSUS '90



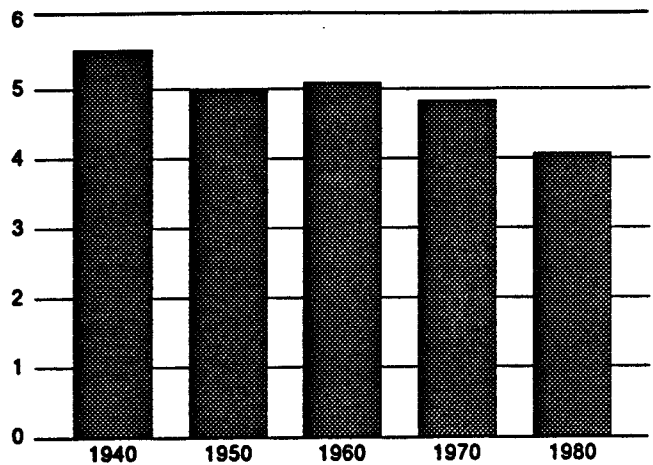
Census Day is April 1, 1990

Historical and Recent Trends for Guam

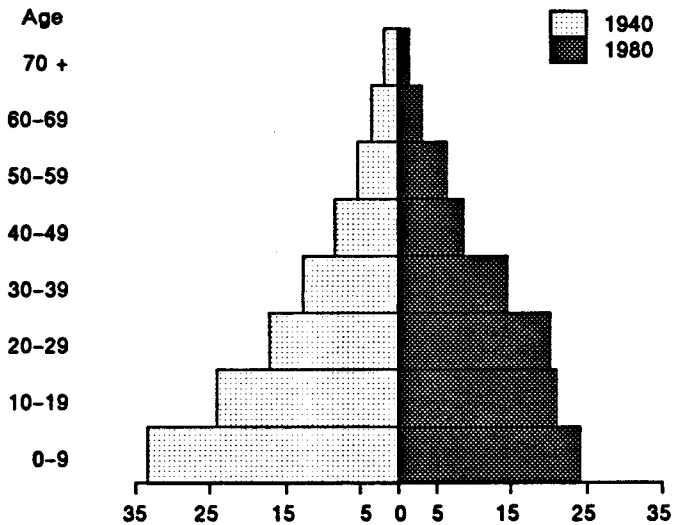
Population of Guam: 1901-1980
(In thousands)



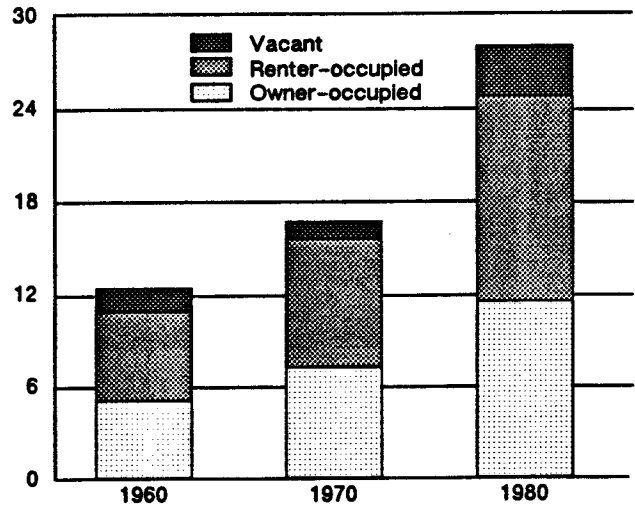
Average Number of Persons per Household: 1940 to 1980



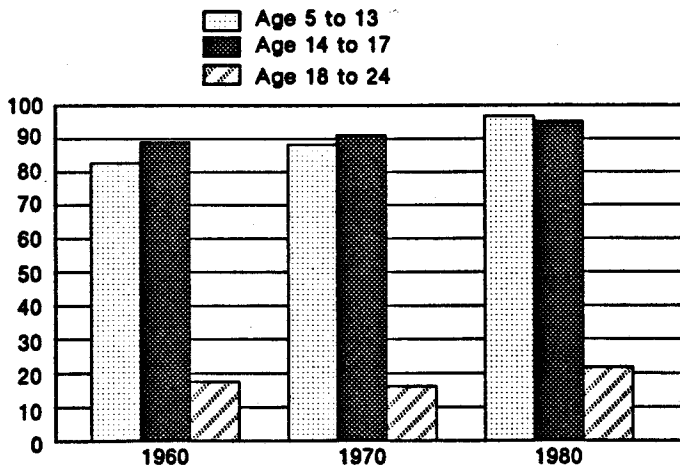
Percent Distribution of Population by Age Group: 1940 and 1980



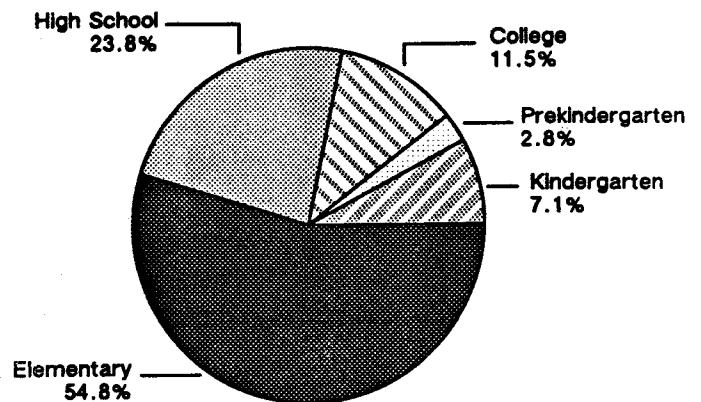
Housing Units by Tenure and Occupancy Status: 1960-1980
(In thousands)



Percent of Persons Age 5 to 24 Years Old Enrolled in School: 1960 to 1980



Percent School Enrollment by Level of School: 1980



Source: U.S. Bureau of the Census; 1980 Census of Population, General Population Characteristics, Number of Inhabitants, Detailed Social and Economic Characteristics; 1980 Census of Housing, General Housing Characteristics; 1970 Census of Population, General Population Characteristics; 1970 Census of Housing, Housing Characteristics for States, Cities, Counties, Vol. 1; 1960 Census of Population, Vol. 1, Part 54; 1960 Census of Housing, Vol. 1, Part 9; 1950 Census of Population, Vol. II, Part 54.

Thank You

The 1990 Census Education Project for Guam is based on the 1990 Census Education Project that is being used stateside, and is tailored toward the characteristics of Guam.

For their content recommendations, review of materials, and assistance on the overall design of the project, we thank the Interagency Committee on Population (ICP) for Guam:

Mr. Peter R. Barcinas	Chairman, ICP Director Guam Department of Commerce
Mr. Joseph T. Flores	Vice-Chairman, ICP Administrator Guam Department of Commerce
Ms. Cynthia L. Naval	Planner IV Guam Department of Commerce
Ms. Susan Ham	Planner IV Guam Bureau of Planning
Mr. Joseph P. Borja	Chief Planner Guam Department of Public Health and Social Services
Mr. Alan T. K. Wang	Administrator Bureau of Labor Statistics Guam Department of Labor
Mr. Chris Perez Howard	Assistant to the President Guam Community College
Mr. Manuel F. Leon Guerrero	Planner III Guam Department of Education
Sister Ana Lee	Superintendent of Catholic Schools Catholic Education Office Archdiocese of Agana

Table of Contents

Letter from the Director of the U.S. Census Bureau

1990 Census Suggested School and Community Outreach Activities (with Take-Home Announcement)

Educator's Guide to the 1990 Census

Poster

Teacher-Ready Activities (Brief descriptions below)

Census Bureau Teaching Resources Guide

Teacher-Ready Activities	Suggested Grades	Suggested Day(s)	Description
1 Taking a Census	K-2	2-3	Students learn what the census is and roleplay the census process.
2 Add! Don't Subtract!	2-6	2-3	Students learn the concepts of complete count and under-count, prepare a map, summarize data, and make decisions.
3 What Do You Know About the Census?	4-7	1-2	Key vocabulary terms and the history of the census of Guam are introduced in a short reading. A quiz about the census and other important census data are included.
4 Where Have We Been? Where Are We Going?	3-10	2	Students participate in a home and hobby survey (which may be customized by the class). They conduct the same survey, asking parents or other adults how things were in the past, and compare the results.
5 Would You Sell Snowshoes in Guam?	4-8	1	Students have a hands-on experience using census-like data as a basis for making decisions about community services and businesses.
6 Lights! Camera! Action!	5-12	1	Students examine how the size and distribution of the population of Guam have changed over past censuses. Historical causes for population change are considered.
7 Changing Districts	6-12	1-3	Using a chart of 1980 census information (area and population) for Guam and its districts, students identify extreme cases and study changes over time.
8 That's Easy for You to Say!	6-12	2-11	Students study the process of designing, conducting, and analyzing the results of a survey, and have the option to carry out a survey project.
9 Studying 1980 Census Snapshots	6-12	2-3	Students study a chart of selected 1980 census data for six districts of Guam, and discuss issues related to business, community planning, and the housing industry.

Teaching About The Census

The U.S. Bureau of the Census has developed this census education package to increase awareness about the 1990 decennial census of Guam, and to illustrate how census information can be used in everyday life.

The objectives of the 1990 Census Education Project for grades K-12 are: 1) to provide educators with materials useful in their

classroom teaching and 2) to introduce educators, students, and their families to an important event in which everyone in Guam needs to participate.

This package contains detailed background information about the decennial census (taken every 10 years), a vocabulary of census terms, nine teacher-ready classroom activities with

placement information, examples of data from previous censuses, sources of additional census products and assistance, and suggestions on how schools and villages can participate actively in the 1990 census. (See the back panel of this folder for a complete table of contents, activity descriptions, time requirements, and suggested grade levels.)

For More Information

Puerto Rico and Outlying Areas Branch
Decennial Planning Division
Bureau of the Census
Washington, DC 20233
(301) 763-2903

Guam Territorial Data Center
Department of Commerce
Tamuning, Guam 96911
(617) 646-5841



October 1989

TO: School Administrators

FROM: Director, Bureau of the Census

The 1990 Census of Population and Housing is fast approaching. You, your staff, and your students have an active role to play in helping make the Guam count complete by participating in the ***1990 Census Education Project for Guam***.

On ***April 1, 1990***, we will begin counting every person and housing unit in the United States, Guam, the other Pacific areas, the Virgin Islands of the United States, and Puerto Rico. The 1990 census will be a count of educators, students, their families, neighbors—everyone—in every community on Guam. For it to be a complete and accurate accounting of Guam, it ***requires*** the full ***participation*** of everyone.

The 1990 census is a current national event for and about everyone. Since this census happens only once every 10 years, it is an event easily forgotten and frequently misunderstood by many. ***Its results will affect everyone***, but few know how or why census information is important.

You can help ensure the success of the 1990 census, make sure your school and community have accurate information to guide decisions into the 21st century, and engage your students in a learning experience by including the census in your curriculum beginning in the 1989-1990 school year.

Through the 1990 Census Education Project, we are providing you the materials to do this. This 1990 teaching kit is a reusable classroom resource for K-12 teachers in ***social studies, mathematics, science, and language arts***. It contains nine challenging instructional activities with professionally prepared work sheets, procedural notes, background information, glossary, and samples of census data from the past. These materials will help create an understanding of the civic responsibility of responding to the census, and the everyday uses of its results. At the same time, they help extend students' skills in history, geography, critical thinking, and mathematical abilities. The kit also gives ideas for community outreach (such as student poster contests, class exhibits, and school media campaigns) to create awareness of the upcoming census among area residents.

We prepared these materials to give you time to review them with your staff, adapt them to your curriculum, make copies for your teachers, and examine ways of actively involving your students in their community. Please work these activities into your school schedule—preferably at least the ***2 weeks just before Census Day, April 1, 1990***. For further information, please contact the Puerto Rico and Outlying Areas Branch at the Census Bureau Headquarters. The telephone number and address are listed inside the teaching kit folder.

Thank you for your help. Everyone will benefit because you took an active role in the 1990 census.

1990 Census

Suggested School & Community Outreach Activities

Dear Educator:

Outreach is vital to the success of the census of Guam in 1990. This is because so much rests upon the willingness of the people of Guam to participate in the census. Without that willingness, costs can increase, delays can be created, and data quality can suffer. We are working to minimize these problems and others by calling on community institutions to help.

Your school and community can help ensure that the 1990 census in your area is complete and accurate. You can help generate an awareness of the census and its importance in your community by using the prepared classroom lessons and by performing some of the following suggested school/ community census outreach activities. We offer this as a starter list. Ask students and staff for their ideas on special localized 1990 census events and activities. You must decide what is appropriate and reasonable, but whatever your class, school, or community can do will help make this census—your census—as successful as possible. Thank you for your help.

1. **Use the Prepared Lessons.** The 1990 Census Education Project for Guam contains nine teacher-ready K-12 lessons in the teaching kit. They introduce students to a variety of concepts and information about the decennial census. Some of the exercises have classroom extensions that can be performed to complement outreach suggestions found in this leaflet and have a take-home component.
2. **Get the Message Home.** This leaflet contains a take-home announcement you can reproduce and give to students to take to their parents/ guardians as a reminder. Use this announcement as a guide for one of your own making for students of other language households.

The announcement is for use BEFORE Census Day, April 1, 1990. You can attach this announcement or one of your own to report cards, school bulletins or other items sent home with the students.

3. **Get the Students Involved.** The 1990 census is a count of the population—children and teenagers as well as adults. Your students are part of the census. They are to be counted on their parents'/ guardians' census form. As the students grow up and eventually form their own households, they will be participating in future censuses.

Motivate the students to participate actively in this census by having them generate community awareness projects such as those listed below. Ask them for their ideas of what they can do to make area residents aware of the census and promote that they, as individuals, a class, or student body, do it. Also in non-English speaking households, older students may actually be interviewed.

4. **Create a Media Campaign.** The 1990 census is a community event. A variety of school communications vehicles could be used to generate awareness of the forthcoming



The Census is Here. There's Nothing to Fear.

A WINNER created by Emily Hall, Grade 4, Shaw Visual and Performing Arts Center, St. Louis, Missouri.

Example of census poster art from one of 12 finalists in a contest conducted through St. Louis Public Schools during the 1988 Dress Rehearsal Census in that city.

CLS: decennial GRP: dald JOB: cep-guam DIV: outreach
 census among the student body and members of the community. Possibilities include: statements on outdoor marquees; announcements on scoreboards/public address systems at sporting events; posters on school bus exteriors/interiors and in gymnasiums; school newspaper stories; and classroom bulletin board displays.

Challenge the students to become involved, for instance using a spin-off of the theme—"Put Yourself in the Picture. Answer the Census." Have the students create an exhibit(s) for display in the community. The exhibit might incorporate a class/school photo around the slogan, "We're in the Picture. Are You?" or "1990 Census, Put Us in the Picture!" Students also could experiment with the theme, "Stand Right Up for Who You Are. Answer the 1990 Census."

Parts of your campaign could be approached as contests. For instance, in art classes, students could create posters, cartoons, and collages that explain the importance of the census and the need for everyone to be counted. Themes can be extracted from the background section of the *Educator's Guide to the 1990 Census*. Students could participate in a slogan contest. Have them design bumper sticker-sized statements that best describe their importance in the census, such as "We Count Too!" Essay or writing contests are another area to consider. Students could cover census data use, the importance of the census to the community, or historical change in the community, and so forth. Contests and winners could be reported in the school newspaper. Video projects are another consideration.

1. **Develop Promotion Around Special Events.** If there is a special school or community event occurring around the time of the census (such as a festival, a concert, a dance, or a sporting event), display student census posters or make special announcements.
2. **Produce an Historical Exhibit.** Library, lobby, and other displays could be created showing historical population changes which have taken place in the community. A combination of photographs, other graphics, and written information can create an effective presentation celebrating these changes. Since a census is much like a snapshot of the population, students might use the theme, "1990 Census: Put Yourself in the Picture," as a portion of such exhibits. Members of local historical societies and genealogical groups make good sources of technical assistance and good speakers for classes or school assemblies. These display projects may be undertaken by history, civics, or political science classes or by the student council.

3. **Have Special Presentations.** Census data are being put to many uses in your community. Invite people from your community who use this information to give special presentations in a class or an assembly. Possible sources include: a local planning office, a chamber of commerce, an education planning office, a market research firm, a large business, a documents library, a local historical society.
4. **Make School Employees Aware.** Outreach to employees or colleagues is important. You can help ensure that employees know about the census and the need for them to respond by including announcements in employee bulletins, with paychecks, and the like. School boards and parent-teacher groups also need to be aware of and involved in the census.
5. **Share Your Ideas.** By no means is this list comprehensive. If you or your students develop some different strategies to encourage community participation in the census, let other educators know. Likewise, if you create an interesting localization of one of the prepared activities or a new exercise, share it. Communicate your ideas to your education associations and colleagues.
6. **Make Other Community Leaders Aware.** We have developed other 1990 census outreach programs. These are directed toward local governments, religious organizations, the media, and a number of community organizations and businesses. All parts of your community have a stake in a complete and accurate census. You can promote census awareness and support of these and other influential community institutions by showing your support. You may want to coordinate some of your activities with other community institutions. Let them know you are counting on them!

When Should I Do This? Be sure to allow yourself preparatory time depending upon the project undertaken. The best time to use these activities is in the 2 weeks before Census Day—April 1, 1990. This will coincide with other local activities and events.

What if I Want Additional Information? If you have questions about the 1990 census or the 1990 Census Education Project for Guam, please contact the Puerto Rico and Outlying Areas Branch, at the Census Bureau Headquarters in Washington, DC, or the Guam Territorial Data Center in Tamuning, Guam. The addresses and telephone numbers are listed on the inside jacket of the kit folder.



Precensus Day

Take-Home Census Announcement—for use from March 19-30, 1990

Reproduce this announcement and give it to students to take home to parents/guardians as a reminder. We have left room for an educator's signature, if you wish. If you prefer, use the text below as a guide for an announcement of your own, especially for students of other language households. This should go out just BEFORE Census Day, Sunday, April 1, 1990.

Census '90: Answer the Census!

Dear Parent/Guardian:

Census Day is April 1, 1990 in our community. A census enumerator will visit your home to obtain information about your household's composition and characteristics. Our community and schools depend on a complete count of our population and housing units. It helps us plan for the educational needs of the students. Census information is used to plan community projects, such as improved streets and roads and the location of health centers. It also provides the basis for distributing funds for many services. New jobs and economic growth also can be based upon census figures.

Remember, the census is safe. The information you provide is confidential. By law, your answers **CAN NOT** be used by anyone—welfare agencies, the Internal Revenue Service, the Federal Bureau of Investigation, the Immigration and Naturalization Service, the courts, the police, the military, no one. Your form can be seen **only** by census workers who have taken an oath to protect your responses. A census worker breaking this law can be fined and go to jail.

We all stand to lose if everyone is not counted. So, please cooperate with the census enumerator when he/she visits your home to collect this important information. Thank you.



Educator's Guide to the 1990 Census

INSTRUCTIONS: PLEASE PROVIDE A COPY OF THIS GUIDE TO ALL TEACHERS. This Guide is an integral part of the teaching materials for the 1990 Census Education Project for Guam. It contains *information about the census* that will be useful in preparing educators to answer students' questions about various aspects of the census and provides a *vocabulary of key words and phrases* students will encounter in the prepared activities. Individual activities provide notations of the specific vocabulary words and phrases and segments of the narrative in this Guide that are useful to that lesson.

The *1990 Census Education Project for Guam* is one part of the Census Bureau's outreach program for the 1990 census. This project is directed to all elementary and secondary schools. The primary component of the project is this package of K-12 teacher-ready classroom activities, suggested lessons extensions, and recommended census outreach activities. The teaching materials have been developed for primary use in social studies and mathematics, but are useful in a number of other subjects including science and language arts.

The objectives of the project are to provide teachers with innovative, reusable materials useful in their classroom teaching and to introduce educators and students to an important event in which everyone needs to participate. The materials will help extend students' history, geography, multicultural, critical thinking, computational, and statistical skills through a "hands-on" exposure to information and activities with real-life relevance. Likewise, we hope to create an awareness and understanding of the importance of the census, the civic responsibility of responding to the census, the confidential nature of all the answers, the uses of the summarized census statistics, and, in general, how census data are a real part of everyone's life now and in the future.

Using the teacher-ready lessons, students can:

- Plan and conduct their own census.
- Conduct a survey within their own households.
- Analyze their own data.
- Graphically display information and map data.
- Take the role of community planner and market researcher and perform site evaluations for businesses and community services.
- Look at changes in Guam recorded by the decennial census.
- Examine similarities and differences in growth patterns.

- Compare census data for their community with other parts of the island.

Using the list of outreach activities, classes, schools, and communities might:

- Create their own media campaign.
- Invite local people who use census data (planners, and other government officials, business persons, local historians, and others) to make special presentations.
- Include special stories in the school newspaper about population change in the community and the forthcoming census.
- Create special displays/ exhibits celebrating the history of the community as recorded by previous decennial censuses.

CENSUS '90



Prepared Activities. There are nine reproducible activities in this package. Each activity's **Teacher's Notes** provides a lesson overview, suggested grade level and time needed, learning objectives, a list of materials needed, the vocabulary list, use procedures, and suggestions of classroom extensions. Basic information on each activity is provided in the **Table of Contents** on the back of the teaching kit folder. The activities generally rise in grade difficulty, however, you should be the judge of appropriateness for your students. The student worksheets do not have any grade identification.

Timing. Census Day is April 1, 1990. The materials are provided now to allow time for their inclusion in the 1989-90 school year curriculum and to make language and local adaptations you consider appropriate. The best time to teach the lessons and perform the outreach activities is in the **2 weeks before Census Day**. By focusing on this peak period, the actions taken by schools will coincide with other 1990 census outreach events and activities to be planned by local officials and community leaders.

Census History

Census-taking is an old practice. Throughout history, many nations have used censuses to determine their populations, occupations, and potential military strength and for taxation purposes.

European governments took censuses of persons inhabiting their North American colonial jurisdictions. In New Spain, enumerations of places like St. Augustine, Florida (the oldest permanently inhabited European settled city in the United States) and San Antonio, Texas and its adjacent province occurred in 1566 and 1783, respectively. The French government saw the need for a detailed census of all of New France in 1666; periodic censuses were continued in the French colony until 1754, and included French settlements such as Cahokia, Illinois (founded in 1699).

In the English colonies, about 40 censuses were undertaken. A count was made as early as 1624 in Virginia, and 1698 in New York. Before the Declaration of Independence, censuses of some segments of the population had been taken in all the English colonies except Pennsylvania, the Carolinas, and Georgia. The need for a national census of the new United States arose after the 13 colonies broke their ties with Great Britain. As required by the constitution, the first census of the United States was taken in 1790. As adopted in 1787, the United States Constitution included these words in Article I, Section 2 and Section 191 of Title 13, United States Code.

Article I, Section 2:

Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers....The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent Term of ten Years, in such Manner as they shall by Law direct.

NOTE: Counting for taxation never did follow from the constitutional directive.

Census Taking on the Island of Guam

The Spanish government took the first official census of the population of Guam in 1710. The Spanish continued to take censuses at irregular intervals until Guam became an American territory under the Treaty of Paris in 1898. In 1901 and 1911, the naval governor assumed the responsibility for conducting the census. Guam was enumerated as a part of the U.S. decennial census program for the first time in 1920, and has been included in all subsequent decennial censuses.

Title 13, United States Code, provides the authorization for the inclusion of Guam in the U.S. Decennial Census Program. Title 13, Section 191, states that the censuses shall include "Each State, the District of Columbia, the Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands, and the Commonwealth of Puerto Rico, and as may be determined by the Secretary [of Commerce], such other possessions and areas over which the United States exercises jurisdiction, control, or sovereignty."

The 1990 Census of Population and Housing of Guam will be conducted under the general framework of a memorandum of agreement between the Census Bureau, U.S. Department of Commerce, and the Governor of Guam. Under the terms of this agreement, the Governor of Guam and his designated representative will have maximum responsibility for conducting the field enumeration on Guam. The Census Bureau will bear the cost of the basic 1990 Census Program for Guam as well as provide maps, instruction manuals, questionnaires, training materials, and related forms for enumeration.

While the Census Bureau is best known for the national Census of Population and Housing conducted every 10 years, the agency also conducts national agriculture, economic, and governments censuses every 5 years.



CLS: decennial GRP: dold JOB: cep-guam DIV: edguide
 These data collection efforts result in thousands of statistical reports each year. All of this has earned the Census Bureau the name, **Factfinder for the Nation**.
 NOTE: Read the definition of the Census Bureau located at the end of this guide.

Collecting 1990 Census Information on Guam

The task of taking the census of Guam in 1990 will be more complex than it was in 1920 or any time since. Since 1920, Guam has grown dramatically, but the time allowed to complete a census and report its findings is very limited. Responding to this challenge, the Census Bureau began planning for the 1990 census in the early 1980s.

To measure the size of this growing population, the number of housing units, and their associated characteristics for Guam is a huge task requiring thousands of hours of preparation.

How will the 1990 census be taken? The 1990 census will be conducted on Guam using the list-enumerate method. This means that on April 1, locally hired enumerators (counters), trained specifically for conducting this census, will list every housing unit and conduct a personal interview to obtain information about each household's composition and characteristics as of Census Day. When the interviews are complete, each questionnaire should include everyone who usually lives in the household, but exclude persons only visiting. Babies born before midnight of Census Day are to be included.

Although April 1 is Census Day, not everything can happen on that one day. Enumerators need time to follow-up with households and persons who may have been missed or if information is missing on a form.

What happens then? As the enumerators return the completed questionnaires to the office, processing begins. The questionnaires are checked for completeness and legibility. If information is missing, the enumerator must contact that household again to complete the missing items. This can increase the expense of and cause delays in the census. After these checks are made, the answers to questions on an individual form are tallied along with the answers to the same question from all other census forms. This results in the creation of statistical totals for a variety of geographic areas. Another check is made by local officials; they review the totals (but not individual addresses) to determine the accuracy of these counts. After appropriate corrections,

the Census Bureau publishes the numeric totals which are put to thousands of uses. Again, the data is presented so that no specific person, household, or home can be identified.

What will be asked? Each household will be asked to answer a series of questions about the members of the household (for example, age, marital status, sex, education, employment, income, occupation, and ethnic origin) and the housing unit (for example, age of the building, source of water, type of fuel used for cooking). It will take the enumerator and the household member responding an average of about 34 minutes to complete most questionnaires.

Uses of Census Summary Data

The census asks questions that address only important policy and program needs. For instance, the data from questions on plumbing facilities provide information for studies on housing standards and quality. Likewise, summary statistics from the income questions are widely used by local governments in the distribution of funds to communities for a variety of programs, including education.

Something for everyone. The above examples present mandated and legislatively specified uses of census data. But there is a myriad of other applications of census information that in one way or another affects everyone. The number of these applications and the variety of agencies and persons using the data are increasing. Given the increasing size of Guam's population and the complexity of society, more decision makers are finding that major plans, especially those involving monetary investments, are facilitated by using census data.

Local governments, business and industry, and an increasing number of social service providers draw heavily on census data for assistance in planning. Here are some examples of the different ways that census data can be used.

Government

- Census data can be used to determine the need for expansion of public services, utilities, and schools to help transportation planners determine the location of new roads; and to develop housing programs.

Business and Industry

- A new company wanting sites for a chain of medical clinics can use census data to narrow the selection of communities with high numbers of families with young children.



CLS: decennial GRP: dpld JOB: cep-guam DIV: edguide

- An entrepreneur wanting to open a roller skating rink can study small-area age statistics to pinpoint possible sites.

Social Service Providers

- Officials of child services programs may find census information valuable in program planning and may use it to obtain numbers of pre-school children.

Individuals

- College students interested in various careers could investigate socioeconomic census information to help them make a decision.

Everyone Loses When Everyone Is Not Counted

After the 1980 census, the Census Bureau estimated that a small percent of the population was not counted. An undercount of segments of the population can have an adverse effect on decisions. Inaccuracies in the data can alter or halt projects and can affect the distribution of local funds and services. Some of these are designed for the very people who may fail to be counted. Being missed in the census has an effect on the people missed as well as their neighbors. This is why it is important that people be made aware of the census and be counted. Everyone loses if everyone is not counted in the 1990 census.

Answering the Census: Civic Duty, Confidentiality, and the Law

The purpose of the census is to obtain counts—that is, statistical totals. Questions are asked of individuals and households to compile these totals.

Answering census questions is a civic responsibility. It also is the law (as recorded in Title 13 of the U.S. Code). Failure to comply can result in penalties, including fines of up to \$500.

This same law keeps answers given in the census confidential—away from welfare agencies, the Federal Bureau of Investigation, the Immigration and Naturalization Service, the Internal Revenue Service, courts, police, the military...everyone. By law, the 1990 census records will be held confidential for 72 years, until the year 2062.

No one—neither a census taker nor any other employee of the Census Bureau—can reveal information about any individual or family to anyone outside the Census Bureau. Census workers swear an oath to uphold this confidence. Census workers violating this oath are subject to severe penalties of up to 5 years in prison or \$5,000 in fines.

The integrity of census confidentiality has been upheld in court. Legal challenges from outside the Census Bureau for access to actual census forms and other protected material (such as names or address lists) have all been denied. This tough stand on confidentiality is a hallmark of census-taking in the United States and Guam.

Census Bureau Mission

In its best interests, a civilized nation counts and profiles its people and institutions. Doing so ably and objectively is the abiding mission of the United States Census Bureau. We honor privacy, shun partisanship, invite scrutiny, and share our expertise globally. Striving to excel, we chronicle the Nation's past, describe its present, and illuminate its future.



Census Vocabulary

Apartment—A room or set of rooms usually equipped with cooking facilities and a bathroom intended as a separate living quarters in a building containing two or more separate living quarters.

Average Number of Persons Per Household—A single number (value) that represents the total population living in housing units in a given geographic area divided by the total number of occupied housing units (households) in that geographic area.

Block—See Census Block.

Block Numbering Area (BNA)—An area delineated for the purpose of grouping and numbering census blocks. Identified by a 4 or 6 digit number, it provides census data for a larger area (about 650 housing units) than a block, but could be smaller than an election district.

Census—A complete count, or enumeration, of a population in a given area. Such a count also can include things other than population. The decennial census of Guam counts the population and housing units and their characteristics.

Census Answers—The responses people give the census enumerators to complete the census form. These responses and other personal information are confidential.

Census Block—The smallest geographic area for which the Census Bureau tabulates census data. A block usually is small in area, and is bounded on all sides by visible features and/or nonvisible boundaries. Census data for census blocks provide a more detailed picture of the general characteristics of the population and housing within a larger geographic unit.

Census Data—The numbers totaled or calculated from individual answers on census forms for a variety of geographic units. For instance, there were 50,658 females living in Guam in 1980. That is a piece of census data. It was produced by adding up all the girls and women listed on all the census forms for Guam.

Census Day—The official date of a census. In the United States and Guam, Census Day has been April 1 since 1930. The count produced during a census will stand for everyone who usually lives in the area on Census Day.

Census Enumerator—See Enumerator.

Census Form—A sheet(s) of paper containing the questions that people answer in a census. It also is called a census questionnaire.

Census Geography—The several land units used by the Census Bureau when taking and reporting a census. Some of these are political units, like an election district. Others are called statistical units, such as a census block or a block numbering area.

Census Year—The year a census is taken. The decennial census of Guam is taken every 10 years: 1920, 1970, 1980, 1990, 2000, 2010....

Complete Count—A 100-percent enumeration of every person and every housing unit. It also means that everyone answered all the population and housing questions on the census form.

Components of Population Change—Births, deaths, and migration (both into and out of an area). At the international level, this migration is referred to as immigration (into) and emigration (out of). In describing movement within Guam, these are called immigration and outmigration. The equation for change in population is simply: births - deaths +immigration - outmigration = population change.

Confidentiality—The legal requirement that the Census Bureau hold answers to census questions in strictest confidence and that it publish no data that allows identification of a specific person, household, housing unit or establishment. This means no one except sworn census workers can look at identifiable personal information in the census. Census confidentiality is maintained for 72 years; this means that 1990 census forms will be confidential until the year 2062.

Decennial Census—A census taken every 10 years. A decennial census has been taken in Guam in years ending in 0 (zero) since 1920.

Election District—A legal subdivision of Guam established by the Government of Guam.

Enumeration—Another term for taking a census.



CLS: decennial GRP: doid JOB: cep-guam DIV: edguide

Enumerator—A locally hired person who collects the information to be totaled in a census. To become an enumerator, the person must take an oath swearing not to share any individual answers with anyone except another census worker who also has sworn to keep the information private.

Family—Two or more persons living in the same household and related by birth, marriage, or adoption. A group of unrelated persons living together is not a family by this definition.

Home—A place where a family or single person lives. For the census, a home is the same as a housing unit.

House—A building intended for people to live in. Here a house refers to a single-family housing unit as pictured in *Activity 1*.

Household—A year-round housing unit with people living in it. In the census, it also is called an occupied housing unit.

Housing Unit (Year-Round)—Any occupied house, apartment, mobile home, tent, van, other structure and any vacant unit available or intended for people to live in all year. Year-round housing units do not include vacation units intended for seasonal occupancy and vacant units held for migratory labor or intended for seasonal occupancy. The occupant(s) lives and eats separately from all others in the same building and can enter and leave the unit without going through anyone else's home.

Median Age—The middle value of a ranked group of person's ages on Guam in 1980, the median age was 22.2. This means that half of the population of Guam was younger than 22.2 and half was older than 22.2.

Migration—A permanent change of residence into a different geographic area, usually at least across a district line.

Population—The number of people or inhabitants of an area at a given time.

Population Change—The increase, decrease, or stability in a population from one point in time to another. For example, from 1970 to 1980, the change in Guam's population was an increase of over 20,000 persons.

Questionnaire—A form containing a set of questions asked, most often, for obtaining statistically accurate information about a group of people.

Statistics—A collection of numeric data. In the census, a summary statistic is a number or other value such as a percentage for a population in a geographic area.

Structure—A building containing one or more housing units. A structure can be a single-family house or a building with apartments.

Survey—A way to collect facts or opinions from a portion or sample of a population. Usually the answers from these people or households will be used to represent those of everyone in the population.

Undercount—The number or proportion of persons and housing units missed in the census count.

United States Bureau of the Census—The Federal agency created in 1902 to take the decennial census of population, as well as other censuses and surveys. The Census Bureau is a part of the United States Department of Commerce.



Teacher's Notes:

Activity 1

Taking a Census

Overview The purpose of this activity is to introduce students to the concept of a census. Students will participate in a variety of learning activities to help them understand how and why a census is taken in Guam every 10 years. They also will learn that the census taken every 10 years counts people and housing. Students will relate the census to a count of their own family members and to a description of their homes. In addition, they will see how the census is related to a total (or aggregate) description of the people in their classroom, school, and neighborhood. **NOTE:** See the **Educator's Guide to the 1990 Census** (a separate leaflet in the teaching kit) for background on the 1990 census, a census vocabulary, and other information.

Suggested Grades K-2

Suggested Time 2-3 days

Learning Objectives

Students will:

1. Explain the term CENSUS and name some of the kinds of information gathered when the census is taken.
2. Use counting techniques to take a census of their families, classroom, or neighborhood.
3. Collect information and organize data into graphs.

Vocabulary

Apartment	House
Census	Population
Family	

Materials Needed

- Copy of **Educator's Guide to the 1990 Census**
- Copies of Handout—*Taking a Census*
- Picture File—cat, ear, nose, sun, up (arrow pointing up), six
- Optional Picture File—house, apartment building
- Letter Cards—C E N S U S
- Copies of *Take-Home Announcement* from 1990 Census Suggested School and Community Outreach Activities leaflet

Getting Started

1. Tell the students they are going to learn a very important word. Show them the set of letter cards, in jumbled order, that spell this word. Tell them that they are going to find out what the word is by solving a mystery word puzzle.

2. Arrange the pictures in the order shown in the picture file. Show the students the first picture (cat) and ask them to name it. Use the mystery word clues below as appropriate. After the picture is identified, ask them to name the first letter of the picture or word and/or simply place the correct letter card on the chalkboard tray, pocket chart, or bulletin board. Repeat the procedure until the word CENSUS is spelled.

Mystery Clues

An animal that meows	= Cat
Part of the body you hear with	= Ear
Part of the body in the middle of your face	= Nose
It's hot and shines during the day	= Sun
The opposite of down	= Up
The number after 5	= Six

3. Tell the students that a census is a count. In Guam, a count—a census—of all the people (population) and all the homes (housing units) happens every 10 years. It happens in years ending in zero. We take a census every 10 years because the number of people and number of homes change. The reason we need these new numbers is that they are used for big decisions. Imagine that the mayor of a local village wanted to build a new playground. He wanted it to be in a place where most of the children could get to it. By looking at the census numbers for all parts of the village, the mayor can find out where most of the children live and locate the playground in the best spot.

Development

1. Tell the students they are going to take a census. Distribute copies of the Handout. Have the students read the introduction or read it to them. Have them

CLS: decennial.GRP: dpld JOB: cep-guam DIV: activity1
 draw a picture of a/their family on the back of the sheet. Tell them that their drawing should include everyone who lives in their home. NOTE: If each student draws a picture of his/her family, the totals will vary. You may want to tell the students what to draw.

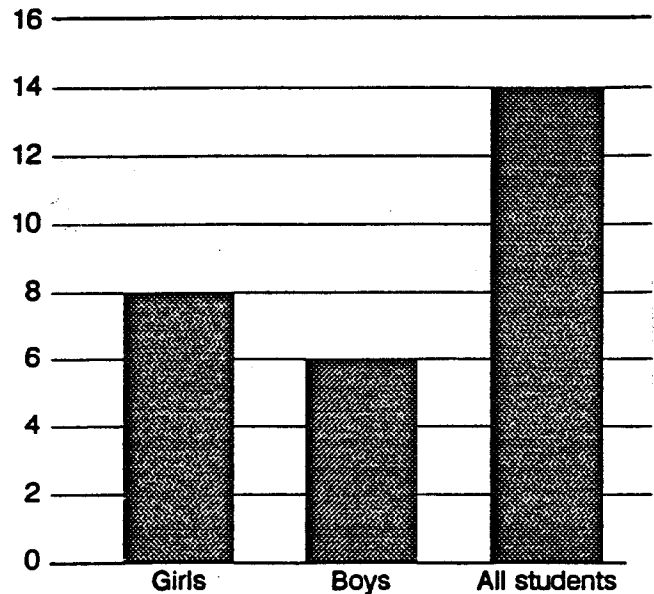
2. After they have drawn the picture, have them answer Questions 2 to 5. NOTE: Have them include all grown-ups in their answer to Question 2. After they have answered the questions, call on individuals to show their pictures to the rest of the class. If you had them draw their own family, have them compare and contrast the total size and makeup of different families. If more than one family lives in the student's home, have them draw multiple pictures, make multiple counts, and then a grand total.
3. Explain the different kinds of housing associated with Questions 6 and 7 and/or show them pictures of these. Call on individual students to tell whether they live in a house (like a single-family home), an apartment or some other kind of housing unit. Then have them answer Questions 6 to 8. NOTE: If the housing depicted in the Handout is too dissimilar to housing in your community, you may want to draw replacement pictures on a separate sheet of paper, overlay it on the Handout and then reproduce copies for the students.
4. Obtain copies of the *Take-Home Announcement* from the 1990 Census Suggested School & Community Outreach Activities leaflet. Give a copy to each student to take home.

Extension/Enrichment Activities

1. Have students count the members of the class and discuss the numbers. Have them count and total the number of boys and girls, their ages, the types of housing they live in, or other characteristics. This could be done by having the students stand and form groups for the characteristic in question (girls on one side, boys on the other). Then have them regroup for the next characteristic and so forth. Expand this activity by designating a few students as "census takers." Their job is to total all the information collected in the census. The totals for each item could be listed on the chalkboard. Then discuss the profile. Other items which you could investigate in this manner are the types of pets students have, their favorite TV shows, favorite colors, and so forth.
2. Develop a human graph by writing the words GIRLS and BOYS in two places on the chalkboard. Have the girls form a straight line in front of the word GIRLS and the boys in front of the word BOYS.

Make a mark with chalk or tape in front of the first person in each line. Draw a bar graph of the information on the chalkboard to demonstrate how real people are depicted in symbolic form. Develop human graphs of other student characteristics.

Our Class Census



3. Take a walking tour near the school and have the students count the different types of housing. From outside observation, students could generate totals for the number of floors in a building, exterior colors, exterior materials, (concrete, metal, or wood) and type of housing. Have them distinguish between housing and nonresidential structures (stores, gas stations, and the like). Translate this information into additional bar graphs. While in the field, assist the students in converting what they see into a map.
4. Have the students create a bulletin board collage by collecting pictures/drawings of people and housing from magazines. Tell the students they are conducting a "people and housing picture census." Establish some categories (older persons, young people, apartments, one-family homes). Since census counts are associated with geography, further divide the categories into urban and rural. Put these category labels on the bulletin board and have the students add their entries to the correct category. On the last day of your "picture census," have the students sum the people and housing by category and create a grand total of people and of housing.



Activity 1 – Handout

Taking a Census

One, two, three, four. You are counting. A CENSUS is a count. A census counts people. It tells us how many people are old. It tells how many people are young. It tells us how many people are girls. It tells how many people are boys.

A census counts the buildings people live in.

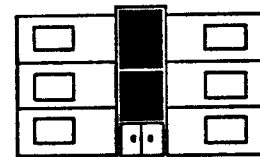
A census counts homes. It tells us the kinds of homes people have. It tells us how many homes there are.

It tells us this and more.

We need counts of people and homes. We need to count everyone. A census answers big questions. Can you count people and homes? Can you add them up? This is what a census does.

Draw it on the back.

1. Draw a picture of a family. _____
2. How many grownups did you draw? _____
3. How many boys did you draw? _____
4. How many girls did you draw? _____
5. How many people are in your picture?
This is what a census does. _____
6. These are houses.
How many houses do you see? _____
7. This is an apartment building.
Each apartment has one window.
How many apartments do you see? _____
8. Add the houses, and apartments. How
many are there? _____



Teacher's Notes:

Activity 2

Add! Don't Subtract!

Overview The purposes of this activity are to introduce students to the concepts of census, complete count, and undercount; to show them that answers to the census become useful in decision making when they are totaled and associated with geographic areas; and to demonstrate the effect of an undercount on real-world decisions and the need for a complete count in the decennial census.

Students learn the difference between the concepts of complete count and undercount by participating in a roleplaying activity. They reinforce these concepts by engaging in activities centered around using/drawing a neighborhood map, summarizing a data set about the persons in households in this neighborhood (both as a complete count and an undercount), and making decisions based upon their computations. **NOTE:** See the **Educator's Guide to the 1990 Census** (a separate leaflet in the teaching kit) for background on the 1990 census, a census vocabulary, and other information.

Suggested Grades 2-6

Suggested Time 2-3 days

Learning Objectives

Students will:

1. Define the term, census.
2. Explain the difference between the terms, complete count and undercount.
3. Prepare/use a map showing residential and nonresidential structures using basic geometric shapes.
4. Summarize and verify a data set.
5. Use a simple model to make a decision.
6. Alter a decision in the face of changing information.
7. Describe how people depend upon each other by seeing how the individual behavior of some can affect everyone.

Vocabulary

Census	Housing Unit
Complete Count	Population
Decennial	Undercount

Materials Needed

- Copy of **Educator's Guide to the 1990 Census**
- Index cards or small pieces of paper (one per student)
- Copies of Handout 1 — *Counting Center Neighborhood*
- Drawing paper or copies of Handout 2 — *Map of Center Neighborhood*

- Red pencils

- Copies of *Take-Home Announcement from 1990 Census Suggested School & Community Outreach Activities* leaflet

Getting Started

1. Introduce this activity by having a discussion of the vocabulary. Tell the students they are going to be learning some important words. Begin with the word **CENSUS**. Write it on the chalkboard. Ask the students if they know the meaning of the word. Tell them a census is a count. (See **Educator's Guide to the 1990 Census** for definitions.)
2. On the chalkboard write the word **DE-CEN-NI-AL** in syllables just to the left of the word **CEN-SUS**. Have the students pronounce the word. Ask them the meaning of this word, but be ready to tell them. Decennial means occurring every 10 years. Have them say the two words **DECENNIAL CENSUS** together. Ask a student to define this phrase. Tell them that a decennial census happens in Guam in years ending in zero (0). Ask in what year the next decennial census happens. Ask if they know when in 1990. [Answer: April 1.]
3. Below these words, write the words **POP-U-LA-TION** and **HOUS-ING U-NIT**. Have the students pronounce these words. Ask them to give their meanings. Ask why these are important words to know. Tell them that these are the things counted in the decennial census in Guam. Besides a count of people and homes, the decennial census counts other things about people and homes, such as age, sex, and type of homes people live in.

CLS: decennial GRP: dolid JOB: cen-guam DIV: activity2

4. Write the words **COM-LETE COUNT** and **UN-DER-COUNT** on the chalkboard. Have them say these words. Ask the students if they can explain what these words mean. As a hint, tell them they are the opposite of each other. Tell them that complete count means that every person and every housing unit in their neighborhood, in their community, on the entire island was counted and all the other questions about every person and housing unit were answered. Tell them that undercount means that some of the people and some of the housing units were not counted. This also means that some of the other information, like age or sex, is missing.
5. Ask the students what they think might happen if there was not a complete count in the decennial census. As a follow-up question, ask why a census of population and housing is taken in Guam. [Answer: A census is taken to create **totals** of the population, housing, and other characteristics. These totals are then used by schools, churches, businesses, and Federal and local governments to make decisions that affect everyone and to plan for the future. Draw specific examples from those given in the Educator's Guide section on *Uses of Census Data* or use an example of how census totals and data are used in your community. Have the students offer some suggestions.]
6. Tell the students they are going to participate in an activity that will show them exactly how census totals are used in making decisions and what happens if there is an undercount.

Development

1. Have the students imagine that their classroom is a village. Have them name it; for instance, **OUR VILLAGE**. Tell them that the owner of a children's clothing store has built but not opened a new store in Our Village. The owner of the company is waiting for the new census totals for Our Village to find out who lives there. These totals will help him/her decide what kinds of clothes to sell in the new store. Embellish as appropriate.
2. Tell the students they are now going to take the census of Our Village to give the total to the owner. Their census will give a count of the population and tell how many boys and girls there are in Our Village. Tell them you are the census taker and you are going to collect information from them. (OPTION: In this part of the roleplaying, you may want to create a badge to wear saying **OFFICIAL 1990 CENSUS TAKER**.) Distribute the index cards. Tell the students they are going to write their sex, **BOY** or

GIRL, on the card. Before you do, tell the boys that they think a census is a dumb idea. They do not care if they are counted. They do not see the reason why. (Depending upon your management style, you may want to elicit a round of "Boos!" from the boys. Don't worry. It will come back to haunt them.) Instruct the boys to write words like **refused**, **don't care**, or **gone fishing** on their cards or leave them blank, instead of writing in their sex. Make sure the cards say **girl** for all of the girl students. (Embellish the roleplaying as appropriate.)

3. On the chalkboard, write the phrase, **CENSUS OF OUR VILLAGE** (or whatever name was chosen). Below that, write the words, **BOYS**, **GIRLS**, and **TOTAL POPULATION**. Tally the returns. Write the number of girls by the tally of girls. There should be no tally marks and a zero (0) entered in the column marked **BOYS**. Ask one of the students to perform the arithmetic ($0 + \underline{\quad} = \underline{\quad}$) to arrive at the total population.
4. Write that number on the chalkboard under the heading, **TOTAL POPULATION**. Transfer the counts on the board to a separate piece of paper with an upper heading, **OFFICIAL REPORT OF THE CENSUS OF OUR VILLAGE**. (Prepare this sheet ahead of time.) Announce, as the census taker, that, "*The Census of Our Village is over. The FINAL counts, which cannot be changed for another 10 years, are 0 boys and _____ girls. The total population is _____.*" Leave the **OFFICIAL REPORT** on your desk.
5. Now, change roles. Become the owner of the children's clothing store. (A badge with the word **OWNER** on it may be appropriate.) Seat yourself at your desk and pick up the **OFFICIAL REPORT**. Say, "*Oh Great! The OFFICIAL REPORT OF THE CENSUS OF OUR VILLAGE just came in. I've been waiting for this. This says the total population is _____ and that 100 percent of the population are girls! From this report, I know exactly what kinds of clothes to put in that new store in Our Village: girls' clothes!*" (Embellish as you wish).
6. Assume your role as teacher. Ask the students for their reaction to the owner's decision. Direct the students now to imagine it is several weeks or months in the future. Tell them that the owner of the store has been receiving complaints from the new store in Our Village. (Roleplay this, if you wish.) The store manager says about one-half (or the proportion of boys in the class) of the people in Our Village do not like the clothes in the store. The owner is not sure what to do but decides to take another look at the **OFFICIAL REPORT**. It is the only thing the owner

