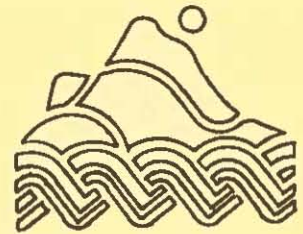


Guam Inventory of Planning Information



Bureau of Planning

ADDENDUM

June 1978

BIBLIOGRAPHIC DATA SHEET	1. Report No. CPA-GU-09-39-1001-2	2.	3. Recipient's Accession No.
	4. Title and Subtitle Addendum to the Guam Inventory of Planning Information		5. Report Date June, 1978
7. Author(s) Planning Information Section, Bureau of Planning		8. Performing Organization Rept. No.	
9. Performing Organization Name and Address Bureau of Planning Post Office Box 2950 Agana, Guam 96910		10. Project/Task/Work Unit No.	
		11. Contract/Grant No. CPA-GU-09-39-1001	
12. Sponsoring Organization Name and Address Department of Housing and Urban Development Region IX Office of Community Planning and Development 450 Golden Gate Avenue, P.O. Box 36003 San Francisco, California 94102		13. Type of Report & Period Covered	
		14.	
15. Supplementary Notes			
16. Abstracts An Addendum to the <u>Guam Inventory of Planning Information, June, 1976.</u> An annotated catalog of plans, reports, surveys, and data bases about Guam that are useful to planners. Covers time period June, 1976, to June, 1978. Each entry includes title, author, date, a paragraph of description, and where the document is located. The Addendum is organized into the following subject areas: Economics, Education, Environment, Health, Housing, Land Use, Population, Public Utilities, Recreation, Safety, Social and Transportation. Includes one appendix on the recent maps made by the Bureau of Planning.			
17. Key Words and Document Analysis. 17a. Descriptors Bibliography Planning Information Guam			
17b. Identifiers/Open-Ended Terms			
17c. OSATI Field Group			
18. Availability Statement		19. Security Class (This Report) UNCLASSIFIED	21. No. of Pages
		20. Security Class (This Page) UNCLASSIFIED	22. Price



**TERRITORY OF GUAM
OFFICE OF THE GOVERNOR
AGAÑA, GUAM 96910
U.S.A.**



RICARDO J. BORDALLO
GOVERNOR

Hafa Adai:

The activity of planning is vital to the future of Guam. Public Law 12-200 created the Bureau of Planning, and directed it to identify territorial goals, and formulate long-range plans to meet these goals. The Bureau is also responsible for developing an information system and data bank materials that are useful to planners.

The Addendum to the 1976 Inventory of Planning Information is part of the continuing effort of the Planning's Information Systems Section. It is a directory of all planning information and statistics available on Guam since 1976.

I strongly urge each agency and department to consult the Inventory and Addendum for planning information and base data to use in functional plans. This is an opportunity for Government of Guam agencies to coordinate their respective plans and programs by using the same base data.

I wish to commend the Bureau of Planning for developing this aid to planning on Guam.

Si Yuus Maase,


RICARDO J. BORDALLO

ADDENDUM TO THE GUAM
INVENTORY OF PLANNING INFORMATION

June 1978

THE PREPARATION OF THIS REPORT WAS
FINANCED IN PART THROUGH A COMPREHENSIVE
PLANNING GRANT FROM THE DEPARTMENT OF
HOUSING AND URBAN DEVELOPMENT (GRANT
NUMBER CPA-GU-0939-1001).

Prepared by Susan Woicik
for the Bureau of Planning
Agana, Guam

INTRODUCTION

The Addendum is an update of the Guam Inventory of Planning Information June, 1976. It is a reference guide for planners and other people doing research about Guam, covering master plans, reports, surveys, and information collected by Government of Guam agencies that is related to planning. The 1976 Inventory was for the period 1970-1976. The Addendum is a survey of the sources of information available since June, 1976, and should be used in conjunction with the 1976 Inventory. Additional copies of the Inventory can be obtained from the Bureau of Planning.

The Addendum is organized into twelve subject areas: Economics, Education, Environment, Health, Housing, Land Use, Population, Public Utilities, Recreation, Safety, Social, and Transportation. It includes one appendix which is an index of the most recent maps prepared by the Bureau of Planning.

Each source document in the Addendum contains the title, author, date, a description of its contents, and the agency or library where it can be located. The Detail Section, which appeared as two supplements to the 1976 Inventory and described the data in detail, has unfortunately been omitted due to time limitations in compiling the Addendum.

INTRODUCTION

The Addendum is an update of the Guam Inventory of Planning Information June, 1976. It is a reference guide for planners and other people doing research about Guam, covering master plans, reports, surveys, and information collected by Government of Guam agencies that is related to planning. The 1976 Inventory was for the period 1970-1976. The Addendum is a survey of the sources of information available since June, 1976, and should be used in conjunction with the 1976 Inventory. Additional copies of the Inventory can be obtained from the Bureau of Planning.

The Addendum is organized into twelve subject areas: Economics, Education, Environment, Health, Housing, Land Use, Population, Public Utilities, Recreation, Safety, Social, and Transportation. It includes one appendix which is an index of the most recent maps prepared by the Bureau of Planning.

Each source document in the Addendum contains the title, author, date, a description of its contents, and the agency or library where it can be located. The Detail Section, which appeared as two supplements to the 1976 Inventory and described the data in detail, has unfortunately been omitted due to time limitations in compiling the Addendum.

TABLE OF CONTENTS

	Page
INTRODUCTION	i
ECONOMICS	
Plans	3
General Economic Studies and Data	4
Topical Economic Studies and Data	6
Government of Guam Economic Activity	8
Employment	10
Labor	11
Agriculture	12
Tourism	13
Taxes	14
EDUCATION	
Enrollment and Attendance	17
Studies and Reports	17
Department of Education Management--Philosophy	17
Specific Program Planning/Handbooks	18
ENVIRONMENT	
Environmental Studies, Impact Assessments and Impact Statements	21
Air Quality	25
Floods	25
Forest Management	25
Geology	26
Introductory Material	26
Life Species Listings	26
Noise Pollution	27
Seismology	28
Shore Protection	28
Typhoons	28
Water Quality Monitoring	29
Water Quality Planning	30
Water (Fresh) Resources and Supply	30
HEALTH	
Information Systems	35
Miscellaneous Published and Unpublished Reports	35
HOUSING	
Published Reports	39

LAND USE

Land Use Plans	43
Other Land Use Information	45
Laws and Regulations	46
Plans for Specific Areas	47

POPULATION	51
----------------------	----

PUBLIC UTILITIES

Public Utilities Overview	55
Solid Waste	55
Power	55
Telephones	56
Public Buildings	56
Hazardous Waste Management	57

RECREATION

Recreation Plans	61
----------------------------	----

SAFETY AND DEFENSE

Published Reports and Surveys	65
Department of Public Safety Source Documents	66

SOCIAL

Surveys and Published Reports	69
---	----

TRANSPORTATION

Land Transportation	73
Air Transportation	74

APPENDIX A

Indices of Guam Maps	A-1
Community Design Index	A-2
Federal and Municipality Land Area Map	A-3

ECONOMICS

PLANS

Overall Economic Development Plan for Guam, 1976 Annual Progress Report; Bureau of Planning; September, 1976; 58 pages, 10 tables. The annual progress report is a discussion of additional areas of concern that need to be addressed to ensure that the initial OEDP remains current. Areas include changes in population; decreased employment, income, and government finance; and establishment of ultimate and intermediate economic development goals. The report reviews projects submitted for consideration in the initial OEDP five years ago. Development strategy and priorities for agriculture and tourism are outlined and the committee work plan lists developing potentials for consideration next year.

Available: Bureau of Planning Library.

Overall Economic Development Plan; Guam Bureau of Planning; 1977; 141 pages. A discussion of development proposals for the Federal Economic Development Administration. Programs which are vital to Guam's economy include those for agriculture, tourism, Commercial Port, Guam International Air Terminal and water resources. A summary of EDA related, specific projects follows an exhaustive discussion of the various components of Guam's economy. Major chapters address population, labor force, and the economic potentials and constraints affecting the various sectors of the economy.

Available: Bureau of Planning Library.

Growth Policy for Guam; Bureau of Planning; May, 1976; 77 pages, tables. The Growth Policy is a general policy statement for decision making in government. It is not a plan or program; rather, it is the framework under which plans and programs will be developed and to which they should adhere. The report presents an overview of the elements affected by population growth and their Growth Policy Statements. The Appendix contains position papers which provide background reports and more detailed recommendations of the five most important growth elements: Environment, Culture and Lifestyles, Agriculture, Tourism, and Light Industry. The agriculture growth policy is presented in another report and summarized here.

Available: Bureau of Planning Library.

Five-Year Economic Plan; Bureau of Planning. The economic plan element of the Comprehensive Development Plan is currently being compiled and is expected to be completed in June, 1978. It will address economic growth potentials for the territory and outlines a five-year plan for economic growth. The emphasis will be on utilization of economic and statistical methodology to more accurately assess trends. Discussions will include the need and use of an economic plan and statement of general economic goals; an overview of the economy with a general description of the state of the economy, including trends in the recent past; economic resources and constraints, and sectorial strategies.

Economic Adjustment Program, Guam; the Office of Economic Adjustment, Office of the Assistant Secretary of Defense; July, 1977. This is a report of the President's Economic Adjustment Committee prepared under contract by Battelle Memorial Institute. The EAC aids communities experiencing serious economic difficulties caused by reduced Defense spending. The study includes an analysis of Guam's economic base and specific development problems; recommendations for an economic adjustment strategy to generate private sector jobs; and suggestions for a set of specific actions which will help implement the strategy outlined. One suggestion was the development of the Guam Growth Council.

Available: Bureau of Planning.

The following three studies were completed as follow-ups to the 1975 Guam Economic Development Master Plan. They were done for the Guam Economic Development Authority by Overseas Bechtel, Inc. to define programs to help stimulate economic growth on Guam.

Program for Development of Apra Harbor; Overseas Bechtel, Incorporated; October, 1977. This study is a conceptual plan for the development of Apra Harbor that identifies some of the major land uses needed around the harbor after the U.S. Navy moves its ammunition loading and unloading wharf from Apra Harbor to Orote Point. The report contains a summary of the proposed development program, a description of the plan, a discussion of the present land uses around Apra Harbor, a discussion of the major industries that might require industrial sites, and a proposed development program for Apra Harbor and preliminary development schedule.
Available: Bureau of Planning

Program for Increasing Research and Development Activities on Guam; October, 1977; Overseas Bechtel, Incorporated. A review of Guam's potential for increasing R&D efforts, particularly with regard to U.S. Government programs. Ten candidate research projects in the fields of energy, marine sciences and agriculture, and their possible sources of funding are recommended. Elements for successful implementation of the research program are also discussed.
Available: Bureau of Planning.

Program for Increasing U.S. Corporate Activities on Guam; Overseas Bechtel, Incorporated; November, 1977. The main purpose of this report is to outline a program that will encourage U.S. corporations to locate some of their regional administrative operations on Guam. Discussions also include advantages Guam can offer to U.S. corporations and the types of operations that could be logically located here.
Available: Bureau of Planning.

GENERAL ECONOMIC STUDIES AND DATA

Guam Needs Assessment; draft; Richard W. Miller, U.S. Department of Interior; February 24, 1978. A broad assessment of Guam's economic resources and development, fiscal system, and capital needs. Discussions of the economy include income; employment; wages; government, military, and private sectors; and zoning and land use. The tax system, expenditures, funds, autonomous agencies and capital development projects comprise discussions on the fiscal system. Capital needs include health, education, infrastructure, housing, and cultural facilities. Contains a compilation of nearly 40 tables and charts.
Available: Bureau of Planning, Chief Planner's Office.

Supplement of Economic Base Study for Territory of Guam, Mariana Islands; EDAW; prepared for the U. S. Army Corps of Engineers, Pacific Ocean Division; March 15, 1977. A partial statistical update of the Economic Base Study for the Territory of Guam, Mariana Islands, by the U.S. Army Corps of Engineers, May, 1973. The essential body of the report consists of a compilation of 27 tables. These show population; employment; sector analysis of tourism, construction, and military; land use; and socio-economic data; particularly for the southern subregion of Guam. The narrative consists of an analysis of the data which reflect changes Guam has undergone in the last four years, such as recent tourist related developments. Potentials for employment, housing, recreation, and agriculture related land uses focus on water development and storage facilities in the south.
Available: Army Corps of Engineers' Office.

Mid-Term Report and Recommendations on Government of Guam; January, 1976; issued by Senator Thomas V.C. Tanaka, Committee on Finance and Taxation; graphs, tables. An assessment of the economy with goals and recommendations for short- and intermediate-term solutions designed to provide positive policy guidance. The four major areas of concern discussed are economic recovery, budgeting, government organization, and taxes.
Available: Bureau of Planning, Economic Planning Section.

Guam Annual Economic Review 1976; Economic Research Center, Department of Commerce; April, 1977. The eighth annual overview of the island's economy. Consists of an analysis of capital improvements, utilities, military, Federal Disaster Assistance Administration, agriculture and fisheries, tourism and international trade, construction, manufacturing, financial institutions, personal income and cost of living, and labor. Contains 20 statistical tables and 10 figures.
Available: Bureau of Planning.

Proceedings of the 7th Guam Annual Economic Conference " . . . towards a sound economic direction"; Guam Department of Commerce and Guam Chamber of Commerce; August 13, 1976; 73 pages. A compilation of addresses given during the conference which evaluate and recommend improvements in Guam's economic conditions, and formulate workable measures to counter the effects of future economic recessions. Discussions center on tourism; agriculture, mariculture and fisheries; and financial development.
Available: Bureau of Planning Library.

South Pacific Economics: Statistical Summary; South Pacific Commission; September, 1977. A paper presented to the Regional Conference on Economic Development Planning, Suva, Fiji, October 24-28, 1977. Includes tables of selected economic indicators prepared by the SPC Economist and Assistant Economist with the assistance of the SPC Statistical Unit. 1) Population characteristics of Pacific countries. 2) Some estimates of national income and government expenditure. 3) Total and per capita trade. 4) Intra-regional exports, 1975. 5) Percentage of population economically active. 6) Structural breakdown of economies as indicated by employment.
Available: Bureau of Planning.

Key Economic Indicators of the South Pacific, No. 1, December 1977; South Pacific Commission; March 1978. The first in a series of statistical publications presenting leading economic indicators for countries in the South Pacific region. Tables for Guam show: population, personal income, government expenditure, trade, gross business receipts, construction, international tourist travel, unemployment, finance and consumer price index. Available: Bureau of Planning, Economic Planning Section.

Bulletin of Statistics, Trust Territory of the Pacific Islands, Volume I, No. 1; Office of Planning and Statistics, Office of the High Commissioner, Saipan, Mariana Islands; December, 1977. The statistical abstract of the Trust Territory and Northern Mariana Islands. Data does not include Guam; however it is interesting because it is the Trust Territory's first effort to compile and publish tables on population, employment, agriculture, manufacturing, tourism, education, health, and so forth. Available: Bureau of Planning.

TOPICAL ECONOMIC STUDIES AND DATA

Gross Island Product; Russell Krueger, Consultant, and Clara Okada, Department of Commerce; April, 1978. The purpose of this project is to estimate the income and product account of Guam from 1972 to 1977. The GIP is an extremely important tool in monitoring and regulating the state of the economy and in providing an economic accounting framework for long term development planning. It measures both the expenditures for consumption, government, investment and net international trade; and income generated by production, including employee compensation, profits, tax receipts, net interest, capital consumption allowance, and business transfer payments. The report is made up of more than 30 tables. These include: Gross Island Product, 1972-1976; Current and Constant GIP, 1972-1976; GIP by Quarter, 1972-1976, not seasonally adjusted; GIP by Quarter, 1972-1976, seasonally adjusted; Gross Business Receipts, 1973-1976; Personal Consumption Expenditures Components, 1972-1976; Government Expenditures - GIP Basis, 1972-1976; GovGuam Expenditures - GIP Basis, 1972-1976; Major Components of Net Exports, 1972-1976; Quarterly Military Personnel and Dependents on Guam. The report includes a detailed methodology suitable to allow preparation of similar estimates on an ongoing basis. Available: Department of Commerce.

Guam Public Market Feasibility Study, The Prospect of Agriculture on Guam U.S.A.; Hong K. Sohn, prepared for the Guam Department of Commerce; July, 1977. A study to determine whether a public market can serve Guam's agriculture and cottage industry marketing needs. Conclusions and recommendations are based on an overall conceptual framework including examination of historical trends, identification of market function, delineation of marketing flow, and forecast of quantitative trends. A comprehensive examination of the entire system of the agrarian sector such as the number and types of producers, capital and labor constraints and potential for future output was conducted to estimate the amount of product flow through the public market. Demand for public market commodities was projected through 1979. Finally, possible location, design, methods of operation, and other specific aspects of implementation are discussed. Other policy recommendations for furthering Guam's Green Revolution are also proposed. Available: Bureau of Planning.

A Request to Reinstate Funds in the FY 1979 Defense Budget for Relocating the Navy Ammunition Wharf on Guam; Ammunition Wharf Task Force; February 27, 1978. The Government of Guam's position paper relating to the U.S. Government's decision to delay relocating the ammunition wharf to Orote Point. The paper includes discussion of the history of the wharf and efforts to relocate it, and the importance of Apra Harbor to Guam's economic development. Two draft reports were previously prepared: "Need for Relocation of the Ammunition Wharf," by the Bureau of Planning, and "Vulnerability Assessment and Economic Impact Scenario for a Large Scale Munitions Detonation of Hotel Wharf, Apra Harbor, Guam," by Michael Storch, Chamber of Commerce. Available: Bureau of Planning.

Report of the Special Study Commission of the Guam Supertanker Port to the Fourteenth Guam Legislature; February, 1978. An initial effort toward studying the feasibility of Guam as a central terminal station storage facility (CTS). The report includes determination of the need for a central fuel storage facility among major oil-consuming nations (especially Japan), an analysis of transportation economic variables to assess economic feasibility, and an assessment of the capability of Guam and its desire to support such a facility. Statements of the methodology and procedures used are given. The report also contains a summary and analysis of the Palau Superport Project and its current status. Available: Bureau of Planning, Chief Planner's Office.

Guam Monthly Food Index; Cost of Living Office, Economic Research Center, Department of Commerce. A supplement of the Quarterly Report of the Guam Consumer Price Index published for the convenience of those who need the information as soon as possible. It consists of two tables: Monthly Food Index and Estimated Average Retail Food Prices. Available: Department of Commerce.

Guam Trade: Summary of Imports and Exports by Countries, Fiscal Year 1975; 4th Occasional Paper, Economic Research Center, Department of Commerce; July, 1976. Compilation of nine tables showing import and export data by country and cost in freight dollar value. Included are annual, quarterly and monthly totals and percents of imports and exports by method of transport. Available: Department of Commerce.

U.S. Census of Outlying Areas, 1972, Guam: Censuses of Construction Industries, Manufacturing, Wholesale Trade, Retail Trade, and Selected Service Industries; issued March, 1975. The economic censuses constitute comprehensive and periodic canvasses of the industrial and business activities in Guam. Data is presented by kind of business for construction industries, manufacturers, retail trade, wholesale trade, and selected service industries. Censuses were conducted in 1958, 1963, and 1967. Beginning in 1967, Congress authorized the economic censuses to be taken at 5-year intervals covering years ending in "2" and "7". Available: Bureau of Planning.

GOVERNMENT OF GUAM ECONOMIC ACTIVITY

Guam, A New Era of Growth: A Report to the People of Guam; Ricardo J. Bordallo, Governor of Guam; February 6, 1978. The Governor's Annual Message on the State of the Territory. Discusses factors accounting for improvements in Guam's socio-economic situation during the past year and goals for 1978. Contains some statistical and financial information. Available: Bureau of Planning, Chief Planner's Office.

Guam Rehabilitation Act Debt Study; Bureau of Planning; November, 1977; tables, graph. A study of the feasibility of a request for the forgiveness of a debt owed by the Government of Guam to the U.S. Treasury. The debt was incurred as the result of Congressional desire to rehabilitate Guam following World War II, and the implementation of Public Law 88-170, known as the Guam Rehabilitation Act of 1963. The report includes discussions of the Government of Guam's financial status, general fund revenues, and capital needs. Available: Bureau of Planning, Economic Planning Section.

Guam: The United States Developing Territory--1977; Office of the Governor; January, 1977; 38 pages. A summary of federal fund grant and loan requirements necessary to meet Guam's community and economic development objectives. Proposed financing is detailed for the following capital improvement projects: post-Typhoon Pamela upgrade and restoration, government operations, rehabilitation and economic development, and community development. Available: Bureau of Planning.

Government of Guam Briefing Papers for the U.S. Department of Interior; Guam Bureau of Planning; July 8, 1977 and January, 1978. Compilations of briefing papers prepared in connection with visits by members of the Office of Territorial Affairs, Department of the Interior to the Island in July, 1977 and January, 1978. A variety of topics vital to the Island's development are discussed.

Available: Bureau of Planning, Economic Planning Section.

Capital Improvements Review Process; Bureau of Planning; June, 1977; Preliminary for review only. A plan which establishes a capital improvements review process that will coordinate capital improvements planning. The report is organized into three main sections: historical background of capital improvements; statement of problems; and conclusions and recommendations. The appendices contain the evaluation of alternatives, the list of impact considerations, and an instruction booklet. Available: Bureau of Planning.

Annual Report, 1977; Bureau of Budget and Management Research; July 20, 1977. A review of the general responsibilities and accomplishments of the BBMR including graphs and charts. The budget and management section of the report gives estimated revenues (general and federal), budget appropriation FY 1978, comparison of cash receipts and expenditures, estimated revenue versus actual revenue, annual revenues from FY 1975 to FY 1978, and capital and special projects. A section on expenditure trends charts expenditures for the Guam Rehab Fund, Highway Fund, and Tourist Attraction Fund, as well as federal grants to the Government of Guam and Typhoon Relief Assistance (federal and local share). The Audit Section shows audit results for the emergency FDAA Program. Available: Guam Environmental Protection Agency Library.

Government of Guam Capital Improvement Request for Fiscal Year 1979; Bureau of Budget and Management Research; revised as of September 23, 1977. A description of Guam's request for assistance grants for FY 1979 from the Department of Interior. It includes a narrative of proposed infrastructure and resources development programs and states territorial needs, goals, and objectives. Available: Bureau of Planning Library.

Geographic Distribution of Federal Funds in Territories and Other Areas Administered by the U.S.: Fiscal Year 1977; Compiled for the Executive Office of the President by the Community Services Administration. This report was formerly entitled Federal Outlays. It is a report of the distribution of Federal funds of the Executive Branch of the Federal Government, by agency, program, and indirect federal support for every county of the U.S. and for each city where the population exceeds 25,000. Additionally, the data are summarized at State and National levels. This volume contains data for the territories, including Guam. Available: Bureau of Planning, Economic Planning Section.

EMPLOYMENT

Territory of Guam Department of Labor Annual Report Fiscal Year 1977; Guam Department of Labor; 63 pages. This report includes data submitted by the Bureau of Apprenticeship and Training, plus additional information that concerns itself with Employment Services, utilization of Wage and Hour Programs, Work Incentive, and Workmen's Compensation. Eighteen statistical tables on the employment and unemployment record were compiled by the Bureau of Labor Statistics.

Available: Bureau of Planning.

Current Labor Force Survey, A Report Devoted to the Manpower Characteristics of the People of Guam, March 1977; Bureau of Labor Statistics, Department of Labor; June, 1977. A comparative summary of the high points of the quarterly CLFS conducted in May, September and December, 1976, and March, 1978. The report consists of 16 tables showing unemployment, duration of unemployment, reasons for unemployment, participation in the labor force and employment and unemployment trends, and unemployment trends in industry and occupation. Several other reports are generated by this survey: Multiple Jobholdings on Guam, Guam Family Money Income, and Guam Household Income. Some data from the September, 1977 survey is available in the report The Unemployment Situation on Guam, September 1977. The full report will be published soon.

Available: Department of Labor, Bureau of Labor Statistics.

Multiple Jobholdings on Guam: May, 1976; Bureau of Labor Statistics, Department of Labor. A product of the Current Labor Force Survey which shows the number of civilian residents holding more than one job by types of industries and reasons for multiple jobholding.

Available: Bureau of Planning.

Job Demand in February 1977; Bureau of Labor Statistics, Department of Labor. A survey of unfilled job openings as reflected by job orders submitted by employers to the Guam Department of Labor's Employment Service. Consists of two tables: Table 1 is a comparison of openings by occupational categories, and Table 2 presents all unfilled job openings for the month ended February, 1977. Jobs in Table 2 were classified on the basis of the Dictionary of Occupational Titles.

Available: Bureau of Planning.

Annual Census of Establishments, Guam--March 1976; Guam Department of Labor, Bureau of Labor Statistics; September 30, 1977. This report was formerly published under the title Annual Census of Employment and is conducted every March. It is a statistical summary of the number of employees on payrolls by industrial division. The Standard Industrial Classifications code is used to identify industries. Data was obtained from a questionnaire mailed to all employers which requested information concerning employment and employment distribution by sex, whether on full-time or part-time schedules, and citizenship status. The report consists of five tables and three figures for 1976 and seven historical tables.

Available: Bureau of Planning.

LABOR

The Guam Alien Contract Worker System; U.S. Department of Labor; May, 1977; tables. A study to determine how the importation of alien contract workers affects the wages and working conditions of American workers, and how well the Guam Employment Service has regulated and controlled this activity. The report discusses Guam's economy, unemployment and underemployment, characteristics of the population, aliens in the labor force, working conditions of alien contract workers, alien contract worker wages and prices, the government's role in the certification process, effect of alien contract workers on government training programs and conclusions.

Available: Bureau of Planning, Economic Planning Section.

Area Wage Survey Territory of Guam December 1976; U.S. Department of Labor, Bureau of Labor Statistics; April, 1977; 7 pages, 6 tables. A statistical report of wages from data collected in December, 1976 from 49 firms with 50 employees or more. Tables 1-5 show straight-time hourly earnings information of office workers, professional and technical workers, maintenance and power plant workers, custodial and material movement workers and general construction workers. Table 6 shows the number of establishments and workers within the scope of the survey and the number studied.

Available: Bureau of Planning.

Guam Personal Income Statistics--1973; Guam Department of Commerce, Economic Research Center; February, 1976. Third in a series on personal income statistics. Data was obtained from income tax returns and excludes the military community. Income distribution, level of income and population growth are included in 17 tables.

Available: Bureau of Planning, Economic Planning Section.

The Real Earnings Report; Guam Department of Labor, Bureau of Labor Statistics. Quarterly real earnings figures covering full-time and part-time workers on production or non-supervisory jobs in the private sector of the Guam economy. Estimates in the report are based on the Current Employment Statistics survey.

Available: Bureau of Planning Library.

Guam Family Money Income in 1976; Department of Labor, Bureau of Labor Statistics News; August 12, 1977. An annual report derived from the Current Labor Force Statistics survey. Two tables show median and mean money income of families by district, and the number and percent of families by family money income.

Available: Bureau of Planning, Economic Planning Section.

Guam Household Income in 1976; Department of Labor, Bureau of Labor Statistics News; August 4, 1977. An annual report derived from the Current Labor Force Statistics survey. Table 1 shows household money income averages (medians and means) for the 19 districts. Table 2 shows the number and percent of households by household money income.

Available: Bureau of Planning, Economic Planning Section.

AGRICULTURE

Growth Policy: Agriculture; Bureau of Planning; January, 1977; 43 pages, 5 tables. A component of the overall Growth Policy which provides the basic philosophy and direction for guiding development plans. The agriculture growth policy presents four growth options to aid the development of agriculture and fishery: conventional agriculture, hydroponic farming, mariculture, and livestock farming. Conclusions and recommendations are given although development plans are beyond the scope of this study.

Available: Bureau of Planning Library.

Agricultural Development Plan for the Territory of Guam; prepared by members of the College of Agriculture and Business, University of Guam; prepared for the Bureau of Planning; January, 1978; 78 pages. This plan is intended as a sequel to the January, 1977 Agriculture Growth Policy done by the Bureau of Planning. It establishes guidelines for optimal development of two growth elements presented in the growth policy: Field Farming and Livestock Farming. Various support services and programs affecting these farm sectors are reviewed. Development objectives are presented including conclusions and recommendations.

Available: Bureau of Planning.

Trends in Agriculture Development in Guam and Micronesia; W.P. Leon Guerrero, R. Muniappan, Jack Ishida, Victor Artero, for the United Nations Economic and Social Commission for Asia and the Pacific; 1975; 46 pages, tables. A compilation of data on the state of agricultural development in Guam and Micronesia. An assessment was made to determine future projects and/or programs that various government agencies will be undertaking. Another section discusses the situation on Guam: geography and climate; geology and vegetation; population and economy; agriculture; and potentials of fruit, vegetable, poultry, pork and fishery production. Discussions and recommendations follow. An appendix contains statistical tables on production and imports of selected commodities on Guam for various years until 1974.

Available: Bureau of Planning Library.

Agriculture in Guam: Observations on Problems and Research Needs; Dr. Te'o Ian Fairbairn, Economist, South Pacific Commission Occasional Paper No. 1, Noumea, New Caledonia; March, 1977. General impressions of Guam's overall agricultural situation and associated problems observed during a visit to Guam from September 24 to October 4, 1976. The main purpose of the visit was to identify possible areas of research on economic aspects of agriculture which the University of Guam, specifically the College of Agriculture and Business, could carry out as part of its contribution to the Government's efforts to stimulate agricultural development. The report examines the present agricultural situation, support services for farmers, some gaps in present agricultural services, and economic research in agriculture, with suggestions and recommendations.

Available: Bureau of Planning.

Conservation of Unique Farmlands; U.S. Air Force; August 19, 1977; 10 pages. An evaluation by the Guam Department of Land Management and other government agencies to determine if potential farmland sites exist on AAFB in order to conserve them and regulate encroachment on them. The report is an interim appraisal pending a more comprehensive analysis by the U.S. Department of Agriculture, Soil Conservation Service. When complete, it will be included in the Base Comprehensive Plan and the Base Land Management Plan.

Available: Bureau of Planning (maps not included).

The Soil Units of Guam and Their Agricultural Capability; Dr. Albert A. Laplante, Division of Agriculture and Home Economics, College of Guam, Bulletin 2; October, 1964; 29 pages. A discussion of soil management which describes the physical condition of soil in fairly technical terms and describes the relationship of soil to plant growth. Guam's soil is classified into 12 area units located on the 1959 Soil Unit Map (not included in the report) with a description of the agricultural capability of each unit. The description includes the name of the principal soil type, number of acres, general location of the unit, soil origin, soil description, agricultural characteristics, recommendations for managing the soil and crops for maximum productivity.

Available: Bureau of Planning.

Aquaculture and Its Potential Environmental Impact on Guam's Coastal Waters; William J. Fitzgerald, for the Guam Bureau of Planning, Coastal Management Section; 1977. An analysis of the potential for various kinds of aquaculture development on Guam with discussion of developable species, environmental impacts and necessary water controls. Areas for potential aquaculture development are mapped.

Available: Bureau of Planning Library.

Some Factors Affecting Household Consumption of Seafood and Fish Products on Guam; Dr. Paul Callaghan, College of Agriculture and Business, University of Guam; 1977; Bureau of Planning, Economic Planning Division Technical Report, No. 77-3; 14 tables, 36 pages. An investigation of the household demand for fish products on Guam and the factors influencing local consumption based on a questionnaire appended to the quarterly labor force survey conducted by the Guam Department of Labor. Consumer preference and behavior, ethnic differences in fish and seafood consumption, and some factors affecting household spending for fish and seafood products are analyzed. The purpose of the study is to serve as a foundation for the planning of mariculture and fishery projects and is intended to be followed by a fisheries plan.

Available: Bureau of Planning.

TOURISM

A Decade of Tourism: The Socio-Economic Impact of Guam's Visitor Industry 1967-1977, An Interim Report; Dr. Don C. Warner, President of Associated Business Consultants; December 27, 1977; 41 pages, 18 tables. The first report of a study that will, when completed, provide the amount of expenditures, employment and government revenues generated by the visitor industry. This will include information about the knowledge of and attitudes toward tourism by local residents; finding the likes, dislikes, and suggestions for improvements from tourists; a review of related studies; and conclusions and recommendations. This particular

ECONOMICS

report is an analysis of a survey given to local residents to determine how much they know about Guam's visitor industry and what their attitudes are.
Available: Bureau of Planning.

Guam's Visitor Industry: An Economic Assessment; James Mak, and Walter Miklius; July, 1977; Bureau of Planning, Economic Planning Division Technical Report No. 77-1; 13 tables, 50 pages. An indepth study to assess the economic benefits of tourism on Guam. Included is an examination of the growth and seasonal variation of Guam's visitor industry. A visitor survey, designed and fielded by the Bureau of Planning, was analyzed to obtain visitor profiles and estimates of visitor expenditures, as well as visitor reactions to Guam. Economic benefits were assessed in terms of the amount of visitor expenditures and the number of jobs created by those expenditures. Four recommendations for increasing tourism are also presented.

Available: Bureau of Planning.

A Feasibility Study for a Convention Center in Guam; November, 1977; and Guam In-Flight Survey on Tourist Traffic to/from Guam; October, 1977; Nomura Research Institute. An evaluation of the feasibility of a convention center in Guam, including recommendations for an effective marketing strategy. Study is based on surveys both of passengers flying on the Guam/Tokyo route and of Japanese businesses in Japan.

Available: Bureau of Planning.

Development of Guam as a Tourist Destination; Harry A. Sickler and Martin Pray; May 14, 1973; 83 pages. A proposal recommending a strategy to develop tourism on Guam by creating a physical and cultural environment attractive to both short-term visitors and permanent residents.

Available: Bureau of Planning Library.

TAXES

GovGuam General Fund Forecast; Dr. George Lee, with Kevin Kuniyuki, and Ik Soon Kim, September, 1977; prepared for the Bureau of Planning, Economic Planning Division Technical Report, No. 77-2; 35 pages, tables, figures. A forecast of yearly and quarterly tax revenues of the Government of Guam for Fiscal Years 1978 and 1979. The various forecasting techniques used provide a forecasting "range" of medium, high, and low estimates both including and excluding the effects of Typhoon Pamela. An important feature of this study is that, for the first time, the impact of anticipated military expenditures on future tax revenues can be estimated. The report stresses that although the forecasts are the best estimates with the available data, they should be revised and extended when more current data becomes available.

Available: Bureau of Planning.

Guam's Tax System: Evaluation and Recommendation; Peter C. Mayer, Ph.d.; 5th Occasional Paper; Economic Research Center, Department of Commerce; July, 1976; 47 pages, 3 tables. A proposal to alter Guam's tax system. Numerous tax proposals are discussed reflecting the different kinds of taxes used in Guam and the large number of tax proposals submitted over the past several years. Recommendations for new or higher taxes are given. Finally, the recommendations are summarized and recommended rates of taxation are given. In the summary, the impact of the full proposal on revenue is given.

Available: Bureau of Planning Library.

EDUCATION

ENROLLMENT AND ATTENDENCE

Guam Projections of Public School Enrollments, 1977-78 to 1984-85; Department of Education Statistical Services Unit, Division of Curriculum and Instruction; 9 pages, 6 tables. Public school enrollment projections for grades kindergarten through twelfth grades exclusively, based on live births and their relationship. Tables include school enrollment projection based on live births 1976 to 1980; school projection based on cohort survival ratios; summary of enrollment projections; and enrollment projections by grade level. Available: Bureau of Planning.

STUDIES AND REPORTS

Limits of Cross-Cultural Education in Solving Ethnic/Race Conflict in Guam; Dr. Samuel Betances; August 28, 1977. A discussion of the different ethnic groups residing on Guam, the causes of tension among these groups, and the limits of cross-cultural education in alleviating racial conflict. Available: Bureau of Planning, Social Planning Section.

DEPARTMENT OF EDUCATION MANAGEMENT PHILOSOPHY

Examination of the Guam Public School System; U.S. Department of Health, Education, and Welfare; August 6, 1976. A discussion of the administrative problems in Guam's schools and the possibility of establishing Section 6 schools to provide for the military. Available: Bureau of Planning, Social Planning Section.

Directions in Education - 1974: Guam U.S.A.; Department of Education; November, 1974. A study of public education on Guam in terms of past activities since 1970, major administrative achievements, education programs from 1970-1974, and goals for continued progress toward problem solution for years 1974-1978. Available: Micronesian Area Research Center.

Audit Report on the Department of Education, Government of Guam; U.S. Department of the Interior, Office of the U.S. Government Comptroller for Guam; May, 1976; 268 pages. An evaluation of all facets of DOE's management operations and administrative procedures and practices. The report presents details of Statements of Conditions and Recommendations (SOCAR) and comments of action taken on the last audit report SOCARs in 1971. Available: Bureau of Planning, Social Planning Section.

EDUCATION

SPECIFIC PROGRAM PLANNING/HANDBOOKS

Five-Year Annual State Plan for Vocational Education; Department of Education, Division of Careers and Occupations; September 8, 1977. Description of the goals, objectives, and activities of the five-year and annual plan. Includes projected enrollments.

Available: Bureau of Planning, Social Planning Section.

Territorial Plan For Adult Basic Education, FY 1976; Department of Education, Division of Career and Occupational Education; 1975. Contains guidelines for the operation of the Territorial Adult Basic Education programs. Included are tables showing the population to be served, breakdown of educational completion level, school drop out level, and projected enrollments.

Available: Bureau of Planning, Social Planning Section.

ENVIRONMENT

ENVIRONMENTAL STUDIES, IMPACT ASSESSMENTS, AND IMPACT STATEMENTS

Final Environmental Impact Statement, Guam International Air Terminal, Guam, Mariana Islands; U.S. Department of Transportation, Federal Aviation Administration; October, 1976. An evaluation of the potential environmental impact of the proposed acquisition of land and expansion of the terminal facilities at GIAT. This development is part of the GIAT Master Plan. The report covers the description, location, and purpose of the proposed project; existing conditions; and probable impact on air quality, utilities, surrounding land use, access, noise, economic, and other factors.
Available: Guam Environmental Protection Agency Library.

Environmental Assessment Report for the Asan Community Redevelopment Project; Juan C. Tenorio and Associates, Inc.; prepared for the Guam Housing and Urban Renewal Authority; 1977. A description of the probable effects and impact on the environment caused by the redevelopment of the village of Asan. Measures recommended to mitigate probable adverse environmental effects of the project are presented and discussed.
Available: Parks and Recreation Library.

Final Environmental Impact Statement of Gilan Beach Development, Tanguisson Point, Guam; Department of Parks and Recreation; August, 1976. This report was completed as part of the U.S. Department of Defense's requirements for obtaining a 25-year lease for the proposed development of 70 acres of Air Force land into a public beach park. It contains an evaluation of the potential environmental impact of the proposed development which includes trails, paved parking areas and roadways, restroom, and shower facilities, and cleared areas for picnic and play.
Available: Guam Environmental Protection Agency Library.

Environmental Impact Assessment of Typhoon Pamela; Environmental Protection Agency; June, 1976; 95 pages. A compilation of reports by various governmental agencies which assess the short- and long-term effects of Typhoon Pamela on the natural environment. The terrestrial assessment includes studies on the Northern Limestone Forest, Agana Springs Nature Preserve, parks and recreation areas, wildlife, pesticides and solid waste removal. The marine assessment includes: surveys by the Marine Lab, GEPA, and the Division of Fish and Wildlife; a siltation survey, a sewer outfall survey, and an oil spill survey.
Available: Guam Environmental Protection Agency Library.

Draft Environmental Impact Statement for the Ammunition Port Facility, Orote Point, Guam, Mariana Islands; U.S. Department of the Navy; March, 1977. An analysis of the environmental impact of the construction of the ammunition port facility at Orote Island. The analysis is limited to the wharf and adjacent supporting facilities such as a breakwater, wave dissipators, access roads, bridge, dredging and improvements. The report includes a project description; existing site characteristics; relationship of proposed action to land use plans, policies, and controls; probable positive and negative impact of the proposed action on the environment; alternatives to the proposed action; and considerations that offset the adverse environmental effects.
Available: Bureau of Planning.

Ammunition Port Facilities U.S. Naval Magazine, Guam, Mariana Islands, Ammunition/Combatant Wharf; C.E. Maguire, Inc., and R.M. Towill Corporation, prepared for Pacific Division Naval Facilities Engineers Command; 5 volumes.
Available: Public Works Center.

Marine Survey of Agat Bay; edited by L.G. Eldredge, R. Dickinson, and S. Moras, University of Guam Marine Laboratory Technical Report No. 31; January, 1977; Submitted to Guam Oil and Refinery Co., Inc.; 251 pages, tables, illustrated.
A marine survey of Agat Bay providing a general description of that region as requested by GORCO to aid in acquiring necessary permits for the proposed construction and operation of a sea-island mooring facility to accommodate tankers of at least 250,000 DWT. The scope of work includes a catalog of marine organisms, an annual ocean currents study, an evaluation of the potential environmental impact of the proposed facility's construction, and an evaluation of the potential environmental impact of operational emergencies and the use of sea water for industrial cooling.
Available: Bureau of Planning.

The Extent of Coral, Shell, and Algal Harvesting in Guam Waters; Steven E. Hedlund, University of Guam Marine Laboratory, Technical Report No. 37; prepared for the Coastal Management Section, Guam Bureau of Planning; July, 1977. The scope of work for this report includes determining which species are being harvested, and to what degree; locating and mapping where harvesting is being done; a review of existing laws and their enforcement; and recommendations regarding the protection of certain species. The report is divided into four sections: coral, shells, algae, and laws and their enforcement.
Available: Bureau of Planning Library.

Marine Environmental Baseline Report Commercial Port, Apra Harbor, Guam; Staff of the University of Guam Marine Laboratory, Technical Report No. 34; April, 1977. Results of a marine environmental baseline study of Commercial Port, Apra Harbor, for the U.S. Army Corps of Engineers. The study provides data and general information on the local water current patterns, water chemistry, substratum composition; and species composition, abundance and distribution of zooplankton, algae, corals, macroinvertebrates, and fishes. The information will be used to assess the probable environmental impact of several possible plans for future navigation and docking facilities in Apra Harbor.
Available: Bureau of Planning Library.

Interim Report--Harbors and Rivers in the Territory of Guam (With Draft Environment Statement) at Apra Harbor, Guam; U.S. Army Engineer District, Honolulu, Hawaii; July, 1977. A study of the feasibility of the expansion of existing port facilities and the evaluation of commercial navigation and related land resource problems in the Apra Harbor complex. It is an update of the interim report done August, 1975.
Available: Bureau of Planning.

Environmental Statement Agana Small Boat Harbor, Agana, Guam; U.S. Army, Pacific Ocean Division, Corps of Engineers; August, 1975 and March, 1976. These reports are supplements to the final environmental statement Agana Harbor for Light-Draft Vessels, Detailed Project Report, February, 1973.
Available: U.S. Army Corps of Engineers Office.

Harbor of Refuge, Apra Harbor Guam--Reconnaissance Report; U.S. Army, Pacific Ocean Division Corps of Engineers; September 20, 1977; 10 pages, 2 plates. A study which addresses the potential needs and justification for a harbor of refuge for small boats at Apra Harbor, and recommends preparation of a detailed project report.
Available: U.S. Army Corps of Engineers Office.

Marine Reconnaissance Survey of Proposed Sites for a Small Boat Harbor in Agat Bay, Guam; Mitchell I. Chernin, Dennis R. Lassuy, Richard E. Dickinson, and John W. Shepard; September, 1977; University of Guam Marine Laboratory Technical Report No. 39, for the U.S. Army Corps of Engineers. An underwater and surface reconnaissance survey and mapping of three study areas (Bangi Point, Nimitz Beach, and the Teleyfac River areas) considered as possible construction sites for a small boat basin. Scope of work includes preliminary mapping and delineation of marine habitats; descriptions of the qualitative conditions of the marine environment; discussion of the dominant coral, fish, algal, and invertebrate species; and qualitative observations on water currents, water quality, and local fishing activities.
Available: Bureau of Planning Library.

Draft Detailed Project Report and Environmental Statement, Agat Harbor for Light-Draft Vessels, Agat, Guam; U.S. Army Engineer District, Honolulu; November, 1977. Identification and evaluation of the problems associated with recreational boating in the Agat area and the need for recreational boating facilities. Alternative improvement plans are developed and evaluated. Studies conducted include detailed site investigations, topographic and bathymetric surveys, oceanographic analysis to determine the design criteria; and preliminary engineering design, economic evaluations and environmental assessment. It also includes a marine ecology survey and a cultural reconnaissance investigation.
Available: Bureau of Planning Library.

Cultural Resources Reconnaissance Alternatives Project Sites for Agat Small Boat Harbor, Territory of Guam; Samuel T. Price, Pacific Studies Institute, Agana, prepared for U.S. Army Corps of Engineers.
Available: Department of Parks and Recreation Library.

A Limited Current, Sediment, and Marine Biological Survey Near the Merizo Shores Docking Facility, Cocos Island, Guam; Steven E. Hedlund, Michael E. Molina, and Russel V. Clayschulte; submitted to Merizo Shores Corporation; April, 1977; 5 tables, 7 figures, 36 pages. An evaluation of the potential environmental impact caused by the proposed construction of a docking facility at Cocos Island. The report includes descriptions of water currents and sediment distribution, and a survey of dominant marine organisms found in the vicinity.
Available: Guam Environmental Protection Agency Library.

Agat Sewage Treatment Plant: Impact of Secondary Treated Effluent on Guam Coastal Waters; Roy T. Tsuda and Deborah A. Grosenbaugh, University of Guam Water Resources Research Center Technical Report No. 3, and Marine Laboratory Technical Report No. 42; Technical Completion Report for Evaluation of the Impact of a Domestic Effluent Discharge on Guam Coastal Waters; October, 1977; 4 figures, 8 tables, 39 pages. The purpose of this study was to obtain long-term information on the impact of a secondarily treated sewage effluent on Guam

Ammunition Port Facilities U.S. Naval Magazine, Guam, Mariana Islands, Ammunition/Combatant Wharf; C.E. Maguire, Inc., and R.M. Towill Corporation, prepared for Pacific Division Naval Facilities Engineers Command; 5 volumes.
Available: Public Works Center.

Marine Survey of Agat Bay; edited by L.G. Eldredge, R. Dickinson, and S. Moras, University of Guam Marine Laboratory Technical Report No. 31; January, 1977; Submitted to Guam Oil and Refinery Co., Inc.; 251 pages, tables, illustrated. A marine survey of Agat Bay providing a general description of that region as requested by GORCO to aid in acquiring necessary permits for the proposed construction and operation of a sea-island mooring facility to accommodate tankers of at least 250,000 DWT. The scope of work includes a catalog of marine organisms, an annual ocean currents study, an evaluation of the potential environmental impact of the proposed facility's construction, and an evaluation of the potential environmental impact of operational emergencies and the use of sea water for industrial cooling.
Available: Bureau of Planning.

The Extent of Coral, Shell, and Algal Harvesting in Guam Waters; Steven E. Hedlund, University of Guam Marine Laboratory, Technical Report No. 37; prepared for the Coastal Management Section, Guam Bureau of Planning; July, 1977. The scope of work for this report includes determining which species are being harvested, and to what degree; locating and mapping where harvesting is being done; a review of existing laws and their enforcement; and recommendations regarding the protection of certain species. The report is divided into four sections: coral, shells, algae, and laws and their enforcement.
Available: Bureau of Planning Library.

Marine Environmental Baseline Report Commercial Port, Apra Harbor, Guam; Staff of the University of Guam Marine Laboratory, Technical Report No. 34; April, 1977. Results of a marine environmental baseline study of Commercial Port, Apra Harbor, for the U.S. Army Corps of Engineers. The study provides data and general information on the local water current patterns, water chemistry, substratum composition; and species composition, abundance and distribution of zooplankton, algae, corals, macroinvertebrates, and fishes. The information will be used to assess the probable environmental impact of several possible plans for future navigation and docking facilities in Apra Harbor.
Available: Bureau of Planning Library.

Interim Report--Harbors and Rivers in the Territory of Guam (With Draft Environment Statement) at Apra Harbor, Guam; U.S. Army Engineer District, Honolulu, Hawaii; July, 1977. A study of the feasibility of the expansion of existing port facilities and the evaluation of commercial navigation and related land resource problems in the Apra Harbor complex. It is an update of the interim report done August, 1975.
Available: Bureau of Planning.

Environmental Statement Agana Small Boat Harbor, Agana, Guam; U.S. Army, Pacific Ocean Division, Corps of Engineers; August, 1975 and March, 1976. These reports are supplements to the final environmental statement Agana Harbor for Light-Draft Vessels, Detailed Project Report, February, 1973.
Available: U.S. Army Corps of Engineers Office.

Harbor of Refuge, Apra Harbor Guam--Reconnaissance Report; U.S. Army, Pacific Ocean Division Corps of Engineers; September 20, 1977; 10 pages, 2 plates. A study which addresses the potential needs and justification for a harbor of refuge for small boats at Apra Harbor, and recommends preparation of a detailed project report.
Available: U.S. Army Corps of Engineers Office.

Marine Reconnaissance Survey of Proposed Sites for a Small Boat Harbor in Agat Bay, Guam; Mitchell I. Chernin, Dennis R. Lassuy, Richard E. Dickinson, and John W. Shepard; September, 1977; University of Guam Marine Laboratory Technical Report No. 39, for the U.S. Army Corps of Engineers. An underwater and surface reconnaissance survey and mapping of three study areas (Bangi Point, Nimitz Beach, and the Teleyfac River areas) considered as possible construction sites for a small boat basin. Scope of work includes preliminary mapping and delineation of marine habitats; descriptions of the qualitative conditions of the marine environment; discussion of the dominant coral, fish, algal, and invertebrate species; and qualitative observations on water currents, water quality, and local fishing activities.
Available: Bureau of Planning Library.

Draft Detailed Project Report and Environmental Statement, Agat Harbor for Light-Draft Vessels, Agat, Guam; U.S. Army Engineer District, Honolulu; November, 1977. Identification and evaluation of the problems associated with recreational boating in the Agat area and the need for recreational boating facilities. Alternative improvement plans are developed and evaluated. Studies conducted include detailed site investigations, topographic and bathymetric surveys, oceanographic analysis to determine the design criteria; and preliminary engineering design, economic evaluations and environmental assessment. It also includes a marine ecology survey and a cultural reconnaissance investigation.
Available: Bureau of Planning Library.

Cultural Resources Reconnaissance Alternatives Project Sites for Agat Small Boat Harbor, Territory of Guam; Samuel T. Price, Pacific Studies Institute, Agana, prepared for U.S. Army Corps of Engineers.
Available: Department of Parks and Recreation Library.

A Limited Current, Sediment, and Marine Biological Survey Near the Merizo Shores Docking Facility, Cocos Island, Guam; Steven E. Hedlund, Michael E. Molina, and Russel V. Clayschulte; submitted to Merizo Shores Corporation; April, 1977; 5 tables, 7 figures, 36 pages. An evaluation of the potential environmental impact caused by the proposed construction of a docking facility at Cocos Island. The report includes descriptions of water currents and sediment distribution, and a survey of dominant marine organisms found in the vicinity.
Available: Guam Environmental Protection Agency Library.

Agat Sewage Treatment Plant: Impact of Secondary Treated Effluent on Guam Coastal Waters; Roy T. Tsuda and Deborah A. Grosenbaugh, University of Guam Water Resources Research Center Technical Report No. 3, and Marine Laboratory Technical Report No. 42; Technical Completion Report for Evaluation of the Impact of a Domestic Effluent Discharge on Guam Coastal Waters; October, 1977; 4 figures, 8 tables, 39 pages. The purpose of this study was to obtain long-term information on the impact of a secondarily treated sewage effluent on Guam

shallow coastal waters. This study will be used to base future depth requirements on scientific observations of an existing sewage outfall.
Available: Bureau of Planning Library.

Effects of Thermal Effluent on the Coral Reef Community at Tanguisson; S. Neudecker, University of Guam Marine Lab Technical Report No. 30; 1976; annual report submitted to Guam Power Authority. A supplement to previous studies that outline the extent of coral kill zones caused by thermal discharge or disposal of heated water onto adjacent coral reef from the power plant facility.
Available: University of Guam Marine Lab.

The Influence of Power Plant Operations on the Marine Environment in Piti Channel, Guam: 1975-1976 Observations; James A. Marsh, Jr., and James E. Doty, University of Guam Marine Laboratory Technical Report No. 26; April, 1976. The fifth in a continuing series of reports concerning the impact of power plant construction and operation on shallow marine environments in the Piti area submitted to the Guam Power Authority. The focus of this report is on thermal conditions as they are actually affected by full-scale operations of the Cabras Power Plant.
Available: Bureau of Planning.

Power Plants and the Marine Environment in Piti Bay and Piti Channel, Guam: 1976-1977 Observations and General Summary; J.A. Marsh, Jr., Mitchell I. Chernin, and James E. Doty, University of Guam Marine Lab Technical Report No. 38; submitted to Guam Power Authority; 1977. A description of the general temperatures observed in the study area, current patterns, and channels profile elevation including the tidal flats. This study also includes biological observations comparing the occurrence and abundance of fish species and macrobenthic species before and after the Cabras Power Plant operation. Also included is the University's summary and recommendations stemming from their findings over the entire study period: 1971-1977.
Available: University of Guam Marine Laboratory.

Guam Power Authority Section 316(a) Type I Demonstration Cabras Power Plant, NPDES Permit No. GU-0020001; prepared by the Guam Power Authority and submitted to the U.S. Environmental Protection Agency, the principle investigator was the University of Guam Marine Lab; September 27, 1977. The result of five years of continuous environmental studies conducted by the UOG Marine Lab in Piti Channel and Apra Harbor. The purpose of the study is to show that the thermal component of the Cabras Power Plant discharge has not caused appreciable harm to the balanced, indigenous community in the receiving waters of Apra Harbor. There are four sections in the report: temperature data, biological data, engineering and hydrological information, and water quality data.
Available: Guam Environmental Protection Agency.

Final Report to EPA on Section 316(a) Type I Demonstration for Piti Power Plant Guam; U.S. Navy, Environmental Branch, Pacific Division, Naval Facilities Engineering Command, Pearl Harbor, Hawaii, principal investigator Robert M. Moncrief; 1977; 40 pages, 9 figures, 5 tables, 7 appendices. The results of a study to show that the thermal component of the Piti Power Plant cooling water discharge has not caused appreciable harm to the marine biota in the receiving waters of Apra Harbor. Attached are all known existing reports concerning the effects of Piti Power Plant thermal discharge on the marine biota in the discharge zone.

Available: Guam Environmental Protection Agency Library.

Comprehensive Environmental Management Programme; South Pacific Commission and South Pacific Bureau for Economic Cooperation; May, 1977. Prepared at the request of the Seventh South Pacific Forum and the Sixteenth South Pacific Conference and circulated at the Seventeenth South Pacific Conference. The report discusses three priority areas for action: human settlements, marine ecosystems and land-based ecosystems. It proposes four phases to be undertaken over a five-year period, from 1977 to 1982. It then outlines an interim action plan based on responses to an environmental activities questionnaire circulated by the SPC in March, 1977. Phase I is now underway and Phase 2 will begin with the SPC Conference on the Human Environment in March, 1978.
Available: Guam Environmental Protection Agency Library.

AIR QUALITY

Island Air--Can Guam Keep It Clean?; Richard R. Justice, P.E., the University of Oklahoma, an environmental research paper submitted for the requirement of PS-5990 Research Problems; January 28, 1977. A discussion of the origins, progress, and enforcement of clean air commitments; particularly by Congress, the Federal and Guam Environmental Protection Agencies, and the public.
Available: Guam Environmental Protection Agency Library.

FLOODS

River Flood Hazard Studies; U.S. Army, Pacific Ocean Division Corps of Engineers; November, 1976. Studies of Agat River, Asan Area, Pago River and Ylig River which show scope of work, basin description, flood history, flood problem, hydrology and flood outline. Plates include basin, frequency curve, basin or stream profiles, and hazard area map.
Available: Army Corps of Engineers.

Agat Guam, Specifications for Construction of Namo River Flood Control Project; U.S. Army Corps of Engineers, Pacific Ocean Division; August 1, 1977. Description of a project to be completed in July, 1979.
Available: U.S. Army Corps of Engineers Office.

FOREST MANAGEMENT

Evaluation of Andersen Air Force Base Forest Resources for a Potential Management Plan; October 27, 1977; 8 pages. An evaluation of AAFB forest reserves to see if it possesses the potential to support a forest management program. It was determined that it is not feasible to produce a commercial timber product on AAFB. Conclusions were based on findings by the Forestry Division of the Guam Department of Agriculture (attached) and the U.S. Navy.
Available: Bureau of Planning.

ENVIRONMENT

GEOLOGY

Atlas of the Reefs and Beaches of Guam; R.H. Randall and L.G. Eldredge, prepared for the Coastal Management Section, Guam Bureau of Planning; 1976. An investigation of the coast and shallow reefs of Guam including locations and geologic descriptions of reef platforms, rocky shorelines, and locations, extent, slope, and composition of beaches. This study completely maps the shoreline and shallow reefs of Guam.

Available: Bureau of Planning Library.

Resources and Projections: Availability of Sand as Fine Aggregate for Engineering Construction in Guam; David B. Doan for the Guam Bureau of Planning, Coastal Management Program; October 1, 1977. Results of an investigation of Guam's resources and requirements for fine aggregate in the local construction industry. Projections of the demand, availability and cost are made to the year 2000.

Available: Bureau of Planning.

INTRODUCTORY MATERIAL

Annual Report 1976-1977; Water Resources Research Center. A description and status report of current projects and activities. The WRRC was established in May, 1975, as a research unit of the University of Guam. Its purpose is to plan, initiate, and undertake research projects relating to the quantity and quality of freshwater that is available and potentially available to Guam and Micronesia. It is the only research agency of this type in the Western Pacific. General areas of research involve groundwater sources, surface water sources, coastal waters, and water distribution. The information gathered is made available to interested agencies and individuals, especially those involved with aspects of water planning such as PUAG, Bureau of Planning, GEPA, and the Guam Department of Agriculture.

Available: Water Resources Research Center.

Guam Environmental Protection Agency, Fourth Annual Report; Guam Environmental Protection Agency; April, 1976-March, 1977; 51 pages. Contains the second annual Environmental Quality Assessment of Guam's present water, air, and land environmental quality. It also presents an overview of the functions of EPA's various divisions and a description of the accomplishments of 19 different agency programs.

Available: Bureau of Planning Library.

LIFE SPECIES LISTINGS

Aquatic and Wildlife Resources Division, Job Progress Reports; Federal Aid to Fish and Wildlife Restoration Project No. FW-2R-13 by Harry T. Kami, Nick Drahos, Ronald D. Strong and Rufo J. Lujan, covers July 1, 1975 to December 31, 1976; Federal Aid to Fish and Wildlife Restoration Project No. FW-2R-14 by Harry T. Kami, Ronald D. Strong, R. Logan Kock, Jr., Michael E. Molina, and Clifford P. Neubauer, covers January 1, 1977 to June 30, 1977. Project segments include a survey of Guam's fish populations and fishing methods; compilation of a checklist of the food and game fishes of Guam; habitat improvements of inshore lagoons; a

study to construct small boat launching facilities on Guam; preparation for a development project to rehabilitate the Masso River Reservoir to a Public Fishing and Recreation area; limnological survey of the major streams and rivers in Guam; study of the doves of Guam; study of the Guam deer; Quail and Rail life history study; study of the fruit bat; habitat appraisal and study of exotics for Guam; and study of the wild pig, Sus scrofa.

Available: Bureau of Planning.

An Ecological Survey of Pristine Terrestrial Communities on Guam; Philip H. Moore, for the Guam Bureau of Planning, Coastal Management Section; August, 1977; 2 figures, 5 maps, 11 plates. Descriptions of five areas considered to be terrestrial pristine ecological communities including lists of flora and fauna found in each. Photographs include some of the most scenic views, area features and vegetation.

Available: Bureau of Planning.

Survey and Species Inventory of Representative Pristine Marine Communities on Guam; by Jeanine O. Stojkovich, University of Guam Marine Laboratory Technical Report No. 40, submitted to the Guam Bureau of Planning, Coastal Management Section; October, 1977. A survey of twelve pristine marine communities including a brief description of the areas, their character, and the presence of endangered or threatened species. Species lists for fish, macroinvertebrates, corals and benthic algae, plus maps and field sketches, are also included.

Available: Bureau of Planning.

Inventory and Mapping of Wetland Vegetation in Guam, Tinian, and Saipan, Mariana Islands; by University of Guam Biosciences, Philip Moore, Lynn Raulerson, Mitchell Chernin, and Patrick McMakin; June, 1977. The report includes the description and mapping of wetland areas. It also lists the characteristic plant species at each of the areas surveyed. The study was contracted by the U.S. Army Corps of Engineers in order to implement the regulations of the 1972 Water Pollution Control Act to protect wetlands from pollution, dredging and filling.

Available: Bureau of Planning.

A Guide to the Medicinal Plants of Guam; Patrick D. McMakin and Philip H. Moore, for the Guam Bureau of Planning, Coastal Management Section; 1977. The report includes a photograph of each medicinal plant; a botanical description; and the range of the species and specific comments pertaining to the function, use, or method of preparation.

Available: Bureau of Planning.

A Checklist of Chamorro Names of Marine Fish, Shellfish, and Crustaceans; Patrick D. McMakin, for the Guam Bureau of Planning, Coastal Management Section; October, 1977. The list gives Latin, English, and Chamorro names.

Available: Bureau of Planning, Coastal Management Section.

NOISE POLLUTION

Air Installation Compatible Use Zones, U.S. Naval Air Station, Agana, Guam, Mariana Islands; prepared for the U.S. Navy by CH 2M Hill; December, 1977. This report defines and maps zones or areas around NAS Agana/GIAT where the Navy is

interested in the type of land use that develops; both to protect the integrity of the air station and its operations, and to protect residents from noise and potential aircraft accidents. The report explores ways that the Navy can lessen these hazards by changing its operating procedures. Also, the current operational level at the station is examined so that local land use plans can be revised to control future undesirable growth on land near the airfield. The means of accomplishing compatible growth through local government functions and official Navy policies is explained.

Available: Bureau of Planning Library.

SEISMOLOGY

Seismographic Records; Guam Observatory. The Guam Observatory maintains the seismographic station on Guam, formerly called the Coast and Geodetic Survey, and originally the National Oceanic and Atmospheric Administration. Monthly tabulations of earthquake data is compiled and sent to local insurance companies and contain such information as the date, time, location, depth and magnitude of the earthquake. The station has existed since 1958 and has access to data since 1825.

Available: Guam Observatory.

SHORE PROTECTION

Shoreline Erosion on Guam: A Position Paper; Patrick D. McMakin, Guam Bureau of Planning, Coastal Management Program; June, 1977. A paper addressing the extent of natural force and man-induced shoreline erosion on Guam. It represents the Guam Coastal Management Program's position concerning the amount of emphasis needed, locally, in relation to the unique factors that formulate our resource planning objectives.

Available: Bureau of Planning.

TYPHOONS

Vulnerability Study Series Report No. I and Report No. II; Syed Zaigham S. Jaffery, Bureau of Planning, Disaster Preparedness Planning Section; October and December 1977. These reports deal with the hazard analysis for Guam, present the choices for adjustments and adaptations, and discuss the nature, cause, and effects of various hazards to which the island is vulnerable. Report No. I is Adaptations and Adjustments to Hazards on Guam: An Analysis and Report No. II is called Typhoons: Their Nature and Effects on Guam. Other reports in this series will be completed later.

Available: Bureau of Planning, Disaster Preparedness Planning Section.

Interim Territorial Emergency Plan; Bureau of Planning, Disaster Preparedness Planning Program; 1978. Outline of a new concept of Government operations before, during, and after hazard situations. The draft is presently being reviewed by key agencies and is expected to be completed by December 1978.

Available: Bureau of Planning, Disaster Preparedness Planning Program.

Joint CINCPACREP GUAM/TTPI/COMNAVMARIANAS Disaster Preparedness Plan 101; October 1, 1976. A plan providing for coordinated disaster preparedness planning and recovery operations by the military in Guam, the Northern Marianas and the Trust Territory. Implementation of the plan could be expected in the event of general war, natural disasters or as may be directed by a higher authority. Instructions are given for heavy weather, tsunami, fire disaster, shelter utilization, NBC warfare defense, and civil disasters.

Available: Bureau of Planning, Disaster Preparedness Planning Section

Information Interface of Individual Assistance Programs; Bureau of Planning, Disaster Preparedness Planning Program; June 1977. This report provides a summary of individual assistance programs provided during the last Presidentially declared Disaster (Typhoon Pamela), and outlines alternatives to reduce duplication of benefits and duplication of efforts among major disaster assistance programs. Recommendations are provided for exchange of pertinent information necessary for eligibility determination.

Available: Bureau of Planning, Disaster Preparedness Planning Program.

WATER QUALITY MONITORING

Water Monitoring Strategy; Environmental Protection Agency; 1977. A proposed plan to collect information on surface, drinking and recreational water quality; analyze the information, and give it to the community-at-large. The report includes an environmental description, general causes of water quality problems, descriptions of five proposed monitoring networks or programs, quality assurance activities, costs, and reporting to the public.

Available: Bureau of Planning Library.

Urban Runoff Quality in Northern Guam; William J. Zolan, Russel N. Clayshulte, Stephen J. Winter, James A. Marsh, Jr., and Reginald H. F. Young; Water Resources Research Center Technical Report No. 5; partial project completion report for Effects of Infiltration of Urban Runoff on Ground and Coastal Waters in Limestone Regions of Northern Guam; January, 1978; 101 figures, 32 tables, 168 pages. Results of a study to obtain qualitative information on urban runoff in northern Guam. To accomplish this, runoff was collected over an 18 month period from ponding basins and storm drains, and analyzed for common water quality parameters.

Available: Bureau of Planning, Coastal Management Section.

Water Pollution Potential of Non-Point Sources: A Survey of Current Literature; Joan Cabreza, Guam Environmental Protection Agency; May, 1977 draft; maps, tables. Summary discussions of various potentials for water pollution as applicable to Guam. Chapters include urban runoff, sewerage, solid waste, feedlots, fertilizer, pesticides, erosion and groundwater pollution from salt-water intrusion.

Available: Bureau of Planning.

Non-Point Water Pollution and Recommended Control Strategies for the Island of Guam; Dames and Moore; prepared for the Guam Environmental Protection agency; February 17, 1978. Results of a study to assess the magnitude and importance of each of eight specific non-point pollution areas. This study will be incorporated into GEPA's 208 program plan, Area Wide Water Quality Management for Guam, to be completed by the end of June, 1978. Topics dealing with

urban runoff pollution, control, treatment, and ultimate disposal comprise one major area. Other chapters discuss the protection of groundwater supplies through land use control, the disposal of swine and poultry waste, lubricating oil wastes, and sewage treatment sludge. The report concludes with recommendations for appropriate abatement strategies.
Available: Guam Environmental Protection Agency.

The Merizo Water Sanitary Survey; Guam Environmental Protection Agency; February, 1977; 47 pages, 5 appendices. Results of a sanitary survey of the potable water supply of the village of Merizo. The survey involved obtaining an inventory of water sources and storage reservoirs, and an assessment of the condition of the system for the purpose of locating the causes of excessive and unexplained water loss and possible sources of pollution. The Merizo area was selected to serve as a model for future sanitary surveys because of its serious water problems both in quantity and quality.
Available: Bureau of Planning Library.

WATER QUALITY PLANNING

Water Quality Inventory Report to Congress 1976 and Guam Water Quality Assessment Report to Congress 305(b) 1977; Guam Environmental Protection Agency. The second and third annual water quality reports to Congress which assess the overall quality of Guam's water and discuss the various pollution control programs, their potential and results. Chapters address: water quality assessment, non-point source pollution problems, current and projected water uses, and planning efforts and costs of pollution abatement. Contain tables and figures.
Available: Guam Environmental Protection Agency.

Area Wide Water Quality Management Plan for Guam (208 Program); Guam Environmental Protection Agency. This plan is still being written and is expected to be completed by the end of June, 1978. The 208 program, a 100% federally funded program under Section 208 of the Federal Water Pollution Control Act, is an islandwide water quality program to study the impact of, and determine methods to control, erosion, urban runoff, and land discharges of residential sewage. A major portion of the program was developing public awareness of environmental problems and providing input to programs designed to curb them. Some components to be included in the report are: "Environmental Management Study"; "Non-Point Water Pollution and Recommended Control Strategies"; "Guam Water Quality, An Historical Analysis of Guam's Potable, Surface and Recreational Waters"; and Navy plans.
Available: Guam Environmental Protection Agency.

WATER (FRESH) RESOURCES AND SUPPLY

Groundwater Analysis By Tritium Technique: A Preliminary Evaluation; John F. Mink, and L. Stephen Lau; October 1977; University of Guam, Water Resources Research Center Technical Report No. 2, Project Completion Report for Preliminary Survey of Guam Groundwater Ages Utilizing Tritium; 4 figures, 3 tables, 29 pages. The first preliminary survey of Guam groundwater ages utilizing tritium

augmented by chemical water quality parameters. Data evaluation strives to provide an understanding of the travel and residence times of groundwater as related to exploitation of water supply in representative groundwater areas of the island of Guam.
Available: Bureau of Planning Library.

Hydrological Study For Potential Water Supply Reservoir - Ugam River; Sunn, Low, Tom and Hara, Inc., prepared for the U.S. Army Corps of Engineers; March, 1977. A study to determine the availability of surface waters of the Ugam River to supply the needs of the southern districts of Yona, Talofofo, Inarajan, Merizo, Umatac and Agat in the year 2040. The scope of the study includes the selection of a dam site with sufficient storage capacity to supplement the low natural flows that would occur during a 20-year recurrence interval drought.
Available: Bureau of Planning.

Plan of Study, Ugam River, Territory of Guam; U.S. Department of the Army, Pacific Ocean Division, Corps of Engineers; April, 1977. A plan of study to determine the feasibility of developing, utilizing, and conserving the surface water and related resources within the Ugam River basin. The study includes the formulation of alternative plans and methods for providing adequate and continued freshwater supply for southern Guam, and considers, on a limited basis, other developable sources of water.
Available: U.S. Army Corps of Engineers.

Current Status of Guam's Petition to Designate the Northern Groundwater System as a Sole Aquifer Under Section 1424(e) of the Safe Drinking Water Act - U.S. Public Law 93-523; Guam Environmental Protection Agency; May, 1977. Guam has petitioned to be designated under Section 1424(e) of the Safe Drinking Water Act which states that financial assistance may be denied for any project that may contaminate the aquifer. This report is a letter from GEPA to the Governor of Guam requesting a reevaluation of the petition and presents three alternatives with pros and cons for each; that is continuing with the petition, withdrawing the petition, or requesting further input from selected GovGuam agencies. Enclosed is a summary of the background of the petition which includes attachments of significant correspondence and the Federal EPA's report.
Available: Bureau of Planning Library.

The Analysis of Small Water Distribution System; Water Resources Research Center Technical Report No. 4; January, 1978; 4 figures, 2 tables, 24 pages. A report consisting of theory and examples which illustrate a method of determining the flow of water lost per foot of pipe in situations involving pipes having leaks or illegal connections.
Available: Bureau of Planning, Coastal Management Section.

Activities of the U.S. Geological Survey Water Resources Division, Hawaii District, 1977. The WRD collects water resources data and investigates areas of existing or potential water problems. The Hawaii District includes Guam. This short brochure explains the functions and activities of the WRD during 1977.
Available: Guam Environment Protection Agency Library.

Transcript of Public Meeting for Ugam River Basin Study, Ugam River, Guam; January 26, 1977.
Available: Public Utility Agency of Guam.

ENVIRONMENT

Waterworks Ordinance: An Ordinance to Provide for and to Regulate a Supply of Water to the Island of Guam; World Health Organization; February 17, 1975.
Available: Public Utility Agency of Guam.

HEALTH

INFORMATION SYSTEMS--HEALTH

Health Information System; Guam Health Planning and Development Agency. The Health Information System established in 1976 is no longer being utilized by the Department of Public Health and Social Services. Currently, Touche and Ross Company is being contracted by the Guam Health Planning and Development Agency to design another information system. When the program is implemented, it will provide for identification, collection and computerization of health data from all island physicians, clinics and hospitals, both government and private.

MISCELLANEOUS PUBLISHED AND UNPUBLISHED REPORTS

Health Services for the Territory of Guam; Touche Ross & Co.; September, 1977. A study of all hospital-based programs and services which identifies civilian health care needs through 1990. The focus of the report is on three alternate ways of satisfying those needs in terms of hospital configuration, ownership, management and cost at GMH and MCM. The study is divided into two parts: Part One summarizes projections of needs and analyzes the alternative delivery structures; Part Two, the appendix, presents detailed information to support the analyses and conclusions, and describes the development of projections. Contains tables estimating and projecting island population, hospital capacity, occupancy rates, and costs.
Available: Bureau of Planning.

Guam Health Plan; Health Planning and Development Agency, Department of Public Health and Social Services. This is the five-year health plan element of the Comprehensive Development Plan. It is expected to be completed in May, 1978, and will focus on the health status and goals of the Territory. Graphs and tables to be included are: Comparison of birth rates by years, U.S. and Guam; comparison of death rates by years, U.S., Guam and Hawaii; population projections by age group; morbidity breakdown by category; ten leading causes of death; neonatal and post-natal infant morbidity; fetal deaths; physician index; dentist index; registered and licensed practical nurse index; pharmacist index; and pharmacy index.
Available: Guam Health Planning and Development Agency.

Cholera Guam; U.S. Bureau of Epidemiology, Bacterial Diseases Division; March 21, 1975. A review and summary of the six cases of cholera that occurred in 1974 on Guam including the source of the disease outbreak and methods for prevention of reoccurrence.
Available: Guam Environmental Protection Agency Library.

Guam ALS Study; Shiro Iwata, Ph.d., Kazunisa Sasajima, and Yoshiro Yase, M.D.; November, 1976. Results of a study done by a research team from Wakayama University in Tokyo working under a grant from the U.S. National Institute of Neurological and Communicable Disease and Stroke. It is part of a Pacific-wide study of the possible correlation of high concentrations of manganese and nickle in drinking water the occurrence of certain neurological disorders. Locally, Litigo and Bodig are of concern. The research team obtained water samples from 39 streams, springs, wells, and distribution systems which were

HEALTH

analyzed for amounts of 12 heavy metals plus manganese and calcium. Following initial analysis in the GEPA laboratory, the samples were taken to Japan for special analysis with sophisticated scientific instruments. This report shows tentative impressions; final results have not yet been published by the authors.

Available: Guam Environmental Protection Agency.

Guam Hospital Facilities Report for Governor Ricardo J. Bordallo and Lt. Governor Rudolfo Sablan; Submitted by Guam Memorial Hospital Board of Trustees; January 20, 1975, 8 pages. The report addresses itself to the question of the feasibility of the Government of Guam purchasing the Medical Center of the Marianas building and making it the central facility for major medical services. In making its recommendation, six tables show population served, hospital bed utilization, maximum and minimum medical service requirements for 1980 and 1985, and capital cost. The Board concluded that the purchase of MCM is a possible, but not a desirable solution.

Available: Bureau of Planning Library.

Five-Year Plan Mental Health and Substance Abuse Services, Territory of Guam, 1976-1981; Guam Memorial Hospital; December, 1976. A five-year plan for a mental health program which specifies goals and objectives, activities, manpower needs, and coordination of planning with other services. It also contains inventories of mental health facilities currently in existence, a survey of the need, and the program and services of the community mental health center. The last section includes the substance abuse plan.

Available: Bureau of Planning Library.

HOUSING

PUBLISHED REPORTS

Housing Element--Comprehensive Development Plan: Residential Development Policy Report; Bureau of Planning; October 1, 1976; 91 pages, 3 appendices, 39 tables, 4 figures. An exhaustive examination of the problems and issues to be addressed in developing the government's housing policies to be included in the Comprehensive Development Plan. The first chapter identifies generalized housing problems. Other chapters outline the various opportunities and obstacles toward sound residential development, and give policy alternatives and recommendations to ensure housing opportunities during the next 25 years. An inventory and survey program were developed to provide the data base for an analysis to determine the present and future housing needs of the Territory. Population estimates were made from the survey.
Available: Bureau of Planning.

LAND USE

LAND USE PLANS

Comprehensive Development Plan, draft; Bureau of Planning; March 20, 1978. This plan is the first draft of a comprehensive assessment of the most important issues facing Guam. The CDP was authorized by Public Law 12-200 to identify territorial goals and objectives; propose long-range plans; coordinate the planning of all governmental and non-governmental activities; and provide factual data, projections, and analyses. The document is a summary of many other plans and studies done by the Bureau of Planning and other agencies over the past three years. The appendix contains a listing of those documents which comprise the various elements of the CDP. The report is organized into the setting, the people, the lifestyle, the economy, disaster, land and sea, and energy.
Available: Bureau of Planning.

Land-Use Plan, Guam: 1977-2000; Bureau of Planning; 1977. The land-use element of the Comprehensive Development Plan which includes statements concerning the policy guidelines of the Bureau of Planning, physical and cultural considerations, and growth and change considerations. Four land-use districts are identified, as well as areas of particular concern to which either natural resource values, geologic constraints or hazards play an important role in determining the suitability of the land for particular uses. Regulatory mechanisms are discussed, and further refinements and recommendations are given. Includes 23 figures, 6 tables, and 15 maps.
Available: Bureau of Planning.

Community Design Plans, Guam: 1977-2000; Bureau of Planning; October, 1977. An element of the Comprehensive Development Plan which formulates a plan for the development of Guam's communities to the year 2000. It consists of Community Design maps with color-keyed land use classifications (see Community Design Index, page A-3), descriptions of the land use classification shown on the maps, and a synopsis of the significant features of each of the thirteen individual community areas.
Available: Bureau of Planning.

The Guam Coastal Management Program, Review Draft; Bureau of Planning, Coastal Management Section; January, 1978; 8 tables, 5 figures, 12 appendices. The Guam 306 Program plan to define CZM goals and policies, determine priorities and develop standards for the management of Guam's resources in order to facilitate the utilization of federal funds for land and water use management. The appendices include summary tables of the CZM land use survey, relationships of agencies under current programs, inventory of present and, projected coastal land and water use, Government of Guam outdoor recreation summary, GEPA programs and responsibilities, and endangered and threatened plant and animal species on Guam.
Available: Bureau of Planning Library.

Guam Land Use Plan: A Plan for Department of Defense Real Estate of Guam; U.S. Department of the Navy, Pacific Division, Naval Facilities Engineering Command; September, 1977. A review and comprehensive analysis of military landholdings on Guam that is required to support the Department of Defense presence on Guam: Navy, Air Force, Marine Corps, and Army. The plan is based on projected Force levels over the next eight years. It identifies necessary land acquisitions and exchanges, and summarizes recommendations for the release of certain military landholdings based on this plan and the known needs of the civilian community. The report includes maps and charts showing existing and planned land use, necessary land acquisitions and releasable areas.

Available: Bureau of Planning.

OTHER LAND USE INFORMATION

1976 Edition Street Atlas of Guam; Guam Bureau of Planning; 1976. An official reference map to all streets and government facilities throughout the island. It is a part of the Uniform Mapping System and consists of single sheet maps of the entire island with lines of the Uniform Grid System and other map series. As well as locating streets, the atlas identifies emergency facility locations, hospitals, village commissioner offices and their telephone numbers, public school locations, and zip-code areas.

Available: Bureau of Planning Library.

Analysis of Results, CZM Land-Use Opinion Survey; Guam Bureau of Planning, Coastal Management Section. An analysis of the results obtained from a survey questionnaire distributed to 931 residents. Attitudes examined concern seashore development, recreational facilities, property ownership, and citizen participation.

Available: Bureau of Planning.

Beach Acces on Guam; Robert Gomez, Guam Bureau of Planning, Coastal Management Section; October, 1977. An attempt to define and identify the importance and the problems of beach use, with recommended proposals for their management. Beach strands are inventoried showing their name, size, ownership, and inland access. Navy recreational facilities and public owned potential recreation areas are listed.

Available: Bureau of Planning.

An Inventory of Present and Projected Coastal Land and Water Uses on Guam; Alexander C. Chan, Coastal Management Section, Bureau of Planning; February, 1977; 13 tables, 6 maps. A concise identification of Guam's existing and projected coastal land and water uses. The report tables and maps coastal water categories defined by the Water Pollution Control Act, existing coastal water uses, and existing land uses adjacent to coastal water. Proposed sea-shore activities are also listed.

Available: Bureau of Planning.

A Summary of Major Federal Agency Land Holdings in the Territory of Guam; Bureau of Planning; January, 1977. A listing of all federally owned or controlled lands on Guam. The listing is in table format which includes the following information: map code, document or drawing from which data was obtained, name of the installation, municipality where located, indication of which agency controls the subject area, size of parcel in square meters and acres, general description of the area's use, and number and remarks indicating method of acquisition and changes to the parcel subsequent to acquisition.

Available: Bureau of Planning Library.

Erosion and Sediment Control Guide for Guam; May, 1977; Geo-Engineering and Testing, prepared for the Guam Environmental Protection Agency; 137 pages, illustrated with 89 figures. An explanation of how to satisfy the requirements of the Guam Soil Erosion and Sediment Control Regulations. Suggestions are given for the preparation of the preliminary site evaluation and sample erosion control plan. Descriptions of various methods and measures to aid in soil erosion and sediment control are presented in general manner.

Available: Bureau of Planning Library.

The Corps of Engineers, in the Territory of Guam; U.S. Army Corps of Engineers; November, 1977; 20 pages. A brochure containing information on engineers' projects and studies now underway for water resources development in Guam. A description of each project includes the location, authority, status and maps. Available: Bureau of Planning, Coastal Management Program.

Guam Coastal Management Program Technical Reports; Bureau of Planning, Coastal Management Program; Volume I--October, 1977, Volume II--November, 1977. A compilation of in-house documents which serve to outline basic resources, federal lands and public opinion concerning land and water use, and delineate areas of particular concern. These documents have also been published as separate reports and are described elsewhere in the Addendum. The reports include: "Analysis of Results, CZM Land-Use Opinion Survey"; "An Inventory of Present and Projected Coastal Land and Water Uses"; "A Summary of Major Federal Agency Land Holdings in the Territory of Guam"; "Future Power Production and Transmission, Alternative Plans, Guam, USA"; "Aquaculture and Its Potential Environmental Impact on Guam's Coastal Waters"; "The Extent of Coral, Shell and Algal Harvesting in Guam Waters"; "An Ecological Survey of Pristine Terrestrial Communities on Guam"; "A Guide to the Medicinal Plants of Guam"; "Survey and Species Inventory of Representative Pristine Marine Communities on Guam"; "A Checklist of Chamorro Names of Marine Fish, Shellfish, and Crustaceans"; "Beach Access on Guam"; "Shoreline Erosion on Guam"; and "Resources and Projections, Availability of Sand as Fine Aggregate for Engineering Construction in Guam." Available: Bureau of Planning.

Life on Guam; 1976 and 1977. Class, lab, and field projects in ecology and social studies used by Guam's junior and senior high schools. This series of eleven booklets was funded through a grant under ESEA Titles III and IV, U.S. Office of Education, HEW. Fully illustrated with drawings and photographs.

Beach Strand by Margie Cushing Falanruw

Farm and Garden by Richard H. Randall and L.G. Eldredge

Freshwater by Lynn Raulerson

Geology by Gail Elkins, Dave Hotaling, and Richard H. Randall

Human Impact by M.C. Falanruw

Limestone Forest by Larry Behrens

Mangrove Flat by Gaylord Diaz and Dave Hotaling

Savanna, Old Fields, Roadsides by M.C. Falanruw

Schoolyard Ecology by Jeffrey E. Shafer

Schoolyard Surveys by Magdalena T. Flores

LAWS AND REGULATIONS

Environmental Management Study; Arizala-Costiniano-Villareal and Associates, and Barrett and Associates, for the Guam Environmental Protection Agency; 1978. A comprehensive review of present activities and procedures of several Government of Guam agencies as they relate to the environmental aspects of issuing, monitoring and enforcing permits, and to reviewing environmental impacts. Its objective is to identify specific opportunities to improve environmental management, especially through improved interagency coordination and consolidation or revision of permitting and review procedures. This study will be incorporated into GEPA's 208 program plan Area Wide Water Quality Management for Guam to be completed by the end of June, 1978. Available: Environmental Protection Agency.

Mechanisms for Land-Use Control on Guam; Robert Gomez, Guam Bureau of Planning, Coastal Zone Management Division; 1977; 13 pages, 3 appendices. An overview of land-use control mechanisms based on a review of zoning laws and major pieces of legislation which regulate development. Land-use permitting processes are discussed and flow charted in Appendix A to indicate the required procedures for land-use control legislation, the Guam legislative process, zone variance and zone change, subdivision approval, planned unit development, building permits, land-use permitting process, agricultural preserves and the Corps of Engineers permit process. Appendix B contains actual copies of forms and schedules for zone changes and variances, subdivision and PUD, building and occupancy permits, land-use permits, agricultural lease, Corps of Engineers and submerged land permit. Appendix C shows Government of Guam organizational characteristics.

Available: Bureau of Planning.

PLANS FOR SPECIFIC AREAS

Community Development and Housing Assistance Plan Second Year Entitlement Application, Territory of Guam; Guam Housing and Urban Renewal Authority; June 25, 1976. Application for \$987,000 for a Comprehensive Community Development Program for the village of Asan to include replanning and resubdivision of blighting, deteriorating, and harmful conditions existing in the area.

Available: Environmental Protection Agency Library.

Asan Community Development Program Survey: Families and Individuals; Guam Housing and Urban Renewal Authority; 1977. Tabulated results of a survey of 171 households and 674 individuals living in Asan. Population data, family composition, employment and income, type of present housing and rehousing preferences are given in 12 tables.

Available: Bureau of Planning Library.

Project Report: Asan Community Redevelopment; Juan C. Tenorio and Associates, prepared for the Guam Housing and Urban Renewal Authority; 1977. A description of the Asan Community Redevelopment Project involving the redevelopment of the entire village of Asan. Discussions include the acquisition and disposition of residential, commercial, recreational and institutional structures; demolition, rehabilitation, and reconstruction of residential and community facilities; and relocation of displaced individuals and families. The reconstruction of the community's transportation, water, sewerage, drainage, power, and communication infrastructure is also outlined.

Available: Parks and Recreation Library.

POPULATION

POPULATION

The following figures represent a summary of current available population estimates and projections. Three of these estimates are used as the official Government of Guam population figures and are known as "Population Projections for Guam's Planning Activities, 1977": Chung-D, QB-II, and Chung C. These estimates were developed by Professor Roy Chung, a demographer once with UOG, and Quinton-Budlong, a firm contracted to prepare a portion of the Guam Master Plan, 1972. In most planning situations, QB-II is considered the most appropriate.

AVAILABLE ESTIMATES AND PROJECTIONS OF GUAM'S POPULATION
(Excluding a Military Constant of 22,000 People in Uniform)

	1975	1976	1980	1990	2000
1. QB-I (Low)	76,089	-	89,938	123,157	-
2. QB-II (Med.)	84,317	88,086	104,956	157,352	214,000
3. 1976 Bureau of Planning Housing Survey		89,600			
4. QB-III (High)	87,562	-	112,597	180,089	
5. Chung-D	83,400	-	104,000	143,400	182,660
6. Chung-C	85,400	-	110,200	176,000	246,660
7. Bureau of Planning (Coastal Zone Mgt.)	84,701	-	-	-	167,589
8. Bureau of Labor Statistics (OEDP)	79,800				

Statistical Report 1976 ; Office of Vital Statistics, Department of Health and Social Services. Population by village is shown in the morbidity and natality tables. These figures were developed by the Bureau of Planning from the housing survey and will be updated yearly by DPHSS by adding and subtracting births and deaths.

Available: Bureau of Planning.

OUTTAUDDA

YATTA
200

PUBLIC UTILITIES

PUBLIC UTILITIES OVERVIEW

Department of Public Works Annual Report Fiscal Year 1977. The Department of Public Works is responsible for highways, sewer systems, and public buildings. The annual report contains details of the major accomplishments of each division within the Department. Included is the status of the various projects of the engineering branch.

Available: Department of Public Works, Highway Planning.

SOLID WASTE

Final Report Third Regional Seminar on Environmental Pollution: Solid Waste Management, 2-9 February 1976; World Health Organization; April, 1976; 60 pages. A report of the findings and conclusions reached during a seminar in which Guam participated along with eleven other countries. The purpose of the seminar was to exchange experiences and ideas and work out a plan of action in the field of solid wastes management at regional and national levels. The seminar offered participants an opportunity to indicate how WHO technical assistance could best be used to solve the problems faced.

Available: Guam Environmental Protection Agency Library.

PWC Guam, Solid Waste Study; U.S. Navy, Pacific Division, Naval Facilities Engineering Command; April 30, 1976. The purpose of this study is to provide the Navy Public Works Center with recommendations on how to best dispose of its solid waste for the next 20 years. Also addressed in the study is the solid waste disposal problem at Andersen Air Force Base, and the Navy's Recovery and Reuse of Refuse Resources Program.

Available: Guam Environmental Protection Agency Library.

Solid Waste Disposal and Resource Recovery Study for the Island of Guam, draft; Dames and Moore, for the Guam Environmental Protection Agency; January 4, 1978. An investigation of Guam's existing solid waste management system and an assessment of the feasibility of implementing an integrated solid waste disposal and resource recovery system. Reclamation and use of existing and proposed landfill sites at the end of their useful lives are discussed. Several sites for resources recovery and sanitary land fill activities were considered and surrounding land use and ownership of the selected sites were investigated. The study examines waste generation through the year 2000 and the impact of these wastes on the environment. Costs for a resource recovery system are compared to continued use of sanitary landfills.

Available: Guam Environmental Protection Agency.

POWER

A Preliminary Management Study of the Guam Petroleum Storage System and the Feasibility of the Establishment of a Guam Petroleum Reserve; by Geoffrey K. Burke, submitted to the Strategic Petroleum Reserve Office, Federal Energy Administration; December 15, 1976; 9 tables. A compilation of fuel import, inventory, consumption and refinery output information for Guam as part of the development of a Strategic Petroleum Reserve Plan for the nation. Data was developed on a monthly basis for 1975, and represents the first such survey undertaken for Guam.

Available: Guam Energy Office.

PUBLIC UTILITIES

Future Power Production and Transmission Alternative Plans, Guam, USA; Walter F. Pinckert and Associates, prepared for the Guam Coastal Management Section, Bureau of Planning; June, 1977; 29 pages, 2 enclosures. The contents of this report are primarily centered around existing and future expansion of facilities needed to produce energy for civilian and military use. Included are annual projected increases in estimated KWH generation, fuel oil needs, fuel oil cost to consumers, fuel oil refinery capability on Guam, and other facets related to power production and future projection. Enclosures include thermal profiles of sea water temperatures showing the potential possibilities of developing solar sea power on Guam, and sketches of an ocean thermal power plant. Available: Bureau of Planning Library.

Guam (State) Energy Conservation Plan, March, 1977; and Supplemental Guam Energy Conservation Plan, July, 1977; Guam Energy Office. The plan proposes to achieve a reduction of 5% or more in the total amount of energy consumed in Guam in the year 1980 from the projected energy consumption for Guam in 1980. The plan explains proposed programs with the supplementary plan expanding its scope to enable Guam citizens to take advantage of technical expertise available from both federal and local governmental agencies for conservation of energy. Available: Guam Energy Office.

TELEPHONES

History of GTA; Guam Telephone Authority; September 26, 1977; 27 pages. A discussion of the history of the telephone system from 1952 to 1977. Available: Bureau of Planning, Economic Planning Section.

Annual Report for 1976-1977 Fiscal Year; Guam Telephone Authority; August 4, 1977; 4 pages. Improvements and plans achieved during fiscal year ending June 30, 1977. Available: Bureau of Planning, Economic Planning Section.

Long Term Plans; Guam Telephone Authority; September 2, 1977. A series of letters, memorandums, and reports outlining plans for reconstruction of the telephone system during 1977 and 1978. Available: Bureau of Planning, Economic Planning Section.

PUBLIC BUILDINGS AND SITES

Nieves M. Flores Memorial Library: Interim Buidling Program, Site Evaluation and Conceptual Design; Mackinlay/Winnacker/McNeil and Associates; January, 1977. The interim program for the phased development that will expand and renovate central library services to meet the needs of the residents of Guam through 1986. Includes a site analysis and evaluation, and conceptual design. Available: Bureau of Planning, Social Planning Section.

HAZARDOUS WASTE MANAGEMENT

Hazardous Waste Management: Problem Assessment and Strategy Formulation; Garretson, Elmendorf, Zinov, Reibin, Architect and Engineers of San Francisco, California; April, 1978. Results of a survey of industrial/military waste generation and management practices in the Pacific Basin. The survey was conducted by mail covering relevant public agencies and private enterprises. Its purpose was to assess the magnitude of hazardous waste management programs, evaluate present handling and disposal practices, recommend alternatives to practices considered environmentally unacceptable, and recommend an overall hazardous waste management strategy. The study covers twelve Pacific Basin Islands including the State of Hawaii, Guam, American Samoa, Northern Marianas, and the Trust Territory.

Available: Guam Environmental Protection Agency.

RECREATION

RECREATION PLANS

Guam Comprehensive Outdoor Recreation Plan, Draft; Department of Parks and Recreation; March, 1977; 60 pages, 13 tables. The recreation element of the Guam Comprehensive Plan which presents a comprehensive system of areas and sites for recreation on Guam. Included are discussions of the territory's characteristics; an inventory of existing public, private, and military recreation facilities; a recreation consumer analysis; projected facilities demand; and a plan of priority groupings to provide needed facilities. Available: Bureau of Planning Library.

SAFETY AND DEFENSE

PUBLISHED REPORTS AND SURVEYS

Comprehensive Criminal Justice Plan-1978; Guam Territorial Crime Commission; July 28, 1977. The annual state plan submitted to the Law Enforcement Assistance Administration, U.S. Department of Justice. It consists of the following sections: Crime and Justice in Guam-1976, a description of the existing criminal justice system and available resources that deal with crime problems, an annual and multi-year action plan, and special requirements of the grant. The Crime and Justice section has been published as a separate report and is described below.

Available: Bureau of Planning Library.

Guam Crime Analysis 1975; February, 1977; Territorial Crime Commission; 77 pages. This report represents the first attempt by the Territorial Crime Commission to publish a relatively detailed statistical look at the crime situation on Guam. It was compiled to serve as the crime analysis section of the 1977 State Plan submitted to the Law Enforcement Assistance Administration. Data is taken from Department of Public Safety activity blotters and Summary Uniform Crime Reports, and, therefore focuses mainly on the police, excluding other units of the criminal justice system. Thirteen tables and 37 figures show data for crime in general, personal crime, property crime, miscellaneous Part II offenses, arrest data, and flow through the system of police and courts. A brief summary of socio-demographic/economic factors is also included.

Available: Bureau of Planning Library.

Crime and Justice, Guam 1976; Territorial Crime Commission; July, 1977; 48 tables, 32 figures. The second annual report published by the TCC providing an analysis and statistical overview of crime and Guam's response to it. It is a part of the 1978 State Plan. Data was drawn from Uniform Crime Report figures of the Department of Public Safety and the annual statistical reports and activity logs of the relevant agencies. It should reflect a more accurate view of the crime and justice system on Guam than the Guam Crime Analysis-1975. The report also places increased emphasis on the criminal justice system and its performance. The report is divided into three main sections: the crime analysis, which corresponds, for the most part, with Guam Crime Analysis-1975; the system analysis, which presents data on performance of the criminal justice system on Guam, characteristics of clients and the agencies, and comparison with mainland norms; and the problem analysis, where the data previously presented is analyzed into a series of problem statements. Socio-economic and other ancillary data are also covered as separate sections.

Available: Bureau of Planning Library.

Criminal Investigation Study; Pacific Studies Institute; March, 1978; prepared for the Guam Territorial Crime Commission. A study of the personal and household crime situation on Guam based on a survey of the extent of victimization including assault, larceny, burglary, auto theft, and robbery. Information on living patterns and the general attitudes of people towards crime, the criminal justice system and the Crime Prevention Mobil Unit Program conducted in 1976 was obtained in order to provide a data base for a demographic and socio-economic understanding of crime.

Available: Bureau of Planning.

SAFETY AND DEFENSE

A Report on Drug Abuse and Guam's Response; Territorial Crime Commission; December, 1977; 9 pages, 2 figures, 8 tables. Information concerning the extent and nature of the drug problem on Guam with a special emphasis on its relation to the convict population. The report consists of a compilation of data that was readily available from various government agencies and a brief analysis of it. There is currently very little drug related data available. Tables and figures included in the report are: six-year trend in actual reported narcotics offense rates on Guam with a three-year projection, marijuana and opiates seizures at Guam's ports of entry, age adjusted arrest rates for narcotics arrests-1976, percent distribution of narcotic offense arrestees by offense--Guam 1976, ethnic specific adjusted arrest rates, comparison of actual reported offenses/arrest/clearance narcotic offenses-Guam 1976, number of inmates reporting use of controlled substance by type of drug, inmates survey responses by offense and type of response, dollar value of heroin confiscated by Department of Public Safety, and statistical figure of drugs seized at ports of entry.

Available: Bureau of Planning Library.

Draft Conceptual Design of the Guam Criminal Justice Information Management System; Arthur Young and Company; September, 1977; prepared for the Guam Department of Public Safety. A description of a design for an automated criminal justice information system which would provide for collection, storage, and dissemination of information required by the various criminal justice agencies of Guam to support planning, operation, and evaluative functions. The report consists of detailed discussions of each of the five major sub-systems: Police Information, Subject-in-Process/OBTS, Support, Court Calendaring and Attorney General PROMIS. Estimated cost and benefits are included. Three appendices discuss systems considered for potential transfer, summary of data processing resource requirements to support the proposed system, and a data element requirements list.

Available: Bureau of Planning.

DEPARTMENT OF PUBLIC SAFETY SOURCE DOCUMENTS

One additional form has been added to the previous eight standard forms used in reporting most offenses.

Incident Report (DPS-1A). This form contains the same information as Incident Report (DPS-1) and is used when the complainant wishes to waive the complaint. It is filled out by the police officer and signed by the complainant.

Department of Public Safety Report of Alcohol Influence. This report is filled out by a police officer in the event of a motor vehicle accident, violation, or arrest involving alcohol. It includes: questions asked the subject about his health and recent alcohol drinking; observations by the police officer on the subject's appearance and behavior; police officer's conclusions as to the effects of alcohol on the subject and his ability to drive; and a physician's report.

SOCIAL

SURVEYS AND PUBLISHED REPORTS

1977 Community Profile Study; Fourteenth Guam Legislature Planning and Research Bureau; August, 1977. Partial results of an island-wide survey of village needs and problems. The questionnaire was compiled by the legislature's Committee of Youth and Senior Citizens and fielded by members of the Summer Youth Employment Program. The survey sample consists of 6,500 households. Respondents were given two lists of 21 needs and 23 problems and asked to choose the five most important from each list. Responses are ranked in order of percent chosen overall and for each village. Respondent characteristics are currently being computerized for such things as age, sex, race, economic status, and household size.

Available: Committee of Youth and Senior Citizens.

Basic Development Goals for Guam; Bureau of Planning; July, 1976. An analysis of the community's response to the "Basic Development Goals Questionnaire" survey by the Bureau of Planning. The questionnaire consisted of 17 positive goal statements concerning employment/manpower, land use, political status, consumer protection, transportation, natural resources, public revenue/expenditures, cultural heritage, economy, population growth, equal opportunity, government operations, housing, health, education, and welfare. Respondents were asked to indicate their reaction to each goal statement by agreeing or disagreeing with it. The purpose of the survey was to measure public attitudes and was used in the Land Use Element of the Comprehensive Development Plan.

Available: Bureau of Planning.

Social Baseline Study of the Territory of Guam; compiled by C. Christopher Ford, Jane Jennison-Nolan, and Marvin Montvel-Cohen, for the U.S. Army Corps of Engineers; 1976; 221 pages. A compilation and summary of socio-cultural data to assist planners in determining the potential impact of projects related to Guam's water resources. Includes a general assessment of data concerning land use and ownership, the family and community, government and civic activity, cultural resources, and education. Contains many tables. The data is summarized in terms of five geographic regions.

Available: Bureau of Planning Library.

Socio-Cultural Aspects of Development in Guam and Micronesia; O. Ronald Haverlandt, C. Christopher Ford, and Marvin Montvel-Cohen of the University of Guam; prepared for the Asian Institute for Economic Development and Planning, a division of the United Nations; December, 1975; 150 pages, tables. An analysis of the relationship between socio-cultural factors and development in Guam and Micronesia. Three interrelated factors were used: resource parameters, political considerations, and cultural determinants.

Available: Bureau of Planning.

Stateside Planning for Vocational Rehabilitation Services, Guam 1974-1979; Division of Vocational Rehabilitation; May, 1973. Results of a survey of the major health and social agencies undertaken for the purpose of estimating the size of the disabled population on Guam. Tables show the disabling condition, age, and sex of the disabled. The current figures were compared to data collected in 1968 for the same purpose. Projections of the agency caseload and activities for the years 1974-1979 were made based on the survey findings, current national

SOCIAL

and community priorities and past service records. A final section appended to this report outlines agency accomplishments since 1968.
Available: Parks and Recreation Library.

Vocational Rehabilitation, Fiscal Year 1977; Guam Department of Vocational Rehabilitation; 1977; 14 pages. A report on the activity of the Department of Vocational Rehabilitation for FY 1977 including a statement of purpose with description of programs available to the handicapped. Includes a list of facts and figures on persons rehabilitated.
Available: Bureau of Planning Library.

Attitudes Toward Language Maintenance and Language Shift in the Guamanian Speech Community; George A. Riley; published in Pacific Asian Studies, Volume II, Numbers 1 and 2; November, 1977; page 112-125. An analysis of the change in language preference on Guam from Chamorro to English, plus a discussion of factors affecting social and cultural change in Guam. Methods and results are discussed.
Available: Antonio B. Won Pat's Office.

Election Comparative Analysis Report, Guam-1976; Guam Election Commission; 155 pages. A compilation of election statistics by the Guam Election Commission. The report gives the total number of registered voters, the number by district, and the number of votes received by each candidate. An extensive statistical abstract chapter shows the voting record in general, and for primary and gubernatorial elections, with tables and graphs by election district from 1950 to 1974.
Available: Nieves Flores Memorial Library.

TRANSPORTATION

LAND TRANSPORTATION

A Bicycling Program for Guam; Department of Public Works; August, 1976; 115 pages, tables, figures. A comprehensive bicycling plan to encourage safe bicycling on Guam. The overall program encompasses the education of the public, the enforcement of safe highway riding techniques, and the engineering of safe bikeways.

Available: Guam Environmental Protection Agency Library.

Proposed Street and Highway Program Territory of Guam, 1972-1977; Department of Public Works; June 24, 1971. A list of proposed yearly highway projects with maps. A chart shows the number of vehicle registration for each year from 1961 to 1970.

Available: Micronesian Area Research Center.

Accident data is collected by the Department of Public Safety. DPS police accident reports are used as source data for the computerization of the data. Data is computerized including 1974 and will soon be current. The Department of Public Safety and the Department of Public Works are both interested in accident analysis and each publish their own annual and monthly reports. The last annual reports are for 1976 and monthly reports are current until May, or June, 1977. Information contained in these reports is described below:

Accident Analysis Report; Department of Public Works Planning Division. Semi-annual and annual report for 1976. The semi-annual accident summaries consist of the same tables shown in the 1976 Inventory of Planning Information Detail Section, compiled for six-month periods. The annual report has a similar accident summary for the year, plus 16 tables of motor vehicle crash facts including: number of registered motor vehicles, 1970-1976; number of licensed drivers, 1970-1976; number of vehicular miles traveled, 1972-1976; fatality rate per hundred thousand registered vehicles, 1970-1976; and so forth. Maps of accident locations are also given.

Available: Bureau of Planning Library.

The following seven reports are compiled monthly by Department of Public Safety. The annual report is a summary of the monthly reports:

Summary of Accidents and Violations Report; Department of Public Safety. A monthly report of the total number of accidents and violations for the month, the previous month, the year to date, comparisons of the same period from the previous two years and monetary loss. Listed are: number of traffic accidents with no injury, injury and death; number of non-traffic accidents; number of traffic deaths; number of injuries; number of vehicles involved; number of vehicles damaged; number of hazardous violations; and number of non-hazardous violations.

Monthly Accident Report; Department of Public Safety. Monthly listing of the number of traffic accidents: no injury, injury, and death; non-traffic accidents; traffic deaths; persons injured; and total traffic accidents. Shows each month of the year and total.

TRANSPORTATION

Selected Accident Characteristics Report; Department of Public Safety. Monthly listing of accidents for the month and compared to the same month for the previous two years showing: types of accidents, types of vehicles, age of drivers, nationality of drivers and sex of drivers.

Type of Traffic Accident Report; Department of Public Safety. Monthly listing of the types of accidents: auto-overturned, auto-auto-non-collision, auto-pedestrian, auto-pedacyclist, auto-motorcycle and scooter, auto-bicycle, auto-animal, auto-fixed object, motorcycle spilled, and more than two vehicle collision. Shows each month of the year and total.

Hazardous Violation Report; Department of Public Safety. Listing of violations for the month and compared to the same month for the previous two years for: speeding/imprudent, failed to yield, disobeyed stop sign, disregard stop sign, wrong lane, improper passing, following too close, improper start/turn/back, drunk driving, other improper driving, disobeyed traffic sign, and reckless driving.

Economic Losses Due to Deaths, Injuries and Vehicle Damage Report; Department of Public Safety. Listing of dollar losses for the month and compared to the same month for the previous two years based on an average of \$36,000 per death, \$2,400 per injury and \$380 per vehicle.

Traffic Fatalities-to-Date Report; Department of Public Safety. A monthly report of the number of fatalities by the hour of the day and the location (beat number) for the year-to-date.

AIR TRANSPORTATION

Master Plan Guam International Air Terminal Draft Report Volumes I and II; Parsons Corporation, prepared for the Guam Airport Authority; July 22, 1977. An airport terminal complex master plan for Guam. Contains projections of future demands for the facilities and outlines a development program for GIAT. Stage I development focuses on new facilities needed to accommodate traffic to the year 1975. The "Ultimate Site" stage covers the period from 1985 onward until the available GIAT site is fully utilized. The report concentrates on a detailed plan for the first stage of facility development.
Available: Bureau of Planning.

APPENDIX A

A

INDICES OF GUAM MAPS

Land-Use Districting Map; prepared by the Bureau of Planning in 1977. This map depicts urban, rural, agricultural, and conservation districts. A district is a land area identified by its development potential, existing characteristics, environmental restrictions, or ecological complexity as being suitable for one of these four types of land use. The color-key map is at a scale of 1:75,000.

Area of Particular Concern Maps; prepared by the Bureau of Planning in 1977. These maps depict geographic areas that, due to ecological, aesthetic, or economic value; or hazard conditions, deserve special management attention. They are mapped on base maps at a scale of 1:75,000 and 1:25,000. They are conceptually mapped on 8 1/2 X 11 page size maps in documents. APC maps depict:

- Resource Development Sites
- Distribution of Materials for Aggregate
- Shoreline Development Areas
- Surfing Locations
- Sound and Accident Potential Zones
- Slide and Erosion Zones
- Seismic Fault Zones
- Water Resource Development Sites
- Aquaculture Potential Sites
- Unique Terrestrial Ecosystems
- Wetlands
- Unique Marine Ecosystems
- Cultural and Recreational Areas
- Subdivision Development Areas
- Urban Waterfront Areas
- Beach Location Map

Community Design Plan Maps; prepared by the Bureau of Planning in 1977. This series of 13 maps depicts land uses within community areas to assist in decision making concerning development proposals and zoning revision. They are color-keyed sheets at a scale of 1:12,500. See Index, page A-2.

Municipality Land Areas Map; prepared by the Bureau of Planning in 1977. This map depicts political municipalities and the percentages of Government of Guam-private and federally-owned lands, in square miles, at a scale of 1:75,000. See page A-3.

Three-Nautical Mile Boundary Map; prepared by the Bureau of Planning in 1977. This map depicts the 3-mile offshore boundary as well as major place names, roads, and topography at a scale of 1:75,000.

GUAM

UNIFORM MAPPING SYSTEM
1958

COMMUNITY DESIGN INDEX

A-2

GUAM

UNIFORM MAPPING SYSTEM
1976

**NOTE: SHADED AREAS ARE
FEDERAL LANDS.**

FEDERAL AND MUNICIPALITY LAND AREAS MAP

MUNICIPALITY	AREA IN SQUARE MILES				MUNICIPALITY TOTAL	
	GUAM- POINTS	%	FEDERAL	%	AREA	%
AGANA	1.16	.84	.01	.01	1.16	.86
AGANA HEIGHTS	.87	.46	.19	.09	1.06	.88
AGAT	7.02	3.31	4.16	1.96	11.18	6.28
ASAN	4.25	2.0	1.18	.50	5.43	2.50
BARRIGADA	3.80	1.79	2.35	2.53	6.15	4.32
CHALAN PAGO ORDOT	6.18	2.90	0.0	0.0	6.18	2.90
DEDEDO	14.44	6.81	16.72	7.41	31.16	14.22
INARAJAN	19.16	9.04	0.0	0.0	19.16	9.04
MANUARO	7.93	3.69	2.33	1.10	10.26	4.79
MERIZO	6.15	2.89	.03	.01	6.18	2.90
MUNICIONS - YOTO- MAITE	1.73	.82	.48	.20	2.21	1.02
PITI	2.96	1.36	4.29	2.02	7.25	3.38
SANTA RITA	1.86	.87	14.31	6.78	16.16	7.62
SINAJANA	1.12	.53	.04	.02	1.16	.56
TALOFORO	16.47	7.78	.69	.32	17.16	8.09
TAMUNING	6.48	2.87	.71	.33	7.19	2.90
UMATAC	6.16	2.90	0.0	0.0	6.16	2.90
YIGO	14.62	6.9	20.54	9.7	35.16	16.60
YONA	20.10	9.48	.06	.03	20.16	9.51
OVERALL TOTAL	19	88.62	33.36	100.00		
		141.29	70.78		212.04	

SOURCE: "MUNICIPAL JURISDICTION MAP" - DEPT. LAND MANAGEMENT, GOV'T OF GUAM
MARCH 1970 / SUMMARY OF MAJOR FEDERAL LAND HOLDINGS - CEM/DC 1977

LEGEND

Scale: 1:100,000

Legend

Legend

Legend

Legend

Legend

Legend

Legend

Legend

Legend

Legend

Legend

Legend

Legend

Legend

Legend

Legend

Legend

Legend

Legend

Legend

Legend

A-3

Economics
Education
Environment
Health
Housing
Land Use
Population
Public Utilities
Recreation
Safety and Defense
Social
Transportation