

# **The Guam Comprehensive Economic Development Strategy**

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**Government of Guam**

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**NOTE:** Electronic version created June 2005 with corrections to the “References” section (removal of duplicate entries). Revised September 2005 to include the “Economic Indices” (poor quality due to original being unavailable). The layout of this document may vary from the original; however, the content has not been altered except as noted.

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## ***Abstract***

*The Guam Comprehensive Economic Development Strategy (CEDS) is primarily based upon the results of Governor Felix P. Camacho's "Ten Strategic Initiatives to Stabilize and Grow Guam's Economy" and "Six-Point Action Framework on Ten Strategic Initiatives" planning process. The process was initiated to provide direction, focus and priority for local efforts and guide federal assistance and private investment in order to stabilize and grow the economy to improve quality of life and public services. In general, the projects outlined in this plan focus on a set of broad economic objectives, including the development of a broader economic base, the achievement of full employment, the establishment of greater employment opportunities, the creation of higher wage and salary levels, the improvement of the island's standard of living, and the equitable distribution of economic growth.*

*Guam's CEDS document describes the island's economic problems, needs, potentials and resources; presents the community's vision and goals; sets its strategic direction for action; establishes priority programs and projects for implementation; and outlines the standards for an annual evaluation and update of the plan and its related processes.*

*To be an effective guide to the island's long-term economic development, the strategies and projects presented in this document must reflect contemporary changes in the economy if they are to correctly correspond to set policies and goals. As such, Guam's CEDS is viewed not as a static document, but rather as a continuous effort to refine Guam's future growth objectives, strategies and requirements.*

## **EXECUTIVE SUMMARY**

### **General Overview**

Since the early 1990's, the Asian Economic Crisis, U.S. military downsizing, U.S. military actions in the Persian Gulf Region and expensive natural disasters, including typhoons and an 8.2 earthquake, have adversely affected Guam's economic health.

Guam's tourism industry is the island's single largest economic sector. The industry generates approximately sixty percent (60%) of Guam's annual business revenue, as well as sixty percent (60%) of private sector employment. With more than ninety percent (90%) of Guam's tourists originating from Asia, and sixty percent (60%) of its trading partners from the Asia-Pacific rim, the island's economy is strongly linked to Asia's business cycle.

Due to a major devaluation of Asian currencies and a corresponding decline in Asian consumer confidence over the past decade, the relative competitiveness of Guam's vacation packages has declined and local visitor spending has been seriously reduced. Between 1995 and 1999, visitor

arrivals reflected a negative fifteen percent (15%) annual decline, resulting in 1999 hotel occupancy taxes falling to the lowest level in five years to \$18.9 million dollars, reflecting a twenty-one percent (21%) decline over this period. Guam's public and private sectors face major challenges in the wake of declining revenues from this important economic sector.

Furthermore, U.S. Military spending, another leading contributor to the island's economy, has undergone significant fluctuations in this period. Since the mid-1990's, civilian military employment has shown consistent decreases, with a thirty-five percent (35%) decline in employment registered from 1994 through 1999. By 1998 the military's annual spending level dipped to \$479 million, compared with \$809 million in 1995. The Navy's A-76 privatization process reduced the Navy's payroll by 2,000 workers by April 2000. However, in light of new evaluations of Guam's strategic importance, increases in annual military expenditures are anticipated. Even though the island will experience marginal increases in military construction projects, port visits and military personnel between 2003-2004, military spending as a multiplier in Guam's economy has significantly changed.

In addition, the island is recovering from the affects of Super Typhoon Pongsona, which struck in December 2002 with maximum winds in excess of 175 miles per hour. Super Typhoon Pongsona is Guam's most expensive natural disaster, to date, with damage estimated to exceed Super Typhoon Paka's damages, which was calculated at \$513 million. While gross business receipts have stabilized over the last two years at \$3.8 billion, it is still below the 1997 level of \$4.6 billion. Correspondingly, annual gross receipts taxes have also stabilized at \$150 million, but it is still below the 1997 level of \$180 million.

The August 1997 Korean Airlines crash that resulted in the death of 228 passengers and crew members, also impacted one of Guam's fastest growing tourist market. In the aftermath of this aviation disaster, total visitor arrivals from Korea plummeted from over 119,000 in 1997 to just over 20,000 in 1998. Aggressive marketing and promotional efforts to restore market share resulted in visitor arrivals from Korea increasing to 128,307 visitors in 2002.

Combined, the declines in visitor industry and military spending and the costs associated with responding to natural calamities have promoted a decline in economic activity and rising unemployment on Guam. As of March 2002, Guam's unemployment rate was recorded to be 11.4%. In comparison, the unemployment rates for Hawaii and the nation as a whole were 4.6% and 5.8%, respectively.

To effectively counteract this situation, Guam has developed this Comprehensive Economic Development Strategy to guide its future economic development policies and efforts. The purpose of Guam's Comprehensive Economic Development Strategy is to develop a specific action plan to assist the island in guiding future economic development by focusing limited community and outside resources on Guam's targeted economic sectors (e.g. tourism; marine resources; aquaculture; commerce, manufacturing and service) and to achieve the specific socio-economic objectives (e.g. full employment, improved employment opportunities, higher wages and salaries, etc.) outlined in the broader planning efforts of the "Ten Strategic Initiatives to Stabilize and Grow Guam's Economy".

## **Key Findings**

Guam's household income decreased by \$2,239 in 1999, while the average household size increased.

The number of households receiving public assistance increased by 55% in 2001. During July 2002, the 1996 federal welfare reform laws placing a five-year moratorium on cash assistance aid programs went into effect. An estimated 10,000 recipients will be impacted by 1996 federal welfare reform laws. Between the months of June and September 2002 when the five year limitation went into effect, recipients under the Temporary Aid to Needy Families declined 21.7 percent.

Guam's unemployment rate was recorded at 11.4% in March 2002 (7,070 people unemployed). Employment declined 7.1% from 60,200 persons in March 2001 to 55,910 persons in March 2002.

Guam serves as an international hub for telecommunications providers, has the most sophisticated systems and infrastructure in the region, and has unique advantages in its connectivity in terms of fiber optic cable and satellite access.

The cumulative impact of military downsizing on Guam's Gross Island Product from the period of 1996 through 1999 is estimated at \$942 million.

While Guam's visitor industry was recovering from the impact of external forces (e.g. Asian Economic Crisis, Super Typhoon Paka, KAL crash) to 1997 arrival levels, with a marginal increase in per capita visitor spending recorded for 2000, the industry suffered serious set backs as a result of Super typhoon Pongsona during December 2002 and the United States War On Iraq during March 2003.

Japan, China, Korea, Taiwan and Singapore are among the top countries, that trade with the U.S. (approaching \$500 billion in 2002). Guam has an opportunity to play a larger role in Asia-American trade activities.

## **Proposed Projects**

The following projects have been selected to put into action the strategy outlined by the CEDS. To determine project priorities, these projects were evaluated against the Economic Development Administration's Policy Investment Guidelines and Guam's requirements.

<b>Priority</b>	<b>Project Name</b>	<b>Description</b>	<b>Amount</b>
High	New Wharf and Land Reclamation	Build new wharf, reclaim land, purchase cranes	\$35,000,000
High	Tumon Business Improve. District	Fund staff support to develop legislation and survey owners	\$100,000
High	Regional Solid Waste Facility	Prepare feasibility study & market study of by-products	\$200,000
High	Immigrant Investor/Econ. Model	Fund office to prepare proposal and develop Econ. Model	\$500,000
High	Money Manager Program	Program development and implementation	\$50,000

Priority	Project Name	Description	Amount
High	Fishermen Coop Building Complex	Design and construction	\$2,500,000
High	Military Prepositioned Ships	Develop feasibility study	\$75,000
High	Tumon Infrastructure Improve.	Construct phase II; design/construct phase III	\$20,000,000
High	Call Centers	Develop marketing plan and implementation	\$250,000
High	Guam Captive Insurance	Marketing plan implementation	\$400,000
High	Guam Domestic Fisheries	Develop and implement fisheries feasibility study	\$200,000
High	Tumon Bay Drainage System	Design and construction of facility	\$16,000,000
High	Marina Development	Design and construction	\$4,500,000
High	Guam-Based Trusts	Market research study on tax implications	\$150,000
High	Airline Flight Kitchen	Design and construction	\$10,000,000
High	Agana Bridges	Design and construction of 3 bridges	\$25,000,000
High	Hagatna Revitalization	Master plan development and design	\$3,000,000
	<b>Subtotal</b>		<b>\$117,925,000</b>
Medium	Alternative Dispute Center	Business plan development, design and bldg const.	\$650,000
Medium	New Air Cargo Facility	Construction	\$20,000,000
Medium	Transportation and Distribution	Complete economic study and needs assessment	\$500,000
Medium	Aviation Flight Schools	Feasibility study, construct and equip flight school	\$495,000
Medium	GWA USEPA Compliance Order	Design and construct water and waste water improvements	\$92,000,000
Medium	Telecom Industry Training Program	Prepare training program	\$205,000
Medium	Northern Industrial Park	Feasibility study and design	\$500,000
Medium	Film Industry Development	Implementation of Feasibility research	\$250,000
	<b>Subtotal</b>		<b>\$114,600,000</b>
Low	Tiyan Infrastructure System	Design and construction of roads, water, sewer, etc.	\$36,000,000
Low	Northwest Parkway Project	Design, construct, extend Route 3a (Castro property)	\$7,000,000
Low	Marine Drive Bypass	Design and construct	\$31,700,000
Low	Small Business Incubator	Construction	\$1,500,000
Low	State Statistical Center	Hire Chief Economist and implement Center project	\$600,000
Low	Regional Software Support	Feasibility study and cost benefit analysis	\$100,000
Low	Multi-purpose Fishing Vessel	Purchase vessel and develop training program	\$200,000
Low	Tumon Bay Light Rail System	Design and construct	\$280,000,000
	<b>Subtotal</b>		<b>\$357,100,000</b>
	<b>Total</b>		<b>\$589,625,000</b>

# INTRODUCTION

This document represents Guam's Comprehensive Economic Development Strategy (CEDS) for 2003. As structured, it describes the island's current economic conditions; and in so doing, identifies local problems, needs, opportunities and resources. In addition, it presents the island's socio-economic development vision and goals; sets the strategic direction for Guam's future economic development; and establishes a comprehensive development program, including priority projects and an implementation strategy. Finally, it outlines a process for annual evaluation, feedback and update for Guam's economic development strategy.

Guam's 2003 Comprehensive Economic Development Strategy has as its foundation, an intensive, on-going, community-wide effort initiated in January 2003 by incoming Governor Felix P. Camacho and Lieutenant Governor Kaleo Moylan to stabilize and grow Guam's economy. In announcing the plan, Governor Camacho stressed, "My economic stabilization plan represents a realistic, incremental and measurable approach to revitalizing Guam's economy. While our goals are aggressive, our process is deliberate and calculated in order to measure the true results of a plan that is designed to create thousands of jobs and restore revenues to mid-1990 levels with an economy that circulates more than \$3 billion annually."

To implement the strategic plan, the Governor has established a Guam Economic Recovery and Development Team consisting of representatives from the public and private sectors. The Team has an ambitious schedule for stabilizing and growing the Guam economy and is working to achieve tangible results in the next few months.

## A. ORGANIZATION AND STAFFING

Guam's initial CEDS was initiated in July, 2000 when the Planning Division of the Guam Department of Commerce was awarded a grant from the U.S. Economic Development Administration funding the preparation of a Comprehensive Economic Development Strategy (CEDS) for Guam. To facilitate the preparation of the CEDS, the Guam Department of Commerce's Planning Division contracted the services of an outside consulting firm, Market Research & Development, Inc (MR&D). MR&D worked with the Guam Department of Commerce to prepare the CEDS and comply with the appropriate procedural guidelines. In February 2003, work to update the CEDS was initiated in a collaborative effort between the Bureau of Statistics and Plans and the Guam Economic Development and Commerce Authority.

## B. THE PLANNING PROCESS

The 2003 Guam Comprehensive Development Strategy synthesizes the new Administration's "Ten Strategic Initiatives to Stabilize and Grow Guam's Economy" and "A Six Point Policy Plan for Action." which were developed to address the island's worsening economic condition and provides a strategy that will stabilize and grow the economy. As a result, its development has incorporated



input from numerous public and private entities including the Guam Chamber of Commerce, the Committee to Get Guam Moving, and Government of Guam agencies. In addition, the involvement of both high level public and private sector representatives ensures high level leadership and attention to implementation. Over the next few months it is expected that significant public input will be solicited and received as the Guam Economic Recovery and Development Team validates information and assumptions, visualizes outcomes, fleshes out strategy and validates opportunities, develops tactical implementation details, quantifies financial contributions to the economy and costs out efforts in terms of human capital and dollars.

# ENVIRONMENTAL ASSESSMENT

## A. PAST AND PRESENT TRENDS

### *Physical Characteristics*

Guam, as the westernmost territory of the United States, is the largest and southernmost island in the Mariana Archipelago, and was the first Pacific island discovered by the Western World. The island is 30 miles long, ranges from 5 to 9 miles in width, and has a total land area of 209 square miles. Guam is located in the Western Pacific Ocean 3,700 miles southwest of Honolulu, 1,500 miles east of Manila, 1,500 miles southeast of Tokyo, and 3,100 miles northeast of Sydney.

The island was formed through an uplift of undersea volcanoes and is surrounded by coral reefs. It is composed of two distinct geologic areas of approximately equal size. The northern part of the island is a high coral limestone plateau rising 850 feet above sea level. This area contains the northern water lens, the main source of fresh water for Guam. Apra Harbor, one of the largest protected harbors in the Pacific, is located on the west central side of the island. The southern portion of the island is composed of volcanic deposits, which form low-lying mountains and rivers, that direct surface run off either to Fena Reservoir or the ocean.

Guam's climate is tropical with temperatures ranging between 75 and 86 degrees, and a mean annual temperature of 81 degrees. May and June are the hottest months, with most rainfall occurring from July through October. The average yearly precipitation is approximately 90 inches. Constant tradewinds blow from the Northeast during the dry season, December through April. Drought-like conditions can occur during the dry season; however, Guam's subterranean water lens is capable of supplying fresh water far in excess of the island's present needs.

### *Socio-Cultural Profile*

The ancient Chamorros, the earliest known inhabitants of the Mariana Islands, were of Mayo-Indonesian descent originating from Southeast Asia as early as 2,000 B.C. Through linguistic, archaeological and historical evidences, the cultural similarities of the ancient and present day Chamorros resemble the languages and cultures of Malaysia, Indonesia and the Philippines. The first historical document relating the general physical features of the ancient Chamorros, written by Pifigetta in 1521, described them as being tall, big-boned, and robust with tawny brown skin and long black hair. The estimated size of the population during the time of Spanish contact in 1521 was 65,000 to 85,000. By 1741, after conquest by Spain through war, the population was reduced to 5,000.

The present day Chamorros are a mixture of various ethnicities including many cultural groups originating from Asia, Europe and the Americas. In 1962, President Kennedy lifted the Naval Clearing Act, which allowed travel to the Guam without a security clearance. Since that time, many

Filipinos, Caucasians, Japanese, Korean, Chinese, Indians, and Pacific Islanders have moved to Guam and have made the island their home. The present population is a rich blend of many ethnic groups and races, making Guam a cosmopolitan community of many customs and traditions.

In modern times, the island's population has grown from 18,000 to 140,000 through a mixture of in-migration and one of the highest birth rates in the U.S. (3.2% as of 1990). With this steady increase in population and the attendant economic expansion such growth portends, significant social changes have occurred. These social changes, while creating even greater diversity, have also caused detrimental effects to the community as a whole. One of the negative results of Guam's rapid population and economic growth has been the erosion of its traditional family structure. The greatest threat to the island's family structure has been in large part the economic growth which has also improved the overall standard of living. Subsistence farming has given way to a wage based economy which has created a new array of expectations and desires. While over time, the island has improved its standard of living, in real economic terms, that same progress has created significant challenges to traditional family values. Loss of these family values has been blamed for rising crime rates, drug and child abuse, as well as increased poverty, welfare dependence, and high school "drop out" rates.

A goal to revitalize traditional family values in island homes and communities has been established. Young people today are subjected to tremendous pressure to conform to modern values that often run counter to the traditional values of local families. This clash of values has often created dislocation and confusion, which has reinforced dysfunctional behavior.

For these reasons, the preservation of the Chamorro culture is sought. Among the needs identified are the preservation of the language, through the study of Chamorro within a scholastic framework, use of indigenous names in public places, development of an authentic Chamorro village, establishment of a permanent Guam Museum Facility, reconstruction of the Governor's Palace, and recovery of Chamorro artifacts from local and foreign sources.

### ***Environmental Situation***

In general, Guam has a high quality physical environment. The Guam Environmental Protection Agency conducts various programs that monitor the status of the environment on a regular basis. U.S. Environmental Protection Agency's regulations apply to Guam; and in some cases, Guam's own laws are more stringent than those of the U.S.

As a relatively small, high density island, Guam's marine environment is a key litmus test for the overall environmental impact of human activity on the land. The quality of marine waters has been found to be generally excellent across all indicators. No major areas of environmental concern have been identified as a result of the various sampling programs. At the confluence of Pago River and its receiving marine waters, however, a high nitrate level is evident in violation of federal EPA standards. This is attributed to nutrient loading by leachate from the island's Ordot Landfill.

Erosion of soil is associated with construction activity and natural erosion occurs in poorly vegetated areas of Southern Guam. Frequent grass fires also subject areas to increased erosion. Soil erosion

is an area of special concern in Southern Guam since sediment run-off negatively impacts the reef in areas where rivers discharge into the receiving waters of the ocean. Past sedimentation has resulted in the destruction of coral reefs and associated organisms in areas adjacent to the mouths of rivers.

The quality of the reef flat environs are found to be generally good with monitoring stations normally showing elevated levels of turbidity consistent with ambient conditions for reef flat environments. Periodically, all monitoring stations are found to be in violation of acceptable fecal bacteria levels with some sites showing chronic levels above acceptable standards.

The quality of the surface water system has been found to be generally good, but problem areas have been identified with specific river systems. The most common violation of water quality standards related to elevated fecal coliform levels. In addition, elevated readings regarding nutrient loading readings are chronic for certain river systems.

Air quality is very high with prevailing winds removing air contaminants (e.g., sulfur dioxide), which are mainly associated with point sources burning of fossil fuels to generate electricity for the Guam Power Authority. The use of high sulfur fuel is allowed under a waiver of the U.S. EPA air pollution guidelines.

Solid waste landfills are an area of concern in Guam, given with its limited land area. The amount of solid waste continues to rise each year. These problems are magnified as the standard of living changes and increases in population and industrial activity bring more goods and commodities to the island. The potential of co-generation is being explored to reduce the volume of garbage going into the landfill. In addition to the issue of volume, the potential for contamination of the northern aquifer, Guam's primary water supply, is an area of concern.

Hazardous and toxic waste has a great potential for adversely impacting Guam's environment. In recent years, this potential has increased significantly, as evidenced by the growth in the number of on-island hazardous waste generators and solid waste treatment, storage and disposal facilities. While increasing quantities of hazardous materials are imported into Guam by the commercial sector, the military continues to be the largest importer and user of hazardous materials. As hazardous materials become waste, disposal requires special handling in accordance with Guam's Hazardous Waste Management Regulations. The cost for packaging, transporting and disposing of hazardous waste at an EPA approved site continue to rise.

### **Natural Resources**

While vast ocean resources surround Guam, the island itself is not endowed with substantial natural resources, other than its people and beautiful beaches and scenery. Mining, other than for coral to use as aggregate for roadways and concrete, is non-existent. Forestry has not been widely practiced, except for harvesting firewood, since World War II, when sizeable areas of Guam's hardwood forests were destroyed through shelling and resulting fires. Development has crowded out large numbers of undomesticated animals, with the exception of deer, wild boar, carabao and dogs. While fish are reasonably abundant in Guam's coastal waters, the cooler ocean waters surrounding the

island are relatively barren in comparison to the equatorial waters located a few hundred miles to the south. The more popular pelagic fish species are concentrated there, supporting commercial fishing activity.

There are no rivers on Guam large enough to provide significant hydropower. However, there is a natural, large deepwater harbor that is protected from typhoons that frequent Guam. The harbor is located on the central leeward side of the island, in reasonably close proximity to the island's business district. The harbor is very advanced relative to other infrastructure in Guam and the Western Pacific, having been extended and improved over the years by both the military and civilian governments.

### **Natural Disasters**

Guam lies in the direct path of frequent tropical storms and typhoons. Since 1945, the island has been affected by 160 tropical cyclones of at least tropical storm intensity (34-60 knots sustained wind speed). Of the 160 tropical storms, 68 were classified as typhoons (sustained wind speed of 64 knots or higher). Supertyphoon Paka, which struck the island in December 1997, with maximum wind speeds in excess of 175 mph, was Guam's most expensive natural disaster with direct damages estimated at over \$500 million. Supertyphoon Pongsona's final estimated cost of the damages the island incurred when it struck the island in December 2002 have not been determined. It is likely that cost of damages from Supertyphoon Pongsona will far exceed those of Supertyphoon Paka, making it Guam's most expensive natural disaster.

The Marianas Trench, which lies just off Guam, is located within a seismically active zone, making Guam subject to periodic earthquakes. The earthquake that occurred in August 1993 was severe, measuring 8.2 on the Richter scale and destroying two major hotels.

The government of Guam's most effective form of disaster mitigation has been the adoption and policing of a building code that mandates that all structural designs minimize the destructive effects of both types of natural disasters. The building code is far stricter than most, if not all, U.S. cities. An emergency response plan is annually updated by the Guam Office of Civil Defense to best utilize the Government's limited resources in mitigating, preparing for, responding to, and recovering from the various emergencies and disasters affecting the island and its residents. While the adoption of a stringent building code has reduced the loss of life and property from natural disasters, the code has also significantly increased construction costs.

### **Population**

The official 2000 census count by the U.S. Bureau of the Census is 154,805. This represents a 16 percent increase over the 1990 total of 133,152, and a 10 percent decline in the population's rate of growth between 1980 and 1990. In 2000, Guam's southern region experienced a 2 percent decline, while the population in the island's northern and central regions increased by 29 and 11 percent, respectively. Between 1990 and 2000 the numbers for the military and their dependents were reduced due to base closures initiated in 1995. Military related population has dramatically

decreased, from 22,178 (active duty personnel and dependents) in 1992, to 11,625 in 2000. Increased migration is expected, especially of Micronesians, primarily due to the Compact of Free Association, which allows these people to travel freely to Guam and to be employed as U.S. citizens. Other natural events affecting the rise and fall of Guam's population over the past decade include Typhoon Omar in 1992, an 8.2 earthquake in 1993, and Typhoon Paka in 1997.

Census 2000 demographic information has not been released as of finalization of this report. Population demographics for 1990 showed that the median age on Guam was 25.0 years, compared to 32.9 for the U.S. as a whole. Overall, 35 percent of Guam's population was less than 18 years old and four percent was 65 years or older in 1990. The ratio of males in the population was 53.3 percent. By ethnicity, the largest groups were Chamorros with 49,935, followed by 30,043 Filipinos, and 19,160 Caucasians.

### **Household Income and Per Capita Income**

According to information released by the U.S. Census Bureau, the Guam's mean household income in 2000 was \$49,617, which represents a 5.3 percent decline from 1990, when after adjusting for inflation, its mean household income was of \$52,419. Guam's average household income in 2000 was \$39,317, a decline of 5.2 percent in comparison to \$41,472 in 1990. While the average household income declined, the average household size increased to an average of 4.16 household members, as compared to an average size of 3.93 in 1998. The average number of earners within the household in 1999 rose slightly to 1.90, as compared with 1.86 average earners from the previous year. Average household income reported in 2000, however remained the same.

While there have been some positive fluctuations, overall, Guam's Per Capita Income and Mean Earner's Income have fallen from income levels set in 1998. Guam's Per Capita Income figure encompass the total civilian population, including those without income. The Mean Earners Income is a statistic that covers workers 16 years of age and older, excluding those without income. The Guam Department of Labor notes that income statistics may not be comparable with other income statistics (e.g. U.S. Census Bureau) due to differences in the income definition concepts used.

In 1998, the Guam Department of Labor reported Guam's Per Capita Income was \$12,028. In 1999, it fell 10 percent to \$10,825. While 2000 was still far below the level set in 1998, it improved 5.9 percent over 1999 to \$11,465. However, this positive gain was not kept in 2001, when Guam's Per Capita Income declined 5.2 percent to \$10,872.

Guam's Mean Earners Income indice has followed the same basic trend as its Per Capita Income indice. In 1998, the Guam Department of Labor reported Guam's Mean Earners Income was \$22,612. In 1999, it fell 7.2 percent to \$20,976. While 2000 remained below the level set in 1998, it improved 3.7 percent over 1999 to \$21,756. While Guam's Mean Earners Income declined to \$21,602 in 2001, the decline was a slight .7 percent from 2000.

## **Public Assistance**

The decline in Guam's economy is reflected by the increase of those seeking assistance through various public assistance programs. According to the information from the 2000 Census released by the U.S. Census Bureau, 6,466 Guam families had income below the National Poverty Level in 1999, which represents 20 percent of 32,367 families surveyed. Of the 38,769 households surveyed, 4,211 households (10.9 percent) reported having public assistance income. The mean public assistance income received was \$5,291. In comparison, the U.S. Census Bureau reported that nationally, only 9.2 percent of families had income below the National Poverty Level while those households receiving public assistance income was 3.4 percent.

With specific regard to food stamp participation on Guam, while there was a small decline in 2001, the average number of households receiving food stamps has increased annually throughout the period of 1999 through 2002, for which data only for the first 9 months are available. The average number of recipients that received food stamps monthly increased throughout the period. In 1999, an average of 6,183 households received food stamps monthly. By 2000, the number of households increased 14.6 percent to 7,085 households. There was a slight decline of .8 percent in 2001, when the number of households dipped to 7,024. During the first nine months of 2002, the average number rose 5.4 over the previous year to 7,404 households receiving food stamps monthly. The average number of recipients receiving food stamps monthly increased through out the period from 20,458 recipients in 1999 to 24,311 recipients during the first 9 months of 2002. The total dollar value of food stamps received declined 5.2 percent from 1999 (\$32.2 million) to 2000 (\$30.5 million). However, in 2001, the total dollar value increased to \$37.8 million, a 23.9 percent increase from 2000. The total dollar value of food stamps issued in 2002 is not available. However, based on the monthly food stamp value average, the monthly average increased 16.1 percent from \$3.1 million in 2001 to \$3.6 million during the first 9 months of 2002.

The following average number of people qualified monthly for various public assistance programs and annual expenditure for those programs in FY 1999: Temporary Aid to Needy Families, formerly known as Aid to Families with Dependent Children, (9,070 persons for \$17,859,761); Old Age Assistance (509 for \$1,594,344); Aid to the Permanently and Totally Disabled (95 for \$273,999); Aid to the Blind (1 for \$1,812); and General Assistance (2,058 persons for \$4,891,493). By 2001, the average number of people qualified monthly for various public assistance and annual expenditures were as follows: Temporary Aid to Needy Families (13,290 persons for \$17,209,865); Old Age Assistance (624 for \$1,452,825); Aid to the Permanently and Totally Disabled (112 for \$261,784); Aid to the Blind (1 for \$2,676); and General Assistance (4,027 persons for \$5,891,127).

The 1996 federal welfare reform laws set a five year limit on recipients from receiving aid under cash assistance programs, which include the Temporary Assistance to Needy Families Program (TANIF) and the Government of Guam's General Assistance Program (GA). These reforms do not affect Food Stamps, Aid to the Blind, Old Age Assistance, Medicaid, or Aid to the Permanently and Totally Disabled. It is anticipated that a total of 10,000 recipients will be affected. This five year limitation went into effect on Guam during July 2002. While there were some downward fluctuations, generally during the period of January 2001 through June 2002, the number of recipients receiving assistance monthly under TANIF steadily increased each month. However, beginning with July 2002, the numbers began declining. Between June and September 2002, the

numbers had declined 21.7 percent from 10,582 recipients in June to 8,286 recipients in September. The General Assistance Program also had a decrease of 34.6 percent from 799 recipients in June to 552 recipients in September.

### **Education**

The educational needs of Guam are provided by an island-wide public school system (the Guam Public School System) comprised of 5 high schools (grades 9 to 12); 6 middle schools (grades 6 to 8); and 24 elementary schools (grades 1 to 5) operated by the Government of Guam. The Catholic Archdiocese of Agana also operates a substantial school system with a total of 15 schools; 3 High Schools, 6 Middle Schools and 6 Elementary Schools. Several other religious denominations also operate schools in Guam. These include Saint John's Episcopal School, Harvest Christian Academy, Guam Adventist Academy, Temple Baptist School and Trinity Christian School. Additionally, there are two Japanese schools, one Chinese school and one Korean school operating on-island. For academic year 2000-2001, public school enrollment was 31,903, total private school enrollment was 4,088 and total Department of Defense schools enrollment was 2,429.

The Guam Community College (GCC) provides vocational and technical education for students from high school through college. The college has an average enrollment of 4,500 students. Students receive academic as well as technical and professional instructions. GCC provides 11 academic and professional programs and 40 technical and vocational programs that award Associate Degrees or Certificates of Completion. Journeyman Certificates are awarded in 22 vocations in the construction industry, with an additional 5 in the hotel and restaurant industry. GCC works in collaboration with local high schools and the University of Guam and is fully accredited by the Western Association of Schools and Colleges (WASC).

The University of Guam (UOG) offers post-secondary degree programs through five different colleges, namely: CPBA-College of Business & Public Administration; CALS-College of Agriculture & Life Sciences; CAS-College of Arts & Sciences; COE-College of Education; and the College of Nursing & Health Sciences. The University provides five Baccalaureate (BA, BA ED, BBA, BS, and BSW) and five Masters (MBA, MED, MPA, MS and MA) degree programs. Total enrollment was 3,894 for the 1999-2000 academic year and 3,462 for 2000-2001.

### **Housing and Land**

During FY 1998 the Guam Housing Corporation registered 1,151 applications for financial assistance. During this period (50) applicants have been approved for a total outlay of \$5.1 million. Of the 50 approved, 26 were processed under a 6 percent interest financial assistance program, while the remaining were approved under a conventional loan program.

Affordable housing is still the number one priority of the Guam Housing Corporation. Land has been secured for a LADA Estates project but a funding source still needs to be identified. Both



LADA Estates and the Community Affordable Housing Action Trust programs are designed to provide affordable housing for low and middle-income families of Guam.

The Community Affordable Housing Action Trust (CAHAT) program is designed to help both the homeowner and private lending institution when it comes to purchasing a home. One of the benefits is that it enables potential homeowners to put 5 percent down payment on a home rather than the usual 20 percent. As of June 2001, a total of \$2,168,174 have been committed, and loans closed for 62 families.

In recognition that only through urban redevelopment would villages be rebuilt, the Guam Housing and Urban Renewal Authority (GHURA) was created in 1962 after the devastation of Typhoon Karen. GHURA is charged with the responsibility of undertaking and pursuing an active urban renewal program to eliminate and prevent the development and spread of slums and blighting influences on Guam.

Two of GHURA's first projects were the Yona and Sinajana Urban Renewal Projects. The Astumbo Subdivision project in Dededo provides for the development and improvement of 500 residential lots. Lots are priced at an affordable \$2,500, enabling qualified families to build their homes.

One of GHURA's purposes is to provide "decent, safe, and sanitary" housing for low-income families. Some of its programs include: the "GHURA 500" project, which began in FY 1977; the Low Income Public Housing project under which 833 units have been built in various villages, including 82 units especially designed for elderly and/or handicapped persons; the Section 8 Housing Assistance Program, through which GHURA subsidizes rental payments for over 1,400 families; and the Guma Trankilidat project, which developed 50 units designed specifically for the elderly.

There are an estimated 45,000 houses and apartments on Guam. Rents and housing prices are much higher than in most U.S. Mainland communities. Construction costs range from \$72 to \$90 per square foot, giving an average three-bedroom house price of \$145,000 to \$156,000. The rental market indices show two-bedroom units renting from \$500 to \$700 per month and three bedroom units renting from \$700 to \$1,000 or more.

In 1997 there were 45,511 land parcels registered with the Department of Revenue and Taxation. A land parcel is any piece of registered land regardless of size. These parcels are located within 15 municipalities. The total appraised value of land for 1997 was \$5.871 billion, down 2.8 percent from the \$6.039 value reported in 1996.

### **Excess Federal Lands**

In September 2000, the U.S. Navy conveyed a total of 1,800 acres of excess federal lands, via quitclaim deed, to the Government of Guam. This transfer represented the single largest land transfer since 1950. Approximately 1,400 acres of this total was transferred to the Guam International Airport Authority for airport and related economic purposes. These properties are currently being cleared to accommodate the development of an airport industrial park.

Approximately 248 acres was transferred for economic development purposes and will be used by former landowners to a) provide opportunities to stimulate Guam's economy, b) create long-term employment, and c) maximize financial returns. The remaining acreage at the former Naval Air Station Agana will be used for homeless, park and highway purposes.

In 1995, the Base Realignment and Closure Commission closed the former Naval Ship Repair Facility, consisting of approximately 100 acres. This property was intended for use as a civilian shipyard. However, just prior to the deed transfer, the U. S. Navy decided to retain the property for security reasons.

In addition to BRAC properties, an additional 3,200 acres are to be returned to the Government of Guam under Public Law 103-339 for civilian use. Much of this property has already been transferred and it is expected that once properties have been transferred to their new owners as required by local law, additional economic activities will be implemented..

### **Employment**

The most important sign of distress in the labor market is seen in Guam's unemployment rate, which has been gradually rising since the 1990's. Following the island's economic boom of the 1980's, total payroll remained flat or declined slightly from 1992 through 1996. In the same period, the unemployment rate rose from approximately four percent of the labor force (about 1,500 unemployed) to approximately nine percent (more than 4,000 unemployed), indicating that the labor market has not met the expectations of a growing number of new entrants.

Guam's unemployment rate according to the Department of Labor's Report has declined slightly from 13.0 percent in March 2001 (9,040 unemployed) to 11.4 percent in March 2002 (7,070). While there was a slight decline in Guam's unemployment rate, it remains significantly higher than Hawaii's unemployment rate. During March 2002, Hawaii's unemployment rate was 4.6 percent. Guam's unemployment rate is also significantly higher than the U.S. national unemployment rate for 2002, which was 5.8 percent. As there has also been a decline in employment opportunities, the decline in Guam's unemployment rate can also be reflective of individuals who have left Guam's labor market and who have moved to communities in Hawaii or the continental U.S. where employment opportunities exist.

Guam Department of Labor's Current Employment Statistics Report for the month of March during the period of 1999 through 2002 reflects an annual decline in Guam's payroll employment. In March 1999, Guam had a total payroll employment of 62,350 persons. Data for March 2000 is not available. By 2001, total payroll employment for the month of March had declined to 60,200 persons, a decrease of 3.4 percent from March 1999. Employment continued to further decline to 55,910 persons in March 2002, a decline of 7.1 percent from March of 2001 employment level. Within Guam's three employment sectors (private sector, Federal government sector and local government sector) there was a loss of payroll employment in all sectors between March 2001 and 2002. The private sector, which employs the greatest percentage of people in the labor force, experienced the greatest loss. In March 2001, 73.5 percent of all who were employed were in the private sector; by March 2002, the percent declined to 71.9 percent. Overall, the number of persons employed within the private sector declined 9.2 percent from 44,300 persons to 40,220 persons.

Guam's government sectors also had declines in the number of persons employed, but the percent of those employed within these sectors increased in comparison to the private sector. The Government of Guam's percent of total payroll employment increased slightly from 21.1 percent in March 2001 to 22.5 percent in March 2002. Correspondingly, the federal government sector employment increased from 5.3 percent to 5.5 percent of total payroll employment. As in the case of the private sector, both government sectors experienced declines in their respective payroll employment. Employment within the Government of Guam declined 1 percent from 12,730 persons in March 2001 to 12,600 persons in March 2002. These include all the responsibilities of municipal, county and state governments. Within the federal government sector, employment declined 2.5 percent from 3,170 persons in March 2001 to 3,090 in March 2002.

The Guam Department of Labor's "Annual Census of Business Establishments" shows that there were 2,588 business establishments in Guam as of March 1999, an increase of 2.2 percent from the 2,533 establishments in 1998. More recent statistics remain unavailable.

### **Price Indicators**

The Consumer Price Index is one of the most widely used economic indicators of economic trends. It is used as a measure of inflation and the effects of economic policy, as a deflator of other statistical series, and as an income or benefits escalator. Since consumers are constantly offered new items to include in their market basket, buying patterns change over time. In the U.S., the CPI market basket is updated approximately every 10 years. The Government of Guam's CPI until 1997 was based upon a market basket of goods and services that took place in 1978 and was reflective of 1978 buying patterns. Since 1978, Guam's consumer buying patterns have changed dramatically as a result of changes in prices, demographic characteristics, income, rapid developments in technology, and habits.

In 1997, the Government of Guam began using a new market basket formula to calculate the island's Consumer Price Index (CPI), which is based on a 1995 Consumer Expenditure Survey. Using the results of the 1995 Household Expenditure Survey, the market basket of goods and services to be included in the CPI was developed with great care. Categories within the market basket included Housing, Apparel and Upkeep, Transportation, Medical Care, Entertainment, Food and Beverages, and Other Goods and Services.

Guam's updated Consumer Price Index was officially released during June 1997. The 3rd Quarter of 1996 was designated Guam's base quarter, and is therefore, equal to 100. From this base quarter the Government of Guam worked backward to the 4th quarter of 1995 to obtain new index numbers based on the revised market basket. Using new weights, the percentage change of each quarter was calculated and comparisons of them with previous quarters was made. The end result showed a 3.72 percent inflation rate for CY1999, a -0.31 percent for CY2000 and a -1.33 percent for CY 2001. The All Items Index for 1st Quarter 2002 was 103.54. This index shows a continuing decline of 1.16 percent from the 1st Quarter 2001 index of 104.76. Further comparison shows that a market basket of good and services costing \$100.00 in October 1996 (base period) now cost \$103.54.

The Housing group index continues to show declines. It decreased 8.37 percent between the 1st Quarter of 2000 and 2001 and further decreased 3.87 percent between 1st Quarter 2001 and 2002. For the period of 1st Quarter 2001 and 1st Quarter 2002, the Other Goods and Services, Apparel and Upkeep, Transportation and Entertainment groups also showed decreases. Contributing to the decreases were a housing market with a high vacancy rate, lower prices recorded for financing, taxes and insurance, household furniture and appliance, apparel for women, boys and men, and sporting goods and equipment. Further comparison shows these decreases were offset by increases in the Medical Care and Food and Beverages groups. The Food and Beverage Group has the largest increase of 10.54 percent from the 1st Quarter 2002 over the same quarter of the previous year; while Medical Care had an increase of 1.29 percent. Contributing to the increases were higher prices recorded for medical care services, personal and educational services, fruits and vegetables, alcoholic beverages, beef and poultry.

### **The Gross Island Product**

In the early 1970s, Guam's Gross Island Product (GIP) was in the neighborhood of \$500 million annually. According to information released from the Guam Economic Development and Commerce Authority, Guam's estimated Gross Island Product had grown by 1998 to roughly \$3.02 billion. In 1999, however, Guam's GPI delined 10 percent to \$2.72 billion. Guam's GPI experienced a slight 2 percent growth in 2000. For 2000 and 2001, Guam's CPI remained at \$2.77 billion. The GIP per Capita in 2001 was \$16,250, declining 2 percent from \$16,575 of the previous year.

An estimated 40 percent of Guam's current CPI output is generated by the tourism industry and related activities, as compared to the early 1970s when more than half of the island's GIP was attributable to U.S. military activity. In the last 20 years Guam has successfully moved from a military based economy to a private sector economy. While the military and public sectors are still important components of Guam's economic activity, the private sector has been responsible for virtually all growth since the early 1980's. In 1982, the combined payrolls of the federal and local governments accounted for approximately 50 percent of total employment. By 1996, this payroll had fallen to about 28 percent, with subsequent years continuing to reflect percentages lower than 30 percent.

Guam's economic performance is closely tied to overseas markets, especially Japan. Furthermore, Japan has overwhelmingly been the primary source of foreign investment for the island. Thus, the current slowdown in the Japanese economy has directly impacted the island. The recession in Japan as well as the rest of East Asia has and will continue to restrain the flow of foreign investment in Guam. Primarily for this reason, Guam did not share in the extended economic boom experienced by the U.S. during the 1990s.

Strengthening and safeguarding Guam's economic performance in the long-term will depend on the island's ability to diversify its export markets and sources of overseas investment. Because the Guam economy is structurally dependent on the export of services, and even lower levels of public sector activity are expected, the private sector will remain primarily responsible for any future growth when that occurs. To fulfill its task as a growth generator, the private sector will need to concentrate on new international markets to spur future economic development. The increased

importance on the island placed by the U.S. Department of Defense is also expected to positively impact the island's economy.

### **Water and Sewer**

The Guam Waterworks Authority's (GWA) primary task is to produce, treat, transmit and distribute water on Guam and to collect, treat and dispose of wastewater. The agency provides water service to approximately 36,800 customers and sewer service to approximately 21,000. Water revenues for FY 2001 were \$23.9 million.

Prior to 1996 GWA operated as a line department of the Executive Branch called the Public Utilities Agency of Guam. In that year PUAG was abolished and GWA was created as an autonomous agency. As an autonomous agency, GWA ceased receiving annual subsidies from the General Fund while still retaining the responsibility for all of PUAG's outstanding debts. In 2002, the Guam Waterworks Authority was placed under the Consolidated Commission On Utilities as a result of P.L. 26-76. The Consolidated Commission On Utilities is an elected nonpartisan body that is responsible for GWA and the Guam Power Authority and replaced GWA's Board during January 2003.

GWA is presently faced with acute problems. These problems include under capitalization for necessary infrastructure projects, limited manpower development, excessive loss of water due to leak from an antiquated Navy water system, continued reliance on the purchase of water from military and private sources, and operating with a chronic deficit. The accelerated growth associated with Guam's tourist industry and rapid modernization are two other factors that have contributed to the island's system failures.

The Authority estimates the costs to revamp the system at \$200 million. In May 2000, GWA previous Board of Directors proposed a strategic initiative plan that includes entering into public-private partnerships to obtain "bridge financing" which would be retired using more conventional long-term financing such as revenue bonds. Benefits cited by the partnering strategy include the acquiring of:

- technical skills, expertise and experience not presently available in GWA;
- needed financial guarantees to improve the confidence of GWA's stakeholders;
- training and mentoring for GWA's employees;
- immediate remedies for GWA's short-term needs and long-term problems; and
- additional access to vendors and economies of scale.

In March of 2001 Executive Order No. 2001-13 was issued by former Governor Carl T.C.Gutierrez, "Relative to Declaring a Continuing State of Emergency Relative to the Guam Water and Waste Water Systems." The Executive Order further states, "A continuing state of emergency exists in the dilapidated state of our water and wastewater systems, which are suffering from age and earthquake damage as well as failure of materials, inability to locate underground pipes and other failures..."

In 2003 GWA estimated the total cost of projects exceed \$90 million to bring the island's sewage treatment plants in compliance with Notice Of Violations and administrative orders issued to the authority by the Guam Environmental Protection Agency. In addition, GWA currently owes EPA \$45 million in penalties. The major projects are as follows and includes design, construction, management, and monitoring:

- Agat Sewer Treatment Plant Renovation
- Agat Collector System Inflow/Infiltration
- Agana Sewer Treatment Plant Renovation/Expansion
- Agana Ocean Outfall
- Agana Village Collector System Inflow/Infiltration
- Baza Gardens Sewer Treatment Plant
- Northern District Sewer Treatment Plant
- Northern District Ocean Outfall
- Umatac/Merizo Sewer Treatment Plant Renovations
- Umatac/Merizo Collector System Inflow/Infiltration
- Comprehensive Performance Evaluations for the Agat, Baza Gardens, and Umatac/Merizo Sewer Treatment Plants
- Comprehensive Assessment of GWA's Sewer Pump Stations/Collection System and Implementation of a Corrective Plan of Action
- Development and implementation of a GWA Preventive Maintenance Program
- Development of an Operator Training and Certification Program
- Monitoring Requirements
- Facilities Master Plan
- Renewal and replacement capital improvement projects
- Meter Management Project
- Sewer Connection Project
- Design, construction observation, etc. for above projects

As a result of P.L. 24-37 which allows the agency to seek partnership with private firms, GWA entered into a 20 year Build-Operate-Transfer contract with Earthtech, Inc. to build wells, operate and maintain them, and turn them over to the government of Guam at the expiration of the contract period. GWA is currently in the process of seeking financing for the design, construction, operation and maintenance of water and waste water infrastructure projects, and seeking partners to take over waste water treatment plants, meter management, and private sewer line connections.

## **Power**

Over the past three decades, the Guam Power Authority (GPA) has changed significantly in response to the development of the tourism industry, the implementation of a Customer Service Agreement with the Navy, and the growth of its residential and commercial customer base. In 1990, 701.6 million kilowatt hours of electricity were consumed by 32,353 users. By 1999, the island's power

consumption more than doubled, with a total of 1,711.5 million kilowatt hours consumed by 44,381 users.

As an autonomous agency, GPA became the first within the Government of Guam to receive a favorable bond rating from Moody's, Fitch, and Standard & Poors. The Authority sought the refinancing of existing 1992 and 1994 series bonds on the market. The three firms upgraded GPA bond rating from BBB negative to BBB stable. The refinancing of the bonds resulted in a \$13 million dollar savings on interest payments.

In order to meet the growing need for expanded services (i.e., Demand Side Management), in 1996 GPA entered into Energy Conversion Agreements to purchase electricity produced by plants constructed, or refurbished and operated, by three companies. GPA has certain minimum power purchase commitments under each of the three agreements, which have 20-year terms. In 1999, power purchases totaled \$24 million.

During fiscal years 1998 and 1999, GPA completed several capital improvement projects focusing on improving system reliability and service. Transmission capabilities were increased with the installation of new transmission lines for Piti-Harmon, Cabras-Piti, San Vitores-Tamuning, and Agat-Umatat. In addition, new substations were built in Umatat and San Vitores. And finally, transmission and distribution line extensions were completed to serve anticipated home construction projects in Iha, Matagua, Pigua and on Chamorro Land Trust property.

GPA will be installing a fuel-switching device that would automate the fuel switching from high-sulfur oil to low-sulfur fuel oil, at an estimated cost of \$2.9 million. This project is a result of a consent decree in a civil action filed in October 1996, by the Environmental Protection Agency against GPA for operating its Cabras-Piti generating facilities in violation of the Clean Air Act. The consent decree was signed by EPA and GPA on February 24, 1999.

### **Telecommunications**

Guam possesses the most advanced telecommunications infrastructure and systems in the Western Pacific Region. The island sits at the nexus of the Pacific's underwater fiber optics cabling network, with more terminating cable connections than anywhere else in the world, making Guam a telecommunications hub for numerous international providers.

The Guam Telephone Authority (GTA) was created as an autonomous agency of the Government of Guam twenty-seven years ago. With island wide fiber-optic trunking, GTA is currently the only local telephone service provider. GTA's system is implicitly redundant and provides alternate routing should damage occur to any part of its fiber-optic loop. Its services are at par with other U.S. areas and much cheaper than similar sized service areas. Efforts are presently underway to privatize GTA as a means of spurring Guam's full integration into the global telecommunications system. The existing government structure of GTA is seen as hampering Guam's competitiveness in an industry dominated by private companies that have the resources to meet the requirements of rapidly changing technology.

As a result of the Telecommunications Act of 1996, Guam was included in the U.S. Domestic Rate Structure. As part of the North American Numbering Plan, long distance rates to the U.S. mainland now average between 5 and 30 cents per minute, depending on the time of day and day of the week. Due to increasing competition and the entrance of pre-paid calling cards, international rates are also less expensive. Currently there are 7 companies that offer long distance service on Guam and 2 main carriers of cellular service. Some companies, which provide consolidated services for land lines, mobile and Internet services offer incentive plans. Currently, half a dozen companies offer Internet access to local residents with rates based on usage varying from \$5 to \$30 a month.

Its particular global position allows data packets to make a single hop to fiber-connections that serve other parts of the world. The Tycom Network telecommunications cable station facility provides support for the TyCom Global Network, allowing traffic to be carried from Asia to the U.S. and beyond. The National Space Development Agency of Japan (NASDA) has also completed construction of a \$10 million tracking station to receive launch vehicle data in Guam.

Guam's political and economic stability also provides an attractive environment for establishing call and sales centers and telecommunication gateways.

Guam's educational institutions and private enterprises are beginning to take proactive steps to prepare an educated and tech-savvy workforce for the immediate and distant future.

The initiatives of the past decade have been designed to further Guam's status as a full service telecommunications hub in the Pacific. While the island's advanced local telecommunications capabilities provide the basis for international giants like MCI and AT&T to currently operate on-island, there is significant room for expansion in this industry. With the rapid movement of major American companies into Pacific Rim areas (i.e., Vietnam, Malaysia, Indonesia, Philippines and China), Guam is a prime location for firms that rely heavily on advanced telecommunications.

### **Federal Government**

The federal government plays a leading role in the economic affairs of the Island of Guam. Federal government expenditures totaled \$908 million in Fiscal Year 2001. Of this total, \$247 million were expended for wages and salaries, \$176 million were awarded as grants to local government, \$75 million were in direct payments to individuals, \$219 million were for procurement, and \$191 million were to pay for retirement and disability. The U.S. Postal Service contributed \$8 million and the Department of Justice contributed \$6.3 million in wages and salaries to the Guam economy.

The largest federal expenditure on Guam is for military operations. For fiscal year 2001, the Department of Defense's expenditure on Guam was approximately \$461 million. While an increase of 6.9 percent from its fiscal year 2000 expenditure of \$431 million, DOD expenditures for FY 2001 are a 38% decrease from its 1993 expenditure of \$748 million. Of the funds expended on Guam by the Department of the Defense, \$221 million was expended on wages and salaries and \$211 million were expended on procurement contracts. Federal income taxes (Section 30 Funds) returned a total of \$47.8 million to the Government of Guam for fiscal year 2001, a decline of 6.6 percent from the \$51.2 million that was remitted to the Government of Guam for FY 2000.



The American military has maintained bases on Guam since the turn of the century. After the end of World War II, Guam became the site of major naval and air force facilities in support of the U.S. defense commitments in the Asia-Pacific region. In Fiscal 1993, military expenditures in Guam amounted to \$748 million, making the defense sector second only to tourism in terms of expenditures and employment. In that year active military personnel based in Guam numbered 10,600 with another 11,400 dependents living on the island.

Since 1993, however, Guam has experienced a significant decrease in military activity beginning with the Base Realignment and Closure Commission's (BRACC) recommendations in 1995. BRACC '95 recommended closure of the Naval Air Station (NAS), the Naval Ship Repair Facility (SRF), the realignment (downsizing) of the Naval Activities Guam, the "disestablishment" of the Fleet and Industrial Supply Center, and the reassignment of naval air units, formerly slated to be transferred from NAS to Andersen AFB, to locations outside of Guam.

The economic impact of these base closures, unit transfers, and scale back activities has resulted in direct job losses of approximately 4,800 (i.e. 3,500 federal civilian jobs and 1,300 military positions). In terms of lost income, cumulative current dollar losses to the Gross Island Product for the period 1996-1999 has been estimated at \$942 million (refer to Team Guam Report on DOD closure & Realignment Recommendations for BRAC '95, Draft Final Report, April 1995:46-54). In terms of the rapidity of job loss, more than 60 percent of the jobs were lost within two years, with the balance being lost in the following two years.

Considering indirect job losses related to BRACC actions (i.e., those jobs lost to the multiplier effect of direct job income losses), it is estimated that another 2,011 jobs were lost, bringing the total decline in local jobs to 6,800. The loss of 6,800 direct and indirect jobs is very significant, especially when considering that many of these jobs were high-paying, skilled, professional and managerial positions, and that the cumulative number of jobs lost is equivalent to approximately 10 percent of Guam's total workforce.

While the impact on the economy in the short-term has been grim, particularly to those losing jobs and to the Government of Guam managers faced with major revenue losses, in the long-run military downsizing may result in the kinds of concrete local actions needed to further stimulate private sector development (e.g., income tax reform, privatization of selected government operations, increased public sector fiscal discipline coupled with the upgrading of labor productivity while limiting the growth of payrolls and number of public hires). One factor, which could further facilitate the transition of Guam's economy to one more reliant on private sector-led growth, is the favorable disposition of land and other assets now held by the military.

In support of a continuing military presence, government and civic leaders jointly submitted in March 2001, a white paper calling for a greater military presence on Guam. Entitled, "Force Structure Redistribution in the Asia-Pacific Region: Guam's Potential Role", the purpose of the white paper, which was prepared by the Guam Chamber of Commerce, was to demonstrate Guam's endorsement of a larger military presence. Also due to tensions in the region and Guam's strategic location to serve as a staging base and operating location for mobilizing U.S. military forces and equipment within the Western Pacific, there is evidence of increased military activity on Guam,

including the appropriation by the U.S. Congress in 1999 of \$103 million for military construction projects on Guam and the decision of the U.S. Defense Department to station a squadron of nuclear-powered submarines on Guam.

### **Compact Impact**

Another major issue affecting federal-territorial relations is the unrestricted immigration to Guam by the Freely Associated States (FAS) citizens of the Marshall Islands, the Federated States of Micronesia, and Palau. The Compact of Free Association of 1985 (P.L. 99-239) which established the relationship between the United States and the FSM and Marshalls, authorized unrestricted immigrations of FSM and Marshalls citizens into the United States, its territories and possessions. The Palau Compact (P.L. 99-958), which contains an identical provision, came into effect in 1994. These agreements enable citizens from these island states to enter Guam and to lawfully engage in occupations. Guam's resident population, as a result of this law, is estimated to have increased by approximately 33,000 persons between 1987 and 2002.

The Compacts, as approved, included the authorization of funds to cover the costs of increased demands placed on educational, health and social services by in-migration from the FAS. The Government of Guam's preliminary Fiscal Year 2002 Compact Impact expenditures is estimated to be \$26.9 million. In contrast, Guam received for FY 2002, \$6,380,000 in reimbursement through a Congressional appropriation. Since the initial implementation of the Compact, the total costs incurred by the Government of Guam for the period of FY 1986 through FY 2002 is \$210 million. The total amount appropriated by Congress for Compact Impact reimbursement to the Government of Guam for the same period is \$45,089,434. Costs incurred by the Government of Guam for education, health and social services to FAS citizens that have not been reimbursed is over \$165 million.

The Government of Guam filed a court action in 1996 seeking the preparation of a report on the impact of the Compact. In 1997, the Federal District Court of Guam issued an order requiring the Department of Interior to provide an annual report as required by statute. The court also ordered DOI to address the financial impact of the Compacts on Guam, the CNMI and Hawaii. U.S. Public Law 106-504 Section 2 negated the Court Order and now provides for Guam and other impacted jurisdictions to directly report to the Secretary of Interior the impact of the Compacts upon their political jurisdiction.

### **Local Government**

Guam is an organized, unincorporated territory of the US, which means that in some cases federal laws do not automatically apply to the island. For example, U.S. import tariff laws do not apply and Guam is considered to be a duty free port. On the other hand, federal banking and transportation laws and regulations apply to Guam, with some exemptions to address the island's unique political, geographical and social circumstances.

The Organic Act of Guam provides for three branches of government: executive, legislative and judicial. The Governor heads the Executive Branch. Until 1970, the Governor of Guam was appointed by the President of the United States. Since the November 1970 election and the January 1971 inauguration, the Governor and the Lieutenant Governor have been elected for four year terms. In 2002, the Honorable Felix P. Camacho and the Honorable Kaleo S. Moylan were elected Governor and Lieutenant Governor. The Governor is responsible for implementing all local and federal laws pertaining to Guam. He oversees the functions of the departments and agencies within the Executive Branch.

Guam's Judiciary system consists of one Federal District Court, the Superior Court of Guam and the newly established Supreme Court of Guam. Prior to the creation of the Supreme Court, local appellate cases were heard by the Appellate Division of the Federal District Court before going before the Federal Ninth Circuit Court of Appeals. Since July 26, 2000, the Supreme Court of Guam has assumed appellate jurisdiction over lower local courts. The President of the United States, with the consent of the Senate, appoints the presiding judge of the Federal District Court to an eight-year term. This Court has jurisdiction over cases involving federal issues. The Superior Court of Guam has authority over all cases arising under the laws of Guam. This includes family, small claim, traffic, probate, civil and lands registration issues.

Guam has a unicameral legislature. As a result of a plebiscite vote in 1998, the number of senators was reduced from 21 to 15. As well as making laws for the island, senators are responsible for appropriating funds from the General Fund for government operations and other public purposes.

Guam also has a non-voting delegate to the U.S. House of Representatives. Although precluded from voting on the floor of Congress, Guam's delegate does serve and vote in those House committees and subcommittees of which the delegate is a member.

Guam elected its first Public Auditor in November 2000 as a result of PL 25-42. The Public Auditor serves a four-year term and is responsible for auditing all transactions and accounts of all departments, offices, corporations, authorities, and agencies of the Government of Guam. As a result of P.L. 25-44, Guam also elected its first Attorney General in November 2002.

The Organic Act provides that Guam's income tax "mirror" the federal income tax. As a consequence, the Guam income tax law is basically the federal law, with local revenues going to the Government of Guam. As required by Section 30 of the Guam Organic Act, the federal income taxes collected from military personnel and other federal government employees on Guam revert to the Government of Guam. In addition, Guam is free to pass other tax laws. Major tax initiatives include a four percent tax on Gross Business Receipts from retail sales, and excise taxes on liquor, cigarettes and liquid fuels.

The United States Tax Reform Act of 1986 included a provision for Guam to develop its own income tax code. The Act mandates that such a code must provide protection against double taxation, fraud and tax avoidance and evasion. The Guam Tax Code Commission was established in May 1990, and succeeded by the Guam Finance Commission in 1994, to formulate a new tax system for Guam. In December 2000, the Guam Finance Commission was disbanded by the 25th

Guam Legislature, and no further action has been taken on delinking the Guam tax law from the U.S. Internal Revenue Code .

The projected combined revenues and sources of funding for the Government of Guam General Fund totaled \$338 million for Fiscal Year 2001. Combined expenditures of \$484 million for the same period left a deficit of \$146 million for the year. The Government of Guam has experienced deficits for the past four years, moving from a surplus of \$52.6 million at the end of FY1990 to a deficit of 93.5 million at the end of FY1995. This deficit has been financed by:

- borrowing from revenues in future years,
- internal borrowing from special funds and government agencies,
- bond issuance and loans, and
- delayed payments to vendors.

According to the Bureau of Budget and Management Research, a \$72 million budget shortfall is being projected for Government of Guam revenues during fiscal year 2003. The Administration's budget for FY2003 is estimated at \$464 million, which includes retiree supplemental benefits under the Government of Guam Retirement Fund. Revenue collections for 2003 are estimated at \$392 million.

Several cost cutting and revenue generation policies are being pursued by the Legislative and Executive branches. Cost cutting measures being implemented include: the elimination of numerous public holidays, termination of unclassified employees, imposition of a 32 hour work week (20% salary reduction) for approximately 4,000 government employees funded under the General Fund, reduction of 10% in the appropriation level for all entities receiving funding under the General Fund, and the transfer of General Fund employees to positions funded under federal grants. Other options to reduce expenditures include: the consolidation of agencies; the privatization of some government services; government wide reduction of salaries by ten percent and the lay-off of employees. Revenue generating policies being implemented include: increases in tobacco and alcohol excize taxes, an increase in Guam's Gross Receipt Tax from 4 percent to 6 percent and creation of new industries uncorrelated with tourism and military spending. The overall economic ramifications to the community resulting from these cost cutting and revenue enhancement policies are unknown as of this writing ;but are expected to bring about fiscal stability in the near term. The conversion from a gross receipts tax to a sales tax is also in active discussion among policy makers.

### **Agriculture**

As of September 2002, Guam's agriculture sector employed 300 people out of a workforce of 54,760. The number employed in 2002 is up from the numbers employed in 2001, which averaged 250 people each quarter. In comparison to 2001, it is a decline as 340 people were employed in the agriculture sector during September and 410 people were employed in December.

In FY2000, the production value for fruits and vegetables totaled \$1 million. Also in terms of value, the top five crops were long beans (\$233,503), cucumber (\$166,126), watermelon (\$105,960), cherry tomatoes (\$64,321), and small hot peppers (\$62,983). The number of acres under production declined 50 percent from FY 1999 when 220 total acres were under production. Most of the acreage

was used for bananas (34 acres), eggplant (30 acres), long beans (23 acres), cucumber (23 acres), and watermelon (20 acres).

Public Law 15-18, authorizing the Department of Agriculture to administer the Agricultural Land Lease Program, was repealed in 1993 with the implementation of the Chamorro Land Trust Act. There are currently 57 leases comprising 574 acres being leased by local farmers (not all leased lands are under cultivation simultaneously). Public Law 15-107 provides a subsidy to farmers who lease certain farm equipment from private vendors for agricultural purposes (i.e., bulldozing, plowing, tilling, mowing, etc.).

A nine-member Agricultural Board of Commissioners was created by Public Law 20-176 in 1990 to review and make recommendations regarding zoning, pest control, preparation of an agricultural development plan, agricultural loans, and related matters. One major objective of the Board is the eradication of the melon fly in Guam. The eradication of this pest will eliminate farm product trade restrictions with other countries. Other major plans include constructing a pig slaughterhouse; upgrading the Artificial Insemination Program; development of irrigation systems; and seeking alternative property for land-lease farmers. The Board hopes to introduce a unified approach to agricultural development for everyone involved in agriculture.

### *Aquaculture*

Aquaculture represents a part of the economy that still has great untapped potential within Guam's economy. The aquaculture industry is relatively new to Guam with the first experimental and demonstration farm having been established in 1973. The first commercial operation began in 1975; and since that time, the industry has grown significantly despite numerous obstacles.

Over the past five years, aquaculture production by private commercial farms has focused on Tilapia and Milkfish. However, a significant increase in Marine Shrimp production has recently sparked new interest in aquaculture opportunities. Commercial farming of shrimp was re-established in 1991, as a result of the initiation of post-larvae production at the Guam Aquaculture Development and Training Center. Post-larvae shrimp sales to commercial farmers totaled 5.8 million pieces in 1999-2000. Taking into account a mortality rate of 57 percent, estimated shrimp sales for 1999-2000 amounted to \$675,000, representing a 41.3 percent increase over 1994 sales of \$355,600.

Guam's current commercial aquaculture infrastructure is made up of five active farms with approximately 100 acres currently under production. Activity by small scale (i.e., backyard) farmers has increased significantly in the past five years with nearly a dozen growers of Tilapia, Milkfish and Catfish producing cultured species for sale through restaurants, roadside stalls and weekend flea markets.

The estimated value of Guam's aquaculture production in 1998 totaled \$1.7 million. With the operation of the Guam Aquaculture Development and Training Center, the value of production from commercial aquaculture farms already exceeds the value of total domestic fisheries (subsistence and commercial), further emphasizing the potential role and importance of aquaculture in Guam's economy. Current estimates indicate the island imports approximately \$12 million worth of fish

annually. Production from the aquaculture industry can replace a significant portion of these imports.

A recently formed private group of farmers is currently writing by-laws for a non-profit organization called the Guam Aquaculture Growers Association. The organization's intent is to form a co-operative to increase sales and to lobby for less stringent permitting processes in the application of agriculture power and water rates for aquaculture activities.

The worldwide market for ornamental fish has been estimated to be approximately \$4.5 billion, with the US share estimated at \$500 million. The culturing of ornamental tropical fish and plants is a clean industry utilizing renewable resources with little environmental risk. Although technology for cultured marine ornamental species is just being developed, a few popular species such as the Clownfish and the Neon Goby have been commercially cultured on Guam for several years.

### **Fisheries**

Commercial opportunities in the area of small-scale fisheries fall primarily into two categories: (1) troll fishing and (2) charter boat fishing operations. Catch rates for troll fisheries have historically accounted for most of the island's recorded fisheries harvest. There are an estimated 300 boats, which participate in this activity. During Fiscal Year 2000, catches from trolling, totaling 64.6 metric tons, comprised the bulk of the 98.3 metric tons recorded from offshore harvesting. Compared with FY99, the total offshore catch decreased significantly, posting an 82 percent decline. However, in Fiscal Year 2001, catches from trolling significantly increased over the FY 2000 level with 336 metric tons caught. Catches from trolling comprise 67.6 percent of the 497 metric tons recorded from offshore harvesting in FY 2001.

In 2001, over 1.1 million visitors to Guam were recorded. Of this total, an estimated 2.6 percent participated in charter boat fishing as an optional tour. It is estimated that these tourists made direct expenditures of \$2.3 million to the charter boat fleet. In addition, most of the fish caught on charter boats were sold in local markets, with proceeds accruing to the vessels and their crews. Charter boat fishing represents a profitable enterprise, and is a valued component of the overall tourism economy.

Fisheries related incentives provided by the Government of Guam include a liquid fuel tax exemption of \$.14 per gallon for diesel fuel and \$.15 per gallon for gasoline for vessels engaged in commercial fishing. In addition, full-time commercial fishermen can request a waiver from Guam's Gross Receipts Tax.

The Guam Fishermen's Cooperative Association was established as a nonprofit organization over 25 years ago in 1977 to aid fishermen in promoting and marketing their catch. Estimated revenues related to the Cooperative were just over \$1.5 million in 2002. The Cooperative has a 50-year government lease for one acre of land adjacent to the Hagatna Boat Basin. The annual fee for the lease is one dollar.

Guam presently serves as a major transshipment and port-of-call for large scale fishing fleets operating in the Western Pacific. Two primary types of fishing vessels, purse seiners and longliners,

utilize Guam for a variety of operations. Direct and indirect fishing vessel activities include, but are not limited to: fueling; provisioning; unloading; air and sea transshipment; net and vessel repairs; crew repatriation; medical care; and warehousing. In 2001, longline tuna transshipments totaled 9,349 metric tons, posting a 16.4 percent decrease from the 2000 figure of 11,184 metric tons. The decline in longline tuna transshipments is a direct result of licensing policies by the Federated States of Micronesia (FSM) that require tuna caught within its Exclusive Economic Zone to be off-loaded and transshipped from FSM. Longline tuna is fresh tuna that is offloaded from longline vessels at Guam's Commercial Port for air transshipment to Japan for the lucrative sashimi markets. Transshipment activities are conducted almost exclusively by Taiwanese and Japanese vessels. Ports-of-call to Guam by longliners numbered 1,993 in 2001. Most of the ports-of-call (53.8 percent) were made by Japanese flag vessels (1,072).

### **Construction**

The construction industry accounted for a significant share of the island's economic boom in the early 1970s. Construction receipts accounted for approximately one-quarter of the Government of Guam's gross business receipts during this period. Following the economic recession in the mid-1970s, construction receipts fell 40 percent from \$109 million in 1974 to \$64 million in 1976.

Construction was once again on the upswing in 1977 and 1978 following Super Typhoon Pamela in May 1976. Over \$200 million in federal funds were authorized for typhoon relief and reconstruction of damaged military, civilian and government facilities during this period. Over \$70 million in defense construction projects were completed during fiscal year 1978, as compared with approximately \$48 million during the previous two-year period. Construction receipts rose to an estimated \$75 million in calendar year 1977 and \$111 million in 1978.

In 1993, Guam's building sector again began to grow with the opening of several new tourist facilities, including the 448-room Hyatt Regency Hotel (\$150 million); 291-room Parc Hotel—now the Holiday Inn (\$60 million); 381-room Leo Palace Hotel—now the Westin Resort Guam; and 200-room Leo Palace Resort (\$600 million).

In 1995, the US Department of Defense put out to bid more than \$124 million in naval construction projects. Over 300 family housing units were scheduled to be built at Apra Heights at an estimated cost of \$56 million. Other projects included: a hanger apron at AAFB (\$29 million); a hazardous material storage facility (\$14.8 million); a Tomahawk mill magazine (\$8.2 million); a child development center on Andersen (\$2.9 million); and a storage facility (\$5.2 million).

The number of building permits being issued has been declining since Fiscal Year 1998, when a total of 2,554 building permits were issued. The number of construction permits issued during Fiscal Year 2001 was 1,030, a decrease of 19 percent from the 1,278 permits issued in FY 2000. The number issued in FY 2001 was also a decrease of 45 percent from the 1,893 permits that were issued in FY 1999. The value of permits issued in FY 2001 was \$117 million; a decline from the \$152 million issued in FY 2000 and \$174 million issued in FY 1999. Of the building permits issued in FY 2001, most were for new home construction (26 percent). The value of these permits was \$20.9 million. While new commercial construction only represented less than one percent of the permits issued, the value of new commercial construction was \$23.6 million. The only other sector with

significant construction was the Government of Guam, which had \$14.8 million in new construction. The number of persons employed in the construction industry correspondingly declined. During December 2001, 2,810 persons were employed in the construction industry, a decrease of 29 percent in comparison to 3,950 person employed during December 2000. It is also a further decline from the 4,890 persons who were employed in the construction industry during December 1999.

For FY 2000, the US Senate passed a military construction appropriation for Guam. That construction package, totaling \$103 million, included \$8.2 million for phase one of the Guam Army National Guard Readiness Center; \$17.5 million for the Army Reserve Center maintenance shop; \$8.9 million for closure of the Andersen Air Force Base landfill; \$44.1 million for the new Andersen Elementary DODEA School; and \$24.3 million for the Defense Logistics Agency fuel support point.

During the period from 1986 to 1997, foreign-owned companies dominated Guam's construction industry. Foreign contractors enjoy favorable currency exchange rates and minimal enforcement of employment-regulation laws. Until 1997, wages in the construction sector had been depressed mainly because of cheap alien labor brought into Guam under a temporary alien labor employment program known as the H-2 program. The H-2 program allows non-immigrant workers with job skills not available locally to be employed temporarily. In 1997, the U.S. Department of Labor initiated a series of increases in the minimum wage to be paid to H-2 workers in the construction trades. These increases doubled previous wage rates. While intended to encourage local labor participation in the construction trades, this move is expected to increase construction costs by as much as 40 percent over and above other increases stemming from rising prices for construction materials.

## **Tourism**

Guam's visitor industry has grown dramatically since its inception more than 30 years ago. Despite its relatively brief history, tourism clearly is Guam's leading economic sector, accounting for up to 60% of the government's annual revenues and providing more than 20,000 direct and indirect jobs.

In 1967, Guam's first year of tourism, approximately 6,600 tourists visited the island. In 1994, visitor arrivals surpassed the million mark, grew by another 25% in 1995, and climbed to almost 1.4 million in 1997. Late in that year, a fatal Korean Airlines crash, a major typhoon and a softening Asian-Pacific economy, suddenly brought to a halt the momentum of Guam's tourist industry.

To mitigate the downside effects of declining tourist arrivals, the government and private sectors joined forces to augment promotional efforts in Japan, Korea, Taiwan, and other target markets. With the gradual recovery of Guam's major markets since 1997, the island's economy has managed to steadily rebuild visitor arrivals to over 1.2 million in 2000.

Recently, Guam's hotel room inventory has experienced both losses and additions, with the closure of the 197-room Tropicana Hotel and the 334-room Sherwood Hotel, and the openings of the Outrigger Guam Resort, Pacific Islands Club expansion, Guam Garden Villa, Hotel Accion, and the New Century Hotel, for a net gain of 369 units. As the weakened Asian economies brought a reduction in visitor arrivals throughout the region, the hotel occupancy rate in Guam bottomed out at 59% in late 1997, and has since climbed to an average of 70% despite an increase in the island's



hotel inventory. Guam's hotel room inventory currently stands at 10,000 units, with room rates ranging from \$40 - \$195 per night.

For nine straight years, visitor arrivals to Guam have surpassed the million mark. However, while visitor arrivals increased annually between 1997 and 2000, they declined in 2001 and 2002. Tourist arrivals have struggled in the midst of a worldwide economic slump, compounded by the September 11, 2001 terrorist attack on the World Trade Towers, the invasion of Afghanistan by the United States and its allies, the war with Iraq, and the fury of Typhoon Chataan and Supertyphoon Pongsona in 2002.

Initially, the outlook for 2001 was positive for an increase in visitor arrivals. Prior to the September 11<sup>th</sup> attack on the World Trade Tower, tourist arrivals were up 4.7 percent for the first 8 months in 2001 in comparison to the same period in 2000. Instead, visitor arrivals plummeted 10 percent and dropped from 1,286,807 arrivals in 2000 to 1,159,071 in 2001. While tourist arrivals continued to lag in 2002, surpassing 2001 arrivals was promising until all gains were erased on December 8 when Supertyphoon Pongsona slammed into Guam. As a result, tourist arrivals fell an additional 8.7 percent from the 2001 level to 1,058,121 arrivals in 2002.

In all, 90% of all visitors to Guam are from Asia, with the balance made up of visitors from the US, neighboring Pacific islands and other areas. Visitors from Japan comprise the largest share of Guam's market mix with 80% of all arrivals to Guam. Guam's market share in 2002 dropped roughly from 5.6 percent to 2.98 percent of the Japanese tourist market of 16.8 million outbound travelers.

In 2000, visitors from Korea almost doubled with 87,070 visitors when compared to 47,299 in 1999. This year heralded the first upswing in arrivals since the KAL crash in August 1997 which had halted all visitors from Korea. This market continues to grow in spite of other limitations to Korean arrivals which include outbound travel restrictions designed to encourage more domestic travel and limited airline seating capacity. Korea's resiliency to the worldwide economic slump has resulted in significant increases in Korean tourist arrivals. Korean visitor arrivals grew 3 percent in 2001 with 89,655 visitors. Korean visitor arrivals in 2002 jumped 43 percent over 2001 figures with 128,307 visitors. Visitors from Korea comprise 12 percent of Guam's total visitor arrivals in 2002 an increase over the 8 percent in 2001.

Visitor arrivals in 2003 are anticipated to further decline as a result of America's War On Iraq. This is based upon Guam's experience when the United State entered into the Persian Gulf War in 1991 and travel among Japanese visitors radically declined roughly 37 percent during the War's duration. With the onset of new military war actions during March 2003, travel bookings are being cancelled and have declined. The extent and length of U.S.military action in Iraq will significantly impact whether the decline will be long or short term. Further impacting visitor arrivals is political instability in the region caused North Korea's actions. Tourists from the Guam's Korean Market are most impacted by their actions.

## **Roads**

Guam's road network is just under 1,000 miles long. Of this total, 420 miles of roadway are classified as non-public. Of the 550 miles of public roads, approximately 144 miles comprise the primary and some secondary roads. There are about 222 miles of streets and 123 miles of local or collector roads on Guam. The primary road network is paved. In the case of streets and local roads, 80 percent are paved.

The Guam 2010 Highway Master Plan calls for capital investments in the island's primary road and highway system estimated to cost \$470 million over the next two decades. A large portion of the funding to construct and maintain these highway improvements will come from bond issues backed by fuel taxes and vehicle registrations. For the year 2000, the Department of Public Works reported the completion of \$19 million in federally funded and \$7.9 million in locally funded projects. Major projects included the widening and reconstruction of Route 3 in Dededo (\$6.8 million), the rehabilitation of Route 1 in Tamuning (\$7 million), and the reconstruction of Governor Carlos G. Camacho Road and Farenholt Avenue in Tamuning (\$7.9 million). In general, Guam's highway system is overcrowded, but adequate.

Guam has 35 bridges, most of which are located in central and southern Guam. In 1995, most bridges were observed to be in fair condition however, an updated survey is currently underway by the Guam Department of Public Works. Three bridges in the capital city of Hagatna are unsafe and are in need of replacement. They are not designed to meet increased military heavy equipment traffic. They must also be upgraded to meet the Army Corps of Engineers' flood way requirements.

## **Seaport Facilities**

The Port Authority of Guam's Commercial Port was initially established in March 1950 as a division of the Guam Department of Commerce. It was originally located on 24.5 acres of U.S. Navy property within Inner Apra Harbor. In 1966, the Commercial Port became a separate department of the Government of Guam; and in October 1975, the Commercial Port was renamed the Port Authority of Guam (PAG) and reestablished as a public corporation and autonomous agency.

Guam's port is a major transshipment center for the Western Pacific. It is equipped to move containerized, break-bulk, and tuna cargo. Presently, ten shipping lines serve the Port Authority, providing service to Hawaii and the U.S. mainland, the Far East, and Micronesia. As promulgated, the "Jones Act" restricts shipping between Guam and other U.S. ports to U.S. registered ships. Currently only CSX Lines (formerly Sealand) and Matson (which took over American President Lines) service U.S. ports from Guam. Because the restrictions of the Jones Act are widely believed to be a serious impediment to trade within the region, the Government of Guam is seeking an exemption to the Act from the U.S. Congress.

PAG serves vessels from around the world. In FY 1999, approximately 350 foreign-flagged cargo vessels and 1,919 foreign-flagged fishing vessels called on Guam's port. The majority of these fishing vessels were Japanese and Taiwanese longliners serving Asian sashimi markets, taking

advantage of the island's proximity to these markets as well as the efficiency and ease of access provided by Guam's highway system and the Guam International Air Terminal.

PAG currently maintains three containerized cargo berths with depths of 38 feet. To service these berths, the port utilizes three 40-ton gantry cranes. For larger cargo items, a 150-ton heavy lift crane is used. To support its cargo activities, the port also maintains a 26.5-acre container yard. In FY1999, more than 1.9 million tons of cargo moved through the port.

While many Asian seaports are overcrowded with limited potential for growth, Guam is in an ideal position for expanding its present port facilities through capital investment and the acquisition of excess federal lands. In order to help Guam meet its responsibilities as a transshipment hub, the Port Authority of Guam has developed a master plan that will expand the current port footprint to include new deep-water cargo piers, upgraded fisheries facilities, expanded container lay-down areas, an industrial park, and cruise-ship facilities.

In addition to its current and expansion plans, the port has identified a waterfront location with a draft of 60 feet -- ideal for installing a deep-water pier using the most modern cargo equipment. In addition, plans are underway to expand the existing fisheries facilities to include the development of warehouses, ice plants, an auction house, net repair facilities, and other support services for the fishing fleet.

### **Airport Transportation**

Since 1945, all civilian air traffic arriving and departing from Guam have used the naval airfield and facilities at Naval Air Station (NAS), Agana. In 1974, a Joint Use Agreement was signed between the Navy and the Guam Airport Authority (GAA) allowing shared use and responsibility of the runway, taxiway, and aircraft rescue and fire fighting facilities. As part of that agreement, the Navy also transferred 68 acres of land in the northeastern corner of the base to Guam.

For many years, the Government of Guam has petitioned the Navy to return the airfield to GovGuam ownership. The 1993 Base Reuse and Closure Commission ordered the closure of NAS Agana. On October 14, 1994, the Department of Defense issued a Notice of Surplus Determination declaring major portions of NAS to be surplus property. Having met the transfer criteria, NAS, now referred to as Tiyan, was deeded to the Government of Guam in September 2000. Of the 1,806 acres involved in the transfer, 1,417 acres fall under the purview of the Guam International Airport Authority, which operates the Antonio B. Won Pat Guam International Air Terminal.

The terminal, originally built in 1982, experienced an increase in passenger traffic which peaked in 1995 with 1,653,327 passengers. In 1999, the airport handled approximately 1.3 million passengers. To meet Guam's current and projected air transport needs, the island invested more than \$240 million in an ambitious expansion and renovation program that tripled the airport's total area, and turned the old air terminal into a state of the art facility.

The net effect of this expansion increased passenger processing from its previous capacity of 1,500 passengers to 5,000 passengers per hour, easily accommodating projected arrivals. The airport

presently services more than eight international air carriers that conduct over 270 flights per week connecting Guam to all major cities in the Pacific and Asia. The airport also services nine air cargo carriers, which in 1999 moved more than 33,167 metric tons of cargo.

In addition to the terminal expansion project, the conversion of the Naval Air Station's airfield facilities to civilian use marked a major milestone for Guam and created a wealth of aviation-related opportunities. Among other facilities, the prime properties connected to civilian use include:

- 207,212 sq. ft. of aircraft hangar space;
- 92,120 sq. ft. of cargo and commuter terminal facilities;
- 92,800 sq. ft warehouse; and
- 67,006 sq. ft office building.

The Airport Authority continues with capital improvement projects such as the extension of runways and the upgrade of the Commuter Terminal Building to enhance its capacity and safety. Extended runways will provide the opportunity to expand air service to accommodate long haul Trans-Pacific flights to the U.S. Mainland for both passenger and cargo aircraft.

### **Retail and Wholesale Sector**

Guam's retail and wholesale sectors are components of Guam's economy that are heavily influenced by the growth of tourism and lifestyle improvements. In the last two decades, these sectors have developed remarkably. In 1999, they employed 13,660 persons out of a total employment of 60,340 (22.6 percent). While by March 2002, employment within these two sectors declined to 12,860 persons out of a total employment of 55,910, the percent of people employed in these two sectors increased to 23 percent.

Approximately 25% to 40% of Guam's retail sales are generated by the tourist industry, with each tourist spending, on average, \$560 shopping while on island. Based on a Guam Department of Commerce's survey, a typical Japanese tourist in 1995 spent \$129.55 per day locally. Those surveyed normally stayed 4.3 days and spent 51% of their expenditures shopping. Purchases by visitors contributed to high retail and wholesale receipts. Due to Japan's economic woes during recent years, the average local spending of the Japanese visitor dropped to \$573 in 1998, \$513, in 1999 and \$491 in 2000. However, the average local spending of visitors from Korea and Taiwan have demonstrated a general increase in trend: for Korea - \$435 in 1998, \$449 in 1999, \$513 in 2000; for Taiwan - \$430 in 1998, \$310 in 1999, \$630 in 2000. Even though the average expenditure by Japanese visitors has declined, their expenditures significantly impact Guam's retail sales as the comprise the vast majority of Guam's tourist market.

Furthermore, the military and other temporary residents (i.e., contract labor from Asia or the United States) contribute substantially to Guam's retail sales by making a significant portion of their lifetime purchases on durables while on the island.

As an economic sector, which complements the tourist industry and responds quickly to a generally rising standard of living, this sector is expected to play an important role in Guam in the coming

years. Because of its supportive and reactive nature, however, it cannot be relied upon as a major income generator.

### **Financial Institutions**

The Seventeenth Annual Report of the Banking Commissioner (latest available) has listed the following licensed financial institutions on Guam for 1999: two (2) national banks; three (3) state banks; two (2) territorial banks; five (5) foreign banks; two (2) savings and loan associations; three (3) off-shore lending facilities and twenty-five (25) finance companies. The combined total assets of all of these financial institutions domiciled on Guam as of December 31, 1999, were \$3.7 billion, a slight decrease from the previous year's total of 3.8 billion.

The system of the U.S. State and Federal banking regulations is known as the dual banking system. This system allows both the State (i.e., Territorial) and Federal governments to charter and regulate banks. Federal regulators include the Federal Reserve, which regulates banks and bank holding companies, and the Office of the Comptroller of the Currency, which charters and regulates national banks. In addition, the Federal Deposit Insurance Corporation (FDIC) serves as the insurer of both national and state-chartered banks. National banks are automatically members of the Federal Reserve and must be insured by the FDIC as are the two territorial banks.

Deposits for all financial institutions totaled \$2,070.2 million as of December 1999, which were up .11 percent over \$2,164.5 million as of December 1998. Total loans for the same period were \$3,164.9 million, a slight decrease of .089 percent over the December 1998 figure of \$3,213.5 million.

### **Investment Incentives**

The Government of Guam offers various incentives to attract economic activity from both overseas domestic and foreign business interests. Unfortunately, Guam's investment incentives programs have not kept pace with changes in international trade and commerce. Efforts are currently underway to address this situation in order to develop a Guam investment incentives package which can more effectively compete with investment incentive packages offered by other major domiciles.

Historically, Guam's status as a duty free port allowed ample opportunity to import materials for manufacturing. Guam is a participant in two major trade programs that benefit export-oriented manufacturing, namely, Headnote 3(a) of the U.S. Tariff code and the Generalized System of Preference (GSP). For Guam to benefit from either of the two programs, it would have to attract an industry wherein the product normally has a high duty in the importing country and the component costs are considerably lower than in the country to which it is exported. Over the years, changes in Headnote 3(a) have resulted in the program being less attractive to domestic and foreign establishments that led to the demise of the light manufacturing sector of Guam's economy. Efforts are underway to review these changes and encourage amendments to the program to bring the program back into viability.

The Qualifying Certificate (QC) Program, administered by the Guam Economic Development and Commerce Authority, allows tax rebates to qualified investors. QCs for tax incentives are granted to investors for business ventures on the basis of investment commitment and the creation of new employment, expanding the island's industrial base, and are aimed primarily at hotel developers and tourism development firms, manufacturers, insurance companies, reinsurance companies, captive insurance companies, Guam-based trusts, telecommunications, Internet-based companies, commercial fishing, transshipment companies and recycling companies. Qualified businesses may be granted up to 75 percent income tax rebates for a maximum of 20 years; 100 percent abatement of real property tax for a maximum of 10 years; up to 75 percent rebate on corporate dividend tax for a maximum of 5 years; and abatement on petroleum and alcoholic beverages made on Guam for a maximum of 10 years.

In the case of insurance, reinsurance and captive insurance companies, as well as Guam-based trusts, the benefits are 100 percent rebate of corporate income taxes for twenty years; 100 percent abatement of premiums taxes; and 100 percent rebate of shareholders dividends taxes. All benefits are for 20 years but can be extended for an additional 20 years.

Recently, the Guam Foreign Investment Equity Act passed by the U.S. Congress, included Guam in the U.S. Tax Treaty rates with Guam withholding tax rates reduced to treaty defined rates. Restrictions in the law prohibit application of the Act to beneficiaries of a Guam Qualifying Certificate.

As a means of reducing the tax burden and simplifying tax reporting requirements for small businesses, the "Dave Santos Small Business Enhancement Act" was adopted in 1997. The act reformed Guam's Gross Receipts Tax filing requirements by exempting from the tax, the first \$50,000 of annual rental income, and exempting the first \$50,000 of gross annual income received from retailing services and other rental activities.

### ***Planning and Economic Development Activities***

In March 1990, Guam Public Law 20-147 created the Guam Planning Council. Public Law 26-76 transferred the responsibility for a Comprehensive Development Plan for Guam to the Bureau of Statistics and Plans (BSP). The Comprehensive Development Plan:

Serves to guide the physical, social, and economic growth and development of the island;

Reflects the goals and aspirations of the people of Guam as they relate to land use, physical infrastructure, social infrastructure, economic development; and the quality and standard of living desired by the people;

Expresses the policy requirements and directives sought by the people of Guam as a means of achieving rational and balanced physical and socio-economic development that protects and sustains the present and future livelihood of the island's people.

The BSP is responsible for the development of a Guam Comprehensive Development Plan that incorporates four (4) major components, and are outlined as follows:

Land Use Component (i.e., Land Use, Public Facilities, Housing, Recreation, Seashore Reserves, Community Design, Public Buildings, Public Lands, Conservation, Safety—Hazard Mitigation—and Regulations);

Physical Infrastructure Component (i.e., Transportation, Public Facilities, Utilities, and Capital Improvements);

Social Infrastructure Component (i.e., Education, Health Services Support, Cultural Arts and Humanities, and Public Safety);

Economic Strategy Component (i.e., Economic Development, Integrated Communications, Finance, and Tourism).

In 2000, the former Guam Planning Council received updated status reports on the following studies:

The Guam Integrated Solid Waste Management Plan – a comprehensive study addressing the management of the island’s solid waste and methodology for disposal prepared for the Guam Environmental Protection Agency.

The Department of Education 10-year Capital Facilities Plan -- a comprehensive study of schools, inclusive of design types, through 2010; the location of these schools; student enrollment projections for the next 10 years; and an aggressive maintenance plan for the public educational facilities on Guam.

The Guam 2010 Highway Master Plan – a short and long range study addressing the improvement of Guam’s thoroughfare system, concerns related to the completion of the plan, and timelines for each project identified in the plan.

The Port Authority of Guam Master Plan – a comprehensive study of Guam’s only commercial seaport with analyses and recommendations related to the current market, existing port conditions, existing land use, and forecasts and demand-capacity.

## **B. MAJOR ISSUES**

### ***State of the Regional Economy and Causes of Guam's Current Economic State***

The core components of Guam's Economy have shifted since the early 60s as shown in the table below. Tourism now contributes more revenues, employment and economic activity than any other sector of the Guam economy.

### Core Components of Guam's Economy

Major Revenue Source	1960s	2002
Tourism	20%	60%
Military/Federal	75%	30%
Other	5%	10%

Following a prolonged period of investment-driven growth through the 1980's and early 1990's, during which the private sector overtook the public sector in economic importance, growth in employment and output in Guam dropped significantly in the latter part of the 1990's and continues into the 21st century.

Guam has seen a precipitous drop in revenues from three major sectors of the economy. The tourism industry has contracted as a result of terrorism, the persistent weakness in Asian economies, natural disasters, and the continuing uncertainties in North Korea and Iraq. Military and federal expenditures are only now experiencing a slow rebound from post-military downsizing levels of past years. Other areas of the economy have not grown because of limited diversification, Guam's geographic and physical limitations, and limited resources. A shrinking economy means fewer people working and paying taxes. There are approximately 5,000 fewer jobs today than in 1999. For an island community of some 155,000 people, this compares to a U.S. congressional district in the mainland of nearly 20,000 people losing their jobs.

As a result of the drop in the three major sectors of the economy, total government revenues have dropped 49% from \$660 million in the mid-1990's to an estimated \$340 million for 2003. This condition has led to very serious shortcomings in the delivery of basic public services and raises major concerns in public safety, health, education and employment. Other economic indicators as shown below, paint an equally dismal picture. Reduction in government expenditures has not kept pace with the island's shrinking economy.

#### Island Revenue Picture (\$ Millions)

Economic Indicators	% Change	FY'02	FY'00	FY'96
Gross Island Product	<b>(12%)</b>	<b>\$3000</b>	<b>\$2900</b>	<b>\$3400</b>
Gross Receipts Taxes	<b>(36%)</b>	<b>\$119</b>	<b>\$148</b>	<b>\$185</b>
Hotel Occupancy Taxes	<b>(40%)</b>	<b>\$15</b>	<b>\$20</b>	<b>\$25</b>
Military/Federal Expenditures	<b>9%</b>	<b>\$200+</b>	<b>\$222</b>	<b>\$177</b>

Contributing to this slump were the downsizing activities caused by the implementation of the 1993 and 1995 Base Realignment and Closure Commission (BRACC) recommendations, and the 1999 implementation of the A-76 Circular directives for outsourcing. In a report prepared for a BRACC-



GovGuam Steering Committee, a broad summary of impacts were identified including the loss of 3,050 active duty personnel and 1,645 civilian jobs; the direct loss of income tax receipts totaling \$81 million between 1994 and 1999 (i.e., \$48.2 million in accumulated loss of Section 30 receipts and \$32.5 million in lost civilian income receipts); and aggregate island payroll decreases, beginning in 1999, of \$123.4 million per annum due to active duty personnel transfers, and \$97.5 million per annum due to civilian employment losses. These reductions in military activities and related employment further exacerbated Guam's already growing unemployment rate, which reached 15.3 percent in July 2000. Correspondingly, the unemployment rate for Hawaii was 4.3 percent and the U.S. national unemployment rate was 4.2 percent for the same period. The Guam unemployment rate as of March 2002 was 11.4% however, over 22% of the total civilian population between the ages of 18-59 years were not in the labor force.

As noted previously, in an effort to increase the military's presence on the island, the Guam Chamber of Commerce prepared a white paper entitled, "Force Structure Redistribution in the Asia-Pacific Region: Guam's Potential Role." Endorsed by Chamber officers, the Governor, Speaker of the Legislature and Congressional Delegate, this document was transmitted to Navy and Air Force officials in March 2001. The white paper itemized Guam's assets relative to military activities as:

### **Strategic Location**

Guam's strategic location is the primary asset it contributes to U.S. defense efforts. Its long-standing geopolitical value to the U.S. remains unchanged as a forward base within range of the Asian Rim for air and naval operational units and for logistical support. As an island under U.S. sovereignty, Guam provides greater security for overt and covert operations than any location west of Hawaii.

### **Land Remains Available**

The post-BRACC configuration has left considerable acreage available and under-utilized in Apra Harbor, the Naval Station, the Ship Repair Facility, the Naval Magazine, the Naval Communications Facility, Andersen Air Force Base, northwest Field, Andy South, etc.

### **Unencumbered and Secure Air and Sea Space**

The Marianas, as a whole, provides an area of approximately 500 x 1000 miles for training and maneuvers which is relatively free of political constraints and human encroachment.

### **Favorable Economy**

Advantages of U.S. currency and tax system; lower cost-of living, labor, and construction costs; considerable off-base housing available at reasonable rents; large areas available for construction of new rental units off-base by local contractors.

### **Infrastructure in Place**

Military fuel lines, docks, runways, roads, storage facilities, communications installations, regional Naval Hospital, commissaries, and exchanges all remain largely intact and still available despite BRACC downsizing. Sierra and other major piers remain operational. Airfields at Northwest Field (Guam), Rota and Tinian are available for flight training from Guam or aircraft carriers. Existing civil roads, an international airport, and civilian port facilities are available to support wartime or military contingencies. In-place DODEA

schools, including a high school, provide primary and secondary education, and nonresident programs by Troy State University, Oklahoma State University, and the University of Maryland, along with resident programs at University of Guam, offer U.S.-accredited tertiary education. Considerable local and DOD housing is in place and can be expanded at Naval Station and Andy South if needed for additional military dependents. Ongoing installation of new civilian fiber-optic cable systems is steadily improving Guam as a regional communications nexus.

### **Positive Social and Legal Climate**

Guam is a slice of America in the far Pacific. U.S. laws prevent all the problems associated with Status of Forces Agreements or foreign legal systems. Guam is an English-speaking, fast food, shopping mall culture familiar to U.S. military personnel. Further, Guam has developed the infrastructure (i.e., hotels, restaurants and other entertainment facilities) to accommodate over 1.8 million tourists annually. Guam's people are overwhelmingly patriotic, tolerant and friendly. Chamorros are now more receptive to the return of military personnel than at any point since World War II. The quality of life on Guam has improved in recent years (e.g., K-Mart, Pleasure Island, more tourist attractions, Micronesia Mall, etc.) and the island is the closest to U.S. living standards of any place in Asia. The retention rate of naval personnel on Guam is 50% higher than the Navy's average retention rate.

In addition to the deleterious effects of recent military downsizing activities and the declines in tourism and hotel occupancy taxes, the economic damage resulting from the destruction brought by Super Typhoons Paka, Chataan and Pongsona has further retarded Guam's economic growth and development. For Super-Typhoon Pongsona alone, over \$300 Million in damages were experienced by Guam's commercial sector.

### **External Trends and Forces**

As part of the Guam's economic fate is not only tied to the United States but more directly affected by the regional economic downturn that eventually led to the disastrous Asian economic meltdown in 1997-1998. The island's unemployment rate, which hovered at 8% from 1994 through 1996, rose to 10% in 1997, and then surpassed 15% in 1999 and 2000. While Guam is now stabilizing from the effects of the Asian Economic Crisis, the struggle to recover will be hampered by recent economic setbacks in the United States and Japan. As the economic outlook for the U.S. (Asia's biggest single market for the region's exports) has become increasingly less optimistic, the United Nations Economic and Social Commission for Asia and the Pacific (UN-ESCAP), was prompted to declare that its 2001 forecast for a 6.0 percent GDP expansion for Asia's developing nations was too optimistic. While no one is predicting another regional crisis, and the U.S. slowdown is expected to be short-lived, the current economic performance of the U.S. and Japan will undoubtedly delay the region's full economic recovery.

**Leading U. S. Trading Partners**  
(December 2002)

<b>Country Name</b>	<b>Year to Date Total (Billions)</b>
Canada	371.39
Mexico	232.26
Japan	172.93
China	147.22
Germany	89.11
United Kingdom	74.12
Korea	58.17
Taiwan	50.59
France	47.43
Italy	34.38
Singapore	31.01

*Note: The values shown are for imports and exports added together. These countries represent 70% of US imports and exports. Source: U. S. Census Bureau*

The U.S. exports far more across the Pacific than across the Atlantic. Asian countries, in turn, have benefitted greatly from selling to the American market. Guam has an opportunity to play a greater role in the midst of this vast Asian-Pacific trading zone. In this regard, Guam has several key advantages:

**Location**

The high and rising cost of locating offices in Tokyo, Hong Kong, Taipei or even some major cities in China, may help to influence corporate decision-makers to consider Guam as a location for their regional offices. Rapid technological progress in telecommunications has made possible the location of offices outside of industrial centers. In addition, corporations seek to locate regional offices in politically stable environments.

**Geo-Political Status**

As a U.S. territory, Guam is strategically close to Asia with the general security-stability umbrella that its U.S. ties convey.

**Cultural Bridge Between East And West**

People in Guam are in a better position to understand how Asians think and operate than many other Americans. On the U.S. Mainland, people often think that once an agreement has been reached, it is settled. The Asian approach is more evolutionary. An agreement represents a commitment to engage in further negotiations. A perfect example is the contrast

between the thousands of pages in the North American Free Trade Agreement (NAFTA) and the eight-page ASEAN Free Trade Agreement.

### **Proximity To Other Pacific Island Nations**

Guam's relative proximity both economically and culturally to other Pacific islands can provide comparative advantages in dealing with the Pacific Islands. Although their populations are tiny and widely scattered, the Pacific islands encompass continent-size ocean expanses, containing largely unexplored resources and possessing global strategic value. It may well be that Guam can parlay a comparative advantage in dealing with the Pacific islands and establish a niche for facilitating economic transactions, as well as serving as a knowledge and information dissemination center for the U.S. in its relationship with these areas.

### **U.S. Currency Standard**

The use of the U.S. dollar and banking system lends a sense of confidence and stability to Guam's financial system and simplifies business transactions whether in the U.S. or overseas.

### **U.S. Legal Standards**

The application of U.S. federal standards generally provides the assurance of quality, suggesting the international competitiveness of Guam's goods and services.

### **Favorable Business Climate**

Guam's business climate includes the absence of taxes on foreign imports, a well-regarded legal and judicial system (U.S. based), and a full array of community infrastructure and professional and technical services expected of a U.S. jurisdiction

### **Additional Competitive Advantages**

Advance telecommunications technology

Airline hub for the Western Pacific

Transshipment Center

High level of infrastructure support including office, warehouse and hotel resort and meeting facilities

Lower costs compared to major Asian business centers for corporate based offices.

Duty-free port

Absence of taxes on foreign trade

Liberal investment incentives program

Despite these advantages, however, Guam is still a small island territory with a small population, which is highly dependent on international markets. This situation makes this island territory highly vulnerable to adverse developments in its closest overseas markets. Specific economic weaknesses include:

### **Inadequacy of Infrastructure**

Inadequacy of infrastructure (i.e., power, water, sewer, and solid waste disposal) and the need for technological improvements must be addressed as a high priority issue. The business

community as well as investors have identified inadequate infrastructure as a major drawback to attracting outside investment to Guam. For Guam's economy to advance, there is a need not only to address inadequacies of the past, but also to improve and extend new technologies especially in the areas of telecommunications and environmental protection.

### **Off the Main Routes**

For fishing, shipping and allied industries, Guam is not located on major international routes. This provides for some inertia against the development of these markets.

### **Lagging Social Services**

Relative to the U.S. and developed countries is Asia, Guam's education and health systems are far below standard. Educational and skill levels of Guam's workforces are not presently sufficient for the needs of a growing and diversifying economy. Also, poor education and health services adversely affect overseas investor or company decisions to use Guam as a regional corporate base.

### **Lack of Land and Low-Cost Labor**

Guam cannot compete in industries that require an abundance of inexpensive land and low-cost labor. In combination with improved education and training, Guam should set its sights on export industries that produce high quality, technologically advanced goods and services.

### **U.S. Tariff Regulation**

Guam is subject to the U.S. minimum wage law and regulated shipping tariffs, which reduce Guam's wage and international shipping competitiveness, especially when compared with neighboring Asian countries.

### **Restrictive local laws**

Local regulation for some sectors, especially finance and insurance, are unduly restrictive and inhibit overseas investment in those sectors.

## TEN STRATEGIC INITIATIVES TO STABILIZE AND GROW GUAM'S ECONOMY

The new Administration has developed "Ten Strategic Initiatives to Stabilize and Grow Guam's Economy" and "Six-point Action Framework on Ten Strategic Initiatives" which provides direction, focus and priority for local efforts and will guide federal assistance and private investment. Stabilizing and growing the economy to improve quality of life and public services is the plan's overall goal. The Ten Strategic Initiatives are:

- Promote tourism aggressively;
- Fix water and landfill problems;
- Increase military presence;
- Outsource GovGuam services;
- Consolidate and refinance GovGuam debts;
- Improve revenue management and enhancements;
- Fix retirement abuses;
- Create Tumon Bay Improvement District;
- Promote Guam's regional hub potential; and
- Reorganize GovGuam's structure.

The Strategic Initiatives were developed to address the island's worsening economic condition and to provide a strategy that will stabilize and grow the economy. It is aimed at restoring the government's revenue base from a debilitated \$340 million to the \$660 million seen in the mid-1990's. Key challenges associated with this goal are:

- Reinvigorating tourism receipts;
- Facilitating more military activity; and
- Creating employment opportunities which are not correlated with tourism and military segments of the economy.

### Six-point Action Framework on Ten Strategic Initiatives

A Six Point Action Framework was also developed as a platform from which immediate action would be taken as follows:

1. **Promote tourism aggressively and fix our Guam product.** Target markets including Japan, Korea, China/Asia and military "R&R" personnel will be aggressively pursued in order to generate immediate cash income and diversify our visitor markets. A Tumon Improvement District will be created to restore destination viability and protect the driver of \$2 billion in island income.
2. **Increase military presence and uncorrelated regional employment opportunities.** Military presence will be increased to provide immediate cash income for Guam, and produce a more stable and permanent revenue base. Guam's regional advantages will also be promoted to cultivate the development of industries uncorrelated with tourism and the

military in order to provide incremental income, diversify employment opportunities, and broaden the tax base.

3. **Reorganize the government of Guam's structure.** This strategy is intended to consolidate and streamline departments and agencies in order to reduce waste and costs to government, and to improve services and interagency coordination.
4. **Improve revenue management and Retirement Fund reforms.** This strategy is intended to consolidate and refinance existing debt in order to improve cash flow, interest savings, and debt management. An interdepartmental core team will be established to maximize federal entitlements in order to provides cost savings and income opportunities, timely payment to vendors, and improve federal grants management and accountability. Retirement fund abuses will also be addressed in order to generate cash flow, reduce costs and enhance financial security of retirees.
5. **Facilitate immediate capital improvement expenditures.** GWA and Ordot Landfill problems will be fixed and spending of \$82 million in idle funds already available for capital improvement and other operational projects will be expedited in order to resolve EPA and other legal issues, improve the quality of life, stimulate construction activity, and improve our investment image.
6. **Facilitate GWA privatization and outsourcing initiatives.** Guam Waterworks Authority, Department of Corrections and Department of Youth Affairs will be privatized and other government functions, maintenance and services will be outsourced in order to improve reliability of services, reduce cost of government, and convert tax consuming activities to tax producing enterprises to expand the island's tax base.

### **Guam Economic Recovery and Development Team**

To implement the Ten Strategic Initiatives and the Six Point Action Plan, Governor Felix P. Camacho has appointed a Guam Economic Recovery and Development Team consisting of both private individuals and government officials. Team members and their specific responsibilities are:

- Honorable Felix P. Camacho, Governor of Guam, Chairman and responsible for GovGuam and federal relatons.
- Honorable Kaleo S. Moylan, Lieutenant Governor of Guam, Vice-Chairman responsible for Overall Coordination and Implementation
- Gerald S.A. Perez, Administrator, GEDA Vice Chairman responsible for Military Initiatives and Regional Business Opportunities
- David Tydingco, President, Guam Hotel and Resturant Association and Chairman, Guam Visitors Bureau responsible for Tourism Marketing and Product Improvement
- Paul Leon Guerrero, Director, Bureau of Budget and Management Research responsible for GovGuam Reorganization
- Bertha Duenas, Special Assistant for Fiscal Affairs responsible for Revenue & Debt Management and Retirement Fund Reform
- Fred Castro, Administrator, Guam Environmental Protection Agency responsible for Ordot

- Landfill Solution and Immediate Capital Spending  
Jeffrey Jones, Guam Chamber of Commerce and Vice President, Triple J Enterprises responsible for GWA Privatization and Outsourcing Initiatives

Additional resources will come from an informed panel of business professionals from the public, private and military sectors which will be selected to advise the economic team on specific issues as needed and the following GovGuam agencies:

#### **Guam Economic Development Authority**

Promotes investment in entrepreneurial capital in Guam. Authorized to issue, sell or dispose of revenue bonds; to invest funds in an enterprise that results in the development of agriculture, industry, hospital facilities, housing, commerce and tourism; to make loans to non-profit cooperative associations. Acts as the Central Financial Manager and consultant for agencies requiring financial guidance and assistance through bonds or other obligations.

#### **Bureau of Statistics and Plans**

Facilitates the creation of a comprehensive planning process that addresses the long-range development needs of the island. The agency also ensures consistency among plans, policies, and programs, through assessment of each individual scheme and its place in the overall comprehensive development plan.

#### **Guam Visitors Bureau**

Promotes visitor satisfaction with Guam as a tourist destination and facilitates the orderly growth and maintenance of the visitor industry. Encourages and supports the employment of local residents in job opportunities in the tourism industry; and local activities and programs that enhance Guam as an attractive tourist destination, the marketing of local arts handicrafts, and local cultural activities. Assists in the development of adequate tourist facilities and attractions. Develops visitor statistics.

#### **Bureau of Budget and Management Research**

Provides guidelines to the various agencies and departments on organizational methods, policy execution, financial management and technical assistance. Provides guidance to the Governor on policy development, program coordination, planning and budgeting matters.

#### **Department of Revenue and Taxation**

Enforces local tax laws and the collection of revenues generated from the various taxes levied on Guam. DRT also protects the general public from unethical and/or unfair business practices through the enforcement of local and federal licensing, examination and registration laws.

#### **Department of Administration**

Provides administrative, fiscal and policy direction for execution of government-wide support services. The department's fiscal responsibilities include ensuring the availability of revenues for obligations and investments, proper governmental accounting and computer technical and consultation services.



## **ACTION PLAN AND PROJECTS**

The Comprehensive Economic Development Strategy will be realized through the implementation of a series of specific projects. These projects are intended to address the core development objectives of the Six Point Action Plan and to meet both near and longer term objectives for Guam's economy. Each project was evaluated against EDA's Investment Policy Guidelines and against Guam's needs.

### **EDA Policy Investment Guidelines**

The following are EDA's Policy Investment Guidelines criteria:

1. The proposed investments are market-based. The investment should capitalize on the community's unique regional assets and strengths to build comparative advantages for future business investment.
2. The proposed investments are proactive in nature and scope. The investment should support and advance innovation and increased productivity. It should enhance a community's success in achieving a high and rising standard of living.
3. The proposed investments look beyond the immediate economic horizon, anticipate economic changes, and diversify the local and regional economy. The investment should be part of an overarching, long term regional strategy that includes expanding existing industry clusters and developing emerging, new clusters. Investments should create the conditions for sustained productivity.
4. The proposed investments maximize the attraction of private sector investment and would not otherwise come to fruition absent EDA's investment. EDA should serve as a unique public sector source of "venture capital" to assist distressed communities that otherwise would be at a distinct competitive disadvantage in attracting the higher levels of private capital investment in facilities and equipment that drives the creation of higher skilled, higher wage jobs.
5. The proposed investments have a high probability of success. The investment should have high level of local matching funds; should have high degree of local political capital (support); should have significant commitment of human resources talent to ensure achievement; and should have strong local leadership.
6. The proposed investments result in an environment where higher skill, higher wage jobs are created. The jobs created or retained should have a higher than average wage and skill level than that of the community.
7. The proposed investments maximize Return on Taxpayer Investment. Investments should generate a return for the taxpayer by attracting private capital investment and high wage jobs that promote regional prosperity through consumer demand they create. Successful economic development investments promote economic self-sufficiency; provide the

resources for building safe, healthy, and attractive communities; and minimize poverty.

The projects are presented below in order of priority based upon an evaluation that was conducted of each project against EDA's Investment Policy Guidelines and against Guam's needs.

CEDS PROJECT	EDA Policy Investment Guidelines Criteria							Total	Priority
	1	2	3	4	5	6	7		
Repair MPS	X	X	X	X	X	X	X	7	H
Solid Waste Facility	X	X	X	X	X	X	X	7	H
Money Manager	X	X	X	X	X	X	X	7	H
Immigrant Investor Prog.	X	X	X	X	X	X	X	7	H
Domestic Fish (Aqua)	X	X	X	X	X	X	X	7	H
Captive Insurance	X	X	X	X	X	X	X	7	H
New Wharf	X	X	X	X	X		X	6	H
Transport and Tranship.	X	X	X	X	X		X	6	M
Aviation Flight School	X	X	X	X		X	X	6	M
Altern. Dispute Center	X	X	X	X	X		X	6	M
Guam-based Trusts	X	X	X	X		X	X	6	H
GIAA Cargo Facility	X	X	X	X	X		X	6	M
Coop Marina	X	X	X	X	X		X	6	H
Hagatna Revitalization	X	X	X	X	X		X	6	H
Tumon Drainage	X	X		X	X		X	5	H
Incubator		X	X	X	X		X	5	L
Tumon Infrastructure	X	X		X	X		X	5	H
Tumon Improve. District	X	X		X	X		X	5	H
Call Centers	X	X	X		X		X	5	H
Northern Ind. Park		X	X	X	X		X	5	M
Coop Building		X	X	X	X		X	5	H

CEDDS PROJECT	EDA Policy Investment Guidelines Criteria							Total	Priority
	1	2	3	4	5	6	7		
Regional Software Supp.	X	X	X	X	X			5	L
Flim Industry		X	X	X		X	X	5	M
Telecom Training	X	X	X	X				4	M
Tiyan Infrastructure		X		X	X		X	4	L
Flight Kitchen	X	X			X		X	4	H
Northwest Parkway		X		X	X		X	4	L
Statistical Center			X	X	X	X		4	L
Multi-Purpose Vessel		X	X	X	X			4	L
Agana Bridges				X	X		X	3	H
Marine Drive ByPass		X			X		X	3	L
GWA Compliance Projects				X	X			2	M
Light Rail								0	L

### Priorities

#### High Priority:

**Project Name:** Construction of New Wharf and Land Reclamation

**Situation Statement:** The BRAC decision of '95 resulted in the closure of the former Naval Ship Repair Facility which was to have been transferred to the Government of Guam thereby increasing wharf space by 3,251 linear feet. Navy has since decided to retain the lands, wharves and buildings associated with this facility due to the strategic value of Guam. In addition, the Navy has decided to dredge the inner Apra Harbor to accommodate additional vessels in 2006. This proposal is intended to create new wharf space at the Port Authority of Guam to replace those wharves that will not be returned under BRAC. The additional wharf space will be available for Navy use.

**Objectives:** Construction of new wharfage totaling 2,900 lineal feet and 3,000 lineal feet of reclaimed land at the Commercial Port of Guam under the auspices of the Port Authority of Guam.

**Project Description:** The Port Authority of Guam is developing architectural and engineering plans under a grant from the Economic Development Administration, for the construction of new wharfage totaling 2,900 lineal feet of sheet piles with tie-rods anchored to sheet pile dead-men, and 3,000 lineal feet of reclaimed land at the Commercial Port of Guam. Funding is needed for wharf construction and purchase and installation of cranes at the new wharf.

**Anticipated impacts and benefits:**

Upon completion of the project, congestion at the Port would be alleviated, room for additional economic activity would be created, thereby generating additional jobs. New wharf construction, especially in the proposed area which is characterized by deep water draft will also provide the U.S. Navy with the opportunity to utilize wharf facilities that can accommodate larger military vessels such as aircraft carriers, that cannot enter the inner harbor even after Navy's dredging project is completed.

**Project Deliverable:** 2900 lineal feet of new wharf space; new cranes for cargo off-loading; and reclamation of 3000 lineal feet of land for industrial development.

**Timing and**

**Responsibilities:**

Construction of the new wharf and installation of cranes will be completed within 36 months of receiving funding.

**Budget:**

The project is estimated to cost \$35 Million.

**Project Name: Tumon Business Improvement District**

**Situation Statement:**

Guam's marketability as a tourist destination is materially dependent upon Tumon Bay where Guam's tourism resources are concentrated, having clean, well maintained and attractive public spaces including parks, beaches and roadways. Government of Guam cannot fund all improvements required to raise the standard of Tumon Bay. Since property owners within Tumon Bay enjoy a direct economic benefit from the concentrated tourist business activities in Tumon Bay, it is reasonable to expect property owners to underwrite, through a supplemental property tax assessment, the establishment and operation of a Tumon Business Improvement District.

**Objectives:**

Create a Tumon Business Improvement District Public Corporation which shall supplement government maintenance and care of Tumon public spaces.

**Project Description:**

Fund staff support to develop legislation that identifies the percentage increase in property tax assessment for all businesses and home owners in the area to satisfy area needs, and develop surveys to determine acceptability of the assessment district to the general public, property and business owners, and policy makers.

Anticipated Impacts and Benefits: Increases in tourists and revenues resulting from physical improvements in Tumon and improvements to Guam and Tumon's image as a tourist destination.

Project Deliverable: Legislation establishing the Tumon Business Improvement District Public Corporation.

Timing and Responsibilities: The Government of Guam will complete the project within 12 months.

Budget: \$100,000.

**Project Name: Regional Solid Waste Facility**

Situation Statement: Guam and the rest of the Micronesian Region generate significant amounts of solid waste as the majority of products used in the region are imported. As island communities with limited land area for residential, commercial, industrial and resort development however, land disposal options are few and those that are available tend to create significant environmental impacts.

Objectives: Provide a venue for the storage, recycling, processing and disposal of solid waste in a fashion that creates employment opportunities and resolves individual island waste disposal problems.

Project Description: Develop a feasibility study that evaluates the costs and benefits of establishing a regional solid waste facility in Guam including a market study for recycling and use of solid waste by-products including ethanol.

Anticipated Impacts and Benefits: If feasible, this project will assist in resolving individual island solid waste problems while generating jobs, revenue and increased economic opportunity.

Project Deliverable: A Regional Solid Waste Facility Feasibility and Market Study and a plan of action, costs and funding sources to implement the project .

Timing and Responsibilities: GovGuam, with assistance from other Micronesian Island Governments will complete the feasibility study within one year from the date of grant award.

Budget: \$200,000 for contractual services

**Project Name: Immigrant Investor Program/Econometric Model**

Situation Statement: Guam's dismal economy has resulted in, among other things, a 11% unemployment rate, reduced services, and a depressed real estate market.

Alternative incentive tools must be explored and implemented to augment those that are currently used to attract new capital into Guam. One area under consideration is for Guam to be designated as a Regional Center under the Immigrant Investor Pilot Program sponsored by the US Immigration and Naturalization Service. Advantages to the alien investor is that it is a means to obtain a US resident "green card" and for Guam it is a means of obtaining new capital. Alien investors in Guam would have access to a quota of 3,000 visas set aside under the Pilot program for Regional Centers. Alien investors in Guam would be required to only invest \$500,000 as Guam has been identified as a target area by INS. Under the Pilot program, commercial enterprises undertaken by Guam investors are not required to tie their business activities to the production of exports. The program inspires confidence in investors and adds legitimacy to the process for Guam investments under the program. Guam would act as a liaison in the facilitation of the EB-5 application and serve as a contact point for Immigration Service Center personnel.

**Objectives:** To provide Guam with an additional incentive tool to attract new capital into the island by foreign investors.

**Project Description:** Prepare a proposal for submission to the US Immigration and Naturalization Service for Guam to be designated as a Regional Center under the Immigrant Investor Pilot Program. The proposal will describe how the center will promote Guam's economic growth through export sales, improved regional productivity, job creation and increased domestic capital investment; provide verifiable detail on how jobs will be created; provide a detailed statement regarding the amount and source of capital committed to the Center and a description of the promotional efforts planned by the Center; describe the manner in which the Center will have a positive impact on the regional economy; and be supported by economically or statistically valid forecasting tools which will be obtained through implementation of an econometric model, including but not limited to feasibility studies, analysis of foreign or domestic markets for export goods, and/or multiplier tables.

**Anticipated Impacts and Benefits:** Direct and indirect job creation of a least 10 full time jobs for every \$500,000 in new investment; provides Guam businesses with access to capital for expansion; provides troubled businesses with access to funding and a means to turn their businesses around and result in job retention; increases government revenues through taxes; and creates revenue opportunities for all island small businesses.

**Project Deliverable:** A Regional Center Proposal and implementation of the Center upon approval from INS.

**Timing and**

Responsibilities: 18 months by Government of Guam

Budget: \$500,000 for proposal development including econometric model, staffing and office related expenses.

**Project Name: Money Manager Program**

Situation Statement: A significant amount of investment funds are available both on-island and off-island that can be managed in Guam. Initially, it is proposed that a portion of the Government of Guam's employee pension fund be utilized to generate a track record of high yield investments to attract other investment funds.

Objectives: To diversify the Guam economy and create jobs uncorrelated with tourism and military spending.

Project Description: Establish a Money Manager Program consisting of appropriate legislation governing the administration, management and monitoring of investments.

Anticipated Impacts and Benefits: Although some employment will be generated, the major thrust of this program is to bring additional investment dollars to Guam and to create a cadre of investment managers.

Project Deliverable: A Money Manager Program

Timing and Responsibilities: The Guam Economic Development Authority in conjunction with the private sector will oversee development of the program over a six month period.

Budget: \$50,000 for program development and implementation.

**Project Name: Guam Fishermen's Cooperative Marina Building Complex**

Situation Statement: The Guam Fishermen's Cooperative Association is a 25 year old non-profit organization whose mission is to market the fish harvested by its members who are considered "artisanal fishermen". Established in 1977 with a dozen fishers, the Association has expanded to nearly 200 members in 2003. With Guam's current economic difficulties, there exists the need to enhance economic opportunities within its fisheries industry. Insufficient space within the Coop's facility, compounded by significant typhoon damage to the facility in 2002, necessitates the need for a new structure to house the Coop's retail outlet, office and processing and ice facilities. Further diversification of Guam's economy will occur through the design and construction of a complex, which compliments the adjacent Chamorro Village, that houses the Coop's structure, restaurants that exclusively sell seafood from the Coop and

Guam's Aquiculture Association, marine related gift shops, dive and tackle shops and other mariana related businesses.

**Objective:** To promote long term economic benefits that will advance Guam's efforts to diversity its economy and stimulate growth through the design and construction of a 16,000 sq. ft. facility that will house the Coop's retail outlet, office, fish processing area and ice production area; a seafood restaurant, gift shop, and dive and tackle shop. And to design a complex along the western shore of Paseo with a series of restaurants, gift shops and other mariana related businesses that further enhance the adjacent Chamorro Village.

**Project Description:** The project has three phases. Phase I: The Guam Fishermen's Cooperative Association would issue a Request for Proposals (RF) to contract the services of a architectural / engineering (A/E) firm to prepare the design for the entire complex, prepare the A/E design for the 16,000 sq. ft. facility that will house the Coop's retail outlet, office, fish processing area and ice production area; a seafood restaurant, gift shop, and dive and tackle shop; prepare the Environmental Impact Statement (EIS); secure all federal and local permits; and serve as contract/construction manager during the construction phase of the Coop's facility. Phase II: Construction of the Coop's 16,000 sq. ft. facility housing its retail outlet, office, fish processing area and ice production area; a seafood restaurant, gift shop, and dive and tackle shop. Phase III: A/E design and construction for the remaining portion of the complex.

**Anticipated Benefits:** The project will create at least 50 new jobs in the initial facility. The spin-off will be the creation of 200 fishery jobs and 25 tourism related jobs within the structure and in the adjacent Greg D. Perez Marina. In addition, the economy will realize \$10 million in annual sales from the facility and an opportunity for larger scale domestic commercial fishery.

**Project Deliverable:** The completion of a design for the entire complex; an EIS and A/E design for the Coop's facility, the securing of all federal and local permits, and the construction of the facility.

**Timing and Responsibilities:** The Guam Fishermen's Cooperative will oversee the contracts for the environmental impact statement (EIS), the A/E design and the construction of the facility. The total project is anticipated to take 36 months to complete the A/E design and EIS, secure permits and complete construction for Phase I and II.

**Budget:** The project is estimated to cost \$2,500,000 for Phase I and II

**Project Name:** **Repair of U. S. Military Preposition Ships (MPS)**

**Situation Statement:** MPS are U. S. military-chartered vessels that carry combat supplies and



equipment and are pre-positioned in forward areas such as Guam, to allow rapid response to situations that require military intervention. Prepositioning vessels is a cheaper alternative to forward basing of military personnel. Currently, there are 4 MPS in the Mediterranean and 9 MPS forward deployed to the Guam/Saipan and Diego Garcia area that travel, at huge expense, to Florida for vessel repair and for maintenance of on-board combat equipment (e.g., humvees, cannon, tanks, etc). Repair facilities in Florida are unable to meet the huge demand for repair services, as these vessels are required by the Navy to be dry docked every two years. The Ship Repair Facility in Guam can handle vessel repair at a much cheaper cost however, repair and maintenance facilities and services for combat equipment are not available.

**Objectives:** To diversify the Guam economy by providing opportunities for the development and expansion of industrial capability utilizing the ship repair assets released by the Navy under the Base Realignment and Closure process.

**Project Description:** To attract this business to Guam, the Guam Economic Development Authority will prepare a feasibility study to determine demand and type of facilities and services needed; design and construct facilities for the repair of vessels and their combat stores.

**Anticipated impacts and benefits:** Creation of industrial capacity and skilled jobs, including apprenticeship programs.

**Project Deliverable:** Feasibility Study; design plans; and eventual construction of facilities.

**Timing and Responsibilities:** Feasibility study to be completed 6 months after contractor selection.

**Budget:** \$75,000 for feasibility study. Design and construction to be determined at a later date.

**Project Name:** **Tumon Infrastructure Improvements, Phases II and III**

**Situation Statement:** Guam's marketability as a tourist destination is materially dependent upon Tumon Bay where Guam's tourism resources are concentrated. To improve the area's infrastructure and physical appearance, the Government of Guam issued a general obligation bond to finance design and construction of phase I and II improvements. Design for both phases and construction of phase I have been completed. However, bond monies allocated for phase II were diverted to assist Guam in recovery after the Presidentially-declared disaster in December 2002. In addition, the bond issuance did not cover design and construction costs for phase III.

**Objectives:** To provide for improved and safer conditions for both local residents and visitors; provide adequate infrastructure; and entice an increasing number of visitors to Guam, both tourists and the military.

**Project Description:** Design and construct highway improvements, underground utilities, installation of sidewalks, landscaping and installation of traffic signals. The phase II project area is from the Guam Fujita Hotel to the Guam Hilton Hotel roadway intersections while phase III is from the Hospital Point area to Guam Hilton Hotel and from the Westin Hotel to Marine Drive, totaling approximately 4 miles.

**Anticipated Impacts and Benefits:** Increase the number of visitors to Guam by making the centerpiece of Guam's tourism industry more attractive and functional thereby increasing employment and allowing employee retention during this time of uncertainty as a result of regional conflicts.

**Project Deliverable:** Design plans and physical improvements.

**Timing and Responsibilities:** The Department of Public Works will coordinate this project over a 30 month period (18 months for phase II and 12 months for phase III).

**Budget:** \$20 Million (\$18 Million for phase II and \$2 Million for phase III).

**Project Name: Call Centers**

**Situation Statement:** Call Centers are where calls are answered and made. Agents use ACD or automatic call distribution for sales and support functions or computer order-entry. Any company function that can be made remotely are candidates for moving or outsourcing to call centers or (customer contact) environment where costs can be lowered and risk can be hedged (eg, multiple locations in the event of a local disaster or outage at any one site). Statistics on the number of total call centers is limited. However, Datamonitor estimates that in 2000, there were approximately 70,000 call center facilities in the U. S. Large banks (over \$1 billion in deposits) maintain an average of 4 call centers each, with the 20 largest banks averaging 23 call centers per institution (Mentis Group). Emerging network technologies are enabling the migration of previously site-specific functions such as security and interactive voice recognition to be located at a central facility in order to lower costs.

**Objectives:** Diversify the Guam economy and create jobs uncorrelated to tourism and military spending.

**Project Description:** Develop a marketing plan for Guam as the Call Center in Asia

Anticipated Impacts and Benefits: Cutting edge telecommunications technology and infrastructure will be available in Guam thereby increasing job opportunities, increasing the tax base and increasing spending.

Project Deliverable: Marketing Plan

Timing and Responsibilities: 3 months

Budget: \$250,000 for marketing plan development and implementation

**Project Name: Guam Captive Insurance Program**

Situation Statement: The fostering of this industry came under GEDA's purview in 1998. Actions over the last few years included marketing the domicile in various markets, resulting in the establishment of 4 domestic insurers and 2 captive insurance companies.

Objectives: Diversify the Guam economy and create jobs uncorrelated with tourism and military spending.

Project Description: Provide secretariat service to the Guam Captive Insurance Association, market Guam as global competitor domicile, coordinate efforts to ease entry by offshore captive companies, and conduct appropriate research to understand the tax scenarios for captive and domestic parents.

Anticipated Impacts and Benefits: The industry helps diversify the Guam economy and brings "clean", non-environmentally taxing businesses to Guam. The industry provides high tech, fair waged white-collar jobs to the marketplace.

Project Deliverable: Marketing plan implementation.

Timing and Responsibility: 24 month by GEDA and the Guam Captive Insurance Association

Budget: \$400,000

**Project Name: Guam Domestic Fisheries (inclusive of Aquaculture & Domestic Ocean Fisheries)**

Situation Statement: Guam's Domestic Ocean Fisheries consists of a few hundred small-scale fishermen operating personal trolling and bottom fishing boats. The Guam Fishermen's Cooperative coordinated the maiden efforts of this industry and grosses approximately \$1.5 Million dollars annually. A key issue for Guam

fisheries identified by the Western Pacific Regional Fisheries Management Council (WESPAC) is that there are no domestic purse seign operators.

Guam's Aquaculture Fisheries operates mostly on a small-scale basis and consists of roughly 100 farmers, with less than 25 farmers comprising the most of the \$300,000 to \$750,000 in gross annual sales. The main species farmed are tilapia, freshwater shrimp, catfish and milkfish. Information is difficult to obtain due to the seemingly uncoordinated efforts of the farmers and lack of technical business expertise.

**Objectives:** Diversify the Guam economy and create jobs uncorrelated with tourism and military spending.

**Project Description:** Identify assistance needs of the industry; facilitate needed financing of projects; coordinate outreach to remote farmers and fishermen; assist in compliance with federal environmental regulations.

**Anticipated Impacts and Benefits:** There is capacity for increase of Guam's ocean fisheries. The opportunity for the development of a Guam long line fleet, the further development and increased capacity of the Guam Fishermen's Cooperative are a few possibilities. This industry is underutilized and Guam relies heavily on imported seafood. There is also much room for development in Guam's Aquaculture industry. farmers can take advantage of technical advice and business expertise provided by the development of this facet. The low cost of entry into this industry make this a viable opportunity.

**Project Deliverable:** Develop and implement a fisheries feasibility study.

**Timing and Responsibility:** 24 months by GEDA, the Guam Fishermen's Association and Guam Aquaculture Growers Association.

**Budget:** \$200,000

**Project Name:** **Tumon Bay Drainage System**

**Situation Statement:** The Tumon Bay area is densely developed with commercial and tourist facilities, and suffers from frequent flooding during significant rain events which economically impact the businesses in the area. A pump station combined with an ocean outfall addresses the problem of Tumon Bay being the ultimate destination of storm water. Horizontal drilling should not disturb any living reef formations, as it would occur below the top of the reef. This alternative has been identified by the government of Guam as the preferred alternative.

The Guam Coastal Management Program and the U. S. Army Corps of Engineers have coordinated in the preparation of a “Tumon Bay Ecosystem Restoration Study - Section 206 Preliminary Restoration Plan” which includes a literature search of materials written about Tumon. The Plan leads to the next phase which is the development of an Ecosystem Restoration Report followed by a Feasibility Study, design and construction.

**Objectives:** Construct a pumping station and horizontal drainage system that will deliver storm run-off below and outside of Tumon Bay.

**Project Description:** Prepare A/E Design for the construction of a pump station capable of pumping 6,000 g.p.m. to re-route storm drainage to a horizontal outfall 60-100 feet below sea level, approximately 1,500 feet from the high watermark, outside the fringing Tumon Bay reef.

**Anticipated Impacts and Benefits:** Tumon Bay is home to Guam’s tourism industry and has undergone tremendous growth to host over one million visitors per year. Not only do potentially noxious wastes end up in Tumon Bay, but the resulting effluent will hasten further degradation of the health and longevity of the reef and jeopardize the pristine quality of Guam’s prime tourism plant.

**Project Deliverable:** Improved infrastructure that would eliminate up to 70 percent of the accumulated run-off into San Vitores Road and Tumon Bay.

**Timing and Responsibilities:** Lead Agency – Department of Public Works. Upon completion of the design phase, joint funding sources would be investigated (U.S. Army Corps of Engineers, Guam Hotel and Restaurant Association, EDA, Department of Interior, Department of Transportation, Federal Emergency Management Agency). The entire process will take 4 years to complete, beginning with the 24 month Ecosystem Restoration Report. Project design will be accomplished within 6 months from the date funding is received.

**Budget:**

Feasibility Study:	\$750,000
Design Costs:	\$866,400
Construction:	\$14,380,000

**Project Name:** **Marina Development Project**

**Situation Statement:** With Guam’s current economic difficulties, there exists the need to enhance economic opportunities within its fisheries industry through the expansion of marina facilities. The current facility is inadequate and is unable to withstand typhoon conditions. The construction of typhoon-proof docks and additional boat slips and services will enable Guam’s marine tourism activities and its local boating and fishing industry to expand, flourish and prosper.

**Objective:** To design and construct a 150 boat slip marina and shore-line facility to promote marine industry, stimulate job growth through the revitalization of Guam's capital city of Hagåtña and to promote long term economic benefits that will advance Guam's efforts to diversity its economy and stimulate growth.

**Project Description:** The project has two phases. Phase I: The Hagatna Revitalization Authority in conjunction with the Guam Fishermen's Cooperative Association would issue a Request for Proposals (RF) to contract the services of an architectural and engineering (A/E) firm to prepare the design for the marina and facility, prepare the Environmental Impact Statement (EIS), secure all federal and local permits and serve as contract/construction manager during the construction phase of the project. Phase II: Construction of the 150 boat slip marina and shore-line facility.

**Anticipated Benefits:** The project will create at least 50 new jobs in the marina. The spin-off will be the creation of 50 support jobs and 50 tourism related jobs in the adjacent public marina. In addition, the economy will realize \$25 million in annual revenue from tourism activities within the marina, alleviate over-crowding and provide for an opportunity for larger scale domestic commercial fishery not to mention global exposure as a marine activity destination.

**Project Deliverable:** The completion of an EIS and A/E design for the complex, the securing of all federal and local permits, and the construction of the facility.

**Timing and Responsibilities:** The Hagatna Revitalization Authority, in conjunction with the Guam Fishermen's Coop, will oversee the contracts for the environmental impact statement (EIS), the A/E design and the construction of the facility. The total project is anticipated to take 36 months to complete the A/E design and EIS, secure permits and complete construction.

**Budget:** The project is estimated to cost \$4,500,000.

**Project Name:** **Guam-Based Trust Incentive Program**

**Situation Statement:** In 1998, GEDCA, in cooperation with the Guam Legislature, the Department of Revenue and Taxation, and the Office of the Attorney General, contracted with several local and US mainland law firms specializing in tax law to develop the legislation necessary to structure a Guam based trust program as well as the corresponding special Qualifying Certificate incentive for trusts.

The Guam Trusts were conceived as a marketing incentive for Guam that would attract large deposits of money from high net worth individuals. The most significant component of this program was that the tax on the income of these trusts would be paid, then rebated after 180 days by the Government

of Guam pursuant to a special qualifying Certificate issued by GEDCA.

The trusts were designed to rely on §935 of the IRS Code, which states in part that residents of Guam who file their returns on Guam do not have to file an additional return with the federal government. Under the Guam based trust laws (PL 25-08, 25-73 and 25-149) trusts are treated as “individuals”. On November 22, 2000 the IRS released Notice 2000-61, which stated that the IRS has ruled that a Guam based trust is not an “individual” for purposes of §935. If a Guam Trust is not an individual then it is required to file two returns and faces a double tax liability. As a result of the notice the Guam based trust program for the US domestic market was effectively shut down. At present Guam is considering if it should move the program forward and review other types of trust structures that may work for the domestic trust market and/or market the program to Asian (foreign trust) clients. In order to proceed, a Market Research Study on the viability of a Guam Based Trust Program for the Asian market must be completed.

**Objectives:** To provide Guam with an additional incentive tool to attract new capital into the island by foreign investors.

**Project Description:** Fund a Market Research Study on the viability of a Guam Based Trust Program for the Asian market.

**Anticipated Impacts and Benefits:** Direct and indirect job creation; provides Guam with exposure to clients with high net worth who would otherwise have little knowledge of opportunities in Guam; increase in government revenues through interest earned on withholding taxes held for 6 months prior to rebate; revenue opportunities for all island small business – Real estate sales, car sales, retail outlets, restaurants, etc.

**Deliverables:** Market Research Study on tax implications for Guam-based Trusts from Asian countries.

**Timing and responsibility:** 18 months after receipt of funding by Government of Guam

**Budget:** \$150,000 to contract market research firm to develop study

**Project Name:** **Airline Flight Kitchen**

**Situation Statement:** There are no adequate facilities within short distances from the airport suitable for catering companies presently serving air carriers on Guam. The most significant problem with the current situation is it is off-airport. Local automobile traffic presents a problem during certain hours of the day for timely access to the terminal apron. A site on the airport is desirable. The

delays and inefficiencies in delivering meals to aircraft result in added costs to the airlines, which are passed on to the traveler. The GIAA has identified the need for on-site flight kitchen facilities in response to the island's growth as an air transportation hub in Micronesia.

**Objectives:** Construct an on-site flight kitchen at the Guam International Airport.

**Project Description:** Award a construction contract for the flight kitchen. Lease the facility to catering companies.

**Anticipated impacts:** The project would create 100 new jobs and provide a needed stimulus for Guam's visitor industry.

**Project Deliverable:** New flight kitchen facility at the Guam International Airport.

**Timing and Responsibilities:** Construction time estimated at 18 months. Lead agency will be the Guam International Airport Authority.

**Budget:** The project is estimated to cost \$10 Million.

**Project Name:** **Design and Construction of Capital City of Agana Bridges**

**Situation Statement:** The bridges and riverine channels, because of their deteriorated conditions must be improved in Agana; and in order for Guam to retain eligibility under the National Flood Insurance Program (NFIP). The Department of Defense (Navy and Air Force) components on-island utilize these bridges when traveling between installations, transporting military cargo, equipment, etc. from one end of the island to the other along Marine Drive, Route 1.

**Objective:** Construct three (3) bridges in the capital city of Agana.

**Project Description:** Design and construction of Agana River Bridge, O'Brien Bridge and Santo Papa Bridge.

**Anticipated Impacts and Benefits:** Project completion will benefit the national defense whereby the military activities stationed on island will continue to utilize improved and secured highway infrastructure; project will improve highway safety. The project will allow Guam to be in compliance with the FEMA 's National Flood Insurance Program (NFIP) and continue to qualify for secondary mortgage program as Freddie Mac, HUD, Fannie Mae and other disaster assistance programs.

**Project Deliverable:** Improved and safe bridges in the city of Agana.

**Timing and**



Responsibilities: Estimated time to complete the project is 18 months, including design.

Budget: The project is estimated to cost \$25 million.

**Project Name: Hagátña Revitalization**

Situation Statement: Guam’s capital city of Hagátña was once the seat of government, commercial and cultural activity. Over the past several decades, commercial and government activity have left the city and its Spanish charm has diminished. It has become a city of abandoned buildings, vacant lots and blighted areas even though it contains many historic sites from Guam’s Spanish era through its World War II era. Through revitalization, it will once again become a place of honor and the seat of government, commercial and cultural activity. It also will become an important tourist draw through the refurbishment of historic sites, the creation of a Agana River Walk and the creation of botanical gardens, museums, and performing arts and cultural centers.

Objective: To increase the long term benefits that will advance efforts to diversity Guam’s economy and stimulate job growth through the revitalization of Guam’s capital city of Hagátña.

Project Description: To develop a comprehensive Master Design Plan for Hagátña that is consistent with FEMA’s Agana River’s flood control requirements, that: incorporates all infrastructure requirements to sustain economic growth; a historic river walk; botanical gardens; parks; landscaping; design criteria for commercial and government structures; identification and refurbishment of historic buildings and structures; site locations for government office buildings and a new Capitol building; and the location and design concepts for new museums and performing arts and cultural centers. The Hagátña Master Design Plan will include all of Hagátña: from the Agana River, west to Adelup (inclusive of East and West Agana Bays, the Paseo, the Chamorro Village and boat mariana) and north to the top of San Ramon Hill (inclusive of Fort Apugan, Government House and the Japanese caves).

Anticipated Benefits: The Project will initially generate new employment opportunities first by attracting commercial enterprises back into Hagátña through the relocation of government facilities back into the city. This economic activity will continue to grow and be sustained as the Capital City of Hagátña becomes a major tourist attraction through the development of its historic areas, the creation of a historic river walk and the development of botanical gardens, parks, museums and cultural centers.

Timing and Responsibilities: The Hagátña Revitalization Authority will complete the project in two years.

Budget: The project is estimated to cost \$3 million.

**Medium Priority:**

**Project Name: Guam Alternative Dispute Resolution Center (ADR)**

**Situation Statement:** There is an immediate opportunity for Guam to capture the Asian arbitration market, a growing industry that would enable Guam to diversify its predominately tourism based economy. Current industry trends in the Asia region regarding Arbitration Centers:

- Industry trend shows decline in use of Asian based arbitration centers with a correlating increase in European center usage.
- Asian centers encountering credibility issues i.e. Hong Kong viewed as an extension of China; not acceptable ADR center for US companies
- Guam as a stable US flag domicile would be a favored “neutral” location and a forum of choice for US and Asian contract disputes.
- Japanese lawyers prefer locations such as Guam as they are at a competitive disadvantage in Hong Kong and Singapore centers where they compete against large in-country law firms.
- Tokyo based ADR too slow, expensive and based on antiquated arbitration rules
- Expensive arbitration and mediation costs in Asian locations – permanent office space costs at a premium and utilization of expensive hotel banquet facilities common but not suitable for litigation.
- Rising costs of litigation in US court system
- Time delays caused by court scheduling system
- US Court mandated arbitration of smaller (dollar value) cases

**Objectives:** To diversify Guam’s economy in non-tourism and non-military related commercial enterprises that will provide direct and indirect benefits to Guam in the form of increased employment and expansion of its tax base.

**Project Description:** Fund the design and construction of a facility to house a Guam Alternative Dispute Resolution Center (ADR). This state of the art facility will host international as well as domestic disputes.

**Anticipated Impacts & Benefits:**

ADR provides prompt and fair outcome to contractual disputes – creative resolutions possible; provides a cost effective resolution vs. high costs associated with protracted litigation; business relationships maybe preserved; Privacy and confidentiality may be preserved (courts are “open”); Limits access to appellate review; direct and indirect job creation; Center revenue opportunities – registration fees, administrative fees, room rental (hearing and war rooms), appointing authority fees, electronic filing system fee, business services, CLE courses, and Membership and sponsorship dues; support

services revenue opportunities – Airlines, hotels, restaurants, rent a car, office supplies, etc.; Center can provide continuing legal education seminars for potential arbitrators, local bar and ex-pat lawyers practicing in Asia; Conference and workshops opportunities to the local bar, judiciary, and Asian lawyers on ADR subjects

Project Deliverable: Business plan development; design plan and building construction

Timing and Responsibility: 24 months from grant award to the Government of Guam.

Budget: \$650,000

**Project Name: New Air Cargo Facility**

Situation Statement: The existing cargo facility is beyond capacity. With the acquisition of former Naval Air Station property from the Navy, the Guam International Airport is now able to expand its current cargo operations, or build an entirely new facility. The ideal situation for the new cargo building would be to have dedicated aircraft parking aprons on the airside. The cargo building is calculated to require three to seven acres to have adequate landside areas for truck docks, circulation, and customer and employee parking. From two to four acres will be required for airside areas for container storage and staging. The new cargo building area requirement is estimated to be approximately 133,500 square feet.

Objectives: Construct a new air cargo facility at the Guam International Airport.

Project Description: Award a construction contract for the new air cargo facility. Lease portions of the facility to airlines, couriers, transport or moving companies.

Anticipated impacts: The project would create 150 new jobs and provide a needed stimulus for Guam's visitor industry.

Project Deliverable: New cargo facility at the Guam International Airport.

Timing and Responsibilities: Construction time estimated at 18 months. Lead agency will be the Guam International Airport Authority.

Budget: The project is estimated to cost \$20 Million.

**Project Name: Transportation & Distribution (Transshipment)**

**Situation Statement:** Guam’s port is the deepest, most advanced port in the mid-western Pacific. In the early 1980’s and 1990’s, Japanese, Korean and Taiwanese (distant water fishing nations) purse seign and long line vessels operated out of Guam’s port. In the height of Guam’s involvement in the region’s “fishery”, there was an annual movement of roughly 12,000 Metric Tonnes of “Sushi grade” or AAA grade tuna to Japan and Asia. Unfortunately, as tuna are migratory, so are the fishery operations. Higher tariffs and other operating costs, as compared to other island ports, made Guam’s port a less likely choice for vessel home-porting. Relative to the Export Zone, efforts are currently underway to identify special industrial zones in or around the Guam Airport and ocean port facilities. A proposed facility will consist of value-added processing of product, bonded warehousing, docking facilities, etc.

**Objectives:** Diversify the Guam economy and create jobs uncorrelated to tourism and military spending.

**Anticipated Impacts and Benefits** Guam has the opportunity to once again become a strong regional fishery hub. The port recently approved a public/private partnership fisheries development of "Hotel Wharf" which will include chilled/nonchilled warehousing, a valued added plant, truck ports and modern dock facilities. An export zone will add incentive to manufacturing companies to establish production plants or enhanced distribution chains in Guam.

**Project Deliverable** Completion of Economic Study and needs assessment for Port and Fisheries Transhipment Industries to include identification of current relevance of the Magnuson Stevens and Jones Acts to Guam's needed development.

**Timing and Responsibility** 12 months by GEDA

**Budget:** \$500,000

**Project Name: Aviation Flight Schools**

**Situation Statement:** Guam has the potential to become an FAA approved Aviation and Flight School in Asia. Being in close proximity to Asian countries and relying on air travel as a major mode of transportation, a training facility would benefit Guam as it would create employment, increase the local tax base and simultaneously stimulate the economy. Occupations such as pilots, flight attendants, aircraft mechanics and other skilled workers would be products of an aviation flight school. Pilots from neighboring Asian countries with the desire to attain an FAA Pilot License could do so by attending and successfully completing the specified training.

**Objectives:** To diversify the Guam economy and create jobs that are uncorrelated with tourism and military spending.

**Project Description:** To conduct a feasibility study, purchase equipment and design and construct an Aviation Flight School.

**Anticipated Impacts and Benefits:** Job creation, revenue generation and increased economic activity in addition to creating a skilled work force.

**Project Deliverable:** A feasibility study and the construction and equipping of a flight school.

**Timing and Responsibilities:** 24 months by the Government of Guam.

**Budget:** \$495,000 including \$90,000 for a feasibility study, \$175,000 for equipment and \$230,000 for construction.

**Project Name: Water/Wastewater Improvements - USEPA Compliance Order**

**Situation Statement:** The Guam water and sewer infrastructure systems are in a seriously deteriorated state which resulted in the issuance of a notice of violation by the U. S. Environmental Protection Agency. Violations have gone uncorrected and the courts have since issued an order for compliance which mandates that the Government of Guam make over \$46 Million in improvements to island-wide water and sewer systems.

**Objectives:** Improve water and sewer systems for the benefit of local residents and visitors.

**Project Description:** Design and construct various water and wastewater system improvements. These are as follows:

1. Agat Sewer Treatment Plant Renovation - \$5 Million
2. Agat Collector System Inflow/Infiltration - \$13.6 Million
3. Agana Sewer Treatment Plant Renovation/Expansion - \$3.8 Million
4. Agana Ocean Outfall - \$4.4 Million
5. Agana Village Collector System Inflow/Infiltration - \$1.6 Million
6. Baza Gardens Sewer Treatment Plant - \$1.0 Million
7. Northern District Sewer Treatment Plant - \$2.0 Million
8. Northern District Ocean Outfall - \$4.3 Million
9. Umatac/Merizo Sewer Treatment Plant Renovations - \$260,000
10. Umatac/Merizo Collector System Inflow/Infiltration - \$2.8 Million
11. Comprehensive Performance Evaluations for the Agat, Baza Gardens, and Umatac/Merizo Sewer Treatment Plants - \$500,000
12. Comprehensive Assessment of GWA's Sewer Pump Stations/Collection System and Implementation of a Corrective Plan of Action - \$600,000
13. Development and implementation of a GWA Preventive Maintenance Program - \$1.5 Million
14. Development of an Operator Training and Certification Program - \$1.5 Million
15. Monitoring Requirements - \$600,000
16. Facilities Master Plan - \$2.3 Million

- 17. Renewal and replacement capital improvement projects - \$30 Million
- 18. Meter Management Project - \$4.5 Million
- 19. Sewer Connection Project - \$6 Million
- 20. Design, construction observation, etc. for above projects - \$5.864 Million

Anticipated Impacts and Benefits: Improved water and sewer systems and compliance with federally mandated requirements.

Project Deliverable: Construction of water and wastewater improvements

Timing and Responsibilities: Design and construction will be overseen by the Guam Waterworks Authority over a 5 year period.

Budget: \$92 Million

**Project Name: Telecom Industry Training Program**

Situation Statement: To insure Guamanians benefit from the development of the telecom industry as expected as a result of other proposed telecom projects, a training center would be established jointly at the University of Guam and the Guam Community College to accommodate the various levels of skills necessary to fulfill the needs of the IT and Telecom industries that will surely develop in the immediate future.

Objectives: Obtain a funding source to conduct a program development study that would identify the program training needs in the telecom industry and prescribe a step-by-step program to accommodate those needs utilizing the training environment and facilities currently available at the local college institutions mentioned above.

Project Description: Issue an RFP to obtain the services of a consultant to develop the program development study. Assess the University of Guam and Guam Community College’s contribution to providing technical assistance in this type of industry, conducting applied research, and disseminating program results.

Anticipated impacts and benefits: Project would create 50 - 100 certified technicians.

Project Deliverable: Program Development Study for the proposed Telecom Industry Training Program.

Timing and Responsibilities: The selected consultant would be required to complete the project within six (6) months from time of grant approval.

Budget: The project is estimated to cost \$205,000.

**Project Name: Feasibility Study and Design for Industrial Park in Northern Guam**

Situation Statement: With increased recognition of Guam's military strategic value and the continuing difficulties faced by the United States in forward deployment of forces in foreign countries comes the likelihood that additional military operational units will be assigned to Guam. This assignment creates economic opportunities for private industries that do business with the military, particularly if they are located in proximity to the military establishment.

Objectives: To increase employment, revenue and economic activity in Guam by establishing an industrial park that caters to U. S. Air Force needs in northern Guam.

Project Description: The Government of Guam proposes that a feasibility study be developed to analyze the types of economic activities that should be located in proximity to the U. S. Air Force, to develop revenue projections based upon future military procurement and operational needs and to identify the types of incentives required to ensure businesses locate in the park. If determined feasible, a design plan for an industrial park in northern Guam will be developed that will fit the needs of the businesses to be located in the area.

Anticipated Impacts and Benefits: The implementation of a northern industrial park will create increased jobs, revenue and economic activity. U. S. Air Force requirements for servicing by private companies will also be satisfied.

Project Deliverable: A feasibility study and design plan for a northern Guam industrial park.

Timing and Responsibilities: The Government of Guam will ensure that the deliverables are completed within 18 months of the grant award.

Budget: \$150,000 for the feasibility study and \$350,000 for the design plan.

**Project Name: Film Industry Development**

Situation Statement: Guam has recently been approached by several Hollywood film production companies interested in using Guam as a film production site. In other domiciles, a film commissioner coordinates the efforts, assists with regulatory needs and issues required licenses. There are a few players currently in the marketplace, in both conventional film and digital arenas. There is high capacity for growth and increasing demand for this industry. With the growth of Guam's participation in this industry, there are also

tourism opportunities with the hosting of regional film festivals. As an added note, Bollywood, India's version of Hollywood, produces approximately 800 movies annually.

**Objectives:** Diversify the Guam economy and create jobs uncorrelated to tourism and military spending.

**Project Description:** Feasibility research currently being done with local industry players; link with Association of Film Commissioners International to network and become more aware of existing opportunities; identify filming sites on Guam, as well as warehousing to be used for sound stages.

**Anticipated Impacts and Benefits:** Guam's gains increased from tourism revenue. Additionally there are opportunities for Guam based trust if complete movie rentals are based in Guam (financial serves). There are also technical, high paying jobs, associated with this industry.

**Project Deliverable:** Implementation of feasibility research

**Timing and Responsibility** 18 months by GEDA and Shooting Star Productions

**Budget** \$250,000 for planning and subsequent initial implementation of plans.

### **Low Priority**

**Project Name:** **Construction and Rehabilitation of Tiyan Infrastructure System**

**Situation Statement:** The existing infrastructure system at Tiyan, which was closed by the 1993 decision of the Base Realignment and Closure Commission, is between 40 to 50 years old and has suffered from various forms of physical strain and deterioration over the years and is in need of upgrades and rehabilitation in order to meet future demands.

**Objectives:** Improve existing infrastructure systems to accommodate land uses approved by the Guam Legislature.

**Project Description:** Contractor will design, construct, renovate, replace and upgrade existing infrastructure systems at Tiyan including roads, water system, wastewater system, storm drainage system, power system, street lighting and communications systems.

**Anticipated impacts and benefits:** Project will provide Guam the opportunity to realize significant short and



long-term job creation through the economic activities that will result from infrastructure development.

**Project Deliverable:** An improved infrastructure system which will provide the backbone roads and utilities which support full development of Tiyan.

**Timing and Responsibilities:** The Infrastructure Improvements Plan will be completed in various phases over a five year period in consonance with land use priorities and funding increments.

**Budget:** The following is a budget cost estimate summary of the project at full build-out (design and construction):

Road Improvements	\$21,243,838
Water System Improvements	\$ 2,040,180
Wastewater System Improvements	\$ 1,456,200
Storm Drainage System Improvements	\$ 4,317,648
Power System Improvements	\$ 3,517,020
Street Lighting System Improvements	\$ 1,550,700
Telephone System Improvements	\$ 1,388,640
Total	\$35,514,226

(Note that design and construction of a portion of the water and wastewater system has already begun pursuant to a grant from the Economic Development Administration.)

**Project Name: Northwest Parkway Project**

**Situation Statement:** The construction of this Northwest Parkway Project will enhance the accessibility to many private properties adjacent to Andersen Air Force Base. The project is necessitated by increased security requirements for base protection at AAFB, which hinders non-DOD personnel from transiting the base to non-DOD property. The project will allow upgrading and extension on an existing public roadway to allow access to private properties and expand Eco-Tourism opportunities in the northern part of Guam.

**Objective:** To resurface, upgrade and extend an existing public roadway.

**Project Description:** Design, resurface, upgrade 6.82 miles of Route 3A and extend Route 3A approximately 3.5 miles.

**Anticipated Impacts and Benefits:** Project would enable Andersen Air Force Base to meet its current enhanced security requirements while simultaneously allowing local land owners to access their property. The project will benefit and help spur the local economy and the tourism industry by providing accessibility to eco-tourism facilities located in Northern Guam. There may be an effect to wildlife

habitat, which will be assessed during the design phase.

**Project Deliverable:** The resurfacing, upgrading and extension of an existing roadway, Route 3A.

**Timing and Responsibilities:** Estimated time to complete the project is 18 months.

**Budget:** The project is estimated to cost \$7 Million.

**Project Name:** **Design and Construction of Marine Drive By-Pass (Route 20)**

**Situation Statement:** Significant traffic congestion exists at the intersections of Route 8, the airport access road and Marine Drive which slows vehicular travel, reduces productivity, and adversely affects the military's ability to transport equipment, supplies and personnel among military installations.

**Objective:** The project will enable the Government of Guam to design and construct a bypass at Tiyan which is crucial to the success of the implementation of the Guam 2010 Highway Master Plan and the Guam International Airport Authority Development Plan.

**Project Description:** To construct an alternate roadway for Marine Drive within a 120-foot wide roadway corridor that will follow the western boundary of the former U.S. Naval Air Station and continue eastward to the Route 16 underpass.

**Anticipated Impacts and Benefits:** The Marine Drive bypass will reduce congestion on Marine Drive (Route 1) as well as improve access to the Guam International Airport and promote efficient circulation of airport-related vehicular traffic. This project will also entice further development of airport type activities and facilities in the area and will provide for more economic benefits to the local economy.

**Project Deliverable:** The improved accessibility and safer roadway conditions for all residents of Guam including its military population, tourists and island residents.

**Timing and Responsibilities:** Estimated time to complete the project is 24 months.

**Budget:** The project is estimated to cost \$31.7 Million.

**Project Name:** **Small Business Incubator**

**Situation Statement:** The Small Business Development Center at the University of Guam is seeking to construct a business incubator to create jobs and improve structural deficiencies that exist among micro business producers of food products, and small service businesses on Guam.

Objectives: To construct facility that will provide lower than market cost facilities and equipment to micro food and beverage manufacturers and small business services. The project will support the development of entrepreneurship among women, Pacific islanders, and other disadvantaged residents of Guam, as well as the general public.

Project Description: Issue an RFP to obtain construction bids for the facility which has already been designed.

Anticipated impacts and benefits: Project would create an anticipated 250 new jobs among minority women and other disadvantaged residents.

Project Deliverable: A completed incubator meeting the specifications developed through the existing construction design.

Timing and Responsibilities: The contractor is expected to complete the work within 6 months of the award of the contract.

Budget: The project is estimated to cost \$1.5 million.

**Project Name: State Statistical Center**

Situation Statement: Various entities in Guam produce statistics while various types of statistics that should be collected are not. Companies seeking to locate in Guam have found the general lack of relevant, reliable and timely statistics which has affected decisions to locate here. There is a need to create an overall plan for the collection, analysis, publication, and distribution of relevant, reliable and timely statistics to meet identified public purposes.

Objectives: To create a State Statistical Center to coordinate the collection, analysis, publication and distribution of data for economic development purposes.

Project Description: Employ a Chief Economist to guide preparation of a State Statistical Center and implement over a one year period.

Anticipated Impacts and Benefits: Reliable, relevant and timely statistical information concerning the island's economic and social development.

Project Deliverable: An employment contract and a State Statistical Center plan covering the types of statistics to be collected, responsibilities for collection and other related purposes..

Timing and Responsibilities: The Government of Guam will complete implementation of this project

within 12 months from the date of grant award.

Budget: \$600,000

**Project Name: Regional Software Support Center**

Situation Statement: Interest has been raised by several U.S.-based software companies interested in exploring the possibility of using Guam as a hub for their software support and marketing activities. These companies have existing clients in Asia and would like to use Guam as a software support center for these clients. Guam needs to assess the potential for this type of activity.

Objectives: To assess the potential for this type of activity and to evaluate the benefits and costs for the development of such an industry.

Project Description: Feasibility Study and Cost Benefits Analysis For The Development Guam As A Center for Software Support for U.S.-based software companies doing business in Asia.

Anticipated Impacts and Benefits: Creation of Jobs in the information technology field.

Project Deliverable: A report analyzing the feasibility of such an endeavor inclusive of the costs and benefits.

Timing and Responsibilities: As interest has been expressed in the last two months, Guam needs to complete this study in 6 months.

Budget: \$100,000.00

**Project Name: Multi-purpose Fishing Vessel**

Situation Statement: The Guam Fishermen's Cooperative Association is a 25 year old non-profit organization whose mission is to market the fish harvested by its members. The average vessel size of its members is 22 feet. The "El Nino and La Nina" weather conditions demonstrated that the current fishery vessels size is inadequate and unsuitable to deal with the ever changing conditions. Greater fisher capacity is also needed to meet the ever increasing demand of fresh quality fish. Today, the island imports 95 percent of the fish it consumes; valued at \$32 million.

Objective: To increase the long tem benefits that will advance efforts to diversity Guam's economy and stimulate growth through the purchase of a suitable vessel to advance the fishery industry and development of a training program.

**Project Description:** To purchase a large, US made hull, vessel and to develop a training program. The Coop will prepare the specifications for the vessel and develop the training program.

**Anticipated Benefits:** The Project will demonstrate the economic potential of a larger fishing vessel. The creation of ten fishery jobs and ten support jobs. In addition, the economy will realize \$2 million in annual revenue from fish sales.

**Timing and Responsibilities:** The Guam Fishermen’s Cooperative Association will complete the project in one year.

**Budget:** The project is estimated to cost \$200,000.

**Project Name: Design and Construction of Tumon Bay Light Rail System**

**Situation Statement:** This project will reduce highway congestion within the area; allow expansion of the tourism industry in Guam and showcase Guam as a United States Territory in the Pacific Region.

**Objective:** To design and construct a light rail system that interconnects the Guam International Airport with Tumon Bay (approximately 2 miles), and running the entire a length of Tumon Bay (approximately 4 miles).

**Project Description:** The design and construction of the Tumon Bay Light Rail System

**Anticipated Impacts and Benefits:** Project will reduce highway congestion, provide a positive “first impression” for the visitors to the island and increase tourist arrivals.

**Project Deliverable:** A Light Rail System that provide a safe mode of travel, alleviate traffic congestion and allow for the development of other related business (in the tourism industry).

**Timing and Responsibilities:** Estimated time to compete the project is 27 months, including design.

**Budget:** The project is estimated to cost \$280 Million.

## **PROJECT MANAGEMENT AND EVALUATION FRAMEWORK**

While responsibility for the successful implementation of each economic development project will be delegated to the appropriate public/private organization, general oversight for coordination and assessment of the CEDS annual reports and updates and its proposed projects will be provided by the Guam Economic Recovery and Development Team with staff support from all Government of Guam agencies including the Bureau of Statistics and Plans, the Port Authority of Guam and the Guam Economic Development and Commerce Authority. To guarantee timely, cost-effective completion of each project, all designated project sponsors will be required to utilize proven project management techniques to guide project implementation activities and to report on the status of projects to the Guam Economic Recovery and Development Team.

In addition to using project management techniques to insure successful results, the Guam Economic Recovery and Development Team and its working groups, will conduct an annual evaluation of the CEDS process, including the evaluation results in an annual report. The Team and its working groups will also take responsibility for evaluating the Territory's a) progress towards achieving the proposed projects; b) adherence to implementation schedules and budgets; and c) progress towards achieving stated socio-economic goals and priorities.

In assessing progress towards improving Guam's economic climate, both quantitative and qualitative techniques will be applied to measure the expected impacts of the proposed projects on a) reducing unemployment and underemployment; b) expanding development activities and investments, c) resolving key development issues, and d) improving living standards.

# APPENDIX

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**Economic Indices**

## Census Population of Guam by Districts 1970, 1980, 1990 and 2000

GUAM	1-Apr-70	1-Apr-80	1-Apr-90	1-Apr-00	Numeric Change			Percent Change			Average Annual Exponential Growth Rate		
					70-80	80-90	90-00	70-80	80-90	90-00	70-80	80-90	90-00
<b>TOTAL POPULATION</b>	84996	105,979	133,152	154805	20,983	27173	21653	24.69%	25.64%	16.26%	2.21%	2.28%	1.51%
<b>DISTRICTS</b>													
Agana Heights	3156	3284	3645	3940	128	362	294	4.06%	11.02%	8.06%	0.40%	1.05%	0.78%
Agai	4308	3999	4960	5656	-309	961	696	-7.17%	24.03%	14.03%	-0.74%	2.15%	1.31%
Asan	2629	2034	2070	2090	-595	36	20	-22.63%	1.77%	0.97%	-2.57%	0.18%	0.10%
Barrigada	6356	7756	8846	8652	1400	1090	-194	22.03%	14.05%	-2.19%	1.99%	1.31%	-0.22%
Chalan Pago-Ordot	2931	3120	4451	5923	189	1331	1472	6.45%	42.66%	33.07%	0.62%	3.55%	2.86%
Dededo	10780	23644	31728	42980	12864	8084	11252	119.33%	34.19%	35.46%	7.85%	2.94%	3.04%
Hagåtña	2119	896	1139	1100	-1223	243	-39	-57.72%	27.12%	-3.42%	-8.61%	2.40%	-0.35%
Inarajan	1897	2059	2469	3052	162	410	583	8.54%	19.91%	23.61%	0.62%	1.82%	2.12%
Mangilao	3228	6840	10483	13313	3612	3643	2830	111.90%	53.26%	27.00%	7.51%	4.27%	2.39%
Merizo	1529	1663	1742	2163	134	79	421	8.76%	4.75%	24.17%	0.84%	0.48%	2.16%
Mongmong-Toto-Maite	6057	5245	5845	5845	-812	600	0	-13.41%	11.44%	0.00%	-1.44%	1.08%	0.00%
Piti	1284	2866	1877	1666	1582	-1039	-161	123.21%	-36.25%	-8.81%	8.03%	-4.50%	-0.82%
Santa Rita	8109	9183	11857	7500	1074	2674	-4357	13.24%	29.12%	-36.75%	1.24%	2.56%	-4.58%
Sinajana	3506	2485	2658	2853	-1021	173	195	-29.12%	6.96%	7.34%	-3.44%	0.67%	0.71%
Talofof	1835	2006	2310	3215	71	304	905	3.67%	15.15%	39.18%	0.36%	1.41%	3.31%
Tamuning	10218	13580	16673	18012	3362	3093	1339	32.90%	22.78%	8.03%	2.84%	2.05%	0.77%
Umatac	813	732	897	887	-81	165	-10	-9.96%	22.54%	-1.11%	-1.05%	2.03%	-0.11%
Yigo	11542	10359	14213	19474	-1183	3854	5261	-10.25%	37.20%	37.02%	-1.08%	3.16%	3.15%
Yona	2599	4228	5338	6484	1629	1110	1146	62.68%	26.25%	21.47%	4.87%	2.33%	1.84%
<b>NORTH</b>	32540	47583	62614	80466	15043	15031	17852	46.23%	31.59%	28.51%	3.80%	2.75%	2.81%
Dededo	10780	23644	31728	42980	12864	8084	11252	119.33%	34.19%	35.46%	7.85%	2.94%	3.04%
Tamuning	10218	13580	16673	18012	3362	3093	1339	32.90%	22.78%	8.03%	2.84%	2.05%	0.77%
Yigo	11542	10359	14213	19474	-1183	3854	5261	-10.25%	37.20%	37.02%	-1.08%	3.16%	3.15%
<b>CENTRAL</b>	31266	34526	40965	45382	3260	6439	4417	10.43%	18.65%	10.78%	0.99%	1.71%	1.02%
Agana Heights	3156	3284	3645	3940	128	362	294	4.06%	11.02%	8.06%	0.40%	1.05%	0.78%
Asan	2629	2034	2070	2090	-595	36	20	-22.63%	1.77%	0.97%	-2.57%	0.18%	0.10%
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Piti	1284	2866	1877	1666	1582	-1039	-161	123.21%	-36.25%	-8.81%	8.03%	-4.50%	-0.82%
Sinajana	3506	2485	2658	2853	-1021	173	195	-29.12%	6.96%	7.34%	-3.44%	0.67%	0.71%
<b>SOUTH</b>	21190	23870	29573	28957	2680	5703	-616	12.65%	23.89%	-2.08%	1.18%	2.14%	-0.21%
Agai	4308	3999	4960	5656	-309	961	696	-7.17%	24.03%	14.03%	-0.74%	2.15%	1.31%
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Umatac	813	732	897	887	-81	165	-10	-9.96%	22.54%	-1.11%	-1.05%	2.03%	-0.11%
Yona	2599	4228	5338	6484	1629	1110	1146	62.68%	26.25%	21.47%	4.87%	2.33%	1.84%

Source: U.S. Census Bureau; Prepared by: Department of Commerce, Census Population Section

## Household Income and Per Capita Income

<b>Distribution of Income 1999</b>		
Subject	Number	Percent
<b>INCOME IN 1999</b>		
<b>Households</b>	38,769	100.0
Less than \$2,500	3,110	8.0
\$2,500 to \$4,999	698	1.8
\$5,000 to \$9,999	1,768	4.6
\$10,000 to \$14,999	2,128	5.5
\$15,000 to \$24,999	4,758	12.3
\$25,000 to \$34,999	4,842	12.5
\$35,000 to \$49,999	6,357	16.4
\$50,000 to \$74,999	7,175	18.5
\$75,000 to \$99,999	3,982	10.3
\$100,000 or more	3,951	10.2
Median household income (dollars)	39,317	(X)
Mean household income (dollars)	49,617	(X)
<b>Households</b>	38,769	100.0
With earnings	32,821	84.7
Mean earnings (dollars)	49,337	(X)
With Social Security income	4,147	10.7
Mean Social Security income (dollars)	7,758	(X)
With Supplemental Security income	248	0.6
Mean Supplemental Security Income (dollars)	6,067	(X)
With public assistance income	4,211	10.9
Mean public assistance income (dollars)	5,291	(X)
With retirement income	6,889	17.8
Mean retirement income (dollars)	21,750	(X)
<b>Families</b>	32,367	100.0
Less than \$2,500	1,982	6.1
\$2,500 to \$4,999	512	1.6
\$5,000 to \$9,999	1,461	4.5
\$10,000 to \$14,999	1,734	5.4
\$15,000 to \$24,999	3,923	12.1
\$25,000 to \$34,999	4,082	12.6
\$35,000 to \$49,999	5,400	16.7
\$50,000 to \$74,999	6,267	19.4
\$75,000 to \$99,999	3,536	10.9
\$100,000 or more	3,470	10.7
Median family income (dollars)	41,229	(X)
Mean family income (dollars)	51,674	(X)
<b>Nonfamily households</b>	6,402	(X)
Median nonfamily income (dollars)	22,712	(X)
Mean nonfamily income (dollars)	31,264	(X)
Per capita income (dollars)	12,722	(X)
<b>Median earnings (dollars):</b>		
Male full-time, year-round workers	28,125	(X)
Female full-time, year-round workers	24,118	(X)

Source: U.S. Census Bureau

## Distribution by Household Income

HOUSEHOLD INCOME	1999	Percent	2000	Percent
<b>TOTAL</b>	<b>37,316</b>	<b>100.0</b>	<b>38,983</b>	<b>100.0</b>
<b>NO INCOME</b>	986	2.6	1,291	3.3
<b>Under \$ 3,000</b>	1,194	3.2	1,012	2.6
<b>\$ 3,000 - 4,999</b>	779	2.1	733	1.9
<b>\$ 5,000 - 6,999</b>	779	2.1	1,117	2.9
<b>\$ 7,000 - 8,999</b>	1,090	2.9	1,082	2.8
<b>\$ 9,000 - 10,999</b>	675	1.8	1,082	2.8
<b>\$11,000 - 12,999</b>	882	2.4	907	2.3
<b>\$13,000 - 14,999</b>	1,038	2.8	873	2.2
<b>\$15,000 - 19,999</b>	2,076	5.6	2,862	7.3
<b>\$20,000 - 29,999</b>	4,619	12.4	5,375	13.8
<b>\$30,000 - 39,999</b>	5,190	13.9	4,153	10.7
<b>\$40,000 - 49,999</b>	4,152	11.1	3,979	10.2
<b>\$50,000 - 59,999</b>	3,685	9.9	3,734	9.6
<b>\$60,000 - 69,999</b>	3,010	8.1	2,757	7.1
<b>\$70,000 - 79,999</b>	1,453	3.9	1,780	4.6
<b>\$80,000 - 89,999</b>	1,817	4.9	1,885	4.8
<b>\$90,000 - 99,999</b>	1,401	3.8	873	2.2
<b>\$100,000 &amp; Above</b>	2,491	6.7	3,490	9.0
<b>Median Household Income</b>	38,749	N/A	37,605	N/A
<b>Mean Household Income</b>	45,045	N/A	45,091	N/A
<b>Average Household Size</b>	4.2	N/A	3.9	N/A
<b>Average Earners per Household</b>	1.9	N/A	1.8	N/A

Note: Income statistics may not be comparable with other income statistics as a result of differences in the income definition concepts used and the scope of persons and households included.  
 Source: Household & Per Capita Income: 2000, Department of Labor, Government of Guam.

Source: Guam Comprehensive Economic Development Strategy - June 2001

**Numerical & Percentage Distribution By Household Income On Guam, 2000 & 2001**

Household Income	2000	Percent	2001	Percent
<b>Total</b>	<b>38,983</b>	<b>100.0</b>	<b>39,107</b>	<b>100.0</b>
<b>No Income</b>	<b>1,291</b>	<b>3.3</b>	<b>2,074</b>	<b>5.3</b>
<b>Under \$3,000</b>	<b>1,012</b>	<b>2.6</b>	<b>1,296</b>	<b>3.3</b>
<b>\$3,000 - 4,999</b>	<b>733</b>	<b>1.9</b>	<b>778</b>	<b>2.0</b>
<b>\$5,000 - 6,999</b>	<b>1,117</b>	<b>2.9</b>	<b>1,199</b>	<b>3.1</b>
<b>\$7,000 - 8,999</b>	<b>1,082</b>	<b>2.8</b>	<b>940</b>	<b>2.4</b>
<b>\$9,000 - 10,999</b>	<b>1,082</b>	<b>2.8</b>	<b>1,102</b>	<b>2.8</b>
<b>\$11,000 - 12,999</b>	<b>907</b>	<b>2.3</b>	<b>1,102</b>	<b>2.8</b>
<b>\$13,000 - 14,999</b>	<b>873</b>	<b>2.2</b>	<b>810</b>	<b>2.1</b>
<b>\$15,000 - 19,999</b>	<b>2,862</b>	<b>7.3</b>	<b>2,495</b>	<b>6.4</b>
<b>\$20,000 - 29,999</b>	<b>5,375</b>	<b>13.8</b>	<b>5,508</b>	<b>14.1</b>
<b>\$30,000 - 39,999</b>	<b>4,153</b>	<b>10.7</b>	<b>5,314</b>	<b>13.6</b>
<b>\$40,000 - 49,999</b>	<b>3,979</b>	<b>10.2</b>	<b>3,920</b>	<b>10.0</b>
<b>\$50,000 - 59,999</b>	<b>3,734</b>	<b>9.6</b>	<b>3,305</b>	<b>8.5</b>
<b>\$60,000 - 69,999</b>	<b>2,757</b>	<b>7.1</b>	<b>2,624</b>	<b>6.7</b>
<b>\$70,000 - 79,999</b>	<b>1,780</b>	<b>4.6</b>	<b>1,717</b>	<b>4.4</b>
<b>\$80,000 - 89,999</b>	<b>1,885</b>	<b>4.8</b>	<b>1,426</b>	<b>3.6</b>
<b>\$90,000 - 99,999</b>	<b>873</b>	<b>2.2</b>	<b>1,037</b>	<b>2.7</b>
<b>\$100,000 &amp; Above</b>	<b>3,490</b>	<b>9.0</b>	<b>2,462</b>	<b>6.3</b>
<b>Median Household Income</b>	<b>37,605</b>		<b>34,235</b>	
<b>Mean Household Income</b>	<b>45,091</b>		<b>40,877</b>	
<b>Average Household Size</b>	<b>3.93</b>		<b>3.76</b>	
<b>Average Earners per Household</b>	<b>1.78</b>		<b>1.59</b>	

Note: Income statistics may not be comparable with other income statistics due to differences in the income definition concepts used and the scope of persons and households included.

Source: Household & Per Capita Income: 2001, Department of Labor, Government of Guam

Source: 2000-2001 Guam Annual Economic Review

**PER CAPITA MONEY INCOME, 2001**

Income Category	Number	Percent	Income Category	Number	Percent
<b>Total</b>	<b>99,500</b>	<b>100.0</b>			
No Income	25,499	25.6	28,000 - 28,999	940	0.9
Under \$1,000	2,495	2.5	29,000 - 29,999	778	0.8
\$ 1,000 - 1,999	2,041	2.1	30,000 - 30,999	2,531	3.0
\$ 2,000 - 2,999	1,652	1.7	31,000 - 31,999	583	0.6
\$ 3,000 - 3,999	1,782	1.8	32,000 - 32,999	1,037	1.0
\$ 4,000 - 4,999	1,782	1.8	33,000 - 33,999	778	0.8
\$ 5,000 - 5,999	2,203	2.2	34,000 - 34,999	745	0.7
\$ 6,000 - 6,999	1,588	1.6	35,000 - 35,999	1,490	1.5
\$ 7,000 - 7,999	2,203	2.2	36,000 - 36,999	907	0.9
\$ 8,000 - 8,999	1,944	2.0	37,000 - 37,999	583	0.6
\$ 9,000 - 9,999	2,009	2.0	38,000 - 38,999	745	0.7
\$10,000 - 10,999	3,555	3.6	39,000 - 39,999	389	0.4
\$11,000 - 11,999	1,620	1.6	40,000 - 40,999	1,523	1.5
\$12,000 - 12,999	3,629	3.6	41,000 - 41,999	259	0.3
\$13,000 - 13,999	1,426	1.4	42,000 - 42,999	454	0.5
\$14,000 - 14,999	1,847	1.9	43,000 - 43,999	324	0.3
\$15,000 - 15,999	2,041	2.1	44,000 - 44,999	65	0.1
\$16,000 - 16,999	1,944	2.0	45,000 - 45,999	551	0.6
\$17,000 - 17,999	875	0.9	46,000 - 46,999	227	0.2
\$18,000 - 18,999	2,689	2.7	47,000 - 47,999	259	0.3
\$19,000 - 19,999	1,069	1.1	48,000 - 48,999	194	0.2
\$20,000 - 20,999	2,106	2.1	49,000 - 49,999	292	0.3
\$21,000 - 21,999	1,102	1.1	50,000 - 59,999	2,333	2.3
\$22,000 - 22,999	1,328	1.3	60,000 - 69,999	875	0.9
\$23,000 - 23,999	1,426	1.4	70,000 - 79,999	551	0.6
\$24,000 - 24,999	1,685	1.7	80,000 - 89,999	454	0.5
\$25,000 - 25,999	2,236	2.2	90,000 - 99,999	259	0.3
\$26,000 - 26,999	1,231	1.2	100,000 & Above	324	0.3
\$27,000 - 27,999	1,555	1.6			
	<b>2000</b>			<b>2001</b>	
Per Capita Income (\$)	11,465			10,872	
Median Individual Income	12,236			11,591	
Mean Earner's Income (\$)	21,756			21,602	

Note: Income statistics may not be comparable with other income statistics due to differences in the income definition concepts used and the scope of persons and households included.

Source: Household & Per Capita Income: 2001, Department of Labor, Government of Guam

## Public Assistance

### Annual Expenditures for Public Assistance FY 1990 - 2000

Fiscal Year	Total	AFDC	OAA	TITLE XIX			(Medicaid)
				APTD	AB	GA	
1990	11,795,537	5,579,608	1,244,491	259,446	4,724	583,213	4,124,055
1991	14,875,279	7,171,145	1,590,412	302,066	6,297	805,359	5,000,000
1992	16,815,628	7,856,782	1,748,136	262,109	3,624	1,060,625	5,884,352
1993	17,629,603	9,166,865	1,983,713	244,703	3,624	1,525,656	4,705,042
1994	23,492,125	11,991,938	2,319,700	245,081	2,659	2,402,970	6,529,777
1995	25,854,992	13,597,924	2,483,688	237,847	1,761	2,913,517	6,620,255
1996	31,639,002	14,313,862	2,543,526	236,284	0	2,974,790	11,570,540
1997	30,827,514	14,177,982	1,856,198	250,291	604	3,372,959	11,169,480
1998	27,257,445	12,539,996	1,471,728	268,692	1,661	3,078,534	9,896,834
1999	35,945,007	19,350,526	1,608,303	273,704	1,812	5,468,163	9,242,499
2000	39,543,290	19,771,006	1,559,546	267,776	1,812	6,453,026	11,490,124

**Definition of categorical codes:**

AFDC-Aid to Families with Dependent Children  
 OAA-Old Age Assistance AB-Aid to the Blind  
 APTD-Aid to the Permanently and Totally Disabled  
 GA-General Assistance  
 AB Aid to the Blind

Source: Department of Public Health and Social Services, Government of Guam.

Source: Guam Comprehensive Economic Development Strategy - June 2001

### PUBLIC ASSISTANCE - AVERAGE NUMBER OF RECIPIENTS

Fiscal Year	Total	AFDC	OAA	APTD	AB	GA
1991	5,406	4,193	677	134	3	399
1992	5,794	4,489	691	116	2	496
1993	6,944	5,300	772	107	2	763
1994	8,892	6,766	896	103	1	1,126
1995	9,930	7,572	935	95	1	1,327
1996	10,190	7,853	917	89	0	1,331
1997	9,846	7,609	572	91	0	1,574
1998	9,223	7,007	507	96	1	1,612
1999	11,733	9,070	509	95	1	2,058
2000 R	14,543	10,705	488	89	1	3,261
2001	18,054	13,290	624	112	1	4,027

**Definition of categorical codes:**

AFDC-Aid to Families with Dependent Children  
 APTD-Aid to the Permanently and totally Disabled  
 GA-General Assistance

OAA-Old Age Assistance  
 AB-Aid to the Blind

R = Revised

Source: Department of Public Health and Social Services, Government of Guam

Source: 2000 -2001 Guam Annual Economic Review



**PUBLIC ASSISTANCE-EXPENDITURES**  
(Dollars)

PERIOD	Type of Aid					TOTAL
	OAA	AB	TANF	APTD	GA	
1999	1,608,303	1,812	19,350,526	273,704	5,468,163	26,702,508
2000	1,529,937	1,812	19,086,455	266,534	6,554,145	27,438,883
2001	1,452,825	2,676	17,209,865	261,784	5,891,127	24,818,277
January	123,583	151	1,478,433	22,194	550,216	2,174,577
February	124,534	151	1,495,900	22,643	543,047	2,186,275
March	112,627	151	1,394,566	20,413	495,924	2,023,681
April	123,583	151	1,478,433	22,194	550,216	2,174,577
May	121,060	259	1,443,201	21,938	497,821	2,084,279
June	120,320	259	1,464,701	21,530	511,658	2,118,468
July	118,902	259	1,493,174	22,179	516,579	2,151,093
August	119,704	259	1,494,854	21,240	523,556	2,159,613
September	120,401	259	1,519,289	21,744	534,625	2,196,318
October	121,230	259	1,421,120	21,452	514,863	2,078,924
November	123,186	259	1,329,436	21,836	371,678	1,846,395
December	123,695	259	1,196,758	22,421	280,944	1,624,077
2002 (YTD)	644,568	1,443	6,270,721	121,402	960,727	7,998,861
January	121,228	259	1,207,046	22,149	243,774	1,594,456
February	122,450	259	1,237,437	22,270	212,811	1,595,227
March	121,042	259	1,240,854	22,394	182,940	1,567,489
April	48,821	111	499,258	9,424	65,848	623,462
May	48,495	111	478,216	9,077	60,127	596,026
June	47,419	111	455,762	9,046	55,842	568,160
July	46,084	111	406,697	8,877	50,845	512,614
August	46,084	111	406,697	8,877	50,845	512,614
September	42,945	111	338,754	9,288	37,695	428,793

Definition of categorical codes: OAA-Old Age Assistance      Note: Does not include administrative costs.  
 AB-Aid to the Blind      GA-General Assistance      APTD- Aid to the Permanently and Totally Disabled  
 Note: AFDC (Aid to Families with Dependent Children) changed to: TANF-Temporary Aid to Needy Families  
 Source: Department of Public Health and Social Services, Government of Guam.

**PUBLIC ASSISTANCE - RECIPIENTS**

Period	Type of Aid					Total
	OAA	AB	TANF	APTD	GA	
2001						
Monthly Average	468	1	9,967	84	3,020	13,541
January	445	1	9,506	86	3,263	13,301
February	480	1	9,602	88	3,211	13,382
March	442	1	9,214	79	2,977	12,713
April	445	1	9,506	86	3,263	13,301
May	473	1	9,629	84	3,009	13,196
June	472	1	9,703	81	3,098	13,355
July	471	1	9,949	86	3,123	13,630
August	475	1	9,993	82	3,160	13,711
September	474	1	10,182	86	3,233	13,976
October	476	1	10,060	84	3,247	13,868
November	482	1	10,871	84	2,546	13,984
December	483	1	11,391	84	2,113	14,072
2002						
Monthly Average	435	1	10,621	84	1,123	12,264
January	470	1	11,754	84	1,765	14,074
February	482	1	10,871	84	2,546	13,984
March	470	1	12,615	84	1,192	14,362
April	431	1	11,168	83	956	12,639
May	429	1	10,870	84	858	12,242
June	421	1	10,582	84	799	11,887
July	413	1	9,723	84	719	10,940
August	413	1	9,723	84	719	10,940
September	387	1	8,286	85	552	9,311

Categorical Codes: OAA - Old Age Assistance      AB - Aid to the Blind      GA - General Assistance  
 APTD - Aid to the Permanently and Totally Disabled  
 Note: AFDC (Aid to Families with Dependent Children) changed to: TANF-Temporary Aid to Needy Families  
 Source: Department of Public Health and Social Services, Government of Guam

Source: Guam Economic Review: July - September 2002

**FOOD STAMP PROGRAM**

Fiscal Year	Participation in Food Stamp Program (Monthly Averages)		Total Bonus (Million \$)
	Households	Persons	
1991	3,358	10,845	14.3
1992	3,624	11,537	15.9
1993	3,969	12,481	17.4
1994	4,857	15,131	21.7
1995	5,278	16,298	24.0
1996	5,645	17,604	26.8
1997	5,370	16,881	25.7
1998	4,965	16,399	24.8
1999	6,183	20,458	32.2
2000 R	7,085	22,595	30.5
2001	9,365	30,412	42.0

R = Revised

Source: Department of Public Health and Social Services, Government of Guam

Source: 2000 -2001 Guam Annual Economic Review

**FOOD STAMPS**

Period	Description		
	Households	Persons	Dollar Bonus
<b>2001</b>			
Monthly Average	7,024	22,809	3,153,339
January	6,918	22,166	2,982,155
February	6,773	22,518	3,078,859
March	6,596	21,682	2,944,462
April	6,116	20,471	2,767,999
May	6,777	22,408	3,085,258
June	6,875	22,652	3,104,408
July	6,972	22,930	3,138,589
August	7,111	23,389	3,201,361
September	7,254	23,856	3,265,388
October	8,154	23,406	3,356,290
November	7,297	23,874	3,423,416
December	7,443	24,352	3,491,884
<b>2002</b>			
Monthly Average	7,404	24,311	3,667,723
January	7,544	24,636	3,735,113
February	7,547	24,672	3,726,613
March	7,698	25,165	3,801,145
April	7,702	25,260	3,815,598
May	7,302	23,961	3,618,979
June	7,287	23,961	3,603,959
July	7,680	25,284	3,803,862
August	7,205	23,675	3,569,143
September	6,670	22,188	3,335,098

Source: Department of Public Health and Social Services, Government of Guam

Source: Guam Economic Review: July - September 2002

## Education

### Total School Enrollment SY1990 - 2000

Academic Year 1/	Total	Private	Public	DODEA
1990 - 1991	31,034	5,293	26,011	0
1991 - 1992	34,278	6,415	27,863	0
1992 - 1993	35,149	4,865	30,284	0
1993 - 1994	37,646	6,524	31,122	0
1994 - 1995	39,135	6,774	32,361	0
1995 - 1996	36,099	4,100	31,998	0
1996 - 1997	37,956	4,449	33,507	0
1997 - 1998 *	39,882	4,913	32,444	2,525
1998 - 1999 *	39,405	5,034	31,860	2,511
1999 - 2000	39,206	4,903	31,903	2,400

1/ Attendance recorded in June.

\* Does not include Guam Community College.

Sources: Department of Education, Government of Guam; Catholic Education Office; St. John's School; Guam Adventist Academy; Trinity Christian School; Department of Defense Education Activity.

Source: Guam Comprehensive Economic Development Strategy - June 2001

### TOTAL SCHOOL ENROLLMENT

Academic Year 1/	Total	Private	Public	Military 2/
1991 - 1992	34,253	6,415	27,838	0
1992 - 1993	35,149	4,865	30,284	0
1993 - 1994	37,896	6,774	31,122	0
1994 - 1995	36,575	4,214	32,361	0
1995 - 1996	36,679	4,100	32,579	0
1996 - 1997	37,956	4,449	33,507	0
1997 - 1998 R	39,419	4,913	31,981	2,525
1998 - 1999 R	39,216	5,034	31,671	2,511
1999 - 2000	39,670	4,903	32,367	2,400
2000 - 2001	38,420	4,088	31,903	2,429

R = Revised

1/ Attendance recorded in June.

2/ Military schools were established in school year 1997-1998.

\* Does not include Guam Community College.

Sources: Department of Education, Government of Guam; Catholic Education Office; St. John's School; Guam Adventist Academy; Trinity Christian School; Department of Defense Education Activity

Source: 2000 -2001 Guam Annual Economic Review

## Employment

HIGHLIGHTS OF EMPLOYMENT AND UNEMPLOYMENT								
SELECTED CATEGORIES	1997	1998	1999		2000	2001		2002
	March	March	March	June	July	March	Sept.	March
Civilian Labor Force 1/	48,190	48,060	72,460	72,700	70,800	69,560	64,800	62,050
Total Employed	43,530	44,340	62,350	61,640	59,950	60,520	56,040	54,980
Adult Women	18,150	19,170	26,510	26,430	26,420	27,010	24,410	24,910
Adult Men	23,430	23,050	33,020	32,420	30,520	31,200	29,670	28,610
Teenagers	1,950	2,130	2,810	2,790	3,010	2,300	1,950	1,460
Household Heads	17,460	18,090	26,170	25,790	23,100	24,640	23,670	24,070
Full-time Workers	39,680	40,690	55,100	55,690	52,890	53,500	50,560	47,790
Part-time Workers	3,850	3,650	8,250	5,960	7,060	7,020	5,490	7,190
U.S. Citizens	34,970	35,730	49,300	50,160	48,940	47,530	45,720	45,360
Immigrant Aliens	8,560	8,610	13,050	11,480	11,000	12,980	10,320	9,620
Veterans	4,050	3,300	6,100	5,430	3,270	4,680	3,360	3,760
Total Unemployment	4,660	3,720	10,110	11,060	10,850	9,040	8,760	7,070
Unemployment Rate (% of Labor Force)								
All Workers	9.7	7.7	14.0	15.2	15.3	13.0	13.5	11.4
Adult Women	7.8	6.2	12.6	11.8	12.4	10.7	12.6	8.9
Adult Men	9.7	7.3	12.1	13.3	13.7	11.7	12.6	11.9
Teenagers	23.5	23.5	38.2	47.7	43.1	41.6	33.9	34.8
Household Heads	6.5	6.1	9.0	9.8	12.2	8.8	11.5	8.8
Full-time Workers	9.7	7.2	14.8	14.9	14.4	12.6	13.2	11.8
Part-time Workers	9.1	13.8	8.1	17.8	21.8	15.5	15.8	8.6
U.S. Citizens	9.4	6.5	12.9	14.8	15.5	13.2	13.2	11.1
Immigrant Aliens	10.9	12.6	17.6	17.1	14.5	12.3	14.7	12.9
Veterans	7.4	4.1	6.3	8.8	13.7	6.9	7.5	7.9

1/ Includes civilians 16 yrs. of age and over excluding non-immigrant aliens and members of the U.S. Armed Forces and their dependents living on military installations.

N/A = Not Available.

Note: A CLFS survey was not conducted for June, 2002.

Source: Current Labor Force Survey (CLFS), Bureau of Labor Statistics, Department of Labor, Government of Guam.

Source: Guam Economic Review: July - September 2002

**EMPLOYMENT BY SEX PRODUCTION WORKERS, WAGES, HOURS AND EARNINGS<sup>1</sup>**

**EMPLOYEES ON PAYROLL BY OWNERSHIP AND INDUSTRY**

	December <sup>2</sup> 2001	March <sup>2</sup> 2002	June <sup>2</sup> 2002	September <sup>2</sup> 2002	December <sup>2</sup> 2002	December 2002 Male	December 2002 Female	Production Workers	Average Hourly Earnings	Average Weekly Hours Paid	Average Weekly Earnings
<b>PRIVATE SECTOR</b>											
<b>AGRICULTURE</b>											
<b>CONSTRUCTION</b>											
General building contractors	250	320	300	300	290	270	20	260	\$9.46	33.9	\$321.17
Heavy construction, ex. building	2,810	3,350	3,070	2,840	3,230	2,970	260	2,150	12.46	43.5	541.83
Special trade contractors	1,830	2,380	2,190	2,030	2,440	2,260	180	1,660	12.49	45.3	566.27
	240	210	380	330	330	300	30	220	10.72	40.3	432.59
	740	760	500	480	460	410	50	270	16.01	34.8	557.13
<b>MANUFACTURING</b>											
Food and kindred products	1,520	1,440	1,570	1,630	1,580	1,230	350	960	13.14	36.5	479.66
Printing and publishing	450	440	470	490	480	350	130	240	11.16	35.4	394.96
All other manufacturing	390	370	370	380	370	200	170	130	10.91	29.8	324.97
<b>TRANSPORTATION &amp; PUBLIC UTILITIES</b>											
	680	630	730	760	730	680	50	590	14.44	38.5	555.90
	4,670	4,610	4,750	4,810	4,480	2,510	1,970	3,840	14.27	34.2	487.62
<b>WHOLESALE TRADE</b>											
	1,890	1,970	1,890	1,860	1,850	1,240	610	1,410	11.53	40.8	470.79
<b>RETAIL TRADE</b>											
	11,230	10,890	11,010	10,910	10,920	5,020	5,900	9,340	9.13	28.6	261.67
<b>FINANCE, INSURANCE &amp; REAL ESTATE</b>											
	2,510	2,410	2,430	2,420	2,450	730	1,720	1,530	10.39	36.7	381.17
<b>SERVICES</b>											
Hotels and other lodging places	15,360	15,230	14,660	14,400	14,560	8,140	6,420	12,280	9.47	31.3	296.83
All other services	4,770	4,790	4,800	4,930	4,820	2,340	2,480	3,890	6.95	28.9	200.54
<b>TOTAL PRIVATE SECTOR</b>	40,240	40,220	39,680	39,170	39,360	22,110	17,250	31,770	11.92	34.2	407.21
<b>PUBLIC SECTOR</b>											
<b>FEDERAL GOVERNMENT</b>											
<b>GOVERNMENT OF GUAM</b>											
Executive branch	3,200	3,090	2,970	3,070	3,110	1,560	1,550				
AHRD Disaster Recovery (Typhoon Chata'an)	12,700	12,600	11,840	12,620	13,280	6,960	6,320		15.97 <sup>2</sup>	41.5	662.25
All others including autonomous	7,610	7,450	7,120	7,250	7,270						
<b>TOTAL PUBLIC SECTOR</b>	5,090	5,150	4,720	4,810	4,960	8,520	7,870		8.02 <sup>3</sup>	35.9	288.07
	15,900	15,690	14,810	15,690	16,390	30,630	25,120				
<b>TOTAL PAYROLL EMPLOYMENT</b>	56,140	55,910	54,490	54,860	55,750						

<sup>1</sup> Wages, Hours, and Earnings information is reported for production (non-supervisory) workers only. Earnings are "gross", they reflect not only changes in basic hourly wage rates, but also such factors as premium pay for overtime work and shift differentials. Average weekly hours information is different from standard or scheduled hours because of such factors as absenteeism, labor turnover, part-time, overtime work, and other practices. Due to the rounding of the Earnings and Hours Paid figures, their multiple may differ from the average weekly earnings rate shown.

<sup>2</sup> Government figures include all employees and are not directly comparable to private sector production worker estimates.

<sup>3</sup> The hours and earnings of these temporary AHRD workers are included in the Government of Guam figures above.

<sup>4</sup> Figures are preliminary      <sup>5</sup> Revised estimates      <sup>6</sup> Updated preliminary figures

**EMPLOYEES ON PAYROLL**

INDUSTRY	2000		2001				2002		
	Sept. R	Dec. R	Mar. R	Jun. R	Sept. R	Dec.	Mar.	Jun. R	Sept. P
AGRICULTURE	340	410	280	250	250	250	320	300	300
CONSTRUCTION	4,320	3,950	4,190	3,950	3,140	2,810	3,350	3,070	2,850
Building Construction	3,380	2,980	2,950	2,840	2,060	1,830	2,380	2,190	2,030
Construction other than Building Construction	190	220	290	250	240	240	210	380	330
Special Trade Contractors	750	750	950	860	840	740	760	500	490
MANUFACTURING	1,630	1,580	1,550	1,550	1,570	1,520	1,440	1,570	1,620
Food and Kindred Products	490	490	470	470	470	450	440	470	480
Printing and Publishing	390	390	400	420	410	390	370	370	380
All other Manufacturing	750	700	680	660	690	680	630	730	760
TRANSPORTATION AND PUBLIC UTILITIES	5,110	5,020	5,000	5,080	5,090	4,670	4,610	4,750	4,800
WHOLESALE TRADE	1,920	1,950	1,960	1,930	1,930	1,890	1,970	1,890	1,860
RETAIL TRADE	12,250	12,410	12,390	12,060	11,730	11,230	10,890	11,010	10,920
FINANCE, INSURANCE & REAL ESTATE	2,500	2,520	2,580	2,590	2,500	2,510	2,410	2,430	2,440
SERVICES	16,010	16,640	16,350	16,250	16,360	15,360	15,230	14,660	14,280
Hotels and other lodging places	5,770	5,870	5,800	5,700	5,670	4,770	4,790	4,800	4,910
All other services	10,240	10,770	10,550	10,550	10,690	10,590	10,440	9,860	9,370
ALL INDUSTRIES PRIVATE	44,080	44,480	44,300	43,660	42,570	40,240	40,220	39,680	39,070
PUBLIC SECTOR									
FED. GOV'T.	3,230	3,170	3,170	3,160	3,190	3,200	3,090	2,970	3,070
TERRITORIAL GOV'T.	12,530	12,560	12,730	11,940	12,540	12,700	12,600	11,840	12,620
TOTAL PAYROLL EMPLOYMENT	59,840	60,210	60,200	58,760	58,300	56,140	55,910	54,490	54,760

R = Revised. P = Preliminary.  
 Note: Data includes full-time & part-time employees who worked during or received pay for any part of the pay period which included the 12th day of the survey months. The CES Survey counts any person employed by 2 or more establishments at each place of employment. Proprietors, self-employed unpaid family workers, domestic servants and military personnel are excluded.  
 Source: Current Employment Statistics (CES) Bureau of Labor Statistics, Department of Labor, Government of Guam.

**HOURLY EARNINGS IN PRIVATE SECTORS  
 (Dollars)**

INDUSTRY	2000		2001				2002		
	Sept.	Dec.	Mar.	Jun.	Sept.	Dec.	Mar.	Jun.	Sept.
AGRICULTURE	8.41	8.42	8.53	8.27	8.43	8.76	8.61	9.29	10.79
CONSTRUCTION	11.89	11.75	11.92	11.79	11.90	11.38	11.13	11.01	12.17
Building Construction	12.13	11.96	11.94	12.19	12.38	11.84	11.33	10.59	12.39
Construction other than Building Construction	11.23	11.14	12.08	10.62	10.66	10.77	10.94	11.18	10.65
Special Trade Contractors	10.41	10.46	11.63	10.82	12.19	10.53	10.52	13.18	13.69
MANUFACTURING	14.50	13.97	13.16	12.77	12.18	11.61	11.72	11.96	12.13
Food and Kindred Products	10.08	10.65	11.02	11.07	10.69	9.41	9.60	10.10	9.75
Printing and Publishing	9.87	9.88	9.85	10.98	11.20	10.83	10.25	9.87	10.31
All other Manufacturing	17.54	17.43	15.03	14.07	13.14	13.02	13.31	13.31	13.84
TRANSPORTATION AND PUBLIC UTILITIES	14.91	14.87	15.18	14.65	14.66	13.90	13.66	13.50	13.22
WHOLESALE TRADE	13.98	13.68	15.06	11.78	11.87	12.02	11.58	11.29	11.64
RETAIL TRADE	8.10	8.23	8.43	8.64	8.42	8.86	8.41	8.82	8.81
FINANCE, INSURANCE & REAL ESTATE	11.14	10.64	10.70	10.64	10.19	10.20	10.46	10.41	10.40
SERVICES	8.66	8.61	8.87	8.59	8.74	10.30	9.66	9.22	9.01
Hotels and other lodging places	7.17	7.15	6.65	6.76	6.77	7.62	7.10	6.76	6.79
All other services	10.48	10.34	11.14	10.95	11.12	12.56	12.43	11.94	11.50
TOTAL PRIVATE SECTOR	10.30	10.18	10.38	10.21	10.24	10.81	10.43	10.27	10.16

Note: Wage, hour & earnings information is reported for production workers only. The earnings are "gross", that is, they reflect not only changes in basic hourly rates, but also such factors as premium pay for overtime work & shift differentials.  
 Source: Current Employment Statistics (CES), Bureau of Labor Statistics, Department of Labor, Government of Guam.

Source: Guam Economic Review: July - September 2002

## Price Indicator

CONSUMER PRICE INDEX (Base Period: 3rd Qtr. 1996 = 100)										
GROUP	1999				2000				2001	
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.
<b>ALL ITEMS</b>	101.63	102.03	103.32	104.03	105.51	105.78	104.38	104.13	104.77	104.45
Food & Beverages	107.98	110.37	112.32	112.22	113.65	112.43	111.54	112.40	115.68	117.55
Housing	93.35	93.00	95.50	96.47	98.65	98.33	95.54	90.87	90.39	90.09
Apparel and Upkeep	102.88	99.69	100.47	97.62	100.74	99.39	95.98	95.98	96.57	89.32
Transportation	103.51	104.59	107.30	106.72	107.47	113.25	111.98	116.36	115.08	114.07
Medical Care	115.88	115.92	115.92	128.29	128.51	128.48	128.54	143.05	143.07	143.01
Entertainment	99.46	99.39	99.39	92.51	91.05	91.08	87.58	87.59	87.69	87.70
Other Goods & Service	112.43	112.37	113.20	112.84	113.94	114.12	122.13	123.08	125.02	125.19
<b>SPECIAL GROUPS</b>										
ALL ITEMS less Food & Beverages	99.49	99.21	101.09	101.28	102.76	103.54	101.96	101.38	101.09	106.05
COMMODITIES less Food & Beverages	101.70	100.96	102.01	101.34	102.77	103.33	101.06	101.22	103.51	100.71
COMMODITIES	104.88	105.73	107.23	106.86	108.28	107.94	105.37	106.88	109.88	109.24
SERVICES	98.41	98.36	100.64	101.23	102.75	103.65	102.41	101.40	99.76	99.74
Purchase Power of Consumer Dollar (3rd Qtr. 1996 = 100.00)	0.98	0.98	0.96	0.96	0.95	0.95	0.96	0.96	0.95	0.95

**Notes:**

The inflation rate for 1998 was -1.10 percent.

The inflation rate for 1999 was 3.72 percent.

The inflation rate for 2000 was -0.31 percent.

SOURCE: Cost of Living Section, Economic Research Center, Department of Commerce, Government of Guam.

Source: Guam Comprehensive Economic Development Strategy - June 2001

**CONSUMER PRICE INDEX (Base Period: 3rd Qtr 1996 = 100)**

Group	CY 2000				CY 2001			
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
<b>ALL ITEMS</b>	105.51	105.78	104.38	104.13	104.76	104.45	102.64	102.57
Food and Beverage	113.65	112.43	111.54	112.40	115.66	117.55	119.61	124.08
Housing	98.65	98.33	95.54	90.86	90.39	90.05	86.13	86.11
Apparel and Upkeep	100.70	99.35	95.95	95.99	96.38	89.11	92.35	90.29
Transportation	107.47	113.25	111.96	116.35	115.08	114.07	106.83	101.06
Medical Care	128.51	128.48	128.64	143.05	143.07	143.01	143.00	145.10
Entertainment	91.05	91.08	87.58	87.59	87.59	87.70	87.60	82.38
Other Goods & Services	113.94	114.12	122.13	123.08	125.02	125.19	123.27	123.13
<b>SPECIAL GROUP</b>								
All Items Less Food and Beverages	102.76	103.54	101.96	101.34	101.08	100.02	96.91	95.31
Commodities Less Food and Beverages	102.75	103.31	101.04	101.22	103.44	100.58	99.19	93.86
Commodities	108.27	107.93	106.36	106.88	109.63	109.18	109.54	109.17
Services	102.76	103.65	102.41	101.40	99.76	99.74	95.83	96.01
Purchase Power of Consumer Dollar (3rd Qtr 1996 = \$1.00)	0.95	0.95	0.96	0.96	0.95	0.96	0.97	0.97

Note: The inflation rate for 1999 was 3.72 percent.

Source: Cost of Living Section, Economic Research Center, Department of Commerce, Government of Guam

**PERCENT DISTRIBUTION OF QUARTERLY PRICE COMPARISONS (Diffusion Index)**

ITEMS	Percent of Quotations							
	CY 2000 - 3rd Qtr to 4th Qtr				CY 2001 - 3rd Qtr to 4th Qtr			
	No Change	Increase	Decrease	Not Available	No Change	Increase	Decrease	Not Available
All Items	49.32	4.85	5.65	40.17	48.80	2.51	3.86	44.82
All Items Less Food and Beverages	51.01	6.74	8.76	33.48	44.20	2.46	6.47	46.88
Food and Beverages	48.69	4.14	4.48	42.69	50.55	2.54	2.87	44.04
Commodities Less Food and Beverages	46.93	5.07	8.80	39.20	37.14	1.86	6.63	54.38
Commodities	48.27	4.36	5.52	41.85	47.31	2.37	3.78	46.54
Services	72.46	15.94	8.70	2.90	81.69	5.63	5.63	7.04

Source: Cost of Living Section, Economic Research Center, Department of Commerce, Government of Guam

Source: Guam Comprehensive Economic Development Strategy - June 2001



**CONSUMER PRICE INDEX (Base Period: 3rd Qtr 1996 = 100)**

Group	CY 2001 R				CY 2002		
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.
<b>ALL ITEMS</b>	104.76	104.45	102.64	102.57	103.54	103.55	103.90
Food and Beverage	115.66	117.55	119.61	124.08	127.85	124.74	126.76
Housing	90.39	90.05	86.13	86.11	86.89	86.67	86.84
Apparel and Upkeep	96.38	89.11	92.35	90.29	87.15	86.51	83.36
Transportation	115.08	114.07	106.83	101.06	100.68	106.33	106.15
Medical Care	143.07	143.01	143.00	145.10	144.92	144.96	145.26
Entertainment	87.59	87.70	87.60	82.38	82.46	72.46	82.46
Other Goods & Services	125.02	125.19	123.27	123.13	123.54	125.94	126.24
<b>Special Group</b>							
All Items Less Food and Beverages	101.08	100.02	96.91	95.31	95.34	96.41	96.19
Commodities Less Food and Beverages	103.44	100.58	99.19	93.56	93.7	94.17	93.71
Commodities	109.63	109.18	109.54	109.17	111	109.66	110.46
Services	99.76	99.74	95.93	96.01	96.21	97.50	97.91
Purchase Power of Consumer Dollar (3rd Qtr. 1996 = \$1.00)	0.95	0.96	0.97	0.97	0.97	0.97	0.96

Note: The inflation rate for 1999 was 3.72 percent.

R = Revised

P = Preliminary

Note: The inflation rate for 2000 was -0.31 percent.

Note: The inflation rate for 2001 was -1.33 percent.

Source: Cost of Living Office, Economic Research Center, Department of Labor, Government of Guam

**PERCENT DISTRIBUTION OF QUARTERLY PRICE COMPARISONS (Diffusion Index)**

ITEMS	Percent of Quotations							
	1st Qtr. CY 2002 to 2nd Qtr. CY 2002				2nd Qtr. CY 2002 to 3rd Qtr. CY 2002			
	N.C.	INC.	DEC.	N/A	N.C.	INC.	DEC.	N/A
All Items	53.16	2.51	2.82	41.51	36.36	3.37	2.33	57.94
All Items Less Food and Beverages	53.35	3.13	2.01	41.52	43.08	5.13	3.13	48.66
Food and Beverages	53.09	2.28	3.13	41.50	33.81	2.70	2.03	61.45
Commodities Less Food and Beverages	48.01	2.39	2.13	47.48	38.20	5.04	3.71	53.05
Commodities	51.86	2.31	2.88	42.95	34.87	3.27	2.44	59.42
Services	81.69	7.04	1.41	9.86	85.71	3.17	1.59	9.52

Categorical Codes:

DEC. = Decrease

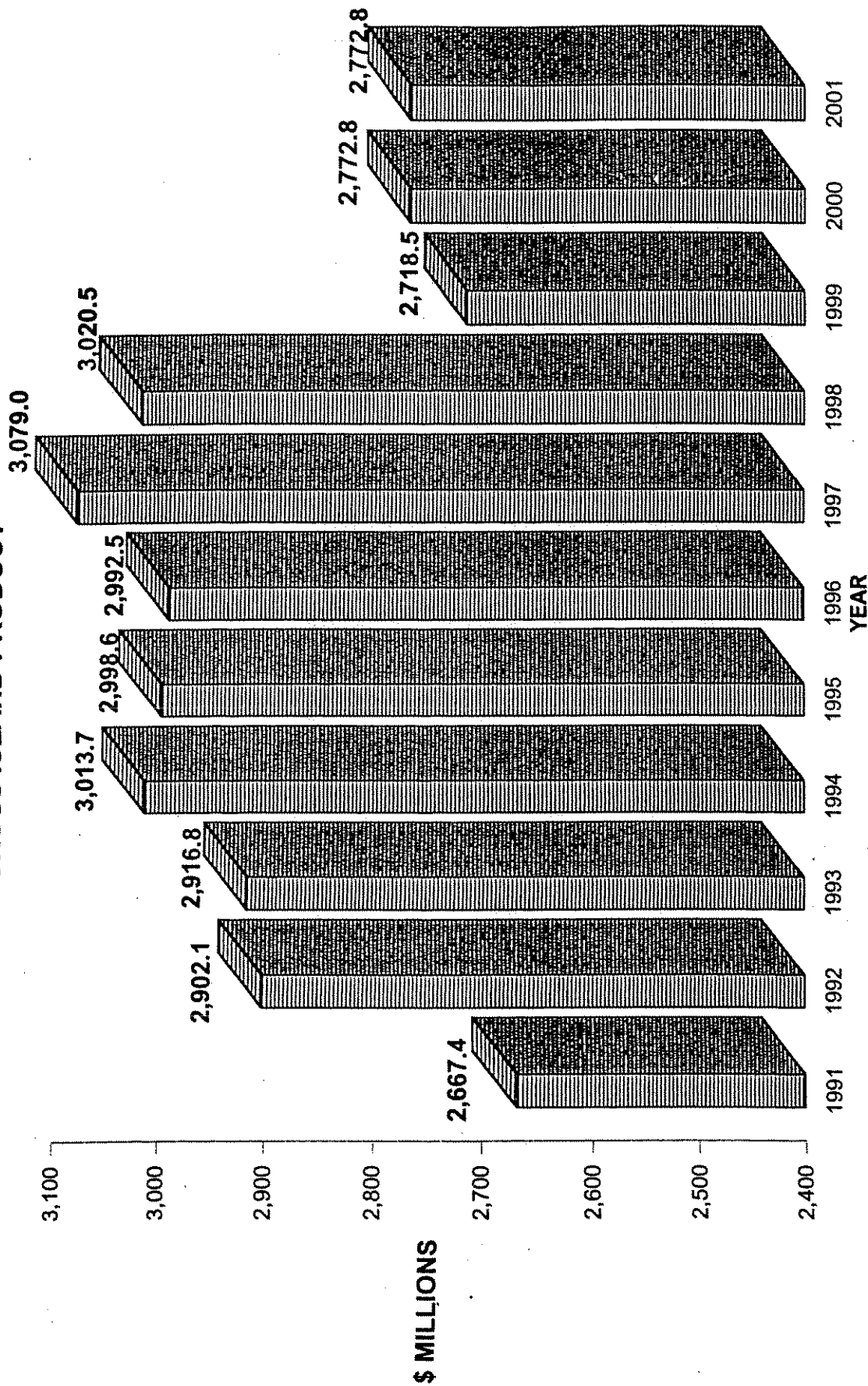
R = Revised.

N/A = Not Available

Source: Cost of Living Office, Economic Research Center, Department of Labor, Government of Guam

Source: Guam Economic Review: July - September 2002

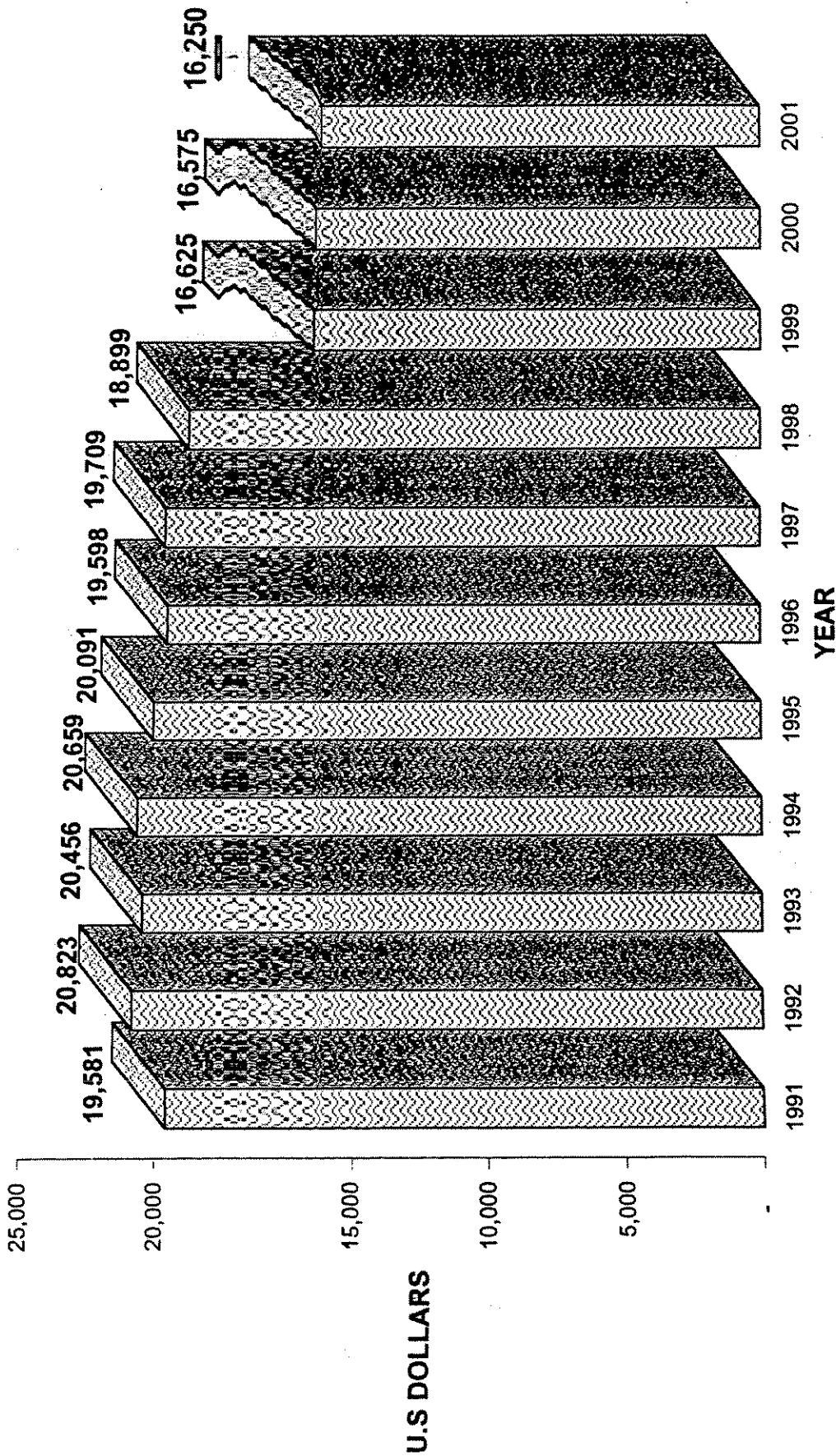
# GROSS ISLAND PRODUCT



SOURCES: GUAM ECONOMIC REPORT AUGUST 2001, BANK OF HAWAII; DEPARTMENT OF COMMERCE, DEPARTMENT OF LABOR, GOVERNMENT OF GUAM.

Source: Guam Economic Development & Commerce Authority

# GROSS ISLAND PRODUCT, PER CAPITA



SOURCES: GUAM ECONOMIC REPORT AUGUST 2001, BANK OF HAWAII; DEPARTMENT OF COMMERCE, DEPARTMENT OF LABOR, GOVERNMENT OF GUAM.

Source: Guam Economic Development & Commerce Authority

## Federal Government

### HISTORICAL SUMMARY OF FEDERAL EXPENDITURES

(Millions of Dollars)

Description	1993	1994	1995	1996	1997	1998	1999	2000	2001
Total Expenditures	952	1,048	816	827	836	998	834	840	908
Grants	161	154	162	134	125	266	188	138	176
Salaries and Wages	472	457	370	384	359	344	304	247	247
Direct Payments	137	139	139	177	192	66	52	72	75
Procurement	165	276	125	112	121	167	134	222	219
Other	17	22	20	20	39	155	156	161	191

Note: Sums of details may not add due to rounding.

Source: Consolidated Federal Funds Report for Fiscal Years 1993 - 2000, U.S. Department of Commerce, Bureau of the Census  
Produced by the Economic Research Center, Department of Commerce, Government of Guam

### FEDERAL EXPENDITURES

Expenditures (Millions)	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001
Total	835.0	997.0	834.0	839.0	907.0
Department of Defense	480.0	507.0	429.0	451.0	461.0
All Other Federal Agencies	355.0	490.0	405.0	388.0	446.0

Source: Consolidated Federal Funds Report - FY 1997-2001

### MILITARY EXPENDITURES

(Millions)

Expenditures	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001
Total Spending	451.2	479.0	403.1	431.2	N/A
Military Pay	196.2	167.1	127.6	134.0	216.1
Civilian Pay	142.1	151.7	150.1	95.9	49.8
Military Construction	113.9	160.2	125.5	211.3	N/A
Total Withholding Taxes	36.1	38.8	48.6	51.2	N/A

Note: Data not available from Revenue and Taxation.

Sources: Commander Naval Forces Marianas; U.S. Department of Commerce, Economics and Statistical Administration, Bureau of the Census; Department of Revenue and Taxation Government of Guam.

### MILITARY POPULATION

Description	1993	1994	1995	1996	1997	1998	1999	2000	2001
Grand Total	22,077	15,523	15,760	13,792	13,002	12,739	12,159	11,625	N/A
Active Duty Personnel	10,639	7,884	7,834	6,948	6,265	6,379	6,155	5,807	5,974
Navy	7,836	5,487	5,415	4,408	4,029	3,946	3,902	3,741	3,626
Air Force	2,550	2,163	2,163	2,346	1,926	2,119	1,964	1,752	1,981
Army	56	65	56	26	186	178	158	172	183
Marines	55	51	55	40	0	2	1	6	4
Coast Guard	142	118	145	128	124	134	130	136	180
Dependents	11,438	7,639	7,926	6,844	6,737	6,360	6,004	5,818	N/A
Navy	7,001	4,475	4,782	4,317	4,497	3,382	3,179	3,403	N/A
Air Force	4,131	2,828	2,828	2,351	1,926	2,396	2,275	1,973	N/A
Army	169	176	171	40	186	454	448	335	N/A
Marines	20	45	23	49	4	0	0	0	N/A
Coast Guard	117	115	122	87	124	128	102	107	N/A

N/A = Not available

Source: Commander Naval Forces, Marianas

Source: 2000 -2001 Guam Annual Economic Review

## Agriculture

### PRODUCTION OF PRIMARY CROPS (Pounds)

Crop	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999
<b>Total</b>	<b>9,568,957</b>	<b>13,187,579</b>	<b>2,256,915</b>	<b>2,296,116</b>	<b>1,607,074</b>	<b>1,117,737</b>	<b>2,814,125</b>
Watermelon	6,699,347	9,384,337	555,580	483,072	295,900	264,900	1,198,896
Cucumber	611,089	2,010,741	694,557	452,052	389,755	332,252	670,602
Head Cabbage	436	38,768	6,359	- 0	0	1,536	0
Sweet Potato	58,806	93,560	15,315	8,016	56,230	1,680	17,605
Eggplant	262,667	426,162	158,602	409,032	289,933	111,020	172,841
Cantaloupes and Melons	747,326	592,116	168,800	81,912	14,914	78,300	110,359
Chinese Cabbage	2,033	19,493	74,809	204	430	2,665	0
Bananas	724,500	N/A	285,054	469,416	250,304	48,593	97,243
Tomatoes	218,545	196,712	86,299	97,812	112,893	53,288	127,263
Long Beans	244,208	425,690	211,540	294,600	196,715	223,503	419,316

Note: FY 2000 and FY 2001 data not available.

Source: 2000 -2001 Guam Annual Economic Review

**PRODUCTION OF FRUITS AND VEGETABLES**

Commodity	FY 1999		
	Acres	Estimated Yield (Lbs)	Dollar Value
Bananas	68.34	97,243	121,554
Beans, KW	0.00	0	0
Beans, Long	42.25	419,316	628,974
Beans, Wing	1.36	2,967	2,967
Bittermelon	22.89	212,511	318,767
Cabbage, Head	0.00	0	0
Cantaloupe	2.48	31,744	26,983
Corn, Sweet	3.27	30,015	24,012
Cucumber	46.08	670,602	670,602
Eggplant	46.50	172,841	172,841
Ginger	1.30	5,200	7,800
Okra	3.34	13,981	17,476
Onion, Green	2.67	10,247	20,494
Papaya	11.50	127,995	191,993
Pechay	6.00	60,654	90,981
Pepino	6.89	78,615	39,308
Pepper, Bell	0.88	2,567	1,669
Pepper, Long, Hot	3.56	12,129	36,387
Pepper, Small, Hot	3.48	20,824	62,472
Pineapple	1.28	986	986
Potato, Sweet	7.23	17,605	17,605
Radish	0.86	8,600	8,600
Squash, Calabasa	8.30	52,713	31,628
Squash, Patola	2.00	20,880	12,528
Squash, Pumpkin	1.45	5,893	4,420
Tapioca	2.17	8,584	7,726
Taro	6.22	9,983	12,479
Tomato, Cherry	12.34	84,665	126,998
Tomato, Regular	14.75	42,598	61,767
Watermelon	84.08	1,198,896	599,448
Yam	1.34	3,574	3,574
Zucchini	0.00	0	0
<b>Total</b>	<b>415</b>	<b>3,424,428</b>	<b>\$3,323,039</b>

Note: Updates for 2001 and 2002 not provided by source.  
 Source: Department of Agriculture, Government of Guam.

Source: 2000 -2001 Guam Annual Economic Review

**PRODUCTION OF FRUITS AND VEGETABLES**

**FY 2000**

Commodity	Acre	Estimated Yield in Lbs.	Dollar Value
<b>Total</b>	<b>219.9</b>	<b>1,441,106</b>	<b>1,033,541</b>
Banana	34.0	48,593	24,297
Beans, Long	22.5	233,503	233,503
Beans, Wing	2.5	6,520	8,150
Bittermelon	5.0	44,565	44,565
Cantaloupe	8.9	26,229	17,835
Corn, Sweet	4.0	17,468	17,468
Cucumber	22.8	332,252	166,126
Eggplant	29.7	111,020	44,408
Ginger	0.0	0	0
Okra	4.4	18,250	18,250
Onion, Green	1.3	5,105	10,210
Papaya	4.8	53,670	32,202
Pechay	3.5	25,390	25,390
Pepino	6.6	21,610	14,406
Pepper, Bell	0.4	1,225	857
Pepper, Hot, Small	4.2	25,193	62,983
Pepper, Hot, Long	3.8	13,013	26,026
Pineapple	15.0	32,638	65,276
Potato, Sweet	0.7	1,680	1,680
Radish	0.5	4,600	2,760
Squash, Calabasa	8.7	54,593	21,974
Squash, Patola	2.5	25,995	10,398
Squash, Pumpkin	1.5	13,201	6,601
Tapioca	0.0	0	0
Taro	2.8	3,315	4,069
Tomato, Cherry	7.5	51,458	64,321
Tomato, Regular	0.8	1,830	1,464
Watermelon	20.0	264,900	105,960
Yam	1.5	3,290	2,362

Source: Department of Agriculture, Government of Guam

Source: Guam Economic Review: July - September 2002

## Fisheries

### TUNA TRANSSHIPMENT INDUSTRY

(Fiscal Year)

Description	1997	1998	1999	2000	2001
Tuna Transshipped 1/	6,231	12,742	9,922	11,184	9,349
Total Number of Fishing Vessels	2,189 R	1,945 R	1,780 R	1,906	1,989
Number of Fish Carriers	16	151 R	149 R	1	3
Calls by Flag 2/					
U.S.	26	6	22	6	4
Japanese	953	952	1,000	1,033	1,072
Other	1,210	987 R	758 R	758	917

R = Revised

1/ Metric Tons

2/ Purseiners and Longliners

Sources: Port Authority of Guam; Department of Commerce, Government of Guam.

### ANNUAL OFFSHORE AND INSHORE CREEL SURVEY

(Metric Tons)

Description	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001
<b>Offshore Fisheries</b>						
Trolling	363.6	357.4	377.7	329.7	64.6	336
Bottomfishing	66.6	52.1	40.3	63.2	13.4	61
Nighttime Jigging	9.8	5.4	31.3	21.6	15.5	20
Spearfishing	59.3	44.2	55.5	61.4	0.3	68
Hand/Gill Net Fishing	2.4	31.2	24.4	74.0	4.5	12
Subtotal	501.7	490.3	529.2	549.9	98.3	497.0
<b>Inshore Fisheries</b>	30.0	45.6	49.5	70.6	38.1	59.5
<b>Total</b>	<b>531.7</b>	<b>535.9</b>	<b>578.7</b>	<b>620.5</b>	<b>136.4</b>	<b>556.5</b>

Note: Inshore Fisheries figures for FY 1996, FY 1997, and FY 1998 were revised

Source: Division of Aquatic and Wildlife Resources, Department of Agriculture, Government of Guam

Source: 2000 -2001 Guam Annual Economic Review

## Construction

### CONSTRUCTION PERMITS (Thousands of Dollars)

Type of Construction		FY 1992		FY 1993		FY 1994		FY 1995		FY 1996	
		Number	\$ Value	Number	\$ Value	Number	\$ Value	Number	\$ Value	Number	\$ Value
Residential	N	608	56,652	1,048	95,699	739	97,554	575	79,049	575	84,611
	A	538	19,010	1,089	40,530	460	19,591	481	20,973	245	9,085
Apartments & Dormitories	N	42	35,046	51	43,853	41	33,656	12	2,937	10	10,472
	A	24	3,631	19	2,903	19	12,596	14	1,153	15	959
Hotel	N	4	40,770	3	40,600	2	5,000	0	0	2	4,195
	A	28	88,107	33	7,701	28	6,365	12	2,982	11	1,263
Condominions	N	3	5,456	1	744	0	0	0	0	0	0
	A	3	737	5	798	9	3,144	0	0	1	100
Commercial	N	86	66,020	217	64,708	60	68,610	68	81,105	29	25,166
	A	172	15,032	242	26,305	212	18,624	252	36,097	254	32,428
Industrial	N	0	0	0	0	1	15	1	1,000	0	0
	A	0	0	0	0	0	0	5	522	0	0
Religious & Non-Profit	N	3	536	9	4,097	2	558	7	4,128	2	2,680
	A	9	515	19	1,699	9	4,182	5	187	4	600
Gov. of Guam	N	105	72,082	64	51,279	167	307,158	57	60,751	81	81,565
	A	12	12,595	58	37,520	0	0	21	62,645	0	0
Miscellaneous	N	537	38,220	350	5,320	492	30,246	311	17,340	628	81,379
<b>TOTAL</b>		<b>2,174</b>	<b>454,409</b>	<b>3,208</b>	<b>423,756</b>	<b>2,241</b>	<b>607,299</b>	<b>1,821</b>	<b>370,869</b>	<b>1,857</b>	<b>334,503</b>

### TABLE (Continued) CONSTRUCTION PERMITS (Thousands of Dollars)

Type of Construction		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001	
		Number	\$ Value	Number	\$ Value	Number	\$ Value	Number	\$ Value	Number	\$ Value
Residential	N	540	57,550	780	80,974	592	59,806	402	38,475	237	20,942
	A	240	10,402	781	34,330	290	12,853	121	4,419	100	3,576
Apartments & Dormitories	N	7	12,448	3	1,878	0	0	4	2,350	1	212
	A	5	319	3	531	8	3,572	1	66	4	225
Hotel	N	4	53,435	1	1,800	0	0	0	0	0	0
	A	14	5,359	18	54,079	5	8,944	7	6,243	2	5,965
Condominions	N	0	0	0	0	0	0	2	9,666	0	0
	A	0	0	2	600	0	0	0	0	15	2,679
Commercial	N	22	14,935	25	26,607	14	6,209	14	8,447	10	23,573
	A	217	54,785	205	22,102	172	15,592	91	14,616	96	9,923
Industrial	N	0	0	1	7,000	1	258	0	0	0	0
	A	0	0	0	0	0	0	0	0	0	0
Religious & Non-Profit	N	1	700	1	2,624	0	0	0	0	6	3,431
	A	2	776	8	2,404	4	799	3	421	0	0
Gov. of Guam	N	76	41,282	92	91,966	92	37,577	79	33,787	53	14,772
	A	0	0	0	0	0	0	0	0	0	0
Miscellaneous	N	487	28,130	634	26,468	715	28,782	554	33,753	506	31,745
<b>TOTAL</b>		<b>1,615</b>	<b>280,121</b>	<b>2,554</b>	<b>353,363</b>	<b>1,893</b>	<b>174,392</b>	<b>1,278</b>	<b>152,243</b>	<b>1,030</b>	<b>117,043</b>

N = New

A = Addition

Source: Department of Public Works, Government of Guam.

Source: 2000 -2001 Guam Annual Economic Review



**TABLE 22**  
**BUILDING AND CONSTRUCTION PERMITS (Thousands of Dollars)**

Type of Construction	YTD 2001		2nd Qtr. 2001		3rd Qtr. 2001		2nd Qtr. 2002		3rd Qtr. 2002		YTD 2002		
	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	
Residential	N	237	\$20,942	74	\$6,539	74	\$6,539	50	\$4,574	56	\$5,408	106	\$9,982
	A	100	3,576	26	993	26	993	36	1,638	37	1,241	73	2,879
Apartments and Dormitories	N	1	212	0	0	0	0	1	250	0	0	1	250
	A	4	225	0	0	0	0	1	182	3	356	4	538
Hotel	N	0	0	0	0	0	0	0	0	0	0	0	0
	A	2	5,965	1	2,565	1	2,565	2	300	2	9,424	4	9,724
Condominiums	N	0	0	0	0	0	0	0	0	0	0	0	0
	A	15	2,679	0	0	0	0	0	0	0	0	0	0
Commercial	N	10	23,573	4	1,824	4	1,824	2	640	3	862	5	1,502
	A	96	9,923	31	3,472	31	3,472	18	1,225	9	1,096	27	2,321
Industrial	N	0	0	0	0	0	0	0	0	0	0	0	0
	A	0	0	0	0	0	0	0	0	0	0	0	0
Religious and Non-Profit	N	6	3,431	2	985	2	985	0	0	1	189	1	189
	A	0	0	0	0	0	0	1	255	2	41	3	296
Government of Guam	N	53	14,772	15	4,077	15	4,077	11	5,219	10	18,342	21	23,561
	A	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous	N	506	31,745	139	7,899	139	7,899	105	2,776	78	2,624	183	5,400
<b>Total</b>		<b>1,030</b>	<b>\$117,043</b>	<b>292</b>	<b>\$28,354</b>	<b>292</b>	<b>\$28,354</b>	<b>227</b>	<b>\$17,059</b>	<b>201</b>	<b>\$39,583</b>	<b>428</b>	<b>\$56,642</b>

N = New      A = Addition      R = Revised  
 Source: Department of Public Works, Government of Guam

**COMPLETED BUILDINGS (Occupancies)**

Type of Construction	1st Qtr. 2001	2nd Qtr. 2001	3rd Qtr. 2001	1st Qtr. 2002 R	2nd Qtr. 2002	3rd Qtr. 2002
Residential	78	78	79	57	63	50
Apartment and Dormitories	0	2	2	0	1	0
Hotel	0	0	0	0	0	2
Condominium	0	1	0	4	4	3
Commercial	22	29	17	14	23	9
Industrial	0	0	0	0	0	0
Religious and Non-Profit	1	4	3	1	1	1
Government of Guam	7	3	4	2	13	40
Miscellaneous	3	3	3	5	3	2
<b>Total</b>	<b>111</b>	<b>120</b>	<b>108</b>	<b>83</b>	<b>108</b>	<b>107</b>

Source: Department of Public Works, Government of Guam

R = Revised

Source: Guam Economic Review: July - September 2002

Tourism

**Annual Visitor Arrivals • 1999-2002**

	1999	2000	2001	2002	% over 2001	% of Total Air
Japan	957,740	1,048,813	901,539	786,947	-12.7%	76.3%
Korea	47,299	87,070	89,882	128,307	42.8%	12.4%
Taiwan	41,456	39,451	31,540	19,500	-38.2%	1.9%
U.S. Mainland	32,456	33,334	32,969	33,073	0.3%	3.2%
Hawaii	8,723	8,330	8,908	8,448	-5.2%	0.8%
CNMI	23,195	22,889	22,546	19,080	-15.4%	1.9%
Palau	3,709	3,846	3,392	3,190	-6.0%	0.3%
FSM	11,779	10,435	9,757	7,715	-20.9%	0.7%
RMI	1,039	862	870	673	-22.6%	0.1%
Philippines	6,233	6,000	5,697	6,530	14.6%	0.6%
Australia	1,897	1,638	1,724	1,788	3.7%	0.2%
Canada	619	620	671	1,454	116.7%	0.1%
Europe	1,628	1,618	1,312	1,436	9.5%	0.1%
Hong Kong	8,943	9,050	9,174	8,444	-8.0%	0.8%
Nauru	530	336	89	10	-88.8%	.
Thailand	155	184	272	229	15.8%	.
China P.R.C.	1,100	787	868	1,236	42.4%	0.1%
Vietnam	35	52	26	51	96.2%	.
Other/Unknown <sup>a</sup>	7,027	3,928	3,202	3,050	-4.7%	0.3%
<b>TOTAL AIR</b>	<b>1,155,563</b>	<b>1,279,243</b>	<b>1,124,438<sup>r</sup></b>	<b>1,031,161</b>	<b>-8.3%</b>	<b>100.0%</b>
<b>TOTAL SEA</b>	<b>6,286</b>	<b>7,564</b>	<b>34,633<sup>r</sup></b>	<b>27,543</b>	<b>-20.5%</b>	<b>.</b>
<b>TOTAL AIR &amp; SEA</b>	<b>1,161,849</b>	<b>1,286,807</b>	<b>1,159,071<sup>r</sup></b>	<b>1,058,704</b>	<b>-8.7%</b>	<b>100.0%</b>

<sup>a</sup>Figures reflect arrivals not available by region or city

<sup>r</sup>Revised

Source: Customs Declaration Forms, Customs & Quarantine Agency

Note: Detailed breakdown of military air & sea arrivals available upon request.

Source: Guam Visitors Bureau

## MONTHLY AIR & SEA - 1997~2003

<b>AIR &amp; SEA ARRIVALS • 1997 ~2003</b>							
	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
January	121,335	93,779	86,023 <sup>b</sup>	95,538	121,463 <sup>r</sup>	84,361	57,757
February	117,603	103,243	83,741 <sup>b</sup>	112,770	115,157	91,749	
March	123,822	115,765	102,726 <sup>b</sup>	118,271	120,253 <sup>r</sup>	100,077	
April	105,586	89,111	86,363 <sup>b</sup>	96,590	104,726	75,597	
May	120,046	99,450 <sup>†</sup>	95,140	100,771	95,990 <sup>r</sup>	94,004	
June	113,316	87,343	91,734	99,614 <sup>r</sup>	103,429 <sup>r</sup>	88,233	
July	130,929	99,689	105,750	116,040	115,145	88,188 <sup>r</sup>	
August	129,270	114,420	114,569	127,555	132,249	111,182	
September	113,928	95,790	103,408	109,627	73,224	103,211	
October	101,499	72,107	93,764	93,377	47,213	88,712	
November	109,368	79,419	97,656 <sup>r</sup>	105,352 <sup>r</sup>	56,659 <sup>r</sup>	95,441	
December	<u>94,811</u>	<u>86,910</u>	<u>100,975</u>	<u>111,302</u>	<u>73,563<sup>r</sup></u>	<u>37,366</u>	
<b>TOTAL</b>	<b>1,381,513</b>	<b>1,137,026</b>	<b>1,161,849</b>	<b>1,286,807</b>	<b>1,159,071<sup>r</sup></b>	<b>1,058,121</b>	<b>57,757</b>
Peak Month:	July	March	August	August	August	August	
Peak Figure:	130,929	115,765	114,569	127,555	132,249	111,182	
Low Month:	December	October	February	October	October	December	
Low Figure:	94,811	72,107	83,741	93,377	47,213	37,366	
<b>FY Total</b>	<b>1,411,447</b>	<b>1,204,268</b>	<b>1,107,890</b>	<b>1,269,171</b>	<b>1,291,667<sup>r</sup></b>	<b>1,014,037</b>	

### AIR & SEA ARRIVALS • 2002 & 2003

	<u>AIR ARRIVALS</u>			<u>SEA ARRIVALS</u>		
	<u>2002</u>	<u>2003</u>	<u>% Change</u>	<u>2002</u>	<u>2003</u>	<u>% Change</u>
January	83,066	56,798	-32%	1,295	959	-26%
February	91,382			367		
March	98,287			1,790		
April	73,423			2,174		
May	83,897			10,107		
June	87,571			662		
July	87,833			355		
August	108,295			2,887		
September	102,687			524		
October	86,956			1,756		
November	91,994			3,447		
December	<u>35,770</u>			<u>469</u>		
<b>TOTAL</b>	<b>1,031,161</b>	<b>56,798</b>		<b>34,633</b>	<b>959</b>	

Note: Military air & sea arrivals are compiled in the air & sea breakdown. Detailed breakdown is available upon request. The 12 year summary of visitor arrivals are published in the quarterly reports.

<sup>r</sup>Revised

<sup>†</sup>Preliminary

<sup>\*</sup>Audited

<sup>\*</sup>Preliminary Sea Arrivals provided by the Japan Guam Travel Association

Source: Customs Declaration Forms, Customs & Quarantine Agency

Source: Guam Visitors Bureau

## HOTEL OCCUPANCY TAX COLLECTION • 1998~2003 (Calendar Year/Fiscal Year)

	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
January	\$1,809,030.41	\$1,533,178.41	\$1,717,421.53	\$1,784,482.97	\$1,141,547.32	\$948,181.99
February	\$2,163,092.99	\$1,776,501.68	\$1,742,345.37	\$2,054,122.68	\$1,405,926.79	
March	\$2,139,688.79	\$1,507,663.51	\$1,750,879.43	\$1,727,824.45	\$1,324,016.89	
April	\$2,206,968.75	\$1,683,457.39	\$1,656,206.38	\$1,872,388.78	\$1,154,310.88	
May	\$1,675,672.07	\$1,449,706.94	\$2,008,360.73	\$1,491,884.10	\$1,275,806.43	
June	\$1,788,310.56	\$1,510,623.25*	\$1,457,059.49	\$1,536,088.44	\$1,285,198.25	
July	\$1,593,440.34	\$1,361,917.45	\$1,264,003.86	\$1,400,637.30	\$1,166,292.06	
August	\$1,744,511.62	\$1,735,308.63	\$2,023,422.28	\$1,648,965.67	\$1,627,151.60	
September	\$2,705,836.88	\$2,227,102.03	\$2,430,564.00	\$2,770,404.60	\$2,062,670.83	
October	\$1,687,707.82	\$1,537,282.50	\$1,680,427.08	\$1,114,731.85	\$1,439,187.58	
November	\$1,289,713.22*	\$1,346,170.84	\$1,321,790.81	\$704,196.50	\$1,226,944.73	
December	<u>\$1,317,507.60</u>	<u>\$1,277,060.10</u>	<u>\$1,523,905.78</u>	<u>\$744,432.87</u>	<u>\$1,069,654.24</u>	
<b>TOTAL</b>	<b>\$22,121,481.05</b>	<b>\$18,945,972.73</b>	<b>\$20,576,386.74</b>	<b>\$18,850,160.21</b>	<b>\$16,178,707.60</b>	
<b>High Month:</b>	September \$2,705,836.88	September \$2,227,102.03	September \$2,430,564.00	September \$2,770,404.60	September \$2,062,670.83	
<b>Low Month:</b>	November \$1,289,713.22	December \$1,277,060.10	July \$1,264,003.86	November \$704,196.50	December \$1,069,654.24	
<b>Fiscal Year</b>	<b>FY 98</b>	<b>FY 99</b>	<b>FY 00</b>	<b>FY 01</b>	<b>FY 02</b>	<b>FY 03</b>
<b>Collection</b>	\$23,608,115.34	\$19,080,387.93	\$20,210,776.51	\$20,812,922.66	\$15,006,282.27	\$4,683,968.54

\*Revised

P Preliminary

Note: Figures reflect taxes collected for the previous month's occupancy.

Source: BR-20 Form, Department of Revenue & Taxation and the Department of Administration, Government of Guam

Source: Guam Visitors Bureau

## Seaport and Airport Cargo Movements

### TOTAL CARGO MOVEMENTS

Fiscal Year	Surface (Thousand Revenue Tons)				Air (Metric Tons)		
	Total	Unloaded (Import)	Loaded (Export)	Trans- Shipped	Total	Unloaded (Import)	Loaded (Export)
1990	1,532.9	1,079.1	176.5	277.3	84,609	29,000	55,609
1991	2,033.3	1,524.1	195.1	314.1	65,382	25,876	39,506
1992	1,062.6	543.6	204.9	314.1	52,860	29,428	23,432
1993	1,113.9	736.1	133.3	244.5	34,742	N/A	N/A
1994	1,896.3	1,182.9	212.8	500.6	40,960	N/A	N/A
1995	1,931.4	1,215.9	267.8	447.7	42,403 R	N/A	N/A
1996	1,805.8	1,035.3	258.9	511.6	413,866	N/A	N/A
1997	1,717.1	1,047.5	205.8	463.8	35,925	N/A	N/A
1998	2,052.6	1,133.5	225.5	693.6	36,691	N/A	N/A
1999 R	1,951.4	1,149.6	214.6	587.2	38,851	N/A	N/A
2000	1,970.1	1,172.2	233.1	564.8	34,752	16,186 <sup>1/</sup>	18,566
2001	1724.3	1050.3	251.3	535.2	N/A	N/A	N/A

N/A = Not Available; Guam Airport Authority did not provide breakdowns.

<sup>1/</sup> Revised.

<sup>2/</sup> Transshipped cargo is cargo that has been brought in by one vessel then transferred to another vessel and sent to another port. It should not be confused with loaded or unloaded cargo.

Sources: Surface-Port Authority of Guam; Air-Guam Airport Authority

### GUAM AIRPORT AUTHORITY PASSENGER, CARGO AND AIRCRAFT MOVEMENT STATISTICS

Fiscal Year	Passengers			Cargo (Metric Tons)		Mail (Metric Tons)		Aircraft Movements (per 1000 lbs.)	
	Arrivals	Departures	Transit	Unloaded	Loaded	Incoming	Outgoing	Number	GTOW <sup>1/</sup>
1991	1,043,828	1,041,719	215,048	12,938	19,753	2,998	2,048	23,523	3,052,997
1992	1,225,003	1,232,931	289,851	29,428	23,432	5,260	2,557	30,194	3,317,710
1993	1,178,242	1,187,056	316,145	2/	2/	N/A	N/A	33,522	3,533,400
1994	1,072,694	1,076,817	257,658	2/	2/	N/A	N/A	33,182	3,488,258
1995	1,426,187	1,431,091	222,236	2/	2/	N/A	N/A	35,775	4,432,803
1996	1,561,023	1,573,157	262,767	2/	2/	N/A	N/A	36,034	4,608,256
1997	1,646,126	1,662,274	292,537	2/	2/	N/A	N/A	37,786	4,822,237
1998	1,374,927	1,378,420	336,049	2/	2/	N/A	N/A	32,295	3,978,105
1999	1,265,383	1,269,902	308,062	2/	2/	N/A	N/A	31,430	2,983,682
2000	1,724,432	1,749,754	302,159	16,186	18,566	4,432	1,109	34,872	5,203,629

<sup>1/</sup> Gross Take-Off Weight.

<sup>2/</sup> Data provided for Fiscal Years 1993 - 1999 were Loaded+Unloaded. FY 1993 = 34,742; FY 1994 = 40,960; FY 1995 = 42,102; FY 1996 = 41,386; FY 1997 = 35,925; FY 1998 = 36,691; FY 1999 = 38,851.

Note: Data for 2001 not available

Source: Guam Airport Authority, Government of Guam

N/A = Not Available.

Source: 2000 -2001 Guam Annual Economic Review

## Retail and Wholesale Sector

### GROSS BUSINESS RECEIPTS OF WHOLESALE AND RETAIL (Thousands of Dollars)

Period	Wholesale	Retail
1987	13,087	756,624
1988	38,460	894,973
1989	73,691	963,214
1990	73,468	1,127,346
1991	139,565	1,167,089
1992	97,818	1,306,543
1993	68,468	1,334,128
1994	69,902	1,393,071
1995	83,850	1,645,122
1996	79,530	1,788,947
1997	100,462	1,601,406
1998	788	16,382
1999	155	6,101
2000	54	5,808
2001	173	6,534

Note: Based on Public Law 24-12, retail figures beginning in FY 1998 show a gradual decline. This is due to the Dave Santos Small Enhancement Act, which gave qualified retailers a \$50,000 exemption.

Source: Department of Revenue and Taxation, Government of Guam

Source: 2000 -2001 Guam Annual Economic Review

## Supertyphoon Pongsona Business Sector Disaster Damage Assessment

Main Economic Activity	Number of Establishments	Number Reporting Damage	Number Sustaining Damage	Type of Damage			Total Damage Cost
				Building Damage Cost	Equipment Damage Cost	Merchandise Damage Cost	
1 Agriculture, Forestry and Fishing	5	1	4	\$10,030	\$48,300	\$4,700	\$63,030
2 Construction	48	10	38	4,139,266	1,741,500	1,621,200	7,501,966
3 Manufacturing	14	1	13	823,350	128,000	392,200	1,343,550
4 Transportation and Public Utilities	19	0	19	834,000	803,500	573,000	2,210,500
5 Wholesale Trade	74	18	56	12,444,000	3,676,800	8,028,100	24,148,900
6 Retail Trade	1,002	244	758	149,645,960	14,038,875	29,202,865	192,887,700
7 Finance, Insurance and Real Estate	94	15	79	6,217,600	2,566,490	433,500	9,217,590
8 Services	785	203	582	17,359,900	13,590,581	6,712,958	37,663,439
9 Recreation	71	20	51	5,089,800	2,710,600	300,200	8,100,600
10 Hotel	32	5	27	14,278,400	3,083,300	572,000	17,933,700
11 Export	0	0	0	0	0	0	0
12 Not stated	1	0	1	25,000	0	0	25,000
<b>Island-wide Total</b>	<b>2,145</b>	<b>517</b>	<b>1,628</b>	<b>\$210,867,306</b>	<b>\$42,387,946</b>	<b>\$47,840,723</b>	<b>\$301,095,975</b>

\* Modified from Annual Census of Establishments, Guam Department of Labor

Supertyphoon Pongsona

Business Sector Disaster Damage Assessment

Business District	Number of Businesses	Sustaining Damages			No Damage Reported		
		Businesses Damaged	Percent Damaged	Businesses Intact	Percent Intact	Businesses Reported	Percent Reported
Tamuning Business District	523	395	75.5%	128	24.5%	6.0%	
Harmon Industrial Park/Upper Tumon	434	328	75.6%	106	24.4%	4.9%	
Dededo Business District	166	125	75.3%	41	24.7%	1.9%	
Northern Guam	86	58	67.4%	28	32.6%	1.3%	
Micronesia Mall	105	80	76.2%	25	23.8%	1.2%	
Central and Eastern Guam	172	143	83.1%	29	16.9%	1.4%	
Southern Guam	90	71	78.9%	19	21.1%	0.9%	
Tumon	229	119	52.0%	110	48.0%	5.1%	
Hagatna/Route 8 Business Corridor	340	309	90.9%	31	9.1%	1.4%	
<b>Island-wide Total</b>	<b>2,145</b>	<b>1,628</b>	<b>75.9%</b>	<b>517</b>	<b>24.1%</b>		

109 Business District General Descriptions

- Tamuning Business District: Tamuning (including Airport businesses), excluding Tumon, Harmon Industrial Park, and Upper Tumon
- Harmon Industrial Park and Upper Tumon: Route 1, Route 16 and Route 1 triangle, including Ypao Road to Route 16 (north side of Route 1)
- Dededo Business District: Dededo along Route 1 and Harmon Loop Road (including Route 1, Yigo)
- Northern Guam: Dededo and Yigo not included in Dededo Business District (excluding Route 15, Yigo)
- Micronesia Mall: All Mall Businesses
- Central and Eastern Guam: Barrigada and Mongmong-Toto-Maite, excluding Route 8 businesses; Mangilao; Chalan Pago-Ordot; Sinajana; Yona; Agana Heights; Maina; Yigo (Route 15)
- Southern Guam: Inarajan, Talofofo, Merizo, Umatac, Santa Rita, Agat, Asan, and Piti
- Tumon: All of San Vitores Road (from Hilton Hotel to Nikko Hotel)
- Hagatna and Route 8 Business Corridor: Hagatna; Barrigada and Mongmong-Toto-Maite along Route 8



Supertyphoon Pongsona

Business Sector Disaster Damage Assessment

Business Category	Businesses Surviving	Total Business Damages	Type of Damage		Average Loss per Business
			Building Damages	Equipment Damages	
Tamuning Business District	395	\$54,689,288	\$25,496,045	\$17,164,838	\$138,454
Harmon Industrial Park/Upper Tumon	328	28,957,788	15,761,048	6,001,740	88,286
Dededo Business District	125	5,824,850	2,515,250	1,911,200	46,599
Northern Guam	58	1,710,400	777,100	703,000	29,490
Micronesia Mall	80	102,432,350	100,726,400	508,650	1,280,404
Central and Eastern Guam	143	13,612,570	8,481,300	3,809,435	95,193
Southern Guam	71	4,026,130	2,437,230	994,800	56,706
Tumon	119	30,172,849	24,560,833	3,628,083	253,553
Hagatna/Route 8 Business Corridor	309	59,669,750	30,112,100	7,666,200	193,106
<b>Island-wide Total</b>	<b>1,628</b>	<b>\$301,095,975</b>	<b>\$210,867,306</b>	<b>\$42,387,946</b>	<b>\$184,948</b>
					<b>\$73,907</b>
					<b>40,234</b>
					<b>26,477</b>
					<b>16,091</b>
					<b>21,324</b>
					<b>35,883</b>
					<b>22,379</b>
					<b>47,160</b>
					<b>95,656</b>
					<b>\$55,423</b>

\* Business District General Descriptions  
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