

Appendix A

Communications

Appendix A

Communications, Outreach, and Public Involvement

Introduction

Public involvement is an integral part of transportation planning, project development, implementation and maintenance. It is a basic tenet that transportation projects, plans and policies of almost any scale, and at any level of government, do not reach fruition unless the public has played an active role in their development. In fact, effective public involvement typically strengthens the decision-making process: by incorporating the input of a wide range of stakeholders, there is a much greater likelihood of developing a consensus to implement recommendations. There are many pieces of the puzzle that must fit together to achieve effective public involvement, including: identifying relevant public groups and stakeholders; developing methods of communication, education and participation; timing - public involvement activities; maintaining an open, inclusive and responsive process – one in which the public will want to remain actively involved, and building consensus throughout the process.

The Federal Transportation Act, titled *Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users* (SAFETEA-LU), prescribes public involvement requirements for statewide planning:

CFR 23 § 450.214. Development and content of the long-range statewide transportation plan.

(k) In developing and updating the long-range statewide transportation plan, the State shall provide citizens, affected public agencies, representatives of public transportation employees, freight shippers, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, providers of freight transportation services, and other interested parties with a reasonable opportunity to comment on the proposed long-range statewide transportation plan. In carrying out these requirements, the State shall, to the maximum extent practicable, utilize the public involvement process described under §450.210(a).

Core requirements for public involvement stem from the National Environmental Policy Act (NEPA) and the Transportation Bills (Federal –aid Highway Act of 1970, Intermodal Surface Transportation Efficiency Act (ISTEA) and the acts extending its provisions (TEA21, and SAFETEA-LU).

Related law and policies include: Clean Air Act Amendments; Americans with Disabilities Act; Title VI of the Civil Rights Act of 1964 and Executive Order on

Environmental Justice; Americans with Disabilities Act; Rehabilitation Act of 1973; Age Discrimination Act of 1975; and the Civil Rights Restoration Act of 1987.

SAFETEA-LU provides specific references to public involvement:

- Planning – Reasonable opportunity to comment on proposed plans and programs – A public participation program required – MPO and State
- Techniques – Many references to technology –visualization and accessibility via the web
- Purpose and need – Involvement in defining the purpose and need of a project
- Alternatives – Involvement in defining the range of alternatives

SAFETEA-LU makes a series of less-specific references to web access and visualization techniques (the technology references were most pronounced in the pilot projects and grants).

Basic Premises

The basic premises of the Public Involvement and Community Outreach Program (COP) used for development of the 2030 Guam Transportation Plan included the following:

- 1. *There is a high degree of skepticism as to the ability of the Government of Guam to effectuate any realistic infrastructure planning.*** Plan after plan has been created by various administrations for everything from education to healthcare to highways with no perceived follow through or progress reporting. Consequently, “planning” has become tied to administrations or legislative initiatives, and plans are shelved or discarded as new administrations or legislatures take the helm.
- 2. *There is a genuine concern as to the impact of the proposed military expansion on Guam’s existing infrastructure.*** As more information is released relative to the (military) build-up, the anxiety of the general public continues to rise over the island’s ability to meet the demands of a 30 percent increase in population. Recent surveys indicate that 92% of the local population agrees that the build-up will be favorable for Guam. Conversely, 82% of the population also believes that our current infrastructure planning efforts will not be able to support the growth.
- 3. *The general public does not differentiate between federally funded roadways and locally funded roadways.*** The distinctions between funding sources and associated regulations relative to Guam’s transportation systems have become blurred over the years. This has resulted in perceptions of inequities among villages and residential communities.
- 4. *The public is generally in favor of any improvements to the existing Guam transportation system.*** Traffic congestion is becoming more difficult, hazardous and expensive to navigate for Guam’s drivers. Traffic fatalities in 2007 were the highest in 5 years. The rising costs of fuel, vehicle maintenance and insurance and a host of

other road and traffic related concerns have increased driver frustration. Road related accidents become front-page news and generally everyone knows the victims or is somehow related to them.

Public Involvement and Community Outreach efforts considered prevalent community values to avoid, minimize and/or mitigate perceived impacts, as well as to narrow the field of alternatives for planning purposes. Impacts relative to specific projects (e.g., alignments, right-of-way, easements, etc.) will be addressed through community outreach efforts for each specific project. Some consideration may have to be made for communicating constraints and tradeoffs of the transportation planning and project development process to effectively create support for the transportation needs and purpose.

Goals and Objectives

The primary goal of the Community Outreach Program (COP) was to provide and distribute information to stakeholders as well as solicit input and feedback to develop the 2030 Guam Transportation Plan and to gain general public support for it.

The plan for the Public Involvement and Community Outreach Program was designed to:

1. Develop a public involvement and communications strategy that would provide the means to engage Guam's community to provide dialogue and input towards the development of the 2030 Guam Transportation Plan.
2. Coordinate the public involvement and outreach strategies to integrate with planning phases and milestones.
3. Conduct communications in accordance with applicable FHWA, SAFETEA-LU and NEPA guidelines.

Outreach Methodologies

There are a number of outreach techniques that are generally accepted as "standard practices" for public engagement on Guam which were used in the GTP public and stakeholder involvement process. All outreach efforts including presentations, press announcements and meetings were jointly facilitated by the DPW and the consultant team. Specific methodologies that were engaged include the following:

1. **Creating public awareness of the plan through the media** – this was accomplished through press releases, press conferences, print, radio and television interviews, local talk shows and a limited amount of paid advertising..
2. **Speaker Circuits.** - these outreach efforts included speaking engagements at civic and business organization membership meetings such as the Guam Chamber

of Commerce, the Guam Contractors Association, and the Guam Hotel & Restaurant Association,. Generally the larger organization luncheons were covered by the media and highlighted through membership communications. Moreover, the larger civic organization luncheon meetings generally included those businesses with an interest in Guam's transportation systems such as commercial haulers, contractors, transit companies, commercial property owners and retail/wholesale businesses. Consequently, many of the concerns of these specific users were able to be addressed without additional meetings.

3. **User group meetings** – these included making presentations and leading discussions at scheduled meetings with specific user groups affected by the program such as tour bus companies, public transit operators, trucking companies, and construction companies among others. Such meetings were conducted on an as needed basis and were primarily used to glean any additional or specific information necessary for the planning effort. In addition, presentations were made at public forums such as the Guam Industry Forum with specific focus on the pending Marine relocation to Guam and its impacts on the existing (roadway) infrastructure systems.
4. **Community Group Communications** – Social, ethnic, cultural and foreign clubs or associations are valuable assets in building community consensus. Equally important are senior citizens' associations and organized recreational or sports associations such as cyclists or motorcycle clubs. Outreach to these groups was accomplished through public village meetings in the north, central and southern regions.
5. **Public Official Communications** – elected or appointed representatives were communicated with directly through letters, phone conferences, round table discussions and briefings.
6. **Meetings with Local and Federal Agencies** information exchange with agency planners and statisticians was crucial to the development of the GTP. Organized meetings with specific goals were organized for both local and federal officials to ensure that accurate statistics were gathered and all policy and process requirements were met as part as the planning effort.

The type of stakeholder group interaction varied relative to the group itself, the type of feedback required or to be shared, levels of confidence and consensus that could be gained, and the effectiveness of the communications methods used.

Government Agencies

The first of many meetings between the planning team and the DPW Management and Highway staff was conducted on December 6, 2007. The DPW PM facilitated the introductory meeting. It provided for introductions, an orientation of the planning process and a chance to discuss and exchange information.

The first in a series of Government of Guam Agency outreach and data collection efforts was conducted on December 12, 2007. With support from the Acting Governor, a total of ten agencies were represented. The planning team made a presentation that included a request for data and information crucial to the traffic impact study modeling. The event was covered by NHK Television (Japan) as part of a documentary on the military build-up on Guam.

From these initial meetings, lines of communications were established between the consultant and the agencies. This allowed the planning team to glean important information crucial to the establishment of a baseline for existing conditions, policies, processes and programs.

This effort was followed up with additional outreach meetings to private sector organized groups to identify specific commercial user issues and/or concerns. Concurrently, the consultant's engineers conducted physical verifications related to existing conditions of federally and locally funded roadways. These crucial first series of outreach and verification efforts provided the planners with valuable insight as to the depth and detail of available information on Guam's existing transportation related systems, planning efforts and user perspectives.

Public Officials Outreach Efforts

Initial outreach efforts began with a press conference on the award of contract and a general briefing to the Governor of Guam. This served to bring public attention to the planning efforts including the Guam Transportation Plan. The event was covered by all media and began the process of public discourse.

Village Mayors represented one of the very first organized community outreach meetings that were conducted. The Mayor's Council of Guam is comprised of the 19 Village Mayors who represent the "front line" for the general public. An initial meeting was held to brief the Mayors Council on the intent of the GTP and to begin the information gathering process village by village. Mayors were asked to identify and prioritize transportation related issues within their villages and to turn them into the consultant for possible inclusion in the GTP and/or the Territorial Transportation Improvement Plan (TTIP). Subsequent meetings were also held with individual Mayors as their listings were finalized.

Initial outreach efforts to the Guam Legislature confirmed many of the concerns expressed by the Mayors including lack of adequate planning and funding as well as concerns over the prioritization for road projects. These outreach efforts included round table discussions and individual briefings with various senators including the Speaker.

The first full briefing to the Congressional Delegate for Guam was given by the project team in April. The briefing gave an exhaustive overview of the planning efforts with particular emphasis on the impacts of the proposed military expansion on Guam's transportation systems.

Civic/Business Organizations and User Groups

The focus of this launch effort was to introduce the GTP project to organized civic/business groups and to utilize earned media as much as possible to build interest for the first round of Public Meetings that was slated for February. Presentations were jointly conducted with DPW. Efforts included speaker circuits and/or meetings with civic/business organization memberships and specific user groups to share the overall approach to the project and provide a forum to discuss issues, gain participation and build support.

These outreach efforts were covered by the media and subsequent interviews with local television and radio stations brought attention and comment from the general public in preparation for the village meetings.

Additional outreach efforts included presentations to the Joint Guam Program Office and Naval Facilities Engineering Command sponsored Guam Industry Forum which was held in March. This Forum was focused on updating industry and the general public on the issues and progress of the planning efforts related to the proposed relocation of 8,000 Marines and their families from Okinawa, Japan to Guam. The presentations were focused on the impacts the proposed relocation would have on Guam's transportation infrastructure and updates on the Guam Transportation Planning efforts.

Community Meetings

This first series of Community Meetings held in early February 2008, included three public meetings, one each in the northern, central and southern districts in coordination with the Mayor's Council. They were held in community centers in Dededo, Agana Heights and Agat.

The objectives of these public meetings were to share the overall goals, objectives and performance measures of the GTP, layout baseline conditions and solicit community input. DPW and the consultant planning team jointly facilitated the meetings. Announcements were made through earned and paid media. Preparations included:

- Announcements of the public meeting dates in all outreach efforts with commercial user groups as well as civic/business and community organizations throughout the month of January.
- Paid advertisements in the Pacific Daily News and the Marianas Variety announcing the meetings five days prior to the first public meeting.
- Press releases with background information were provided to media five days prior to the first meeting with follow up releases on Monday, February 4.
- A Press Release was sent to all media on Monday, February 4 to provide information on what subjects were to be covered in the meeting and inviting the public to attend.

- Interviews on talk radio and media were arranged for DPW and the planning team members to discuss the GTP and invite the public to attend the meetings with follow-up interviews.

Static presentations and handouts were developed and printed for the community meetings to include:

- The mission statement of the Department of Public Works
- Island Map of the FHWA funded primary and secondary transportation systems
- Traffic congestion projections
- TTIP project listings
- Draft Proposed goals and objectives of the GTP
- Maps and graphics providing an overview of the existing baseline conditions
- Contact information and comment cards for collection of public input

Planning team members were present to answer questions related to the static displays and to interact with the public on specific transportation issues.

Comment/response forms were provided at each meeting to allow written public input which were collected and organized by village. In addition, attendees were encouraged to identify specific areas of individual concern by village. These comments were incorporated into an overall village by village compilation of issues and concerns that was folded into the planning process.

A defined timeframe for additional input was planned to accommodate those who could not attend the meetings or may have had additional questions or suggestions. This additional input effort was provided through follow up talk show appearances well as facsimile and phone access for additional public input.

Media

The 2030 Guam Transportation Plan effort officially commenced with the Governor's announcement at a press conference on December 5, 2007. The story was carried by all media and netted headlines in both local newspapers (Pacific Daily News and Marianas Variety), and top stories in local television newscasts that evening. A subsequent interview was given to the Marianas Business Journal featuring the planning team's manager.

2030 GTP: Communications Plan-SAFETEA-LU

Public Involvement References

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§ 450.210 Interested parties, public involvement, and consultation.

(a) In carrying out the statewide transportation planning process, including development of the long-range statewide transportation plan and the STIP, the State shall develop and use a documented public involvement process that provides opportunities for public review and comment at key decision points.

(1) The State's public involvement process at a minimum shall:

(i) Establish early and continuous public involvement opportunities that provide timely information about transportation issues and decisionmaking processes to citizens, affected public agencies, representatives of public transportation employees, freight shippers, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, providers of freight transportation services, and other interested parties;

(ii) Provide reasonable public access to technical and policy information used in the development of the long-range statewide transportation plan and the STIP;

(iii) Provide adequate public notice of public involvement activities and time for public review and comment at key decision points, including but not limited to a reasonable opportunity to comment on the proposed long-range statewide transportation plan and STIP;

- (iv) To the maximum extent practicable, ensure that public meetings are held at convenient and accessible locations and times;
 - (v) To the maximum extent practicable, use visualization techniques to describe the proposed long-range statewide transportation plan and supporting studies;
 - (vi) To the maximum extent practicable, make public information available in electronically accessible format and means, such as the World Wide Web, as appropriate to afford reasonable opportunity for consideration of public information;
 - (vii) Demonstrate explicit consideration and response to public input during the development of the long-range statewide transportation plan and STIP;
 - (viii) Include a process for seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as low-income and minority households, who may face challenges accessing employment and other services; and
 - (ix) Provide for the periodic review of the effectiveness of the public involvement process to ensure that the process provides full and open access to all interested parties and revise the process, as appropriate.
- (2) The State shall provide for public comment on existing and proposed processes for public involvement in the development of the long-range statewide transportation plan and the STIP. At a minimum, the State shall allow 45 calendar days for public review and written comment before the procedures and any major revisions to existing procedures are adopted. The State shall provide copies of the approved public involvement process document(s) to the FHWA and the FTA for informational purposes.
- (b) The State shall provide for non-metropolitan local official participation in the development of the long-range statewide transportation plan and the STIP. The State shall have a documented process(es) for consulting with non-metropolitan local officials representing units of general purpose local government and/or local officials with responsibility for transportation that is separate and discrete from the public involvement process and provides an opportunity for their participation in the development of the long-range statewide transportation plan and the STIP. Although the FHWA and the FTA shall not review or approve this consultation process(es), copies of the process document(s) shall be provided to the FHWA and the FTA for informational purposes.
- (1) At least once every five years (as of February 24, 2006), the State shall review and solicit comments from non-metropolitan local officials and other interested parties for a period of not less than 60 calendar days regarding the effectiveness of the consultation process and any proposed changes. A specific request for comments shall be directed to the State association of counties, State municipal league, regional planning agencies, or directly to non-metropolitan local officials.

(2) The State, at its discretion, shall be responsible for determining whether to adopt any proposed changes. If a proposed change is not adopted, the State shall make publicly available its reasons for not accepting the proposed change, including notification to non-metropolitan local officials or their associations.

(c) For each area of the State under the jurisdiction of an Indian Tribal government, the State shall develop the long-range statewide transportation plan and STIP in consultation with the Tribal government and the Secretary of Interior. States shall, to the extent practicable, develop a documented process(es) that outlines roles, responsibilities, and key decision points for consulting with Indian Tribal governments and Federal land management agencies in the development of the long-range statewide transportation plan and the STIP.

2030 GTP: Communications Plan-Targeted Stakeholders

Government Agencies

- I. Government Agencies
 - a. Government of Guam Agencies:
 - i. Bureau of Statistics & Plans (GovGuam statistical repository – e.g., census statistics, GIS, development projects, Coastal Zone Mgmt)
 - ii. Emergency Responders (Police, Fire, Rescue, Homeland Security, Civil Defense, etc.)
 - iii. Utilities (GWA, GPA, Communications)
 - iv. Land Use related (Dept. of Land Management, Chamorro Land Trust, Ancestral Lands Commission, etc.)
 - v. DPW (school bus operators, solid waste, signage, signalization, routing, etc.)
 - vi. Attorney General’s Office (existing laws, statutes, processes, etc.)
 - vii. Guam Visitors Bureau (tourism numbers & demographics, tourist ground transportation, projections, etc.)
 - viii. Port Authority/Airport Authority
 - ix. GCMP/GEPA/Agriculture/Parks & Recreation/WERI etc. (watershed, wetlands, erosion, archeological/cultural/historical sites, etc.)
 - x. Department of Revenue & Taxation (DMV, licensing, weights & measures)
 - xi. Department of Administration (mass transit, funding processes)
 - xii. BBMR (sources & uses of federal & local transportation funds)
 - xiii. GEDCA (economic projections, funding options, inflation rates, etc.)
 - xiv. Department of Labor (labor statistics, employment categories)
 - xv. GPSS/UOG/GCC (enrollments and facilities – existing and planned)
 - xvi. DISID/Public Health (disabled, disadvantaged, elderly, welfare sectors)
 - xvii. Civilian/Military Task Force (CMTF)
 - b. Federal Agencies:
 - i. Department of Defense
 - ii. FHWA/DOT/FTA
 - iii. EPA
 - iv. Department of Interior
 - v. National Park Service
 - vi. U.S. Postal Service
- II. Public Entities
 - a. Mayors Council
 - b. Municipal Councils
 - c. Suruhano (Ombudsman)
 - d. Legislature
 - e. Consulates

Additional outreach and data gathering meetings are being scheduled with other agencies and organizations for December 17 through January 11 to include the GPSS, DoDEA School Systems, the Ministerial Society (an association of all private faith-based schools), GEPA, Parks & Recreation and others.

User Groups

III. Commercial Users

- a. Commercial trucking companies
- b. Trash haulers
- c. Mass transit operators
- d. Tour bus operators
- e. Construction companies
- f. Shippers & consolidators
- g. Insurance companies
- h. Oil companies
- i. Car rental, sales & fleet operators
- j. Heavy equipment rental companies
- k. Retailers & wholesalers

Civic/Business Organizations

IV. Civic/Business Organizations

- a. Committee to Keep Guam Working
- b. Guam Chamber of Commerce
- c. Guam Contractors Association
- d. Guam Hotel & Restaurant Association
- e. The Employers Council
- f. Chinese Chamber of Commerce
- g. Rotary Clubs
- h. Guam Medical Society

Community Groups

V. Community

- a. Organized recreational & competitive groups (runner's clubs, cyclists, etc.)
- b. Senior Citizens Centers/AARP/retirees/veterans
- c. Foreign, cultural and ethnic clubs & associations (Young Men's League, Filipino Associations, Palauan Association, etc.)
- d. Activists and advocacy groups
- e. General public

2030 GTP: Communications Plan-Meeting Log

Listing of Meetings, Presentations and Discussions
Regarding
The 2030 Guam Transportation Plan Development
(in chronological order)

Note: Light green highlighting indicates business and civic organizations. Blue shading indicates Federal, Regional and Territorial organizations.

DATE	Organization	Interests/Concerns/Discussion Points
December 2007	GovGuam Planners Meeting	
January 16, 2008	Mayors Council of Guam	<ol style="list-style-type: none"> 1. Why 2030? 2. What happened to the plans in the Road Restoration project, DPW has many incomplete projects, villagers still waiting, what is status of Phase I, what is status of Phase II? 3. How well is your coordination with utility agencies 4. As you get your updates from the utilities, will you be able to update the Mayor's Council as well? 5. Villages that will not be impacted by the military build-up should not be left out of improvements. 6. There are many disputed properties in the villages, how will you handle? 7. Agana Heights has two ROW issues 8. Ipan has issue with DPW on two bus shelters, no funding, Mayor acquired private funding but questions on easement issues and design standards have not been answered by DPW, hopes that \$200M will cover bus stops and drainage issues (Talofofo Bridge) 9. Road Restoration Project (PL28-68) should be encompassed into 2030 Plan, two critical areas in Yona, currently Mayor is doing quick-fix, not a quick response time from DPW, give me the coral I will fix.

		<p>10. \$200M, is it new money or old money?</p> <p>11. What is status on insurance money?</p>
January 16, 2008	Guam Hotel and Restaurant Association	<ol style="list-style-type: none"> 1. Pedestrian issues and sidewalks, is it part of overall plan in GTP? How can existing facilities be improved? 2. You indicates two plans, one with military build-up and one without the military build-up; is there potential additional funding? 3. Will a monorail be considered? 4. Because this is federally funded, are there federal requirements and what are they? 5. Will this plan be incorporated with other plans such as the Belt Collins plan on landscaping? 6. What will happen afterwards?
January 30, 2008	K57 Morning Show with Ray Gibson	
February 6, 2008	Guam Legislative Committee on Judicial, Natural Resources, Infrastructure and Cultural Affairs	
February 20, 2008	Guam Contractors Association	<ol style="list-style-type: none"> 1. Hotline to Larry Perez 2. With the military buildup, concern for increased traffic to NCTMS 3. Is presentation available 4. Why 2 PM's, check and balances or finger-pointing? 5. With FEMA projects, and a 10% local match, where do we stand? Most have been awarded. 6. Funding for FHWA projects, still issue on Rights of Way 7. GovGuam is financially strapped, how do you expect to do all of this? 8. Will FHWA funding affect the annual FHWA allotment? 9. Are you there to supervise or to show DPW how to do it correctly 10. Who approves the 2030 Plan? 11. Are designs subject to FHWA standards? 12. Will PTG assess bids?

		13. Will there be some constructability review?
February 21, 2008	Chamber of Commerce Transportation and Truckers Committee	<ol style="list-style-type: none"> 1. GMF/Rte 10 – Road has been reconstructed many times, need to ensure that once road is built we don't go back and open up. Touch the road only once, during construction 2. Intersection of Rte 1 and Rte 8, unable to make left turns onto Rte 1. Currently using Santo Papa, but not feasible. Need better traffic movement from the Port to Harmon Industrial Park, need better infrastructure 3. Need better traffic signalization 4. What is process for Quality Control?
March 11, 2008	Press Conference, Ylig Bridge Closure	Larry Perez, PDN-Gaynor Dumatol, Marianas Variety-Therese Hart, KUAM-R. Sweeney. TelCon w/PNC
June 11, 2008	Guam Chamber of Commerce Developers Committee	<ol style="list-style-type: none"> 1. Guam is notorious for doing "Band-aid" repairs to our roads, is this another example? 2. Mr. Larry Perez indicated that there will be additional funding for Tumon-specific projects and that he would be traveling to Washington, DC to seek add'l funding". Is this part of the plan? 3. Does the numbering system of the projects in the TTIP have any significance in terms of priority and timing? 4. Most of the projects listed are for existing roadways, will there be new roads constructed? 5. Is there a plan for re-naming roads? 6. Is there a website for updated information on the projects? 7. "Trip generation" was used as a forecast model in the 2020 Masterplan, is the same used for the 2030 Masterplan? 8. Will there be advance notice given to the public and those businesses, individuals/residents in the affected areas of construction on these projects? 9. You indicated that RFQ's for future

		<p>projects for the design will be let out, will these be given to local firms?</p> <ol style="list-style-type: none">10. What is the relationship between Parsons and PB?11. Is Parsons primarily working on DOD work?12. Will it be Design/Bid/Build on future projects?13. In the re-surfacing of roads, will you using be rubber in the asphalt?
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2030 GTP: Communications Plan

Community Meeting Stakeholder Input, Feedback and Comments

#	Topics of Concern	Comment/Notes	Public Meeting
1	Traffic Congestion/Flow, Bicycle/Jogging Paths	The lights need to be synchronized. It saves gas and time.	Agana Heights
2	Traffic Signals	Traffic lights on Marine Drive are not synchronized. We need bike/jogging lanes along Marine Drive and up Nimitz Hill.	Agana Heights
3	Traffic Signals	Traffic signal timing needs a lot of improvement.	Agana Heights
4	Environmental & Resource Conservation, Traffic Congestion/Flow	Some of the exits roads now don't need extra property (?) to build the overpass. Just common sense. Main roads like Hamburger, Alagata Rd. need it now to ease traffic! Need pedestrian over pass at all intersections from Tamuning to Yigo and to include Agana. Lines don't work now.	Agana Heights
5	Traffic Congestion/Flow	#1, keeping congestion from engulfing the island – or roads becoming parking lots for commuters, lengthening commute time & eating up gas while sitting. The intersections involving Rt.1 (ITC, airport, road to GM(?), Rt.4, Rt.8). During heavy rains flooding roads in low areas as well as Polaris Point.	Agana Heights
6	Other	The goals are so comprehensive that I doubt that they will receive the attention they may deserve. Yiig(?) Bridge needs replacement. Adrian Sanchez Street (Hamburger Highway) needs construction to 4 lanes and integrated into Rt.1 & Rt.16. Fly-overs to ease traffic on Rt. 1. Leave Rt.17 – Cross Island Roads – as scenic, not fast.	Agana Heights
7	Economic Feasibility, Bicycle/Jogging Paths	Although the correct noises are made about non-motor transportation all the analysis involves highways. My GREAT consideration stands. Economic feasibility must include revenue covering operations and maintenance, plus excess for unanticipated cost. Need no cover capital. A variable should be lanes of traffic on Marine Corp Drive. It would be nice to narrow Marine Corp Drive to 2 lanes, turn lane and shoulders. The rest of the right-of-way could be used to bicycle paths & pedestrian walks. Also, new rights-of-way – unless they provide only access to property – should be restricted to emergency vehicles, public transportation, bicycles and pedestrians.	Agana Heights
8	Safety	One to the dump road by the waste dump – Blind spots, heavy truck traffic, poor striping & signage. Needs lower speed limit. Parking of waste trucks and need to clear brush.	Agana Heights

#	Topics of Concern	Comment/Notes	Public Meeting
9	Future Development, Safety, Handicap Accessibility, Bicycle/Jogging Paths	Will there be overhead crosswalks? Goals #4 & #1, then #10 are important Pedestrian cross walks safety, ADA compliance; pedestrian crosswalks, curb outs and sidewalks, ADA alterations, increase visibility of street markers, long term preservation, cross agency none coordinator construction, no running/biking lanes, Will the 2030 transportation plan incorporate other agencies 5 year strategic plan? i.e. GPA, GWA, GTA and private businesses?	Agat
10		Cross agency none coordinated construction.	Agat
11	Road Disrepair, Safety, Traffic Signals, Handicap Accessibility	Your mission and goals especially of providing good transportation here in Guam because it benefits to us. We can leave our own car and ride in your transportation. I can save gas and I can relax from not driving to my own destination. Another good thing would be if all our roads here in Guam could be fixed for the safety of all of us all and so our cars will not be damaged. When are you going to start your mission and goal? Goal #3 is important to us especially for me if there's a service for disabled people it can benefit to us because my husband is disabled for 4 years. When we go to doctor's appointments we can not go home on time because there isn't much service bus. My traffic problem is that we need signal lights here in Agat Way going to Ocean View School, especially in the morning and the afternoon. Going out is hard for us and we wait long for the traffic.	Agat
12	Traffic Congestion/Flow	More roads to be built. Traffic problems in the morning and evening at Tamuning.	Agat
13	Safety, Traffic Congestion/Flow, Traffic Signals	Safety. Congestion, Roadway Marluss, traffic Signal Timings and flood areas.	Agat
14	Road Disrepair, Secondary Roads and Village Streets, Traffic Signals, Bicycle/Jogging Paths	A secondary road for the Southern Area. Reason – flooding/wash off roads due to storms Too many traffic lights, too many pot holes, need pedestrian walks, railings, and nee more road markers.	Agat
15	Future Development, Safety, Traffic Signals	ITC intersection – and generally Marine Corps Drive as it runs through Tamuning – traffic is extremely heavy and not very safe to make left turns. DEVELOP A PLAN TO ENCOURAGE AND INCREASE THE USE OF PUBLIC TRANSPORTATION.	Agat
16	Environmental & Resource Conservation, Road Disrepair,	Some goals I agree with, and some I don't agree on. The plan you guys are doing is a great plan, but why now and where are you getting the money? Because right now the government is low on money. What made you guys come up with the plan? Is this plan	Agat

#	Topics of Concern	Comment/Notes	Public Meeting
	Safety, Economic Feasibility, Traffic Signals	going to last over 10-15 years? Goal #5 Environmental & Resource Conservation because they need to really support the preservation of natural, historic and cultural resources for our future generation and children to adapt to. When the power goes out, have a back-up power source for the street lights because they can cause accidents. Also the traffic lights need to be more update, even the cross walk lights need to be fixed. Sometimes when you use the cross walk by the time your halfway across the lights say “stop don’t walk” – why is that?	
17		Please give priority to the contraction(?) of Main Road Marine Drive, etc. Why make Cruz Road not contracted(?) ? Proceed(?) the road by the Post Office.	Agat
18		This is a good mission and plan for us people of Guam. I think all goals are important.	Agat
19	Safety	Route 4A Junction. This area needs immediate attention because it’s very dangerous.	Agat
20	Safety, Secondary Roads and Village Streets	How about the secondary road in Agat Village. Well! The main goal especially the most urgent ones should be addressed first but please don’t forget Agat’s secondary roads too. They’re as equally important too for the safety of the senior citizen as well as the kids. The traffic in the central parts of Guam.	Agat
21	Road Disrepair, Safety	My village bridges/flooding issues as well as roadside erosion to shorelines. I would like to see these issues mitigated soon for the safety & well being of my residents. Traffic is not much of an issue in Merigo – However we do have very poor roads i.e. pot holes, lack of bus shelters(?) – or shelters placed in un-needed locations, major flooding issues/major erosions.	Agat
22	Other	Adequate road access to the proposed landfill sites is not currently avoidable and in fact is not even on the proposal books. Until the road (?) is adequate to access these sites any....(?)	Agat
23	Road Disrepair, Safety, Economic Feasibility	Landable(?) No mention of adequate funding. Man holes on some roadways, road work & repairs should be done in the evening with police security, and water hydrant to be protected.	Agat
24	Road Disrepair, Economic Feasibility	provided it’s planned and done correctly the first time and as cheap as possible. Pot holes and dry up roads for water hookups.	Agat
25	Environmental & Resource Conservation, Future Development,	Is road going to paved and then sewer system placed in later? With development going on in cross (?) road area would provisions be provided to tap off water rivers to future development or roads paved and then dug up for water hookups? Goal 5 particularly important. Route 4 highway goes through the	Agat

#	Topics of Concern	Comment/Notes	Public Meeting
	Other	Historic Village of Inarajan. Homes and other structures are protected under the Federal Register because of federal highway rules; residents, visitors and tourists seem to encounter problems enjoying their historic tour because of parking restrictions and other highway enforcement. The highway is presently impeding economic stimulus for the village.	
26	Future Development	This is a start for better roads island-wide. Are all highways to be expanded island-wide to accommodate present and future traffic?	Agat
27	Road Disrepair	The goals that are planned are well laid out. Goal 3 Alageta and Macheche Rd. My understanding is that both roads have been designated Federal Highway's #25 & 26. Commuters utilize these roads to and from work and as detours from Marine Corps Drive. The present conditions of these roads are pathetic. Guam Water Works and Public Works (Hwy Division) have yet to repair "Chalan Galax" since rupture of the million gallon water storage tank.	Agat
28	Secondary Roads and Village Streets, Traffic Congestion/Flow, Other	Reduce amount of traffic and speed up movement of existing traffic through Tamuning on Marine Corp Drive. The workers inside the Harmon Industrial Park have to use Marine Corps Drive from Airport Rd. Traffic light to K-Mart light and then to GTX light just to get to work and back home. This is when they use Airport Access road from Barriga(?) (Route 16). This problem could be easily fixed if we produce a road behind the industrial park up to airport access road directly in front of the airport. Other ways to speed up traffic movement along Marine Corps Drive in Tamuning: The cut on the curbing need to be given more radius (curvature) so vehicles won't have to come to a full stop just to ext Marine Corps Drive. Tires repeatedly climb up onto these curbing.	Dededo
29	Road Disrepair, Traffic Congestion/Flow	Y-Intersection along T-Sengsong Road going to Machanao area. Need improvements – traffic issues. (See attached sketch)	Dededo
30	Traffic Congestion/Flow, Traffic Signals	Hopefully traffic congestion problems could be solved within 15 years. Traffic congestion at Rt. 1 from Dededo to Agana due to commute hours could be lessened if secondary roads would be extended and widened. From Harmon Loop Rd./Route 16 intersection through Hamburger Rd. and into Northbound Rt. 1 – Traffic congestion. Traffic signal required at Harmon Loop Rd. and Liguan Ave. Intersection.	Dededo
31	Environmental & Resource Conservation,	Safety for bicyclists & pedestrians. Lack of adequate mass transit.	Dededo

#	Topics of Concern	Comment/Notes	Public Meeting
	Safety, Other, Bicycle/Jogging Paths		
32	Road Disrepair, Safety, Secondary Roads and Village Streets	I think primary and secondary roads should be repaired and man holes placed on either side walks or on road shoulders. The roads in Guam are deplorable and should be fixed so that we don't tear our cars apart. Storm drains should be on low points instead of high points. Contractors who feel compelled to tear up roads should be held to return roads to original condition, if not to an excellent condition. Turn areas on Harmon Loop Rd. should be further apart so that when two vehicles turning on or about the same time do not clock one another's vision from executing a turn.	Dededo
33		Left turn to Route 3. Can PMT make study? If can, install double left turn onto Route 3 from Route 1.	Dededo
34	Traffic Signals, Bicycle/Jogging Paths	Crosswalk across the Catholic Church Yigo Route 1 to the Dominican School. Perez acre – for traffic light.	Dededo
35	Safety, Secondary Roads and Village Streets, Traffic Signals	Secondary access roads for the two new schools scheduled to open for next school year – August 2008. Ukudo High School and Astumbo Middle. Reference: Emergency situation occurring at Simon Sanchez High School and F.B Leon Guarraro Middle School during chemical explosion and chlorine leak – safety hazard if only one road with access to the new schools. Will traffic lights and turn lanes be installed for the new schools?	Dededo
36	Safety, Traffic Congestion/Flow	Be specific more on objectives to meet the goal. Safety, system and services efficiency Can there be in the future version a main access road aside from Marine Corps Drive going to Central & South? To help the traffic in the morning, especially at 7:00am weekdays.	Dededo
37	Safety, Traffic Congestion/Flow	But what about village streets and secondary roads. New cross walks. Lighting for all roads, streets, dangerous curves, busy intersections, and bus stops. They need street lights and guard rails. Safety – traffic congestion Other access roads going to Yigo, expand Ballo Road, traffic congestion – discuss other option; mass transit, car pooling and other ideas to ease heavy traffic.	Dededo
38	Safety, Traffic Congestion/Flow, Bicycle/Jogging Paths	Whole heartedly! Hope all this comes to fruitations(?) Gave questions to various reps on site. Improvement to all facets of road improvements and maintenance concepts. Safety for motorists, tourists, pedestrians and smooth flow of traffic.	Dededo
39	Future Development,	There are more developments going on in the Northern Villages. People from Central and Southern areas buy, inherit, or	Dededo

#	Topics of Concern	Comment/Notes	Public Meeting
	Road Disrepair, Safety, Traffic Congestion/Flow, Other	previous(?) land from the government. We need to upgrade water systems, roads, sewage systems and power systems to accommodate the growth in the north. What we mainly see here is development in the south and central areas of our island. The most important goal is to assure we have safe roads throughout our island and that they are well maintained. 27. Too much (?) on our roads need an alternate plan to stop traffic congestion in the centralbound(?) northern areas on our island. The outer islanders such as F.S.M(?)... should educate their people about the rules and regulations about driving in Guam. I've seen too many accidents where the outer(?) islander causes it, then they get out of their car and runaway or just drive away like nothing happened. DUI has gone up. Street (?) should be imposed to drivers who are caught.	
40	Other	We need to have street names and street addresses. This bullsh*t about giving direction "Go to the third banana tree with ripe fruit and turn toward the ocean" has got to go.	Dededo
41	Safety, Traffic Congestion/Flow, Other, Bicycle/Jogging Paths	Reduce traffic on Marine Dr. through Tamuning and Public Safety. Pedestrian crosswalk in front of Denny's Tamuning. Crosswalk must be with reflection buttons not just paint!! Also, proper warning of crosswalk ahead with reflection buttons which will alert driver by the buttons causing a vibration and noise. This especially important at night.	Dededo
42	Other	The existing fiasco at the intersection of Route 8 and Marine Corps Drive needs to be fixed ASAP!! Traffic going south on Marine Corps Drive from Route 8 have no signage tot ell them to go to Route 4(?) and use the loop. We need to condemn those buildings along Marine Corps Drive and let's put an overpass there.	Dededo
43	Traffic Congestion/Flow, Other	Throughout the goals there needs to be a geographic information system that captures the transportation infrastructure in order to maximize system & service deficiency (Goal 4), to improve coordination, communication and cooperation (Goal 10), facilitation & documentation. Gridlock during high traffic times.	Dededo
44	Future Development, Safety, Other, Bicycle/Jogging Paths	Where are the other government agencies that are impacted with the 2030 GTP? How much information is being used from GEDCA, GLVC, etc. for long term planning? Future road developments aligned with island economic development plans? Future infrastructure development plans? Will there be a streamline repository for agencies and utilities? Will all facilities be GIS/GEO coded for future use? Standard across repository? Will there be projected ergo-systems with running/biking lanes?	Dededo

#	Topics of Concern	Comment/Notes	Public Meeting
		Will the Guam running club GRC or Guam Bicycle Association GBA be part of the planning? Could this be introduced GVB to increase health & awareness to promote Guam as destination spot? Goals #4 and #1 are important, in that order. Safety should be already in best practices. Yigo – Hagatna Rt. 1. Emergency Routes (911 vehicles) during peak operation.	
45	Other	The name “Transportation Plan” maybe should be changed to “Guam Highway Plan.” Mass transit is normally a component of a Transportation Plan. Is it addressed?	Dededo

Appendix B

Data Review

The Guam Transportation Plan 2030

Data Review Memo

—DRAFT—

February 26, 2008

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1. Introduction

The purpose of this technical memorandum is to record and summarize information gathered and reviewed for the Guam Program Management project. It includes relevant data describing Guam's socio-economic conditions, population, employment, and travel characteristics, as well as previous reports issued by or for the Government of Guam. Data sources consist primarily of tables, charts, and graphs produced by various agencies, while the reports involve more substantial documents. In some cases, the narrative details how the information is to be used within the context of the project.

This technical memorandum is intended to be a living document. It will be updated periodically as new data and reports are consulted during the course of the Guam Program Management project.

2. Reports

The following reports provide background on previous planning and project efforts in Guam and offer a framework for future study and implementation.

2.1 Government of Guam. *Guam Military Growth and Integration Challenge Statements*. Prepared by KPMG. October 31, 2007.

Guam Military Growth and Integration Challenge Statements illustrates the unmet needs that exist on Guam at the first stage of military expansion. The assessment identifies communication, collaborative planning and partnerships, and investment and accountability as key factors for mutual success by the U.S. Military, federal government, and Guam. It presents the infrastructure issues and associated recommendations to be addressed before Guam can adequately accommodate growth.

The issues associated with physical infrastructure include:

- Constrained capacity at the Port of Guam;
- Aging and unreliable power generation and transmission facilities;
- Contamination of water resources, growth pressures, and disrepair of water and wastewater infrastructure
- Insufficient solid waste disposal;
- Limited roadway and public transportation network;
- Disparity between technology and current service level requirements.

The issues associated with social infrastructure include:

- Unique natural environment that will necessitate sustainable development practices;
- Shortage of skilled workers, particularly in the areas of health, education, information technology, and construction;
- Overstretched healthcare system;
- Escalating housing costs disproportional to growth of median household income; and
- Old and overcrowded schools.

Primary recommendations for all of the issues suggest the need for further individual environmental study and bridge funding to support initial capital investments.

2.2 Duenas, Bordallo, and Associates. Guam 2020 Draft Highway Master Plan. Prepared for the Government of Guam, Department of Public Works. October 26, 2005.

The *Guam 2020 Highway Master Plan* was prepared in 2005 as an update to the 2010 Highway Master Plan. The five goals identified in the plan include:

- Highway Transportation Quality
- Highway Transportation Efficiency
- Highway Cost Effectiveness
- Comprehensive Planning
- Environmental Quality and Historic Preservation

The plan reviewed the status of the existing highway network and current economic and demographic conditions. It also generated forecasts of population, employment, school enrollment and other aspects of Guam's demography for the planning horizon. Using the collected data, the plan developed a new travel demand model and used it to analyze traffic flows for the planning period and develop transportation demand forecasts for target years 2015 and 2020. It then evaluated the effectiveness of the current highway system against the results of the transportation demand model. Where the highway system was insufficient, the plan proposed short-range and long-range highway improvement projects to meet the needs.

The recommended 2020 Highway Master Plan Short Range Program consists of 17 highway reconstruction and widening projects totaling about 38.76 miles and 1 new route. The estimated cost for the short range highway improvement program is \$165.91 million. The Long Range Program highway improvement projects go beyond those projects identified in the Short Range Program to further improve highway capacity by widening existing roads and increasing route choices by the addition of connectors along new alignments.

A large number of potential LRP projects were considered and the two concepts emerged:

- Concept A, which includes the minimal highway improvement program required to satisfy updated 2020 Highway Master Plan goals and objectives; and,
- Concept B, which is Concept A plus highway projects that establish a Defense Access Highway System linking Guam's two major Department of Defense base facilities: Andersen Air Force Base and Naval Station.

The 2020 Highway Master Plan draft report provides the following conclusions in regards to implementation and funding options:

1. The Short Range Program highway improvement projects could be funded by proper management of revenues coupled with timely phasing of program implementation.
2. The funding of Long Range Program Concept A highway improvement projects will experience an excess of \$27.15 million, some of which is expected to be offset by inflationary increases in the cost of labor and pricing of materials and equipment.
3. The funding of Long Range Program Concept B highway improvement projects will experience a shortfall of \$53.93 million.

Although the *Guam 2020 Highway Master Plan* was never officially adopted, it still functions as the primary guiding document for the future direction of roadway planning and projects on Guam.

2.3 Government of Guam. Guam Territorial Transportation Improvement Plan.

The *Guam Territorial Transportation Improvement Plan (TTIP)* is a list of proposed project for fiscal years 2005 through 2009. Revenue sources for the projects consist of:

- Emergency Relief Carry Over Funds
- Bridge Discretionary Carry Over
- National Highway System Territories STEA3
- NHS Territories
- Transportation Improvement Project Carry Over
- Section 117 Funds Carry Over
- American Samoa Loan Payment
- Army Corp of Engineers

Several of the funds were carried over from FY05 and FY06 and are expected to be used during FY07. Twenty-eight million dollars are allocated for projects to be reprogrammed with the unexpended balance from FY04 to FY06.

The plan calls for proposed projects in the following categories:

- Emergency relief projects totaling \$10 million dollars are slated for construction in FY06 and FY07.
- Highway Hazard Elimination projects are planned for preliminary engineering and construction for FY05-FY09. Annual totals range from around \$13,000 (FY06) to over \$4 million (FY07).
- Short-range reconstruction and improvement projects total under \$2 million for FY06 and approximately \$20 million for FY07. None of these projects are programmed for FY08 or FY09.
- Projects under the Safe Streets category will be addressed in FY07 with \$3 million dollars for preliminary engineering and \$29 million for construction.
- Most of the special programs and projects will be addressed with six to seven million dollars a year from FY07 to FY09.
- Preliminary engineering for the upgrading of bridges and waterways will occur during FY07 and FY08.
- Work for miscellaneous transportation projects and long-range highway improvement projects will be performed between FY07 and FY09.

Total expenditures are minimal for FY05 and FY06 with much of the money being carried over into the \$92 million dollars obligated for FY07. Projects in FY08 and FY09 will require the over \$20 million dollars a year in available funds. The list of proposed projects can be found in Appendix A-1.

2.4 Department of Administration. Division of Public Transportation Services. Long-Range Statewide Transportation Improvement Program (LSTIP): Fiscal Years 2007-2030. Government of Guam. October 29, 2007.

The *Long-Range Statewide Transportation Improvement Program (LSTIP)* addresses planning for highway and public transit for the entire island of Guam. The LSTIP focuses on the extent of Guam's transit operations. It summarizes the local urban and intercity system, rural and small town services, transportation for the elderly and disabled, and any intercity passenger bus trips. A map of the Guam Public Transit System can be found in Appendix A-2.

The LSTIP also describes the Department of Administration-Division of Public Transportation Services (DOA-DPTS) role in transit. The DOA-DPTS administers federal transit grants funded in SAFETEA-LU. In SAFETEA-LU, Guam received a 46% increase in the amount of guaranteed funding, as compared to the previous surface transportation program. The plan also presents historical and projected ridership figures for transit. Total annual bus ridership has fluctuated over the past five years with the 2007 figure being 260,533. This number is projected to almost double to 236,615. The LSTIP estimates that the reallocation of U.S. military personnel and

dependents will have a direct affect on the transit system, particularly in the municipalities of Dededo and Yigo.

The list of projects listed includes continued operating assistance for the current transit programs, capital investment for the procurement of buses that are compliant with the Americans with Disabilities Act (ADA), and funds for planning, design, and construction of several transit/transfer centers. A summary table listing the LSTIP programs and funding sources is located in Appendix A-2.

2.5 Department of Administration. Division of Public Transportation Services. Short-Range Statewide Transportation Improvement Program (SSTIP): Fiscal Years 2006-2009. Government of Guam. October 29, 2007.

The *Short-Range Statewide Transportation Improvement Program (STIP)* addresses planning for highway and public transit for the entire island of Guam. It is developed every four years and lists all projects proposed for funding. The STIP is consistent with the Territory Long-Range Plan and other funded regionally significant transportation projects.

The STIP primarily addresses public transit transportation projects for Guam, while the roadway, bridge, bicycle, pedestrian and safety projects are reviewed in the unadopted Guam 2020 Highway Master Plan Report and the Guam Territorial Transportation Improvement Plan. The plan discusses the sources of federal funding received through SAFETEA-LU and how Guam uses the money to administer transit programs. The sources include:

- Section 5309-New Starts (Capital Investment Grants)
- Section 5310-Formula Program for Elderly Persons and Persons with Disabilities
- Section 5311-Other Than Urbanized Area Formula Program
- Section 5311(b) (3)-Rural Transit Assistance Program (RTAP)
- Section 5316- Job Access and Reverse Commute
- Section 5317- New Freedom Program

The amount available to Guam between the Fiscal Years 2007 and 2009 is \$1,216,791. The funds are allocated for the procurement of ADA accessible buses, as well as to support continued operation of the current transit services. A summary table listing the STIP programs and funding sources is located in Appendix A-3.

2.6 Department of Public Works. Office of Highway Safety. Highway Safety Plan. Government of Guam. 2007.

The Guam Office of Highway Safety prepares and administers a comprehensive *Highway Safety Plan* for the purpose of reducing the

incidence and severity of vehicular crashes on Guam's highways and local street system. It uses a well-planned public awareness and education campaign, along with infrastructure improvements and selective enforcement countermeasures. The plan states goals, project activities, and performance measures to be activated during Fiscal Year 2007 by topic, as well as the associated partnering agency. The various topics included in the plan are:

- Alcohol & drugs,
- Highway safety traffic prosecution,
- Child/occupant restraints,
- Child traffic safety enforcement,
- EMT services injury prevention services and EMT education,
- Traffic record information management system,
- Safe communities, and
- Pedestrian and bicycle safety program.

The emphasis of the plan is to provide for funding to develop effective programs that can become operational within a three-year period. A summary of the Problem Solution Plans (PSPs) identified in the report is located in Appendix A-4.

2.7 2007 Guam Action Plan for the Coordination of Human Services Transportation. Government of Guam, by Guam CEDDERS Newsletter, November 2007.

The *2007 Guam Action Plan for the Coordination of Human Services Transportation* focuses on transportation services for older adults, persons with disabilities, and persons of lower income. It speaks to the four major goals of the Coordinating Council on Access and Mobility (CCAM):

1. Coordinated transportation planning;
2. Vehicle sharing;
3. Cost allocation; and,
4. Reporting and evaluation.

While public transit on Guam includes fixed route, demand response service to fixed routes, paratransit service, and several other options, access to transportation continues to be a concern.

The plan produced an inventory of all transportation resources available on Guam and provides figures on the number of vehicles by type, number of vehicle by each group, number of vehicles by sector (public or private). It also identified gaps in the current service and performed a needs assessment. Identified needs include:

- Improve the reliability of transportation services;
- Increase accessibility;

- Focus on user friendly services; and,
- Share funding opportunities with partners.

The result of the planning effort is an extensive list of action items that provide strategies, the timeline, responsible agency, and the priority ranking. None of the items have any dedicated financial resources.

2.8 Guam Waterworks Authority. *Guam Water Resources Master Plan*. Government of Guam. March 13, 2007.

The *Guam Water Resources Master Plan (WRMP)* is driven by the need to comply with EPA regulations; however, it goes beyond the requirements to continue to improve its performance on effective water and wastewater management. The WRMP consists of a capital plan, financial plan, and analytical tools. Key goals include:

- Instituting sound asset management and capital planning;
- Developing a foundation for sound management, operations, maintenance ,and financial planning;
- Engaging the customer and achieving the appropriate level of service;
- Achieving long-term resource sustainability; and,
- Establishing a road map for full regulatory compliance.

Water System

The Guam Waterworks Authority (GWA) operates and maintains over 200 water facilities within three different public water systems. The Northern and Central Public Water Systems have a “large” designation, while the Southern Public Water System has a “small” designation. A map of the GWA water system boundaries can be found in Appendix A-5. The GWA water supply is attributed to six sources. The main supply source is a series of deep wells located in the northern/central portion of the island, which contributes over 75% of the island’s 42 million gallons per day. The water is the distributed across the island through 400 miles of pipe.

Wastewater System

The GWA provides wastewater services for the general population and Andersen Air Force base. It consists of seven wastewater basins and sewage treatment plants. A map of the wastewater basins is located in Appendix A-5. Approximately 41% of island residents, primarily located in the Northern and Central Guam, are served by individual wastewater disposal systems.

Existing Conditions and Planning Considerations

The plan’s existing conditions assessment rated the water and wastewater systems as poor. The water system infrastructure is insufficient to meet basic flow and pressure needs and the wastewater system is not typically meeting the discharge permit requirements.

The plan also considered service levels, changes in population and land use, and regulations. The population served by the GWA water system is expected to grow by almost 40,000 by 2025, and the wastewater system population is supposed to increase by 20,000. GWA must continue to maintain service levels that satisfy customers and comply with regulations.

Capital Improvement and Financial Programs

The principal water system needs are associated with the distribution system, while wastewater system needs relate to treatment plant improvements. The plan identifies a Capital Improvement Program (CIP) that represents \$900 million in 2007 dollars. The water system needs represent about \$550 million or over 60% of the estimated funding required. The wastewater system treatment facilities and capacity related collection system needs each require over \$100 million. Areas needing sewer service are also substantial at \$70 million.

Financing the proposed improvements is presented in two alternatives to the pace of construction, with the differences principally due to deferral in construction of certain projects not essential for life and safety.

- **Base Case CIP:** In the first five years through FY 2010-11, the project expenditures total \$185 million in 2007 dollars. To fund the CIP, rate-based revenues should be almost doubled by FY 2011-12. User rates must be increased by 8 percent annually for seven years, and additionally in subsequent years. The Base Case CIP summary table can be found in Appendix A-5.
- **Minimum Pace CIP:** The first five years of the CIP totals \$132 million. User rates must be increased by 6 to 6.4 percent annually for six years, and additionally in subsequent years.

Bank of Hawaii. *Guam Economic Report*. October 2003.

The 2003 Guam Economic Report provides an analysis of the factors influencing the Guam's economic situation. The report discusses current challenges and offers recommendations to minimize the continued erosion of the economy. Because of the lack of data on gross domestic product (GDP) and the tax base, the report uses secondary sources, such as population and employment, federal spending, and tourism, as indicators.

Guam experienced a decline in population growth between 1990 and 2000. The report states this is not because of a drop in births, but rather because Guamanians are moving to Hawaii and other states for employment opportunities. This migration is reflected in a decrease in the civilian labor force, payroll employment, and wage rate in the private sector. Guam is losing the citizens with the most marketable skills who leave the island for higher paying jobs on the mainland.

Tourism and military activity remain the central elements of Guam's economy. Guam depends on tourists from Asian countries, specifically Japan, to drive the tax base, employment, and business receipts. This reliance means that the financial status of Guam is directly linked to the fortunes of

Japan. Federal spending for military interests is the other major economic generator. The ripple effect of every defense dollar is even higher than that of a tourism dollar. The report cites a weak Japanese market and military cutbacks have negatively affected the strength of Guam's economy.

The Guam Economic Report emphasizes that Guam needs to take active measures to enhance their economy. Recommendations include:

- Formulating a comprehensive financial reform program that would include revising the territorial business privilege tax system;
- Improving education;
- Appealing to the federal government for increases in military and civilian commitments; and,
- Creating a more cooperative relationship between government and business.

2.9 First Hawaiian Bank. "Guam Outlook Brighter than in Several Years." *Economic Forecast—Guam Edition*. 2006-2007.

The report entitled "Guam Outlook Brighter than in Several Years" published in *Economic Forecast—Guam Edition* offers insight into the future for Guam's economy. It presents a qualitative evaluation of the external drivers that inject money into the Guam economy. Particular attention is given to the implications of a significant buildup in U.S. military presence.

The report discusses Guam's past economic performance, which has languished in the last decade. It affirms the collapse in Japanese investment and tourism, along with Base Realignment and Closure (BRAC) initiatives that moved military forces elsewhere, as major hits to the Guam economy. Combined with the effects of two consecutive natural disasters, Guam entered a recession.

Recent indicators shown in the report suggest that the economic trend is reversing. The tourism market appeared to revive in 2006 and recovery in the real estate sector has sparked renewed interest in development and new construction. However, the largest contribution to Guam's economy will be the reinvestment and reallocation of U.S. resources. An estimated \$15 billion dollars over a period of ten years will fund the transfer. Much of the money will provide for military housing and facility upgrades. It is expected that an additional 8,000 troops and 12,000 dependents will move to Guam, doubling the current military-related population to 42,000.

The report mentions concerns with growing pains, especially with regards to infrastructure; but overall, it presents a positive economic forecast for Guam's future.

2.10 Tiyan Parkway Project

The information on this project includes court documentation from 1951 through 1954 in the 'Land Docs' folder. Additionally, there are several land

surveys in the 'Real Estate' folder and roadway schematics available in the 'Tiyan Airport Pkwy' folder. An example of the schematics produced from this project is located in Appendix A-6.

2.11 FHWA Territorial Highway Program (THP) SAFETEA-LU Changes. June 2006.

The implementation guidance memorandum for the THP under SAFETEA-LU summarizes significant changes made to the THP in accordance to SAFETEA-LU. The changes replace the implementing guidance under TEA-21. Additionally, the memorandum summarizes significant provisions included in revised sections. A summary of the significant changes and provisions can be reviewed in the "Territorial Highway Program (THP) SAFETEA-LU Implementing Guidance" memorandum.

2.12 FHWA Territorial Highway Program (THP) Implementation Under SAFETEA-LU

The THP was created for federal financial assistance to the Virgin Islands, Guam and American Samoa for the construction and improvement of a system of arterial highways and necessary inter-island connectors. This document provides a:

- Background and legislative history of various federal funding mechanisms;
- Brief description of the THP which is to assist each territory in the construction and improvement of a system of arterial and collector highways, and necessary inter-island connectors;
- Brief description of how the Territorial Highway System (THS) has been an element of the THP since its inception, providing a way of classifying, reviewing and ensuring which roadways are eligible for funding;
- Funding / obligation authority explanation of continued SAFETEA-LU funding for the THP set-aside from the National Highway System (NHS) including a funding distribution across the four territories of American Samoa, Guam, Northern Mariana Islands and the Virgin Islands;
- Federal share;
- Eligible activities which lists projects and activities that may be eligible for THP funding.
- Toll facilities eligibility;
- Emergency Relief (ER) Program with an obligatory funding limit for the four territories;
- Maintenance which is a provision for maintenance projects eligible for THP funding with the exception of routine maintenance;
- Design Standards;

- Project Approval and Oversight would allow the FHWA to provide technical assistance to administer the THP on a continuing basis to the above listed territories. The level of FHWA oversight would be based on the need of a particular territory as well as the resources available to the FHWA.
- Applicability of Title 23 Chapter 1 Provisions are sections that do not apply to the THP;
- Territory Agreement is between the chief executive office of a territory and the FHWA dated August 9, 2006, outlining the responsibilities of each party; and,
- Delegation of Authority identifies the responsible party for the administration of the THP.

A table listing the funding for the THP for Fiscal Years 2005 through 2009 is located in Appendix A-7.

2.13 Government of Guam. Department of Administration – Division of Public Transportation Services. System Security and Emergency Preparedness Plan (SSEPP): Fiscal Year 2008. October 29, 2007

The System Security and Emergency Preparedness (SSEP) Program Plan describes the purpose, objective and goals of the Department of Administration-Division of Public Transportation Services (DOA-DPTS). The SSEP plan outlines the process to be used by DOA-DPTS to make informed decisions appropriate for operations, passengers, employees and communities regarding the development and implementation of a comprehensive security and emergency preparedness program.

The overall purpose of DOA-DPTS's SSEP Plan is to optimize - within the constraints of time, cost, and operational effectiveness - the level of protection afforded to DOA-DPTS's passengers, employees, volunteers and contractors, and any other individuals who come into contact with the system, both during normal operations and under emergency conditions.

The goals ensure that security and emergency preparedness are addressed during all phases of system operation, promote analysis tools and methodologies to encourage safe system operation, and create a culture that supports employee safety and security and safe system operation.

The objectives of this program are to: achieve a level of security performance and emergency readiness that meets or exceeds the operating experience of similarly-sized agencies around the nation; increase and strengthen community involvement and participation in the safety and security of the system, develop and implement a vulnerability assessment program, and based on the results of this program establish a course of action for improving physical security measures and emergency response capabilities; expand training programs for employees, volunteers and contractors to address security awareness and emergency management issues; enhance coordination

with Guam Homeland Security/Office of Civil Defense regarding security and emergency preparedness issues.

The SSEP Plan also includes sections on transit system description, program roles and responsibilities, threat and vulnerability resolution, and evaluation and modification of the SSEP Plan. The Vehicle Safety Program Plan is included in Appendix A-8 as a sample of the overall SSEP plan.

2.14 The Economic Development Administration (EDA): Defense of Economic Adjustment Program.

The Office of Economic Adjustment (OEA) is the Department of Defense's primary source for assisting communities adversely impacted by defense program changes, including base closures or realignments, base expansions, and contract or program cancellations. The OEA offers technical and financial assistance, such as the Joint Landuse Study Program, to adversely impacted communities and coordinates the involvement of other federal agencies through the Defense Economic Adjustment Program (EAP) and the President's Economic Adjustment Committee.

The Defense EAP assists state and local interests in the design and implementation of strategies to adjust or bring about change to an economy. The Defense EAP predominantly supports two types of investment activities, strategic planning and project implementation. The Seattle Regional Office is the contact office for the Guam. Promising practices through the Federal Regional Council (FRC) include using San Francisco as a forward operating location, tri-party or multi-party meetings, around the clock e-mail operations, Office of Insular Affairs Grants and Financial Management Conference, Joint Guam Program Office Environmental Impact Statement Partnering Sessions, Guam Department of Labor, and Guam's Mentoring Center of Excellence.

For additional information on the OEA, visit:

<http://www.oea.gov/OEAWeb.nsf/Home?OpenForm>

2.15 Department of Public Works (DPW) Project Information

The DPW project information includes:

- Road Considerations for new GPSS Schools.
- Project Status Update for August 2007. This document includes the project name, the status of the project, the date of the status update, and the project engineer on the project.
- Traffic Installations is a schedule, scope and budget of traffic signal installations for UKUDU High School and ADACAO Elementary School.
- Project/Contract Type document is a list of project numbers, project description, contract type and status of the project.
- Engineering Scope of Services for intersection reconstruction and traffic signalization upgrades, roadway improvements for Route 8, Route 10 &

Route 16, and GMF Post Office and Guam National Guard Proposed Intersections.

- List of projects needed for immediate delivery.

Examples of DPW project listings are included in Appendix A-9.

2.16 Business Opportunities in Infrastructure. Presentation at the Guam Industry Forum. August 23-24, 2007

This presentation provided a brief introduction of the Consolidated Commission on Utilities (CCU). It goes on to describe the departments within the CCU.

Guam Power Authority is a sole provider of electricity on Guam. There are: a list of major long-term contracts, potential project summary tables, list of transmission & distribution system reliability improvement projects, list of fuel diversification or renewable energy projects, and an additional fuel reserve storage project. Partnership Models highlight the opportunities with Guam Power Authority.

Department of Public Works' Division of Highways (DPW-DH) is charged with the construction and maintenance of all Guam's "horizontal" assets. This department is positioning itself for the unprecedented growth of Guam, and anticipates investing over \$1.5 billion over the next four years. To accomplish this, DPW-DH is looking to secure the services of a Program Management Team to: administer and manage all aspects associated with building an intelligent transportation network, engage with private investors, contractors, suppliers, etc. in the design-build, design-bid-build and design-build-operation of all of its highway infrastructures and systems; and is inviting all to "come to the table" to partner with the DPW and implement as many projects as is possible within a compressed timeframe.

Guam's Waterworks Authority (GWA) provides water service to Guam. Capital improvement projects and bond and Environmental Protection Agency funded projects are described. A list of opportunities for partnership with the GWA is included in the presentation.

Division of Solid Waste Management services mainly the civilian community. American Airforce Base (AAFB) serves the AAFB community and the Navy serves the Naval community. The current infrastructure identifies the financial structure of existing services. The future infrastructure identifies a 'Strategic Plan of Action'.

2.17 Projections of the Number of Households and Families in the United States: 1995 to 2010, U.S. Bureau of the Census, Current Population Reports, by Jennifer Cheeseman Day, P25-1129, U.S. Government Printing Office, Washington, DC, 1996.

This report includes projections of the number of households and families in the United States for the years 1995 to 2010. These numbers are based on the

1990 Census with modifications for age and race. Household estimates from 1991 to 1994, and are projected forward using alternative marital status and household type proportions. These household projections are not intended as a forecast, but represent the results of assumptions about future trends in population change and household formation. There are three different scenarios.

The report presents an overview of projected household trends with regards to changing population size, age distribution, patterns of householdership, and race/ethnic distribution. It also presents projected size of households and families. For projected household composition, the report discusses marital status and number of children. Assumptions and methodology are presented, along with detailed tables of the data. A summary of Household projects are included in Appendix A-10.

2.18 Parsons Brinkerhoff. 2007 Master Plan: Commercial Port of Guam. Progress Report #2, by Parsons Brinckerhoff, Jose D. Leon Guerrero , October 2007.

The document presents activity forecasts for the Port facilities, including cargo forecasts for containerized, break-bulk and bulk cargoes as well as cruise passenger vessels and other ship calls. In addition to cargo, it offers information on the socio-economic trends.

Examples of activity forecasts for the port facilities are included in Appendix A-11.

2.19 Port Modernization and Readiness Status Report. Presentation to the Guam Interagency Task Force, by Parsons Brinkerhoff, November 2007.

The presentation presents an overview of the Master Plan development status, including the history of the port, data collection efforts, existing facilities and trends, 20 year demand forecasts, capacity analysis, alternatives and local preferred alternatives. It also discusses a final analysis and environmental permitting needs.

3. Data

The data collected includes demographic and socio-economic information, tourist/visitor data and travel characteristics, traffic and travel data, transit information, and other transportation movements.

3.1 Guam Statistical Activities. www.pacificweb.org. Website accessed January 2007.

The website provides access to information from censuses, surveys, administrative records and other reports for Guam. The census data includes Census 2000, 1992-2002 Agricultural Censuses, and the 1992-2002 Economic Censuses; the surveys address labor force and migrant trends; and the administrative records present statistical data and forecasts. Report topics vary from drug control and violence prevention to housing and homelessness. The data will be incorporated into the 2030 Baseline Scenario to be used in the travel demand model.

3.2 Department of Labor. Bureau of Labor Statistics. *Annual Census of Establishments--Summary Tables from 1984-2007*. Government of Guam. September 5, 2007.

The data represents total employment and number of establishments by industry division and Standard Industrial Classification (SIC) major group by year. The four-digit SIC code was assigned on the basis of major products or activities as determined by each establishment's percent of total sales or receipts for the previous calendar year. Data ranges from 1984 to 2006 and will be used for the 2030 Baseline Scenario. A summary of establishments by employment size and industry is included in Appendix A-12.

3.3 Department of Labor. Bureau of Labor Statistics. *Current Employment Report--2003-2007*. Government of Guam. Website accessed January 2007. www.guamdol.net/content/section/13/226/.

The report presents information on the number of employees on payroll by ownership and industry and employment by sex. It also shows the number of production workers, wage rates, hours and earnings. Highlights from the report include:

- Total employment increased by 1,590 jobs or 2.7 percent over the comparable period one year ago in September 2006.
- Construction industry jobs accounted for most of the employment gains over the year, and federal government employment increased by 170 jobs.

- A 3 percent increase in the number of private sector workers contributed to an increase in private sector payroll totals of about 7 percent.

The information will be incorporated into the 2030 Baseline Scenario.

A summary of employment data is included in Appendix A-13.

3.4 US Census Bureau. Economic Census for Guam. 1992, 1997, 2002.

Every five years, the Economic Census recorded data about Guam's economic activity and structure. It surveyed establishments engaged in construction, manufacturing, wholesale, retail, or selected service activities for 1992, 1997, and 2002. Another economic census was performed in December 2007 and results will be released in 2009. All establishments provide data on total sales, kind of business, legal form of organization, employment, annual and first quarter payroll, and sources of sales. The data will be included in the 2030 Baseline Scenario. As an example, the 2002 Economic Census data is included in Appendix A-14.

3.5 US Census Bureau. Census 2000 for Guam. 2000.

The US Census provided demographic and socioeconomic data for Guam by block group. The data will be used for the 2030 Baseline Scenario.

A census block group is a cluster of census blocks that fall within a census tract. And, census tracts fall within election districts (village). Generally, a census block group contains between 600 and 3,000 people, with an optimum size of 1,500 people. As an example, demographic and socioeconomic census data, by election district (village), has been included in Appendix A-15.

3.6 US Census Bureau. 1950 Census for Guam.

This Census report includes statistics about the basic characteristics of Guam's population, such as age, sex, race, nativity, country of birth, school enrollment, years of school completed, marital status, work in 1949, and industry. Data are shown in detail for previous decennial years when possible.

3.7 Municipal Commissioners. Island-Wide Census. 1952, 1953, 1954, 1955, 1958. Government of Guam.

Collected by Municipal Commissioners, the tables provide information on the population of Guam by citizenship, sex, and district of residence for the years 1952, 1953, 1954, 1955, 1958. The data excludes transients living in the military reservations.

3.8 US Census Bureau. 1960 and 1970 Census for Guam.

This Census report includes 1960 and 1970 population statistics for election districts and places, the population of Guam from the earliest census to 1970, and 1970 population and land area for election districts (urban and rural). Other data includes general characteristics of Guam's population, such as age, sex, race, nativity, country of birth, school enrollment, years of school completed, marital status, work, and industry.

3.9 US Census Bureau. 1960 Housing Census.

The report shows basic statistics that relate to occupancy characteristics, structural characteristics, plumbing facilities, equipment, and financial characteristics. Data are shown for the island as a whole and, separately, for the civil and military portions of the election districts. The 1960 Census was the first census of housing conducted on Guam.

3.10 US Census Bureau. 1980 Census of Population and Housing: Guam.

This Census report includes 1980 statistics on the number of inhabitants, general and detailed demographic and socioeconomic characteristics of the population, and general and detailed housing characteristics. It also includes a copy of the survey.

3.11 US Census Bureau. 1990 Census of Population and Housing: Guam.

This Census report includes 1990 statistics on the number of inhabitants, general and detailed demographic and socioeconomic characteristics of the population, and general and detailed housing characteristics. It also includes a copy of the survey.

3.12 US Census Bureau. International Database. Actual and Projected Mid-year Population Projections for Guam. 2007.

A list of the actual and projected mid-year population for Guam from the year 1950 to the year 2050 is included in this data. A table of data is in Appendix A-16.

3.13 Guam Department of Commerce. Bureau of Statistics and Plans. Historical Data 1970-2000. February 2002.

Tables that present the population and housing statistics for 1970 to 2000 are included in this data. Data is organized by village and area of the island (north, central, south) and shows the numeric change, percent change, and

annual growth rate for 1970-1980, 1980-1990, and 1990-200. A table of historical population and historical data is included in Appendix A-17.

3.14 Guam Department of Commerce. Bureau of Statistics and Plans. Population Density for Selected Census Geography Levels. Government of Guam. December 2004.

This includes data on Guam population density for year 2000 by village, census tract, block group, and block. The data will be included in the 2030 Baseline Scenario. An example of population density by tract is included in Appendix A-18.

3.15 Guam Department of Labor. Bureau of Labor Statistics. Current Labor Force Survey: Unemployment Situation of Guam: 1974-2006. Government of Guam.

The survey includes quarterly data from 1974 to 2006 on the unemployment situation in Guam. Data includes the total civilian, non-institutional population, the total civilian labor force by number employed and unemployed, the percentage of labor force unemployed and the number not in the labor force. The data will be included in the 2030 Baseline Scenario. A table of unemployment data is included in Appendix A-19.

3.16 U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements, 2006 and earlier. Households by Size: 1960 to Present. March 27, 2007.

The table displays the total number of households by size for the years 1960 to 2006. It also presents information on the average household size. The data will be included in the 2030 Baseline Scenario. A table of households by size is included in Appendix A-20.

3.17 US Census Bureau. International Database. County Summary: Guam. 2007.

<http://www.census.gov/ipc/www/idb/country/gqportal.html>

The webpage provides information on population growth, including fertility, mortality, and migration for the recent year and 1995, 2005, 2015, and 2025. It also has population pyramids by age and sex and offers access to more detailed data. A summary of demographic indicators is included in Appendix A-21.

3.18 Guam GIS Data

Geographic Information Systems (GIS) data was provided to PB in geodatabase feature class format. The following is a list of datasets accompanied by descriptions of the data and how it may be utilized during the course of the project.

Water Pump Feature Class

This dataset depicts the location of water pumps along the utility network throughout the island of Guam. This dataset will be used to assess the location of existing infrastructure on the island. Relevant attributes contained within the database include:

Name- name of pump

Generator- identifies whether the pump has a generator and its status

Size-diameter of pump

Voltage- pump voltage (Only partial information is provided)

District-geographic district pump is located in.

Historical Sites Feature Class

This dataset consists of point features depicting the locations of sites identified as having historical significance to the island of Guam. The dataset may be used to identify areas where transportation impacts should be avoided. These locations may also be considered as important destinations on the island. Relevant attributes contained within the database include:

Name- name of historical site

Municipal- municipality where the site is located

AKA_Area- alternative name of historical site

Lot_Num- parcel lot number

Ownership-type of ownership (private, various, federal, private/federal, government of Guam, private/government of Guam)

Owner1- Owner of historical site

Owner2- Second owner of site

Street Feature Class

This dataset consists of line features depicting the current road network on the island of Guam. The dataset may be used to assess how the population of Guam is currently being served. The network may also be used as the base features in a transportation model. Relevant attributes contained within the database include:

Street Name- name of street

Street Type- type of street (Drive, Boulevard, etc.)

LFrom- start of address range of segment on left side of street

LTo- end of address range of road segment on left side of street
RFrom- start of address range of road segment on right side of street
RTo- end of address range of road segment on right side of street
Village- village where street is located
Number of Lanes- number of street lanes (only partial information is provided)

Solid Waste Collection Routes DPW Feature Class

This dataset consists of line features depicting the roads used for collection of solid waste. Relevant attributes contained within the database include:

Street Name- name of street
Street Type- type of street
Village- village where street is located
Pick Up Day- day of pick up service

Flood Feature Class

This dataset depicts the boundary of the 100 year floodplain. The dataset may be used to assess areas with limited development potential and where transportation design must consider potential flooding.

Contours (1993) Feature Class

This dataset depicts the topography of the island. The contour interval is 10 feet. The dataset may be used to determine how the topography of the island will affect the future development of the island. Relevant attributes contained within the database include:

Elevation- Elevation represented by contour line

Zoning Feature Class

This dataset depicts the current zoning on the island. The dataset may be used as an indicator of how development may occur as the population changes on the island. Relevant attributes contained within the database include:

Zone Code- identification code of zoning
Zone Description- type of zoning

Municipality Feature Class

This depicts the municipal boundaries on the island. The dataset may be used to determine local governing entities. Relevant attributes contained within the database include:

Tag- name of municipality
Square Miles- square miles of municipal boundary

Landmark Feature Class

This dataset depicts prominent features on the island of Guam. The dataset may be used to identify major destinations on the island. Relevant attributes contained within the database include:

Category- landmark classification

Description- description or name of landmark

Land Use- land use code of landmark

Phone- phone number

Geology Feature Class

This dataset depicts the geologic units comprising the island of Guam. This dataset may be used to assist engineering design and development forecasting. Relevant attributes contained within the database include:

GeoAbr- abbreviation of rock unit identifier

Cadastre Feature Class

This dataset depicts the bounding dimensions of parcels on the island of Guam. The dataset may be used to identify land ownership, assess current density, and be utilized as boundaries used to project future growth occurrences. Relevant attributes contained within the database include:

Block- block number of parcel

DLMTAG- unique identifier of parcel

Lot- lot number of parcel

Tract- tract of parcel

Unit- unit of parcel

Village- village where parcel is located

Zone Code- zoning code of parcel

Municipality- municipality where parcel is located

Building Footprint Feature Class

This dataset depicts the footprint of existing structures throughout the island of Guam. This dataset may be used to further refine the location of the Guam population associated with census boundaries. The dataset may also be used to determine current density, land use, and potential growth. Relevant attributes contained within the database include:

Address- Address of building

Place Name- name of building (only partial information is provided)

City- city or village where building is located

3.19 Department of the Interior. US Geological Survey. Guam Quad Maps. 2000.

The USGS maps divide Guam into quadrangles bounded by two lines of latitude and two lines of longitude at a scale of 1 inch equals 2,000 feet. The maps use brown contours to show the shape and elevation of the terrain and name prominent natural and cultural features.

USGS quad maps, along with a reference map of Guam, are included in Appendix A-22.

3.20 Guam Police Department. Planning, Research, and Development. *Crash Statistics: 2001-2007*. Government of Guam, 2007.

The tables provide crash statistics from 2001 to 2007 by classification, type, and driving under the influence. Additional statistics includes monthly crash statistics for 2004 and 2006, as well as driving under the influence by age. A summary of the Guam Police Department crash statistics are included in Appendix A-23.

3.21 Guam Visitors Bureau. Guam Visitors Arrivals 2002-2006.

The table reports the number of visitor arrivals to Guam based on month, country of origin, and mode of arrival (air or sea) for the years 2002 through 2006. The information is collected from Customs Declaration forms. The number of arrivals hit a low in 2003, but has continued to increase since, with peak times appearing around January-March and July-August. The majority of visitors are arriving by air from Japan. A table of Guam visitor arrivals from 2002 to 2006 is included in Appendix A-24.

3.22 Department of Public Works. Office of Highway Safety. Project Listing. January 17, 2008

The table of Office of Highway Safety projects is a list of projects including preliminary engineering dates, construction dates, program codes, funding types, obligated total cost, expended amount, and an unexpended balance. A Department of Public Works list of projects is included in Appendix A-25.

APPENDICES

FOR THE DATA REVIEW MEMO

APPENDIX A1

GUAM TERRITORIAL TRANSPORTATION IMPROVEMENT PLAN (TTIP)

FY'2005 - FY'2009 Proposed Projects

REVENUE

FUNDING SOURCES	FY2005	FY2006	FY2007	FY2008	FY2009
Emergency Relief Carry Over	\$10,838,726	\$10,649,961	\$10,476,520		
Bridge Discretionary Carry Over	\$0	\$376,167	\$376,167	\$0	
National Highway System Territories STEA3	\$23,000,748	\$7,750,986	\$2,268,029		
NHS Territories (FY-06+)		\$15,280,800	\$30,980,800	\$20,000,000	\$20,000,000
Transportation Improvement Projects Carry Over	\$1,560,000	\$3,120,000	\$3,900,000	\$3,900,000	
Section 117 Funds Carry Over		\$491,964	\$491,964	\$0	
American Samoa Loan Payment			\$2,020,000	\$2,020,000	\$2,020,000
Army Corp Of Engineers - Obligated Funds	\$6,414,704	\$6,414,704	\$2,841,317		
Army Corp Of Engineers - Unobligated Funds	\$2,841,317	\$2,841,317	\$2,841,317		
Reprogramming Of Unexpended Balance FY04 to FY06 (Reprog)					
Route 15 Reconstruction, Phase I (Design/Build)		(\$6,900,000)	\$28,695,707		
Route 27 (Finegayan Road) Reconstruction & Widening		(\$230,000)	\$0		
Route 29 Reconstruction & Widening (Route 1 to Route 15)		(\$249,000)	\$0		
Development of the Guam DPW Standard Plans & Specifications (D)		(\$100,000)	\$0		
Safety Improvement on Primary Roads / Islandwide Pavement Markers		(\$2,750,000)	\$0		
Island-wide Potholes Repair (Primary Roads, Northern Region)		(\$1,000,278)	\$0		
Island-wide Potholes Repair (Primary Roads, Southern Region)		(\$692,000)	\$0		
Route 1, Marine Drive (Btn Rte. 10A & Rte. 30) 4 lane		(\$44,919)	\$0		
Route 1, Marine Drive, Agana Bridge		(\$22,637)	\$0		
Route 1, Upgrade/Rehab (10A to Y-Sengsong Road)		(\$1,054)	\$0		
Const. Highway Hazard Elimination/Barrier Rail Rehabilitation		(\$62,072)	\$0		
Route 1, Marine Drive (from Asan to Rte. 4)		(\$15,290)	\$0		
Marine Drive, Piti to Asan (Sta 4 to 85)		(\$304,187)	\$0		
Route 4 @ Veterans Memorial Park thru Umatac		(\$358,260)	\$0		
Route 1, PE (Rte. 10A to Rte. 30)		(\$84,000)	\$0		
Route 2, (from Agat to Umatac)		(\$9,868)	\$0		
Route 3, Marine Drive (Rte. 1 to Rte. 28)		(\$197,842)	\$0		
Route 4, (Between Salagula Pool & Bear Rock, Inarajan)		(\$324,163)	\$0		
Route 4, South approach to Talofof Bridge		(\$5,534)	\$0		
RTE 4: Ylig Bridge PE		(\$50,170)	\$0		
Route 16, (From JCT W/RTE 27 to JCT W/RTES 8 & 10)		(\$52,685)	\$0		
Route 16, Phase IB, ROW ACQ		(\$599,080)	\$0		
Route 16, Phase IB		(\$318,020)	\$0		
Reconstruction of Route 16, Phase 1A		(\$33,366)	\$0		
Route 16, Phase 1A		(\$2,546,160)	\$0		
Route 26, (From Intersections of Rte. 1 to Rte. 5)		(\$16,043)	\$0		
Route 27, Harmon Loop Road Reconstruction & Widening		(\$702,586)	\$0		

GUAM TERRITORIAL TRANSPORTATION IMPROVEMENT PLAN (TTIP)

FY'2005 - FY'2009 Proposed Projects

FUNDING SOURCES	FY2005	FY2006	FY2007	FY2008	FY2009
Route 6, (From Station 00+38 to 66+00)		(\$190,172)	\$0		
PE for Traffic Management		(\$16)	\$0		
Modernization Traffic Signal System		(\$137,792)	\$0		
Highway Planning, Technology & Training Activities		(\$11,431)	\$0		
PE for Branch Inspection		(\$20)	\$0		
Traffic Signal System Emergency Power		(\$7,689)	\$0		
Route 1(Rte. 29 to Rte. 9) Santa Lourdes Church to AAFB Main Gate		(\$51,782)	\$0		
Route 1, Reconstruction & Widening, Phase I (Rte. 10A to Rte. 16)		(\$444,059)	\$0		
Route 1, Marine Drive, Reconstruction & Drainage Improvements		(\$15,043)	\$0		
Route 2, Reconstruction & Widening, Phase I & II		(\$344,000)	\$0		
Route 3, Rehabilitation & Widening (Rte. 28 to Rte. 9)		(\$7,045)	\$0		
Route 4, South Approach to Talofof Bridge		(\$68,120)	\$0		
Route 4, Rehabilitation & Widening (Rte. 1 to Rte. 10) CON		(\$4,898,435)	\$0		
Route 15, Reconstruction & Widening (Rte. 26 to Rte. 29) Ph. I & II		(\$417,323)	\$0		
Route 26, Phase I (Rte. 26 to Rte. 25) Traffic Installation		(\$3,343)	\$0		
Route 27, Raised Median Modification/Signal System Installation		(\$220,315)	\$0		
Construction for Traffic Management Center & Signal Modernization		(\$268,216)	\$0		
Develop Guam Rights-of-Way (ROW)		(\$60,000)	\$0		
Adopt-A-Traffic Signal Program, Upgrade & New Installations-Design, FY04		(\$245,232)	\$0		
Adopt-A-Traffic Signal Program, Upgrade & New Installations-Design, FY04		(\$84,297)	\$0		
FLH Technical Assistance		(\$9,005)	\$0		
Guam International Airport, Runway 6R/24L (Phase I) }		(\$872,263)	\$0		
Guam International Airport, Runway 6R/24L (Phase II) }		(\$965,853)	\$0		
Permanent Restoration of Traffic Signs, Islandwide (FAHS)		(\$460,000)	\$0		
Route 4, Permanent Restoration at As-Alonso Area		(\$522,000)	\$0		
Guam 2010 Highway Master Plan Update		(\$20,583)	\$0		
Highway Planning, Technology Transfer & Training Activities		(\$225,205)	\$0		
Highway Planning & Training Activities		(\$111,329)	\$0		
Highway Hazard Elimination Project (Category I)		(\$15,926)	\$0		
Islandwide Bridge Inspections		(\$350,000)	\$0		
SUBTOTAL OF REPROGRAMMED PROJECTS		(\$28,695,707)			
GRAND TOTAL OF FUNDING SOURCES	\$44,655,496	\$46,925,900	\$92,891,820	\$27,920,000	\$22,020,000

**GUAM TERRITORIAL TRANSPORTATION IMPROVEMENT PLAN (TTIP)
FY'2005 - FY'2009 Proposed Projects**

PROJECT DESCRIPTIONS	FY2005		FY2006		FY2007		FY2008		FY2009		
	PE	CONST	PE	CONST	PE	CONST	PE	CONST	PE	CONST	
	Emergency Relief (ER) Projects										
Route 1, Phase I (10A to 16) Chainlink Fences, Streetlights, Landscaping and Traffic Signs				\$1,679			\$78,361				
Route 1, Cillbank East Agana Shoreline Embankment Restoration				.00			\$108,768				
Route 2, (Agat to Umatac) Southern Trail Overlook Landslide Restoration				\$1,292			\$168,417				
Route 4, As-Misa Bridge (Inarajan North Leg), Wingwall, Abutment & Approach Restoration				.00			\$200,000				
Route 4, Tinaga Bridge Temporary Restoration				.00			\$11,300				
Route 4, Agfayan Bridge (Permanent Repair)				\$47,013			\$492,987				
Route 4, Ajayan Bridge Embankment Restoration				.00			\$121,364				
Route 7, Embankment Restoration				.00			\$5,500				
Route 11, (GPA Cabras, Piti) Roadway Restoration, T-Pongsona (FY 2004)				\$224,626			\$24,958				
Route 17, Calvo Area Embankment Restoration				.00			\$36,000				
Route 27, Harmon Loop Road Traffic Signal Repair				.00			\$37,375				
Roadway Debris Removal and Clean-up, Islandwide on FAHS, TT-Ting Ting				.00			\$25,000				
Waterways (Bridges, Culverts & Damage Channels) Debris Removal, Cleanup Repairs of Embankment Erosion, TT-Ting Ting				.00			\$33,600				
Island-wide, Traffic Signs Replacement, TT-Ting Ting				\$22,173			\$9,627				
Route 17, (Cross Island Road) Repair Shoulder Embankment Slide/Erosion and Guardrails				.00			\$23,700				
Route 7 (Naval Hospital Road) Repair Shoulder, Embankment Slide/Erosion & Guardrails				\$57,915			\$5,313				
Island-wide, Traffic Signal Repair, TT-Ting Ting				.00			\$24,200				
Island-wide, Drainage System Clean-up (Removal of Sand Deposit and Debris Cleanup)				.00			\$219,000				
Route 6A, Murray Road Scour Permanent Restoration				\$9,788			\$276,032				
Islandwide, Traffic Signal System Emergency Repair (Traffic Management)				\$929,969			\$64,031				
Island-wide, FAHS - Debris Removal / Clean-up				\$360,298			\$198,202				
Island-wide, Pavement Markers & Markings Installation				\$696,869			\$239,903				
Islandwide, Ponding Basins, Chain Link Fence Restoration and Route 16, Over-pass Chain Link fence				\$46,456			\$138,544				
Islandwide, Damaged Guardrail System Restoration				.00			\$115,268				
FAHS, Traffic Control Activity (National Guards)				\$471,538			\$0				
Island-wide, Drainage System Clean-up				.00			\$47,000				
Island-wide, Temporary Repair of Traffic Signs				.00			\$27,500				
Island-wide, Ponding Basins Debris Clean-up & Fencing				.00			\$77,000				
Route 11, Temporary Shoulders & Embankment Restoration				.00			\$3,100				
Route 4, Temporary Road Restoration at As-Alonso Area				.00			\$16,600				
Major & Minor Arterial & Major Collector Roads Debris Removal/Clean-up, Island-wide (TC)				\$115,166			\$168,724				
Bridges Debris Removal/Clean-up, Island-wide (TC)				\$46,468			\$125,747				
Drainage System Clean-up, Island-wide (TC)				\$32,111			\$143,132				
Removal of Signs/Erecting Temporary Warning Signs, Island-wide (TC)				\$7,821			\$38,928				
Route 4, Temporary Road Restoration at As-Alonso Area (TC)				\$3,315			\$23,046				
Route 11, Temporary Shoulders & Embankment Restoration (TC)				\$4,810			\$15,106				
Agfayan Bridge Temporary Restoration (Emergency Repair) (TC)				\$843			\$28,858				
Tinaga Bridge Temporary Restoration (Wingwall collapsed) (TC)				\$255			\$10,200				
Santa Rita Bridge (Bordallo) Road Approach Temporary Restoration (TC)				\$1,731			\$2,339				
Ponding Basins Debris Clean-up & Fencing (Major/Minor Roads), Island-wide (TC)				\$1,783			\$1				
Merizo Bridge Road Approach Temporary Restoration (TC)				\$706			\$76,294				
Route 4 Emergency Roadway Embankment Restoration (Various Locations) (TC)				\$10,579			\$589,421				
Route 1 East Agana Emergency Roadway Embankment Restoration (TC)				\$1,135			\$1				
Permanent Restoration of Traffic Signs, Island-wide, (TC)				\$359,362			\$100,638				
Route 4, Permanent Restoration at As-Alonso Area, (TC)				\$145,495			\$376,505				
Agfayan Bridge Temporary Restoration (Permanent Repair) (TC)				\$73,459			\$106,541				
Tinaga Bridge Permanent Restoration (TC)				.00			\$55,000				
Santa Rita Bridge Permanent Restoration (TC)				.00			\$24,500				
Route 4, Earthquake Repair (As-Alonso Area) 10/13/01 Earthquake				.00			\$60,734				
Route 1 (Piti, Near Fish Eye) Road Embankment Restoration, Typhoon Pongsona				.00			\$58,950				
Route 11, (GPA Cabras, Piti) Roadway Restoration, T-Pongsona (FY 2004)				.00			\$46,871				
Route 4 (Pago Bay Area) Pavement Damage & Failure of existing base/subbase due to flooding				\$106,476			\$13,124				
Route 11 Commercial Port, Cabras Island Shoreline Protection						\$195,000	\$1,101,317				

TC - typhoon Chata'an; July 2002

**GUAM TERRITORIAL TRANSPORTATION IMPROVEMENT PLAN (TTIP)
FY'2005 - FY'2009 Proposed Projects**

PROJECT DESCRIPTIONS	FY2005		FY2006		FY2007		FY2008		FY2009		
	PE	CONST	PE	CONST	PE	CONST	PE	CONST	PE	CONST	
Route 1 Marine Drive, Adelup Shoreline Protection											
TOTAL Emergency Relief Projects	\$0	\$0	\$0	\$3,781,112	\$345,000	\$1,545,000	\$7,539,626	\$0	\$0	\$0	\$0
Highway Hazard Elimination (HE) Projects											
Highway Hazard Elimination Route 4 (Jeff's Pirate Cove) (possible under village streets)& Route 14 Resurfacing	\$150,000						\$897,000				
Island-wide Hazard Elimination for Pedestrian Safety Fence, Route 1 - JFK High School		\$23,000		\$13,786							
Safety Improvement Project - Primary Roads Pavement Markes and Markings Replacement, Islandwide - Phase I							\$1,600,000				
School Zone Signs							\$250,000				
Village Road safety signs (NHTSA funded mat'ls - FHWA funded const.) for newly paved local roads; Check or review all newly paved roads; regulatory & warning signs				\$0							
Route 1, JFK Pedestrian Underpass/Overpass								\$200,000		\$2,000,000	
Route 15, Santa Rosa Yigo, Road Hardening							\$150,000	\$1,500,000			
Islandwide Seashore Protection										\$2,000,000	
Island-wide, Highway Hazard Elimination Program										\$2,000,000	
TOTAL Highway Hazard Elimination Projects	\$150,000	\$23,000	\$0	\$13,786	\$150,000	\$4,247,000	\$200,000	\$0	\$2,000,000	\$2,000,000	
Reconstruction and Improvement Projects - Short Range (SR)											
Route 5 & Portion of Route 12, Reconstruction & Widening (Design)						\$300,000					
Route 8/Route 10 (Radio Barrigada Road) Traffic Signal Installation						\$120,000					
Route 10/Sabana Magas Road & Rte. 8 N. Biang Streets Intersections						\$110,000					
Route 26 (Macheche Road) Reconstruction & Widening (Rte. 1 to Rte. 15)			\$51,391			\$141,448					
Route 27 (Finegayan Road) Reconstruction (Route 1 to Route 16)						\$230,000					
Route 10A (Airport Road) Portion Rehabilitation (D)						\$300,000					
Route 14B (Ipao Road) Reconstruction & Widening (D)						\$300,000					
Route 27A (Fatima Road) Reconstruction & Widening					\$989,757		\$1,443,243				
ADA Compliance Project, Route 1 (Rte. 30 to Rte. 16)							\$400,000				
ADA Compliance Project, Route 1, Rte. 30, 30A & 16 (Rte. 1 to Rte. 10A)							\$146,000				
Adopt-A-Traffic Signal Program, Upgrade & New Installations (D)							\$54,768				
Traffic Signal Opticom Emitter System (Equipment)							\$300,000				
Completion of the Traffic Management Center Building for Engineering							\$764,400				
Traffic Signal System, Loop Detector Replacement & Pavement Spot Repair							\$140,000				
Traffic Signal System Upgrade, Island-wide							\$360,000				
Safety Improvement Project on Primary Roads / Islandwide Pavement Markers							\$2,750,000				
Pigua/Bile Bridge Replacement & Road Approaches Improvements							\$800,000				
Route 1/Wusstig Road Intersection Improvements & New Traffic Signalization							\$820,000				
Route 3, Reconstruction & Widening (Design Build)							\$6,073,441				
Route 4 Permanent Restoration at As-Alonzo Area							\$522,000				
Route 4, Yona to Ylig Bridge-Reconstruction & Widening of a 4 Lane											
Route 4, Rehabilitation & Widening (Rte. 1 to McDonalds) Design/Build			\$149,500		\$149,500	\$1,250,000					
Route 5, Reconstruction & Widening (Rte. 2A to Rte. 17) Design						\$120,000					
Route 17, Reconstruction & Widening (Rte. 5 to Rte 4) Ph. I & II (Design)			\$231,259		\$199,393						
Route 25, (Alaqeta Road) Rte. 26 to Bello Road (ROW) Design			\$85,034		\$169,240						
Installation of Traffic Signal at Route 26/Route 25 Intersection							\$441,250				
Guam 2020 Highway Master Plan Modification											
TOTAL SR Projects	\$0	\$0	\$896,601	\$989,757	\$2,340,348	\$16,064,334	\$0	\$0	\$0	\$0	
Safe Streets											
Route 1 - Route 9 to Route 2A					\$3,000,000	\$29,000,000					
Route 1 - U Turn Improvements											
Route 2 - Agat Village											
Route 2A - Sta Rita											
Route 3A - Ritidian Point											

GUAM TERRITORIAL TRANSPORTATION IMPROVEMENT PLAN (TTIP)

FY'2005 - FY'2009 Proposed Projects

PROJECT DESCRIPTIONS	FY2005		FY2006		FY2007		FY2008		FY2009	
	PE	CONST	PE	CONST	PE	CONST	PE	CONST	PE	CONST
Route 4 - Umatac to Rte 1 Hagatna										
Route 4A - Talofofo/Yona										
Route 6 - Rte 1 Adelup to Rte 1 Piti										
Route 7 - Rte 6 to Rte 7A										
Route 7A - O'Brien Drive, Hagatna										
Route 8 - Rte 16 to Rte 1 Hagatna										
Route 9 - Rte 3 to Rte 1										
Route 10 - Rte 16 to Rte 4										
Route 11 - Cabras Island										
Route 12 - Rte 2 to Rte 5 Sta Rita										
Route 14 - Rte 1 to Hillon Intersection										
Route 15 - AAFB to Rte 4										
Route 16 - Rte 1 Dededo to Rte 10 Barrigada										
Route 26 - Rte 1 Dededo to Rte 15										
Route 27 Finegayan Rd & Harmon Loop Rd										
Route 27A Santa Monica Ave.										
Route 28 - Ysengsong Rd, Dededo										
Route 29 - Gayinero Rd Yigo										
Route 30 - Gov Camacho Rd										
Route 30A - Farenholt Ave Tamuning										
Route 33 - Mongmong-Toto-Maite Rd										
Route 34 - Two Lovers Point Rd										
Route 12A - Pale Ferdinand, Sta Rita										
Route 14B - Ypao Road										
Special Programs and Projects										
Tiyan Parkway (Feasibility/EIA/Archaeological/Traffic Study)					\$500,000					
Highway Planning Technology Transfer and Training Activities	\$401,474		\$300,000		\$300,000		\$300,000		\$300,000	
LIDAR Survey	\$250,000		\$192,000		\$192,000					
Pre ROW Survey (ROW from edge to edge)					\$50,000					
Engineering Personnel for Federal-Aid Highway Program			\$750,000		\$750,000		\$750,000		\$750,000	
Recruitment of Engineering Personnel (20) for Federal Highway Projects					\$750,000		\$750,000		\$750,000	
Legal Counsel					\$100,000		\$100,000		\$100,000	
Rights Of Way Manual <i>LEGAL & SURVEY</i>					\$100,000 400,000		\$100,000 400,000		\$100,000 400,000	
Program Management Consultants					\$4,400,000		\$4,400,000		\$4,400,000	
ROW Land Agent Contract					\$50,000					
FLH - Technical Assistance			\$40,995		\$150,000		\$150,000		\$150,000	
Professional Engineering Technical Consultants					\$150,000		\$150,000		\$150,000	
Professional Services - Archives (Scanning)					\$50,000		\$50,000		\$50,000	
TOTAL Special Programs Projects	\$651,474	\$0	\$1,282,995	\$0	\$7,642,000	\$0	\$6,650,000	\$0	\$6,650,000	\$0
Miscellaneous Transportation Improvement Projects (TI)										
Construct Route 3A Extension (New Roadway)						\$3,630,000		\$1,650,000		\$1,320,000

**GUAM TERRITORIAL TRANSPORTATION IMPROVEMENT PLAN (TTIP)
FY'2005 - FY'2009 Proposed Projects**

PROJECT DESCRIPTIONS	FY2005		FY2006		FY2007		FY2008		FY2009	
	PE	CONST	PE	CONST	PE	CONST	PE	CONST	PE	CONST
Piti, GU Construct Cabras Island Intermodal Facility										
Reconstruction Hagatna River Bridge						\$2,220,000		\$1,500,000		\$1,200,000
TOTAL TI Projects		\$0		\$0		\$7,500,000		\$3,900,000		\$3,120,000
Army Corps OF Engineers Projects										
Route 4, Talofofo Shoreline Protection				\$1,671,000						
Route 4, Inarajan Shoreline Protection					\$235,000	\$1,335,000				
Route 11, Commercial Port, Piti Power Plant Shoreline Protection				\$1,517,387						
TOTAL ACOE Projects	\$0	\$0	\$0	\$3,188,387	\$235,000	\$1,335,000	\$0	\$0	\$0	\$0
Highway Improvement Projects - Long Range (Permanent Restoration - LR) D/B										
ROUTE 1					\$10,000,000			\$14,700,000		\$8,250,000
ROUTE 2										
ROUTE 2A										
ROUTE 3										
ROUTE 4										
ROUTE 4A										
ROUTE 5										
ROUTE 6										
ROUTE 6A										
ROUTE 7										
ROUTE 7A										
ROUTE 8										
ROUTE 8A										
ROUTE 9										
ROUTE 10										
ROUTE 10A										
ROUTE 11										
ROUTE 12										
ROUTE 12A										
ROUTE 14										
ROUTE 14A										
ROUTE 14B										
ROUTE 15										
ROUTE 16										
ROUTE 17										
ROUTE 18										
ROUTE 19										
ROUTE 24										
ROUTE 24A										
ROUTE 25										
ROUTE 26										
ROUTE 27										
ROUTE 27A										
ROUTE 28										
ROUTE 29										
ROUTE 30										
ROUTE 30A										
ROUTE 32										
ROUTE 33										
ROUTE 34										
Reconstruction and Upgrading Of Bridges and Waterways at Various Locations										
Agana					\$3,493,512		\$2,470,000			

GUAM TERRITORIAL TRANSPORTATION IMPROVEMENT PLAN (TTIP)

FY'2005 - FY'2009 Proposed Projects

PROJECT DESCRIPTIONS	FY2005		FY2006		FY2007		FY2008		FY2009	
	PE	CONST	PE	CONST	PE	CONST	PE	CONST	PE	CONST
Agana (Santo Papa)										
Agat-umatac Rd Box Culvert, Rte 2										
Aguada										
Ajayan										
Ajayan Bridge, Rte 4										
Apalacho										
Asan Bridge (1st Inland)										
Asan Bridge (2nd Inland)										
Asan Bridge (Marine Corps Drive)										
As-Linguit										
As-Linguit, Cross Drain 2-36"dia. RCP, Rte 4										
As-Linguit, Cross Drain 3-36"dia. RCP, Rte 4										
As-Maile Point, near bus shelter, Rte 4										
Atatano										
Box Culvert, Next to Ace Hardware Tamuning										
Candaso Bridge, Espinosa Ave.										
Chaot										
Commercial Port Bridge										
Cross Drain, Near Tendan Bisino, Rte 4										
Fonte										
Geus										
Inarajan (North Leg)										
Inarajan (South Leg)										
Lada Cross Drain, 3-36" dia. RCP, Rte 4										
Lined Swale, Route 4, Espinosa Ave.										
Lygog										
Manell Culvert, Rte 4										
Masso Bridge #2 - Rte 1										
Minondo										
Namo										
Next to Old Ty's Mini Mart, Rte 4										
Pago										
Papatguan Culvert, Rte 4										
Pauliloc										
Polaris Point, Box Culvert, Rte 1										
Santa Rita (Bordallo)										
Sasa Bridge, Rte 1										
Sumay										
Taleyfac										
Talofof										
Tinaga										
Togcha										
Toguan										
Tonggan Cross Drain, 3-36" dia. RCP, Rte 4										
Tonggan Cross Drain, Rte 4										
Umatac										
TOTAL ESTIMATED EXPENDITURES / OBLIGATIONS	\$826,682		\$10,152,638		\$92,891,820		\$27,820,000		\$22,020,000	
GRAND TOTAL OF FUNDING SOURCES	\$44,655,496		\$46,925,900		\$92,891,820		\$27,920,000		\$22,020,000	
TOTAL AMOUNT TO BE RE-ALLOCATED FOR FOLLOWING YEAR	\$43,828,813		\$36,773,262		\$0		\$0		\$0	

APPENDIX A2

**THE DEPARTMENT OF ADMINISTRATION-
DIVISION OF PUBLIC TRANSPORTATION SERVICES
Territory of Guam**

**Long-Range Statewide Transportation Improvement Program
Program of Projects**

Available Funds means funds derived from an existing source dedicated to or historically used for transportation purposes. For Federal funds, authorized and /or appropriated funds and the extrapolation of formula and discretionary funds at historic rates of increase are considered "available." A similar approach may be used for State and local funds that are dedicated to or historically used for transportation purposes.

Agency	Description	Federal	State	Total	
Department of Administration-Division of Public Transportation Services	Section 5309-Bus and Bus Related Facilities for fy 2006-2008 (Capital Investment Grants for the Proposed Procurement of ADA Accessible Transit Buses - 4 medium size)	(83% federal share with ADA accessible equipment) Available funds for fy 2006-2008 \$297,000.00	\$297,000.00	(17% local share with ADA accessible equipment) \$60,831.33	\$357,831.33
"	Section 5310-Formula Program for Elderly Persons and Persons with Disabilities for FY 2008	Available funds for fy 2008 \$170,961.00 minus 15% for state administration (\$25,644.15 match free) equals \$145,316.85	\$145,316.85	Consolidated grant match free for operating assistance of paratransit	\$145,316.85
"	Section 5311 & 5340-Other Than Urbanized Area Formula Program for FY 2008	Available funds for fy 2008 \$596,775.00 minus 15% for state administration (\$89,516.25 match free) equals \$507,258.75	\$507,258.75	Consolidated grant match free for operating assistance of paratransit	\$507,258.75
"	Section 5311(b)(3) Rural Transit Assistance Program (RTAP) for FY 2008	Available funds for fy 2008 RTAP funding is included in Section 5311 (15% match free state Administration)	-	Consolidated grant match free for operating assistance of paratransit RTAP funding is included in Section 5311	-
"	Section 5316- Job Access and Reverse Commute for FY 2008	(80% federal share) Available funds fy 2008 \$93,984.00 minus 10% for state	\$84,585.60	Consolidated grant match free for operating assistance of paratransit	\$84,585.60

	(Proposed voucher program)	administration (\$9,398.40 match free) equals \$84,585.60			
"	Section 5317-New Freedom Program	(80% federal share) Available funds for fy 2008 \$24,632.00 minus 10% for state administration (\$2,463.20 match free) equals \$22,168.80	\$22,168.80	Consolidated grant match free for operating assistance of paratransit	\$22,168.80
"	Section 5309-Bus and Bus Related Facilities Proposed Procurement of 6 medium size and 10 full size transit vehicles (Guam Public Transit System Transit Fleet Replacement)	(83% federal share with ADA accessible equipment) 10 full size ADA accessible transit buses with two-way radio system and fare boxes, etc. for \$300,000.00 each equals \$3,000,000.00 6 medium size ADA accessible transit buses for \$75,000.00 each equals \$450,000.00 Total \$3,450,000.00	\$3,450,000.00	(17% local share with ADA accessible equipment) \$706,627.00	\$4,156,627.00
"	Section 5309-Bus and Bus Related Facilities (Phase One-MOU with Guam Parks and Recreation for the proposed development of the adjacent land next to the existing DOA-DPTS Hagatna Transit Center as DOA-DPTS Administration and Transit Vehicle Parking Facilities)	(80% federal share) Negotiate with Guam Parks and Recreation for the development of the adjacent land next to the existing DOA-DPTS Hagatna Transit Center	\$0.00	(20 % local share) \$0.00	\$0.00
"	Section 5309-Bus and Bus Related Facilities (Phase Two-preliminary planning and environmental	(80% federal share) Total cost of project is \$450,000.00 multiply by 10% equals \$45,000.00 for preliminary	\$45,000.00	(20 % local share) \$11,250.00	\$56,250.00

	studies for the proposed DOA-DPTS Administration and Transit Vehicle Parking Facilities)	planning and environmental studies			
"	Section 5309-Bus and Bus Related Facilities (Phase three-design and engineering for proposed DOA-DPTS Administration and Transit Vehicle Parking Facilities)	(80% federal share) Total cost of project is \$450,000.00 multiply by 15% equals \$67,500.00 for design and engineering works	\$67,500.00	(20 % local share) \$10,125.00	\$77,625.00
"	Section 5309-Bus and Bus Related Facilities (Phase four-construction for the proposed DOA-DPTS Administration and Transit Vehicle Parking Facilities)	(80% federal share) Total cost of project is \$450,000.00 for a 60'x 60' (concrete structure) administration office with ac paved employee parking and transit bus parking areas	\$450,000.00	(20 % local share) \$112,500.00	\$562,500.00
"	Section 5309-Bus and Bus Related Facilities (Phase One-MOU with Guam Parks and Recreation for the proposed upgrade of the existing DOA-DPTS Hagatna Transit Center)	(80% federal share) Negotiate with Guam Parks and Recreation to upgrade the existing DOA-DPTS Hagatna Transit Center	\$0.00	(20 % local share) \$0.00	\$0.00
"	Section 5309-Bus and Bus Related Facilities (Phase Two-preliminary planning and environmental studies for the proposed upgrade of DOA-DPTS Hagatna Transit Center)	(80% federal share) \$205,000.00 multiply by 10% equals \$20,500.00 for preliminary planning and environmental studies	\$20,500.00	(20 % local share) \$5,125.00	\$25,625.00
"	Section 5309-Bus and Bus Related	(80% federal share) \$205,000.00	\$30,750.00	(20 % local share) \$4,920.00	\$35,670.00

	Facilities (Phase three-design and engineering for the proposed upgrade of DOA-DPTS Hagatna Transit Center)	multiply by 15% equals \$30,750.00 for design and engineering works			
"	Section 5309-Bus and Bus Related Facilities (Phase four-construction for the proposed upgrade of DOA-DPTS Hagatna Transit Center)	(80% federal share) 20'x20' (concrete structure) Restroom and 50' x 20' a (concrete structure) waiting shed with lighted and fenced bus parking area \$205,000.00	\$205,000.00	(20 % local share) \$51,250.00	\$256,250.00
"	Section 5309-Bus and Bus Related Facilities (Phase One-acquisition of land in Dededo for the proposed Micronesia Mall Transit Center)	(80% federal share) 100' x100' land @ \$94,679.00	\$94,679.00	(20 % local share) \$23,670.00	\$118,349.00
"	Section 5309-Bus and Bus Related Facilities (Phase Two-preliminary planning and environmental studies in Dededo for the proposed Micronesia Mall Transit Center)	(80% federal share) \$325,000.00 multiply by 10% equals \$32,500.00 for preliminary planning and environmental studies	\$32,500.00	(20 % local share) \$8,125.00	\$40,625.00
"	Section 5309-Bus and Bus Related Facilities (Phase three-design and engineering for the proposed Micronesia Mall Transit Center)	(80% federal share) \$325,000.00 multiply by 15% equals \$48,750.00 for design and engineering works	\$48,750.00	(20 % local share) \$12,188.00	\$60,938.00
"	Section 5309-Bus and Bus Related Facilities (Phase four-construction for the proposed Micronesia Mall Transit Center)	(80% federal share) 20'x20' (concrete structure) Restroom and 50' x 20' waiting shed with lighted, fenced, and ac paved bus parking	\$325,000.00	(20 % local share) \$81,250.00	\$406,250.00

		area \$325,000.00			
"	Section 5309-Bus and Bus Related Facilities (Phase One-- acquisition of land in Agat for the proposed Agat Transfer Station)	(80% federal share) 100' x100' land @ \$61,542.00	\$61,542.00	(20 % local share) \$15,386.00	\$76,928.00
"	Section 5309-Bus and Bus Related Facilities (Phase one- preliminary planning and environmental studies For the proposed Agat Transfer Station)	(80% federal share) \$325,000.00 multiply by 10% equals \$32,500.00 for preliminary planning and environmental studies	\$32,500.00	(20 % local share) \$8,125.00	\$40,625.00
"	Section 5309-Bus and Bus Related Facilities (Phase three- design and engineering for the proposed Agat Transfer Station)	(80% federal share) \$325,000.00 multiply by 15% equals \$48,750.00 for design and engineering works	\$48,750.00	(20 % local share) \$12,188.00	\$60,938.00
"	Section 5309-Bus and Bus Related Facilities (Phase four- construction for the proposed Agat Transfer Station	(80% federal share) 20'x20' (concrete structure) Restroom and 50' x 20' (concrete structure) waiting shed with lighted, fenced, and ac paved bus parking area \$325,000.00	\$325,000.00	(20 % local share) \$81,250.00	\$406,250.00
"	Section 5309-Bus and Bus Related Facilities Proposed Design built of prefabricated aluminum transit shelters with flexi-glass sidings (12L x 6W x 8H)	(80% federal share) Redline 1: 1. Hagatna Library 2. Across Public Health 3. UOG English Building Parking Lot 4. Guam Community College	\$180,000.00	(20 % local share) \$45,000.00	\$225,000.00

		<p>5. Stoplight at LP Untalan Middle School</p> <p>Total of 5 shelters at \$15,000 equals \$75,000.00</p> <p>Blueline 2:</p> <ol style="list-style-type: none"> 1. Governor's Complex 2. United Seaman's Club 3. Port Beach Entrance 4. Polaris Point Entrance 5. Naval Station Pass & ID Building 6. Camp Covington <p>Total of 6 shelters at \$15,000 equals \$90,000.00</p> <p>Express Line:</p> <ol style="list-style-type: none"> 1. Crosswalk at JFK High School 2. <p>Total of 1 shelter at \$15,000 equals \$15,000.00</p> <p>Grand Total of \$180,000.00</p>			
"	Proposed Extension of Northern fixed route system to accommodate military population increase in Dededo and Yigo before 2015 Erect transit shelters	<p>(80% federal share)</p> <p>Greyline 4:</p> <ol style="list-style-type: none"> 1. Ghura 501 2. Ghura 505 3. Ghura 506 4. AAFB Main Gate 5. Fern Terrace 6. 7-11 NCTMS 7. Astumbo Garden 	\$105,000.00	(20 % local share) \$26,250.00	\$131,250.00

		Total of 7 shelters at \$15,000 equals \$105,000.00			
"	Proposed improvement of all DOA-DPTS Transit routes for the projected increase in transit ridership	-	-	-	-
"	Proposed installation of transit bus stop signs at all transit stops	-	-	-	-
Total			\$6,578,801.00	\$1,276,060.33	\$7,854,861.33
State Administration			\$127,022.00		\$127,022.00
Grand Total			\$6,705,823.00	\$1,276,060.33	\$7,981,883.33

The funding amount for future years will depend upon Federal and State appropriations.

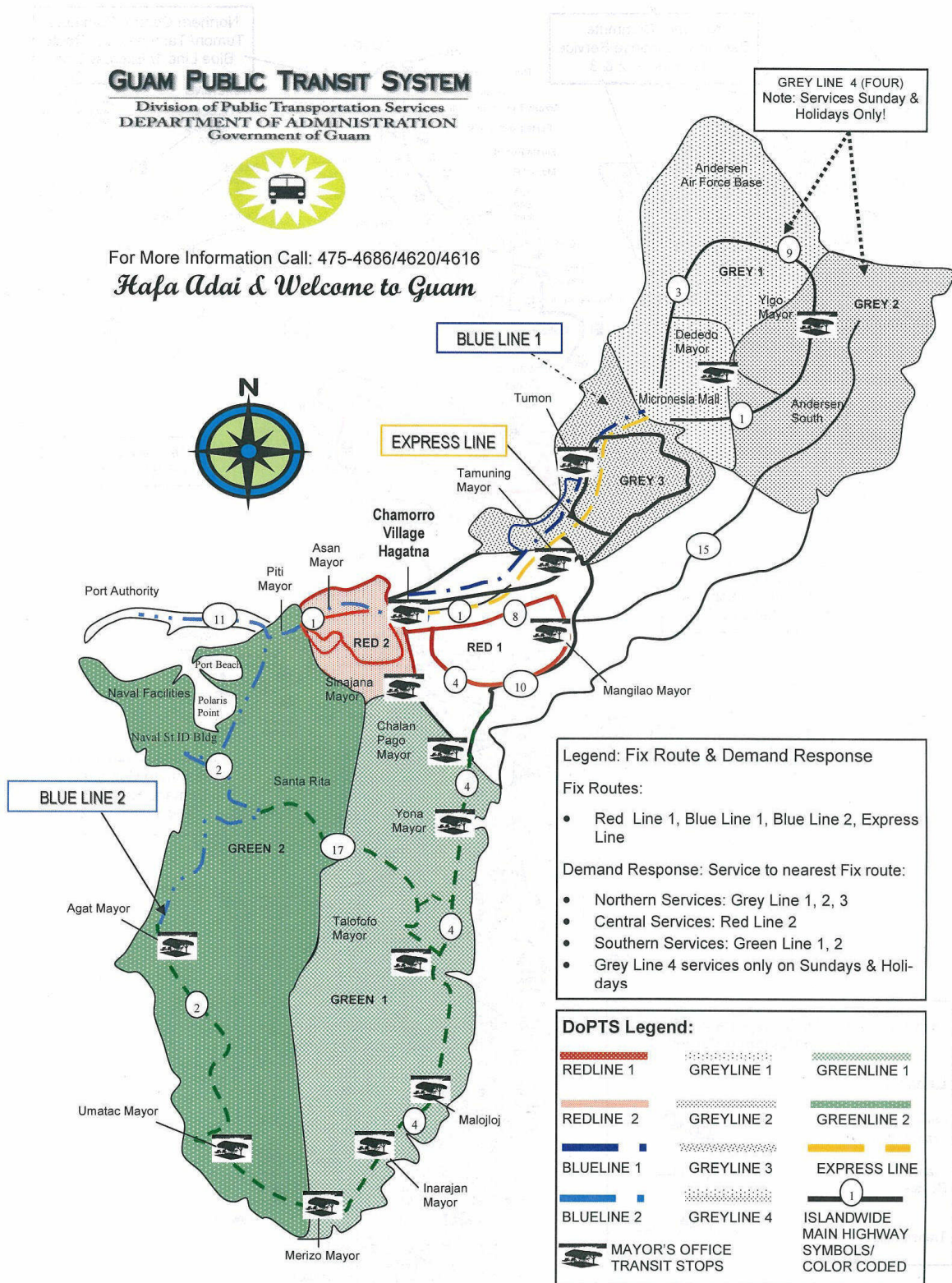
**THE DEPARTMENT OF ADMINISTRATION-
 DIVISION OF PUBLIC TRANSPORTATION SERVICES
 Territory of Guam**

**Long-Range Statewide Transportation Improvement Program
 Summary of the Estimated FY 2007 thru FY 2009 Federal Funds**

Transit Programs	Fiscal Year 2007	Estimated Fiscal Year 2008	Estimated Fiscal Year 2009
Section 5309-New Starts (Capital Investment Grants)	-	\$297,000.00	-
Section 5310-Formula Program for Elderly Persons and Persons with Disabilities	\$167,228.00	\$170,961.00	\$173,448.00
Section 5311-Other Than Urbanized Area Formula Program	\$539,792.00	\$596,775.00	\$630,146.00
Section 5311(b) (3) Rural Transit Assistance Program (RTAP)	\$16,874.00	RTAP funding is included in Section 5311	RTAP funding is included in Section 5311
Section 5316- Job Access and Reverse Commute	\$86,742.00	\$93,984.00	\$99,105.00
Section 5317- New Freedom Program	\$22,802.00	\$24,632.00	\$26,039.00
Total Continuing Federal Grant Program	\$833,438.00	\$886,352.00	\$928,738.00
Grand Total	\$833,438.00	\$1,183,352.00 Total including Section 5309	\$928,738.00

The funding amount for future years will depend upon Federal and State appropriations.

Figure 1.1: Transit Services on Guam



APPENDIX A3

**THE DEPARTMENT OF ADMINISTRATION-
DIVISION OF PUBLIC TRANSPORTATION SERVICES
Territory of Guam**

**Short-Range Statewide Transportation Improvement Program
FY 2008-2009 Program of Projects**

Available funds means funds derived from an existing source dedicated to or historically used for transportation purposes. For Federal funds, authorized and /or appropriated funds and the extrapolation of formula and discretionary funds at historic rates of increase are considered "available." A similar approach may be used for State and local funds that are dedicated to or historically used for transportation purposes.

Agency	Description	Federal	State	Total	
Department of Administration-Division of Public Transportation Services	Section 5309-New Starts for fy 2006-2008 (Capital Investment Grants for the Procurement of ADA Accessible Transit Buses-4 medium size)	(83% federal share with ADA accessible equipment) Available funds for fy 2006-2008 \$297,000.00	\$297,000.00	(17% federal share with ADA accessible equipment) \$60,831.33	\$357,831.33
"	Section 5310-Formula Program for Elderly Persons and Persons with Disabilities for FY 2008	Available funds for fy 2008 \$170,961.00 minus 15% of state administration (\$25,644.15) equals \$145,316.85	\$145,316.85	Consolidated grant match free for operating assistance	\$145,316.85
"	Section 5311 & 5340-Other Than Urbanized Area Formula Program for FY 2008	Available funds for fy 2008 \$596,775.00 minus 15% of state administration (\$89,516.25) equals \$507,258.75	\$507,258.75	Consolidated grant match free for operating assistance	\$507,258.75
"	Section 5311(b)(3) Rural Transit Assistance Program (RTAP) for FY 2008	Available funds for fy 2008 RTAP funding is included in Section 5311 (15% match free state Administration)	-	Consolidated grant match free for operating assistance RTAP funding is included in Section 5311	-
"	Section 5316- Job Access and Reverse Commute for FY 2008	Available funds for fy 2008 \$93,984.00 minus 10% of state administration (\$9,398.40) equals \$84,585.60	\$84,585.60	Consolidated grant match free for operating assistance	\$84,585.60
"	Section 5317- New	Available funds for fy	\$22,168.80	Consolidated	\$22,168.80

	Freedom Program	2008 \$24,632.00 minus 10% of state administration (\$2,463.20) equals \$22,168.80		grant match free for operating assistance	
Total			\$1,056,330.00	\$60,831.33	\$1,117,161.33
			\$127,022.00 Total State Administrati on		\$127,022.00 Total State Administrati on
Grand Total			\$1,183,352.00 Including state administratio n	\$60,831.33	\$1,244,183.33 Including state administratio n

The funding amount for future years will depend upon Federal and State appropriations.

APPENDIX A4

This report is authorized by 23 U.S.C. 402. Failure to use this form could result in a delay of obtaining grant funds.	U.S. DEPARTMENT OF TRANSPORTATION NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION FEDERAL HIGHWAY ADMINISTRATION PROBLEM SOLUTION PLAN (PSP)		O.M.B. No. 004-R2439 (To be Revised)	
	PSP TITLE ALCOHOL & OTHER DRUGS: Public Information & Education (PI&E)	PSP NO: AL07-01-01 PM NO: AL07-01-01	STATE GUAM	PAGE 1 OF 1
OBJECTIVE(S) To increase public awareness and support of highway safety-related activities regarding alcohol and other drugs countermeasures.	MILESTONES			
	CURRENT FISCAL YEAR 2007		TIME FRAMES	

SUBGRANTEE	DESCRIPTIVE PROJECT TITLE	INPUT				OUTPUT		
DEPARTMENT OF PUBLIC WORKS OFFICE OF HIGHWAY SAFETY	I. PERSONNEL COSTS/FRINGE BENEFITS	Share costs for salaries for Program Coordinators (II and III).				To assist in the administration and enforcement of policy issues concerning Alcohol & Other Drugs Countermeasures. Distribute PI&E materials island wide to over 50,000 people for public awareness about alcohol and drugs and the dangers of impaired driving on Guam's highways. For presentations, demonstrations, and viewing by over 50,000 people through electronic media and newsprint media.		
	II. TRAVEL/PERSONNEL DEVELOPMENT	Send attendees for off-island workshops, conferences, training or meetings on highway safety; to include project management, Life-savers and other related training.						
	III. CONTRACTUAL	Contract a Consultant to develop and implement a pilot program related to attitudes on drunk and drugged driving. Photo processing, printing services, PSA productions, billboards, banners, walking posters, etc.						
	IV. MATERIALS & SUPPLIES	Printed materials, posters, stickers, key chains, booklets, videos, etc.						
	V. EQUIPMENT (250)	Purchase of DVD player and accessories and demonstration kits, etc.						
	VI. EQUIPMENT (450)	Purchase of audio/video equipment, i.e. video editor, dash cam, and DVD recorder, etc, to enhance education presentations.						
Program Area Code (Impact)	CURRENT YEAR MAJOR COST ITEMS BY PROJECT	(1) 402 Prior Year Carryover	(2) 402 To Local fr. Col. 1	(3) 402 Current Year	(4) 402 Total (1) = (3)	(5) State Share	(6) Local Share	SEE PROGRAM
AL 07	TASK I	17,908.78	0.00	41,283.14	59,191.92			MODULE COST SUMMARY FOR PLANNING YEARS' COSTS
	TASK II	12,391.66	0.00	32,608.34	45,000.00			
	TASK III	4,081.50	0.00	30,918.85	35,000.35			
	TASK IV	3,083.50	0.00	6,916.50	10,000.00			
	TASK V (250)	749.00	0.00	1,751.00	2,500.00			
	TASK VI (450)	3,517.00	0.00	1,1483.00	15,000.00			
	TOTALS----->	\$41,731.44	\$0.00	\$124,960.83	\$166,692.27	-0-	-0-	

This report is authorized by 23 U.S.C. 402. Failure to use this form could result in a delay of obtaining grant funds.	U.S. DEPARTMENT OF TRANSPORTATION NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION FEDERAL HIGHWAY ADMINISTRATION PROBLEM SOLUTION PLAN (PSP)		O.M.B. No. 004-R2439 (To be Revised)	
	PSP NO: AL07-01-02		STATE	PAGE
PSP TITLE FY 2007 COUNTER DRUG AND DUI PROGRAM	PM NO: AL07-01-02		GUAM	1 OF 1
OBJECTIVE(S) To deter potentially impaired drivers by providing highly visible enforcement presence and effectuate DUI arrests.	M I L E S T O N E S			
	CURRENT FISCAL YEAR 2007		TIME FRAMES	

SUBGRANTEE	DESCRIPTIVE PROJECT TITLE	INPUT	OUTPUT
Guam Police Department HIGHWAY PATROL	I. PERSONNEL/OVERTIME II. TRAVEL/PERSONNEL DEVELOPMENT III. CONTRACTUAL IV. MATERIALS & SUPPLIES V. EQUIPMENT (250) VI. EQUIPMENT (450)	Overtime salaries for highway patrol officers conducting sobriety checkpoints. Send officers for off-island workshops, training, conferences and/or meetings. Photo processing, printing services, billboards, posters, etc. and contractual service for I-connect radios. Purchase of breath testing instruments, video tape supplies, DRE supplies and accessories, etc. Purchase of DRE kits (stefscope, pen lights, blood pressure, etc.) Purchase of threshold, marker lights and signs, and breath testing instruments. Purchase of in-dash cameras to be used for pilot program recording DWI/DUI arrests and LTI Scene mapping kit. Procure police package vehicles.	Increase number of DUI checkpoints and from 18 to 20 biennially at 5 different locations identified as having the highest incidents of DWI/DUI violations and crashes. This will include various saturation patrols in areas where DUI checkpoints are not feasible. Train GPD personnel in effectuating DWI/DUI arrests. Distribute DWI/DUI enforcement materials island wide to over 50,000 people for public awareness on drinking and driving and the consequences of being caught during checkpoints, sobriety testing, and traffic stops on the highways.

Program Area Code (Impact)	CURRENT YEAR MAJOR COST ITEMS BY PROJECT	(1) 402 Prior Year Carryover	(2) 402 To Local fr. Col. 1	(3) 402 Current Year	(4) 402 Total (1) = (3)	(5) State Share	(6) Local Share	SEE PROGRAM MODULE COST SUMMARY FOR PLANNING YEARS' COSTS
AL07	TASK I	\$ 17,536.64	0.00	17,463.36	\$ 35,000.00			
	TASK II	\$10,000.00	0.00	6,126.93	\$16,126.93			
	TASK III	\$ 0.00	0.00	0.00	\$ 0.00			
	TASK IV	\$0.00	0.00	0.00	\$ 0.00			
	TASK V (250)	\$2,205.00	0.00	0.00	\$ 2,205.00			
	TASK VI (450)	\$ 9,481.93	0.00	22,723.07	\$ 32,205.00			

TOTALS----->

\$85,968.41	\$0.00	\$0.00	\$85,968.41	-0-	-0-
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HS Form 57 (Rev. 7/77) Replaces HS-57A, HS-212 and previous editions of HS-57 which are obsolete.

<p>This report is authorized by 23 U.S.C. 402. Failure to use this form could result in a delay of obtaining grant funds.</p>		<p>U.S. DEPARTMENT OF TRANSPORTATION NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION FEDERAL HIGHWAY ADMINISTRATION PROBLEM SOLUTION PLAN (PSP)</p>		<p>O.M.B. No. 004-R2439 (To be Revised)</p>				
<p>PSP TITLE OCCUPANT/CHILD PROTECTION: Public Information & Education (PI&E)</p>		<p>PSP NO: OP07-02-01</p>		<p>STATE GUAM</p>	<p>PAGE 1 OF 1</p>			
<p>OBJECTIVE(S) To increase public awareness and support of automatic crash protection and occupant restraint countermeasures.</p>		<p>MILESTONES</p>						
		<p>CURRENT FISCAL YEAR 2007</p>		<p>TIME FRAMES</p>				
SUBGRANTEE	DESCRIPTIVE PROJECT TITLES	INPUT				OUTPUT		
DEPARTMENT OF PUBLIC WORKS OFFICE OF HIGHWAY SAFETY	<p>I. PERSONNEL COSTS/FRINGE BENEFITS</p> <p>II. TRAVEL/PERSONNEL DEVELOPMENT</p> <p>III. CONTRACTUAL</p> <p>IV. MATERIALS AND SUPPLIES</p> <p>V. EQUIPMENT (250)</p>	<p>Share costs for salaries for Program Coordinators (II/III).</p> <p>Send attendees for off-island conferences, workshops related to transportation safety issues and the Moving Kids Safely, Lifesavers and Child Passenger Safety Technical Conference. In addition, to cover the cost of travel for instructors to come to Guam to conduct the Standardized CPS Technician training.</p> <p>Conduct quantified formal surveys of child restraint device usage rates and produce education material. Printing of public information and educational materials. Printed materials, posters, billboards, stickers, walking posters, key chains, booklets, etc., To cover the cost of rental for CPS training on car restraints.</p> <p>Purchase information and educational materials for distribution at island wide safety activities.</p> <p>Purchase of child restraint systems for car seat check-up events.</p>				<p>To assist in the administration and enforcement of policy issues concerning Occupant Protection.</p> <p>Train personnel in proper child restraint measures to conduct presentations on proper child restraint devices at island wide nurseries, schools, and requesting groups.</p> <p>Establish seatbelts/safety device usage rates. Develop and produce educational programs and materials in multi-language formats for high visibility campaigns.</p>		
Program Area Code (Impact)	CURRENT YEAR MAJOR COST ITEMS BY PROJECT	(1) 402 Prior Year Carryover	(2) 402 To Local fr. Col. 1	(3) 402 Current Year	(4) 402 Total (1) = (3)	(5) State Share	(6) Local Share	SEE PROGRAM
OP07	TASK I	\$15,692.28	\$0.00	\$38,191.76	\$53,884.04			MODULE
	TASK II	18,653.50	0.00	8,600.22	27,253.72			COST
	TASK III	190.00	0.00	24,910.00	25,100.00			SUMMARY
	TASK IV	4,952.63	0.00	15,047.37	20,000.00			FOR
			114.65			11,173.86		

TASK V		0.00	11,059.21					COSTS
TOTALS----->	\$39,603.06	\$ 0.00	\$97,808.56	\$137,411.62	-0-	-0-		

HS Form 57 (Rev. 7/77) Replaces HS-57A, HS-212 and previous editions of HS-57 which are obsolete.

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	PSP TITLE CHILD TRAFFIC SAFETY ENFORCEMENT	PSP NO: OP07-02-02 PM NO: OP07-02-01	STATE GUAM	PAGE 1 OF 1
OBJECTIVE(S) To increase highway safety practices and awareness along with a decrease in traffic related incidents involving youth offenders.	M I L E S T O N E S			
	CURRENT FISCAL YEAR 2007	TIME FRAMES		

SUBGRANTEE	DESCRIPTIVE PROJECT TITLES	INPUT				OUTPUT		
DEPARTMENT OF PUBLIC WORKS OFFICE OF HIGHWAY SAFETY	I. PERSONNEL/OVERTIME/FRINGE II. TRAVEL/PERSONNEL DEVELOPMENT III. CONTRACTUAL IV. MATERIALS AND SUPPLIES V. EQUIPMENT (250/450)	Overtime salaries for highway patrol officers conducting seat belt enforcement. Send officers to the Lifesavers Annual Conference or Child Passenger Technical Conference, T.O.P.S. or other child transportation safety-related training. Printing services for public information educational materials. Purchase educational printed materials, pamphlets, posters, literature, and visual aid supplies for presentations at schools, exhibits and conferences. Purchase educational child traffic safety-related tapes. Purchase of video equipment, etc., to enhance the educational presentations.				To assist in the administration and enforcement of policy issues concerning Occupant Protection. Train personnel in proper child restraint measures to conduct presentations on proper child restraint devices at island wide nurseries, schools, and requesting groups. Establish seatbelts/safety device usage rates. Develop and produce educational programs and materials in multi-language formats for high visibility campaigns.		
Program Area Code (Impact)	CURRENT YEAR MAJOR COST ITEMS BY PROJECT	(1) 402 Prior Year Carryover	(2) 402 To Local fr. Col. 1	(3) 402 Current Year	(4) 402 Total (1) = (3)	(5) State Share	(6) Local Share	SEE PROGRAM
OP07	TASK I	\$19,334.09	\$0.00	\$ 5,665.91	\$25,000.00			MODULE COST SUMMARY FOR PLANNING YEARS' COSTS
	TASK II	0.00	0.00	10,000.00	10,000.00			
	TASK III	0.63	0.00	7,959.67	7,960.30			
	TASK IV	52.00	0.00	4,948.00	5,000.00			
	TASK V	10,503.92	0.00	0.00	10,503.92			

	TASK V (250/450)	20,032.43	0.00	0.00	20,032.43			PLANNING YEARS' COSTS
	TOTALS----->	\$62,398.44	\$0.00	\$24,619.58	\$87,018.02	-0-	-0-	

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<p>This report is authorized by 23 U.S.C. 402. Failure to use this form could result in a delay of obtaining grant funds.</p>		<p>U.S. DEPARTMENT OF TRANSPORTATION NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION FEDERAL HIGHWAY ADMINISTRATION PROBLEM SOLUTION PLAN (PSP)</p>			<p>O.M.B. No. 004-R2439 (To be Revised)</p>				
<p>PSP TITLE EMERGENCY MEDICAL SERVICES (EMS) INJURY PREVENTION & EMT EDUCATION</p>		<p>PSP NO: EM07-04-01</p>		<p>STATE GUAM</p>		<p>PAGE 1 OF 1</p>			
<p>OBJECTIVE(S) To develop programs to prevent traffic-related injuries and fatalities, and to improve Guam's EMS to better respond and administer medical treatment of individuals injured during motor vehicle collisions.</p>		<p>MILESTONES CURRENT FISCAL YEAR 2007</p>			<p>TIME FRAMES</p>				
SUBGRANTEE	DESCRIPTIVE PROJECT TITLES		INPUT			OUTPUT			
DEPARTMENT OF PUBLIC HEALTH & SOCIAL SERVICES (EMS office)	<p>I. CONTRACTUAL II. MATERIALS AND SUPPLIES</p>		<p>Printing of injury prevention educational materials. Purchase essential materials and supplies to develop Highway Safety displays, for public education, awareness campaigns, etc.</p>			<p>EMS Staff will conduct traffic safety presentations to educate young drivers and reduce the number of fatalities and injuries caused by motor vehicle crashes.</p>			
Program Area Code (Impact)	CURRENT YEAR MAJOR COST ITEMS BY PROJECT		(1) 402 Prior Year Carryover	(2) 402 To Local fr. Col. 1	(3) 402 Current Year	(4) 402 Total (1) = (3)	(5) State Share	(6) Local Share	SEE PROGRAM MODULE COST SUMMARY FOR PLANNING YEARS'
EM07	TASK I		\$3,308.46	\$0.00	\$0.00	\$3,308.46			
	TASK II		3,308.46		0.00	3,308.46			

	TASK I	\$ 0.00	0.00	\$9,863.16	\$9,863.16			COST SUMMARY FOR PLANNING YEARS' COSTS
	TASK II (250/450)	0.00	0.00	30,503.92	30,503.92			
	TOTALS----->	\$0.00	0\$0.00	\$40,367.08	\$40,367.08			

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PSP TITLE EMS/VEHICLE EXTRICATION INSTRUCTOR TRAINING		PSP NO: EM07-04-03		STATE GUAM	PAGE 1 OF 1
PM NO: EM07-04-03					
OBJECTIVE(S) To provide continuing vehicle extrication training on up-to-date methods and to allow for rescue personnel to obtain progressive certification levels so that the extrication of persons trapped in motor vehicles, as a result of traffic crashes, can be accomplished safely and expeditiously.		MILESTONES			
		CURRENT FISCAL YEAR 2007		TIME FRAMES	
SUBGRANTEE	DESCRIPTIVE PROJECT TITLES	INPUT		OUTPUT	
GUAM FIRE DEPARTMENT EMS/Rescue Bureau	I. TRAVEL/PERSONNEL DEVELOPMENT	To send two GFD rescue personnel to attend vehicle extrication instructor training off-island.		Provide continuing vehicle extrication training on up to date methods and to allow for rescue personnel to obtain progressive certification levels so that the extrication of persons trapped in motor vehicles, as a result of traffic crashes, can be accomplished with reasonable care-both to avoid injury or aggravating existing injuries, safely and expeditiously.	

Program Area Code (Impact)	CURRENT YEAR MAJOR COST ITEMS BY PROJECT	(1) 402 Prior Year Carryover	(2) 402 To Local fr. Col. 1	(3) 402 Current Year	(4) 402 Total (1) = (3)	(5) State Share	(6) Local Share	SEE
EM07	TASK I	\$0.00	\$0.00	\$10,000.00	\$10,000.00			MODULE COST SUMMARY FOR PLANNING YEARS' COSTS
	TOTALS----->	\$0.00	\$0.00	\$10,000.00	\$10,000.00	-0-	-0-	

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<p>PSP TITLE TRAFFIC RECORDS INFORMATION MANAGEMENT SYSTEM (T.R.I.M.S.)</p>		<p>PSP NO: TR07-05-01</p>		STATE	PAGE
		<p>PM NO: TR07-05-01</p>		GUAM	1 OF 1
<p>OBJECTIVE(S) To conduct and input statistical data of the Territorial Highway System (THS), on traffic crashes, injuries, fatalities, property damages, DWI/DUI crashes, and arrests, and speeding violations to identify problem areas.</p>		<p>MILESTONES</p>			
		<p>CURRENT FISCAL YEAR 2007</p>		<p>TIME FRAMES</p>	
SUBGRANTEE	DESCRIPTIVE PROJECT TITLES	INPUT			OUTPUT
DEPARTMENT OF PUBLIC WORKS OFFICE OF HIGHWAY SAFETY	I. PERSONNEL/FRINGE BENEFITS II. TRAVEL III. CONTRACTUAL	<p>Continue the funding for one (1) Data Control Clerk II to oversee the crash data collection and inputting into the database system.</p> <p>Send representatives to the Traffic Records Forum and/or conferences relating to Crash Data Collection.</p> <p>To obtain service agreement to maintain computer link into other Traffic Records Information System. Contract consultant to provide impact (effectiveness) evaluation, and conduct data</p>			<p>To assist in the coding of section location number and inputting of crash data into database system.</p> <p>Continue improving signs and markings on Guam's highways.</p> <p>Use of updated technology, implement demo projects at high hazard locations to</p>

	IV. MATERIALS AND SUPPLIES	programming assessment and provide recommendations to interface with existing networks. Purchase of computer supplies and materials necessary for the computer systems.				monitor crash factors such as traffic controls, speed, design, visibility, etc., in seven locations with visual clocking monitors.		
Program Area Code (Impact)	CURRENT YEAR MAJOR COST ITEMS BY PROJECT	(1) 402 Prior Year Carryover	(2) 402 To Local fr. Col. 1	(3) 402 Current Year	(4) 402 Total (1) = (3)	(5) State Share	(6) Local Share	SEE PROGRAM MODULE COST SUMMARY FOR PLANNING YEARS' COSTS
TR07	TASK I	\$13,188.37		\$6,126.74	\$19,315.11			
	TASK II	1,596.66		18,403.34	20,000.00			
	TASK III	30,000.00		0.00	30,000.00			
	TASK IV	9,863.16		0.00	9,863.16			
	TOTALS---->	\$54,648.19		\$24,530.08	\$79,178.27'	-0-	-0-	

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This report is authorized by 23 U.S.C. 402. Failure to use this form could result in a delay of obtaining grant funds.		U.S. DEPARTMENT OF TRANSPORTATION NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION FEDERAL HIGHWAY ADMINISTRATION PROBLEM SOLUTION PLAN (PSP)		O.M.B. No. 004-R2439 (To be Revised)	
PSP TITLE ROADWAY SAFETY		PSP NO: RS07-06-01		STATE	PAGE
		PM NO: RS06-06-01		GUAM	1 OF 1
OBJECTIVE(S) To reduce the frequency and severity of traffic accidents through identification of problem areas, development of remedial action programs, and implementation of improvements.		MILESTONES			
		CURRENT FISCAL YEAR 2007		TIME FRAMES	
SUBGRANTEE	DESCRIPTIVE PROJECT TITLES	INPUT			OUTPUT
DEPARTMENT OF PUBLIC WORKS OFFICE OF HIGHWAY	I. MATERIALS AND SUPPLIES II. EQUIPMENT (250/450)	Procurement of reflective safety materials such as traffic tape, traffic paint, etc., for higher visibility. Procure regulatory and warning signs. Procure one (1) 40 ft. steel container to store reflective			Continue improving signs and markings on Guam's Highways. Use of updated technology, implement demo projects at high hazard locations to

SAFETY		equipments and maintain accountability. Procure regulatory and warning signs.				monitor crash factors such as traffic controls, speed, design, visibility, etc., in seven locations with visual clocking monitors.		
Program Area Code (Impact)	CURRENT YEAR MAJOR COST ITEMS BY PROJECT	(1) 402 Prior Year Carryover	(2) 402 To Local fr. Col. 1	(3) 402 Current Year	(4) 402 Total (1) = (3)	(5) State Share	(6) Local Share	SEE PROGRAM MODULE COST SUMMARY FOR PLANNING YEARS' COSTS
RS07	TASK I	\$23,271.50		\$6,000.00	\$29,271.50			
	TASK II	0.00		30,543.05	30,543.05			
	TOTALS---->	\$23,271.50		\$36,543.05	\$59,814.55	-0-	-0-	

HS Form 57 (Rev. 7/77) Replaces HS-57A, HS-212 and previous editions of HS-57 which are obsolete.

<p>This report is authorized by 23 U.S.C. 402. Failure to use this form could result in a delay of obtaining grant funds.</p>		<p>U.S. DEPARTMENT OF TRANSPORTATION NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION FEDERAL HIGHWAY ADMINISTRATION PROBLEM SOLUTION PLAN (PSP)</p>		<p>O.M.B. No. 004-R2439 (To be Revised)</p>	
<p>PSP TITLE PLANNING AND ADMINISTRATION (NHTSA 402)</p>		<p>PSP NO: PA07-07-01</p>		STATE	PAGE
		<p>PM NO: PA07-07-01</p>		GUAM	1 OF 1
<p>OBJECTIVE(S) To provide for the planning and administration of the overall Highway Safety Programs for the Territory of Guam.</p>		<p>MILESTONES</p>			
		<p>CURRENT FISCAL YEAR 2007</p>		<p>TIME FRAMES</p>	
SUBGRANTEE	DESCRIPTIVE PROJECT TITLES	INPUT			OUTPUT
DEPARTMENT OF PUBLIC WORKS	I. PERSONNEL/FRINGE BENEFITS II. PERSONNEL DEVELOPMENT/TRAVEL	Share of costs for salaries for Program Coordinators (II/III). Send representatives to GHSA, NAWHSL, NGA, Partners			To effectively administer all phases of 100% federally funded highway safety programs and to utilize all means for promoting

OFFICE OF HIGHWAY SAFETY	III. CONTRACTUAL IV. EQUIPMENT (250/450) V. UTILITIES	Meeting, Mid-Year Review, workshops, conferences, certificated courses, etc., for courses sponsored/sanctioned by the U.S. DOT, TSI (e.g. Program Management, Project Management, Managing Federal Finances, etc.) And other related activities as approved by NHTSA, Western Region. Printing services, subscriptions, postage, dues, express courier services, DSL services, etc. Lease to own one photocopier and office equipment necessary for daily operations. Telephone services, computer modem usage, e-mail dedicated lines.	Section 402 Grant programs/projects in the Territory of Guam with updated technology and highway safety priorities.
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Program Area Code (Impact)	CURRENT YEAR MAJOR COST ITEMS BY PROJECT	(1) 402 Prior Year Carryover	(2) 402 To Local fr. Col. 1	(3) 402 Current Year	(4) 402 Total (1) = (3)	(5) State Share	(6) Local Share	SEE PROGRAM MODULE COST SUMMARY FOR PLANNING YEARS' COSTS
PA07	TASK I	\$28,000.00		\$7,000.00	\$35,000.00			
	TASK II	13,844.57		30,614.21	44,458.78			
	TASK III	1,000.00		8,130.00	9,130.00			
	TASK IV	0.00		3,729.00	3,729.00			
	TASK V	1,651.88		4,202.09	5,853.97			
	TOTALS---->	\$44,496.45		\$53,675.30	\$98,171.75	-0-	-0-	

HS Form 57 (Rev. 7/77) Replaces HS-57A, HS-212 and previous editions of HS-57 which are obsolete.

This report is authorized by 23 U.S.C. 402. Failure to use this form could result in a delay of obtaining grant funds.	U.S. DEPARTMENT OF TRANSPORTATION NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION FEDERAL HIGHWAY ADMINISTRATION PROBLEM SOLUTION PLAN (PSP)		O.M.B. No. 004-R2439 (To be Revised)	
PSP TITLE YOUTH TO YOUTH ALCOHOL/DRUG FREE	PSP NO: YA07-08-01	STATE GUAM	PAGE 1 OF 1	
OBJECTIVE(S) To provide a community-based program designed to mobilize the youths in Guam to actively lead alcohol/drug free lifestyles.	MILESTONES		TIME FRAMES	
CURRENT FISCAL YEAR 2007				
SUBGRANTEE	DESCRIPTIVE PROJECT TITLES	INPUT		OUTPUT

DEPARTMENT OF PUBLIC WORKS OFFICE OF HIGHWAY SAFETY	I. TRAVEL/PERSONNEL DEVELOPMENT	Send students to attend youth alcohol/drug workshops, conference, etc.	To enhance awareness on the effects of alcohol & drugs among Guam's youths by reaching about 80% of them.
	II. CONTRACTUAL	Printing services, PSA production, ordering paraphernalia such as stickers, key chains, t-shirts, etc. Registration fees for students participating in Guam's annual island-wide youth conference.	Materials will be distributed to all 8 high schools and 5 middle schools to students island-wide.
	III. MATERIALS & SUPPLIES	Purchase Drug I.D. display, order easel pads, films video cassettes, slides, etc.	GPD will continue to concentrate on reducing the number of youths involved in DUI crashes biennially by conducting DUI checkpoints during the holiday season, school functions, and graduation.

Program Area Code (Impact)	CURRENT YEAR MAJOR COST ITEMS BY PROJECT	(1) 402 Prior Year Carryover	(2) 402 To Local fr. Col. 1	(3) 402 Current Year	(4) 402 Total (1) = (3)	(5) State Share	(6) Local Share	SEE PROGRAM MODULE COST SUMMARY FOR PLANNING YEARS' COSTS
YA07	TASK I	\$ 0.00	\$0.00	\$ 0.00	\$ 0.00			
	TASK II	13,973.85	0.00	790.00	14,763.85			
	TASK III	0.00	0.00	443.29	443.29			
	TOTALS----->	\$13,973.85	\$0.00	\$1,233.29	\$15,207.14	-0-	-0-	

HS Form 57 (Rev. 7/77) Replaces HS-57A, HS-212 and previous editions of HS-57 which are obsolete.

This report is authorized by 23 U.S.C. 402. Failure to use this form could result in a delay of obtaining grant funds.	U.S. DEPARTMENT OF TRANSPORTATION NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION FEDERAL HIGHWAY ADMINISTRATION PROBLEM SOLUTION PLAN (PSP)		O.M.B. No. 004-R2439 (To be Revised)	
	PSP TITLE YOUTH TO YOUTH ALCOHOL/DRUG FREE	PSP NO: YA07-08-02 PM NO: YA04-08-02	STATE GUAM	PAGE 1 OF 1
OBJECTIVE(S) To provide training and technical assistance to the Youth for Youth organization in the development, implementation, and	MILESTONES CURRENT FISCAL YEAR 2007		TIME FRAMES	

evaluation of the annual youth conference which is designed to empower Guam's youth as leaders in drug/alcohol prevention work.

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SUBGRANTEE	DESCRIPTIVE PROJECT TITLES	INPUT	OUTPUT
DEPARTMENT OF MENTAL HEALTH & SUBSTANCE ABUSE	I. Contractual Services II. Materials & Supplies	Printing services for bi-monthly newsletters. Purchase of prevention and educational material and conference/program supplies. To include blank video tapes, film, etc.	To enhance awareness on the effects of alcohol & drugs among Guam's youths by reaching about 80% of them. Materials will be distributed to all 8 high schools and 5 middle schools to students islandwide.

Program Area Code (Impact)	CURRENT YEAR MAJOR COST ITEMS BY PROJECT	(1) 402	(2) 402	(3) 402	(4) 402	(5)	(6)	SEE PROGRAM MODULE COST SUMMARY FOR PLANNING YEARS' COSTS
		Prior Year Carryover	To Local fr. Col. 1	Current Year	Total (1) = (3)	State Share	Local Share	
YA07	TASK I	\$5,000.00	\$0.00	\$0.00	\$5,000.00			
	TASK II	5,000.00	0.00	0.00	5,000.00			
	TOTALS----->	\$10,000.00	\$0.00	\$0.00	\$10,000.00	-0-	-0-	

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This report is authorized by 23 U.S.C. 402. Failure to use this form could result in a delay of obtaining grant funds.	U.S. DEPARTMENT OF TRANSPORTATION NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION FEDERAL HIGHWAY ADMINISTRATION PROBLEM SOLUTION PLAN (PSP)		O.M.B. No. 004-R2439 (To be Revised)	
	PSP TITLE	PSP NO: SA07-09-01	STATE	PAGE
SAFE COMMUNITIES	PM NO: SA07-09-01			

		GUAM	1 OF 1
OBJECTIVE(S) To provide a community-based program designed to educate and inform the public at large in highway safety.	MILESTONES		
	CURRENT FISCAL YEAR 2007	TIME FRAMES	

SUBGRANTEE	DESCRIPTIVE PROJECT TITLES	INPUT				OUTPUT		
DEPARTMENT OF PUBLIC WORKS OFFICE OF HIGHWAY SAFETY	I. PERSONNEL/FRINGE BENEFITS II. PERSONNEL DEVELOPMENT/TRAVEL III. CONTRACTUAL	Share of costs for salaries for Program Coordinators (II/III). Send representatives to attend Safe Communities/Injury Prevention related workshops, conferences, financial workshops, or coordinator meeting. Printing services, ordering pre-printed campaign promotional items, such as stickers, key chains, etc., and framing services for highway safety posters for distribution.				To expand and ensure the conformance of Guam's Safe Communities Program with NHTSA and other national criteria. The Guam Safe Kids Coalition will plan and launch community and school traffic crash/injury prevention campaigns. Distribute traffic safety/injury prevention promotional materials to schools island-wide, GovGuam agencies/departments, private, military and civic centers during PI&E campaigns.		
Program Area Code (Impact)	CURRENT YEAR MAJOR COST ITEMS BY PROJECT	(1) 402 Prior Year Carryover	(2) 402 To Local fr. Col. 1	(3) 402 Current Year	(4) 402 Total (1) = (3)	(5) State Share	(6) Local Share	SEE PROGRAM MODULE COST SUMMARY FOR PLANNING YEARS' COSTS
SA07	TASK I	\$32,255.70		\$0.00	\$32,255.70			
	TASK II	0.00		0.00	0.00			
	TASK III	0.00		0.00	0.00			
	TOTALS---->	\$32,255.70		\$0.00	\$32,255.70	-0-	-0-	

HS Form 57 (Rev. 7/77) Replaces HS-57A, HS-212 and previous editions of HS-57 which are obsolete.

This report is authorized by 23 U.S.C. 402. Failure to use this form could result in a delay of obtaining grant funds.	U.S. DEPARTMENT OF TRANSPORTATION NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION FEDERAL HIGHWAY ADMINISTRATION PROBLEM SOLUTION PLAN (PSP)	O.M.B. No. 004-R2439 (To be Revised)
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PSP TITLE CHILD PASSENGER PROTECTION EDUCATION (INCENTIVE)	PSP NO: J307-11-01	STATE	PAGE
	PM NO: J307-11-01	GUAM	1 OF 1
OBJECTIVE(S) To provide public education and awareness on existing occupant/child protection laws designed to reduce injuries and fatalities of people riding in motor vehicles unrestrained or improperly restrained.	MILESTONES		
	CURRENT FISCAL YEAR 2007	TIME FRAMES	

SUBGRANTEE	DESCRIPTIVE PROJECT TITLES	INPUT	OUTPUT
DEPARTMENT OF PUBLIC WORKS OFFICE OF HIGHWAY SAFETY	I. TRAVEL/PERSONNEL DEVELOPMENT II. CONTRACTUAL III. CAPITAL OUTLAY (250/450)	To cover the cost of travel for CPS Instructors to come to Guam to conduct the Standardized Child Passenger Safety Technician Training. Video production of public service announcements (to include duplication of several copies). To contract room rental for CPS training in September 2007. Purchase of child restraint devices and equipment for Child Passenger Seat Check-up Events/Activities.	Train instructors will work closely with public health providers, nurseries, schools, hospitals, private clinics, and village mayors in promoting Child Restraint on Guam. Distribute PI&E materials island-wide and develop and produce educational program and materials in multi-language formats for use in high visibility activities. To coordinate and conduct fitting stations to educate the public on the proper installation of child restraint devices.

Program Area Code (Impact)	CURRENT YEAR MAJOR COST ITEMS BY PROJECT	(1) 402 Prior Year Carryover	(2) 402 To Local fr. Col. 1	(3) 402 Current Year	(4) 402 Total (1) = (3)	(5) State Share	(6) Local Share	SEE PROGRAM MODULE COST SUMMARY FOR PLANNING YEARS' COSTS
J307	TASK I	\$ 0.00	\$0.00	\$0.00	\$ 0.00			
	TASK II	0.00	0.00	0.00	0.00			
	TASK III (250/450)	5,005.85	0.00	0.00	5,005.85			
	TOTALS----->	\$5,005.85	\$0.00	\$0.00	\$5,005.85	-0-	-0-	

HS Form 57 (Rev. 7/77) Replaces HS-57A, HS-212 and previous editions of HS-57 which are obsolete.

This report is authorized by 23 U.S.C. 402. Failure to use this form could result in a	U.S. DEPARTMENT OF TRANSPORTATION NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION	O.M.B. No. 004-R2439
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delay of obtaining grant funds.		FEDERAL HIGHWAY ADMINISTRATION PROBLEM SOLUTION PLAN (PSP)			(To be Revised)			
PSP TITLE SCHOOL BUS SAFETY (402)		PSP NO: SB07-13-01			STATE	PAGE		
		PM NO: SB04-13-01			GUAM	1 OF 1		
OBJECTIVE(S) To increase public awareness about school bus safety and the danger zones around the bus during loading and unloading.		MILESTONES						
		CURRENT FISCAL YEAR 2007			TIME FRAMES			
SUBGRANTEE	DESCRIPTIVE PROJECT TITLES	INPUT				OUTPUT		
DEPARTMENT OF PUBLIC WORKS OFFICE OF HIGHWAY SAFETY	I. CONTRACTUAL II. MATERIALS AND SUPPLIES III. EQUIPMENT (250)	Print color posters of bus danger zones during school bus loading/unloading, and school bus rules for island wide distribution and to produce a master TV/radio public service announcements. Procurement of educational materials for use in demonstrations, orientations, and training activities. Purchase of video training tapes.				Continue the public education awareness by distributing school bus safety materials island wide, and implement school bus safety education activities. To continue to reduce the number of school bus-related traffic crashes and student injuries for SY2006-2007.		
Program Area Code (Impact)	CURRENT YEAR MAJOR COST ITEMS BY PROJECT	(1) 402 Prior Year Carryover	(2) 402 To Local fr. Col. 1	(3) 402 Current Year	(4) 402 Total (1) = (3)	(5) State Share	(6) Local Share	SEE PROGRAM MODULE COST SUMMARY FOR PLANNING YEARS' COSTS
SB07	TASK I	\$ 560.19		5,940.00	\$6,500.19			
	TASK II	558.60		558.60	1,117.20			
	TASK III (250)	0.00		0.00	0.00			
	TOTALS---->	\$1,118.79		\$6,498.60	\$7,617.39	-0-	-0-	

This report is authorized by 23 U.S.C. 402. Failure to use this form could result in a delay of obtaining grant funds.	U.S. DEPARTMENT OF TRANSPORTATION NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION FEDERAL HIGHWAY ADMINISTRATION PROBLEM SOLUTION PLAN (PSP)		O.M.B. No. 004-R2439 (To be Revised)	
	PSP TITLE PEDESTRIAN AND BICYCLE SAFETY PROGRAM	PSP NO: PS07-17-01 PM NO: PS07-17-01	STATE GUAM	PAGE 1 OF 1
OBJECTIVE(S) To develop a safety program to emphasize consistent use of safety equipment and rules of the highways.	M I L E S T O N E S			
	CURRENT FISCAL YEAR 2007		TIME FRAMES	

SUBGRANTEE	DESCRIPTIVE PROJECT TITLES	INPUT				OUTPUT		
DEPARTMENT OF PUBLIC WORKS OFFICE OF HIGHWAY SAFETY	I. TRAVEL	Send representatives to the Annual Bicycle/Pedestrian Safety Coordinators Meetings/Workshops and any other related training concerning pedestrian and bicycle safety programs.				To establish new programs to provide educational information regarding bicycle safety, distribute and properly fit bicycle helmets, conduct traffic safety rodeos at the school and community levels on bicycle and pedestrian laws These projects are to decrease the number of traffic collisions involving bicyclists and pedestrians, and to increase public awareness of traffic safety practices for pedestrians, bicyclists and motorists.		
	II. CONTRACTUAL	Printing of educational materials concerning pedestrian and bicycle safety. To procure printed materials, posters, stickers, walking posters, etc. Contract a Outreach Consultant to conduct educational outreach and provide hands-o educational activities.						
	III. MATERIALS AND SUPPLIES	Purchase information and educational materials for distribution at island wide safety activities.						
	IV. EQUIPMENT (250/450)	Purchase of bicycle helmets, bicycle and rodeo equipments.						
Program Area Code (Impact)	CURRENT YEAR MAJOR COST ITEMS BY PROJECT	(1) 402 Prior Year Carryover	(2) 402 To Local fr. Col. 1	(3) 402 Current Year	(4) 402 Total (1) = (3)	(5) State Share	(6) Local Share	SEE PROGRAM MODULE COST SUMMARY FOR PLANNING YEARS' COSTS
PS07	TASK I TASK II TASK III TASK IV (250/450) TOTALS---->	\$ 4,809.38 2,389.94 8.00 10,632.73 \$17,840.05	\$0.00 0.00 0.00 0.00 \$0.00	\$4,809.38 11,567.68 4,492.00 130.80 \$20,999.86	\$ 9,618.76 13,957.62 4,500.00 10,763.53 \$38,839.91	-0-	-0-	

APPENDIX A5

Figure ES-1 – Water System Boundaries

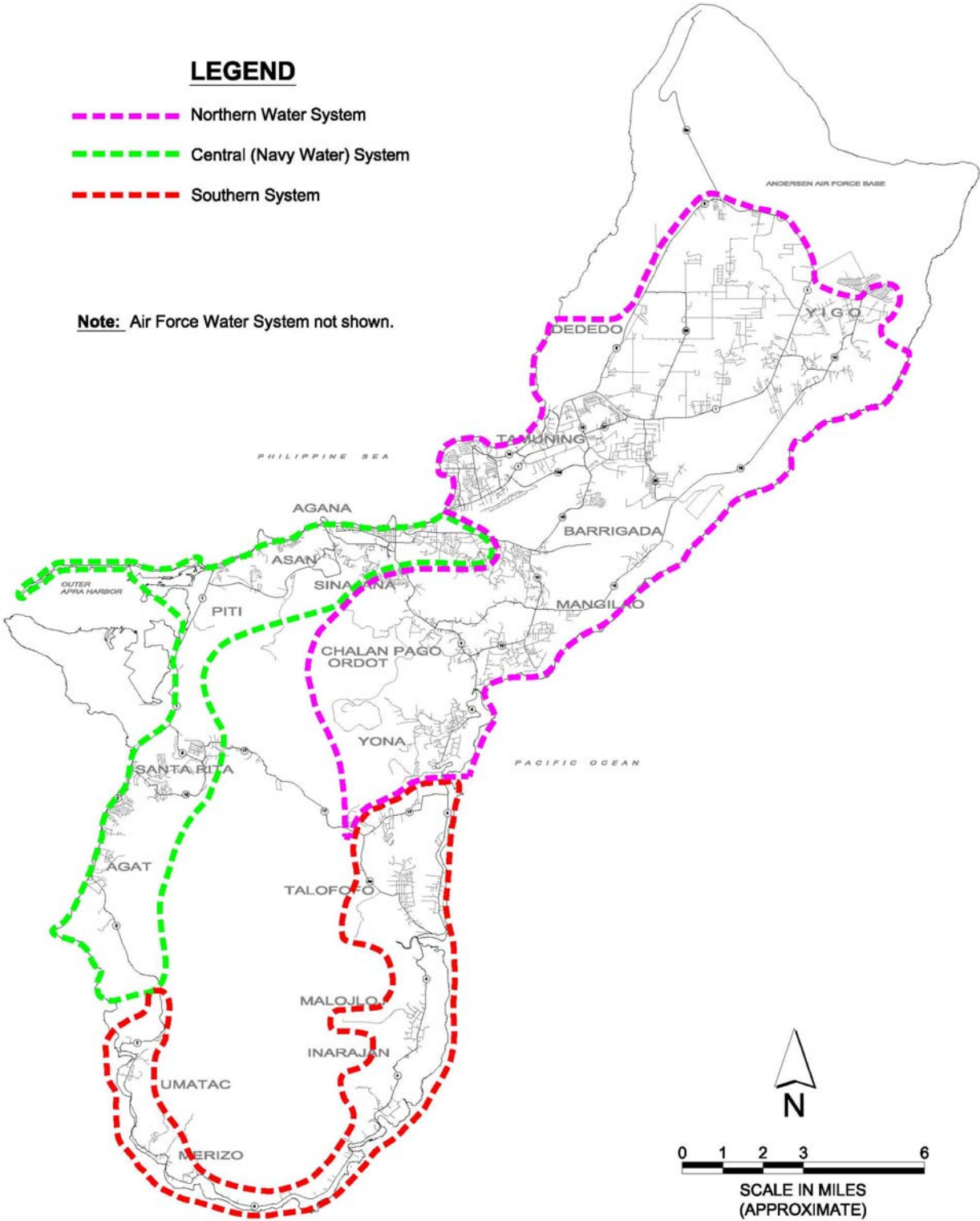


Figure ES-2 – Wastewater Basins

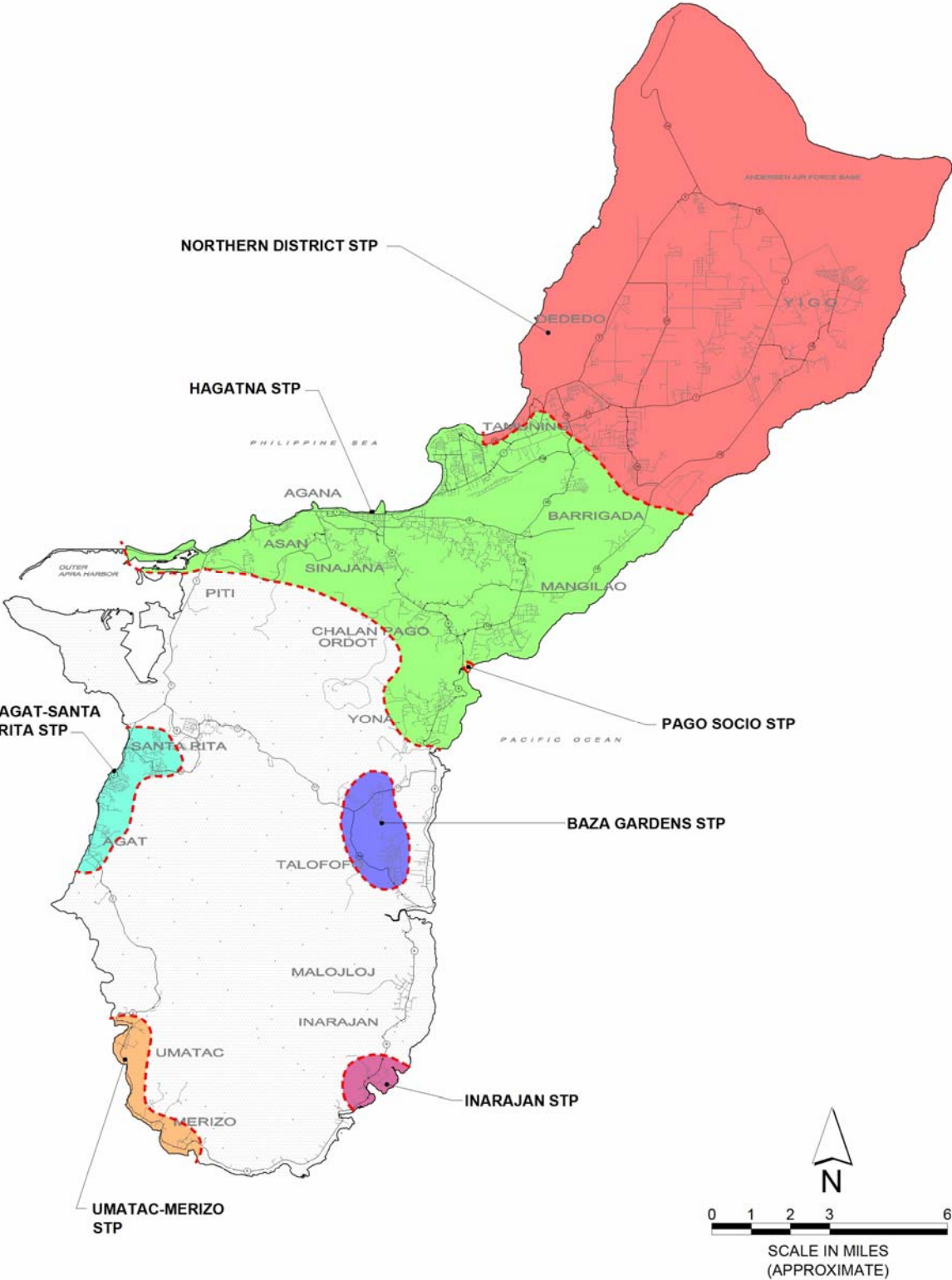


Exhibit ES-1 – Capital Improvement Program – Base Case

Project	Project Types ³	Priority Ranking	Budget Year ^{1,2}																		Totals		
			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		2025	2026
Water System																							
Water Reservoir Internal/External Corrosion Assessment Program	LS/SR/OMR	47.6	\$125,000																			\$125,000	
Water Reservoir Internal/External Corrosion Rehabilitation Program	LS/SR/OMR	47.6		\$500,000		\$500,000	\$500,000	\$500,000														\$2,000,000	
Ugum Water Treatment Plant Membrane Filtration	SC/OMR	23.3	\$8,500,000																			\$8,500,000	
Ugum Water Treatment Plant Reservoir Replacement	LS/SR/SRED	49.9			\$8,700,000																	\$8,700,000	
Ugum Water Treatment Plant Intake Modifications	SR	16.3	\$550,000																			\$550,000	
Water Distribution System Pipe Replacement	LS/SR/OMR	47.6	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$53,140,000	
Mechanical/Electrical Equipment Replacement	LS/SR/OMR	47.6		\$930,000	\$930,000	\$930,000	\$930,000	\$930,000	\$930,000	\$930,000	\$930,000	\$930,000	\$930,000	\$930,000	\$930,000	\$930,000	\$930,000	\$930,000	\$930,000	\$930,000	\$930,000	\$17,670,000	
Southern System Water Distribution System 2005 Improvements	LS/SR	38.1		\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$23,000,000	
Central System Water Distribution System 2005 Improvements	LS/SR	38.1		\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$6,000,000	
Northern System Water Distribution System 2005 Improvements	LS/SR	38.1		\$2,600,000	\$2,600,000	\$2,600,000	\$2,600,000	\$2,600,000	\$2,600,000	\$2,600,000	\$2,600,000	\$2,600,000	\$2,600,000	\$2,600,000	\$2,600,000	\$2,600,000	\$2,600,000	\$2,600,000	\$2,600,000	\$2,600,000	\$2,600,000	\$26,000,000	
Pressure Zone Realignment/Development 2005 Improvements	LS/SR	38.1		\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$8,100,000	
Water Booster Pumping Station 2005 Improvements	LS/SR	38.1		\$700,000	\$500,000																	\$1,200,000	
Water System Reservoirs 2005 Improvements	LS/SR	38.1		\$2,600,000	\$2,600,000	\$2,600,000	\$2,600,000	\$8,700,000				\$8,700,000										\$25,200,000	
Northern System Raw Water Transmission Lines	LS/SR	38.1	\$4,500,000	\$4,300,000		\$18,000,000			\$19,000,000	\$20,000,000	\$20,000,000			\$15,000,000		\$4,000,000						\$123,800,000	
Water System Supply Wells 2025 Improvements	SC	13.8																			\$5,000,000	\$5,000,000	
Southern System Water Distribution System 2025 Improvements	LS/SR	38.1																			\$4,000,000	\$10,000,000	
Northern System Water Distribution System 2025 Improvements	LS/SR	38.1											\$5,700,000	\$5,700,000	\$5,700,000	\$5,700,000	\$5,700,000	\$5,700,000	\$5,700,000	\$5,700,000	\$5,700,000	\$57,000,000	
Water Booster Pumping Station 2025 Improvements	LS/SR	38.1																			\$1,600,000	\$1,600,000	
Water System Reservoirs 2025 Improvements	LS/SR	38.1											\$3,000,000	\$4,300,000	\$3,000,000	\$8,700,000	\$8,700,000					\$27,700,000	
Northern System GWUDI Filtration Compliance ⁴	RC	17								\$14,500,000	\$14,500,000	\$14,500,000	\$14,500,000	\$14,500,000	\$14,500,000	\$14,500,000	\$14,500,000	\$14,500,000	\$14,500,000	\$14,500,000	\$14,500,000	\$145,000,000	
Year Total			\$18,675,000	\$21,230,000	\$25,430,000	\$34,230,000	\$19,630,000	\$29,430,000	\$44,930,000	\$44,930,000	\$24,930,000	\$48,370,000	\$26,370,000	\$39,870,000	\$26,170,000	\$28,870,000	\$30,570,000	\$30,570,000	\$7,370,000	\$20,370,000	\$8,970,000	\$19,370,000	\$550,285,000
Wastewater Collection System - Capacity Related																							
Northern District STP Rte 16 PS Overflow Study	SR/SC	30.1	\$50,000																			\$50,000	
Northern District STP Eliminate Flow Split	SR/OM&R	25.8	\$50,000																			\$50,000	
Northern District STP Priority 1 Sewer Upgrades	RC/LS	38.8				\$2,400,000																\$2,400,000	
Northern District STP Priority 2 Sewer Upgrades	RC/SC	30.8													\$280,000							\$280,000	
Northern District STP Priority 3 Sewer Upgrades	RC/SC	30.8																			\$4,500,000	\$4,500,000	
Hagatna STP Priority 1 Sewer Upgrades	RC/LS	38.8				\$4,000,000																\$4,000,000	
Hagatna STP Priority 2 Sewer Upgrades	RC/SC	30.8													\$17,000,000							\$17,000,000	
Hagatna STP Priority 3 Sewer Upgrades	RC/SC	30.8																			\$11,000,000	\$11,000,000	
Hagatna STP Pump Station Upgrades	RC/SC	30.8				\$440,000	\$4,400,000			\$120,000	\$1,200,000				\$4,500,000		\$45,000,000					\$55,660,000	
Agat-Santa Rita STP Priority 1 Sewer Upgrades	RC/SC	30.8				\$1,200,000																\$1,200,000	
Agat-Santa Rita STP Priority 3 Sewer Upgrades	SC	13.8																			\$4,500,000	\$4,500,000	
Baza Gardens STP Priority 1 Sewer Upgrades	RC/SC	30.8				\$650,000																\$650,000	
Baza Gardens STP Priority 2 Sewer Upgrades	SC	13.8														\$580,000						\$580,000	
Inarajan STP Pressure Sewer Upgrades	RC/SC	30.8				\$1,200,000																\$1,200,000	
Year Total			\$100,000	\$0	\$0	\$9,890,000	\$4,400,000	\$0	\$0	\$0	\$120,000	\$1,200,000	\$0	\$0	\$0	\$17,860,000	\$4,500,000	\$0	\$45,000,000	\$0	\$20,000,000	\$0	\$103,070,000
Wastewater Collection System - Unsewered Areas																							
NDSTP and Hagatna STP Unsewered Properties – Sewer Hookups ⁵	RC/Other	17							\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$6,500,000	
NDSTP and Hagatna STP Unsewered Properties - New Sewers ⁶	RC/Other	17							\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$40,500,000	
NDSTP and Hagatna STP Unsewered Properties - Additional Sewer Hook-ups ⁵	SC/Other	13.8									\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	\$15,000,000	
South System Sewer Hook-ups ⁵	RC	17														\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$7,500,000	
Year Total			\$0	\$0	\$0	\$0	\$0	\$4,000,000	\$4,000,000	\$4,000,000	\$5,250,000	\$5,250,000	\$3,950,000	\$3,950,000	\$3,950,000	\$3,950,000	\$3,950,000	\$5,450,000	\$5,450,000	\$5,450,000	\$5,450,000	\$5,450,000	\$69,500,000
Wastewater Collection System - Other																							
Manhole Frame Seal Repair	SR/OMR	25.8	\$84,000																			\$84,000	
Agat Manhole Rehabilitation	SR/OMR	25.8	\$54,000																			\$54,000	
Wastewater Collection System Recurring Inspection Program ⁷	SR/OMR	25.8	\$610,000	\$610,000	\$610,000	\$610,000	\$610,000	\$610,000	\$610,000	\$610,000	\$610,000	\$610,000	\$610,000	\$610,000	\$610,000	\$610,000	\$610,000	\$610,000	\$610,000	\$610,000	\$610,000	\$12,200,000	
Wastewater Collection System Replacement/Rehabilitation Program ⁷	SR/OMR	25.8	\$1,100,000	\$1,100,000	\$1,100,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$37,300,000	
Year Total			\$1,848,000	\$1,710,000	\$1,710,000	\$2,610,000	\$2,610,000	\$2,610,000	\$2,610,000	\$2,610,000	\$2,610,000	\$2,610,000	\$2,610,000	\$2,610,000	\$2,610,000	\$2,610,000	\$2,610,000	\$2,610,000	\$2,610,000	\$2,610,000	\$2,610,000	\$2,610,000	\$49,638,000
Wastewater Facilities																							
Facilities Plan/Design for the Agat-Santa Rita STP Replacement	RC/SR/SRED/SC	58.9		\$600,000		\$2,600,000																\$3,200,000	
Agat-Santa Rita STP Replacement	RC/SR/SRED/SC	58.9						\$300,000														\$300,000	
Facilities Plan/Design for the Baza Gardens STP Replacement	RC/SR/SRED	45.1	\$500,000		\$1,500,000																	\$2,000,000	
Baza Gardens STP Replacement	RC/SR/SRED	45.1						\$18,000,000														\$18,000,000	
Facilities Plan/Design for the Hagatna STP Improvements & Effluent WWPS	SR/SRED/SC	41.9							\$1,900,000													\$1,900,000	
Hagatna STP Improvements & Effluent WWPS	SR/SRED/SC	41.9									\$18,000,000											\$18,000,000	
Facilities Plan/Design for Inarajan STP Expansion	SR/OM&R	25.8										\$190,000										\$190,000	
Inarajan STP Expansion	SR/OM&R	25.8											\$190,000									\$420,000	
Facilities Plan/Design for the Northern District STP – Biosolids	RC/SC	30.1	\$500,000											\$1,800,000		\$420,000						\$2,300,000	
Northern District STP Expansion																							

APPENDIX A6

ADDITIONAL REFERENCE:

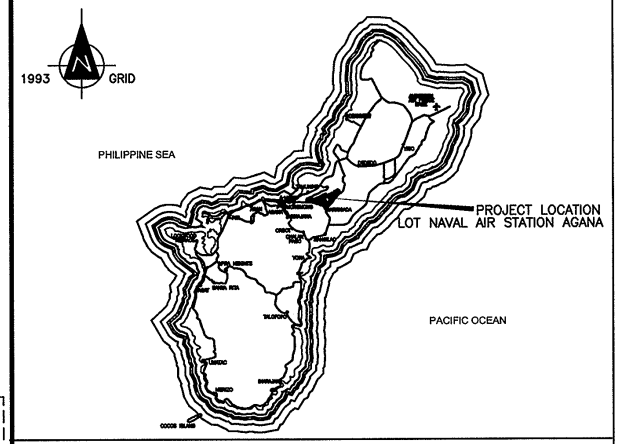
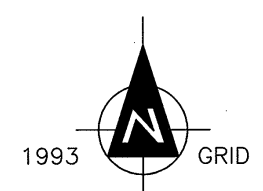
9. NAVFAC DWG. NO. 7942087, REAL ESTATE REQUIREMENT SURVEY MAP OF LOT NAVAL AIR STATION AGANA, MUNICIPALITIES OF BARRIGADA AND TAMUNING, PREPARED BY DUENAS AND ASSOCIATES, DOC. NO. 624410.

NOTES:

1. SURVEY WAS BASED ON FOUND PROPERTY CORNERS AS SHOWN.
2. ALL DISTANCES ARE IN METERS UNLESS OTHERWISE NOTED.
3. BEARINGS AND DISTANCES IN PARENTHESIS ARE RECORD DATA, ALL OTHERS ARE 1993 GRID.

LEGEND:

- ☆ GUAM GEODETIC NETWORK (GGN) SURVEY CONTROL STATION MONUMENT
- # 4 REBAR WITH YELLOW PLASTIC CAP SET, MARKED PLS # 77
- ⊙ # 4 REBAR WITH YELLOW PLASTIC CAP FOUND, MARKED RLS # 60
- ⊙ SPIKE FOUND
- ⊠ 4" x 4" CONCRETE MONUMENT FOUND
- ⊡ 6" x 6" CONCRETE MONUMENT FOUND, MARKED NAS
- ⊢ 4" x 4" CONCRETE MONUMENT FOUND, MARKED DLM
- COMPUTED CORNERS
- ⊙ # 4 REBAR WITH YELLOW PLASTIC CAP FOUND, MARKED RLS # 65
- ⊙ NAIL WITH WASHER FOUND
- ⊠ 4" x 4" CONCRETE MONUMENT FOUND, MARKED PLS # 60
- ⊙ # 4 REBAR WITH YELLOW PLASTIC CAP FOUND, MARKED PLS # 62



VICINITY MAP
NOT TO SCALE

REFERENCES:

1. DWG. NO. 1286586, NAVAL AIR STATION AGANA BOUNDARY, PREPARED BY THE U.S. DEPARTMENT OF THE NAVY, DATED OCTOBER 24, 1969.
2. DWG. # 7019471, REAL ESTATE SUMMARY MAP, PREPARED BY THE DEPARTMENT OF THE NAVY
3. NAVFAC DWG. # 1286585, ROUTE NO. 8 STA. 0+00 TO STA. 198+12.25, PREPARED BY THE DEPARTMENT OF THE NAVY (NAVAL FACILITIES ENGINEERING COMMAND CONTRACTS, MARIANAS, GUAM, M.I.), DATED SEPTEMBER 29, 1969.
4. DWG. NO. PA1-6031, REAL ESTATE REQUIREMENT SURVEY MAP OF NAVAL AIR STATION AGANA, PREPARED BY PERRY ASSOCIATES, INC. DATED AUGUST 1996.
5. PAI DWG. NOS. 7023A, 7023-2A AND 7023-3A, FEDERAL AVIATION ADMINISTRATION (FAA) AND NATIONAL WEATHER SERVICES (NWS) BOUNDARY SITES, PREPARED BY PERRY ASSOCIATES, INC., DATED SEPTEMBER 1996.
6. BOUNDARY DESCRIPTIONS OF PARCELS DESCRIBED IN USE AGREEMENT N 6274283 RP 00034 BETWEEN THE DEPARTMENT OF THE NAVY AND THE FEDERAL AVIATION ADMINISTRATION AT U.S. NAVAL AIR STATION AGANA, GUAM
7. PWC RECORD DWG. NOS. 5-G-7/13430, 5-G-8/13424, 5-G-9/13438, NAVAL AIR STATION AGANA TELEPHONE SYSTEM LOCATION PREPARED BY THE DEPARTMENT OF THE NAVY
8. PWC DWG. NOS. 5-G-11/13097, 5-G-12/13102, 5-G-13/13104, 5-G-15/13112, 5-G-18/13108, 5-G-19/13111, 5-G-20/13113, NAS AGANA AREA WATER SYSTEM, PREPARED BY THE DEPARTMENT OF THE NAVY.

PREPARED FOR, SATISFACTORY TO AND APPROVED BY:

DATE

DATE

CHECKED BY:

MARVIN Q. AGUILAR DATE _____ LILIA S. NATHAT DATE _____
PLANNER, D. L. M. CARTOGRAPHIC SUPERVISOR, D. L. M.

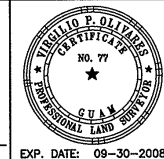
CERTIFICATIONS:
THIS MAP HAS BEEN EXAMINED FOR CONFORMANCE WITH THE TITLE 21, GUAM CODE ANNOTATED, CHAPTER 60, ARTICLE 5, UNIFORM TRIANGULATION SYSTEM AND REGULATIONS, THEREUNDER ON THIS _____ DAY OF _____ 2008.

APPROVAL PURSUANT TO TITLE 21, GUAM CODE ANNOTATED, CHAPTER 62, SUBDIVISION LAW.

CARLOS R. UNTALAN DATE _____
GUAM CHIEF PLANNER, (ACTING)

I, VIRGILIO P. OLIVARES, HEREBY CERTIFY THAT THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, THAT IT WAS BASED ON A FIELD SURVEY MADE ON JULY 18 - DECEMBER 31, 2007 IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS, THAT I AM RESPONSIBLE FOR THE ACCURACY OF ALL DATA AND INFORMATION SHOWN HEREON. I ALSO CERTIFY THAT ALL THE MONUMENTS ARE OF THE CHARACTER AND OCCUPY THE POSITIONS INDICATED ON THIS MAP.

VIRGILIO P. OLIVARES, P. L. S. # 77 DATE _____ EXP. DATE: 09-30-2008

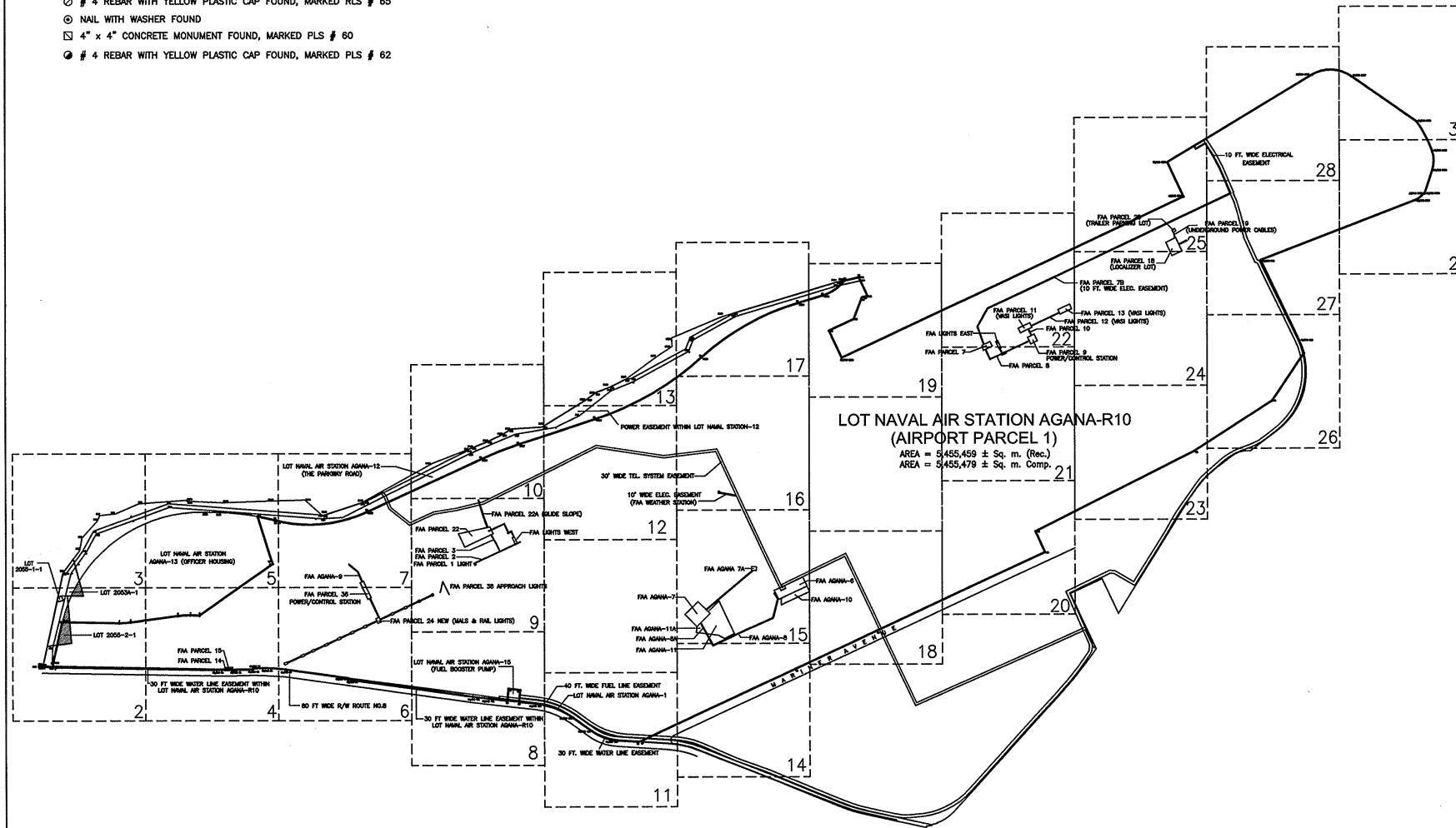


REVISION	DATE	DESCRIPTION	BY	APP'D BY	DATE	APP'D BY	DATE

RE-TRACEMENT SURVEY MAP OF LOT NAVAL AIR STATION AGANA-R10 (PARCEL 1)
MUNICIPALITIES OF BARRIGADA AND TAMUNING SECTIONS 2, 3 & 4

SURVEY DATA		DATE	LOT DATA	
FIELD:	VPO CREW	DECEMBER 2007	LOT NUMBER:	LOT NAVAL AIR STATION AGANA
BOOK NO.:	VPO-2007		CERTIFICATE NO.:	CIVIL NO. 21-50
COMPUTED:	VPO	DECEMBER 2007	REGISTERED ON:	DATE OF TAKING - JUNE 21, 1960
DRAWN:	VPO	DECEMBER 2007	IN THE NAME OF:	
RESEARCH BY:	GAR	DECEMBER 2007	UNITED STATES OF AMERICA	
CHECKED BY:	VPO	DECEMBER 2007		
SHEET 1 OF 34	DRAWING NO. VPO-2007-105		LAND MANAGEMENT CHECK	
SCALE: SEE PLAN			NO. _____ FT	

VIRGILIO P. OLIVARES
PROFESSIONAL LAND SURVEYOR NO. 77
P.O. BOX 4740 HAGATNA, GUAM 96832
CELL PH. (671) 727-7734
TEL NO. (671) 734-5856
E-MAIL ADDRESS: eitpls77@ie.net



APPENDIX A7

A Guide To Federal-Aid Programs And Projects: All Programs And Projects (Updated for SAFETEA-LU)

Section: Territorial Highway Program (THP) Updated April 20, 2007

A portion of the THP program includes Section 1103(b) of the Transportation Equity Act for the 21st Century (TEA-21, Public Law 105-178) continued the funding of the THP from the NHS funds, but provided a fixed amount of \$36.4 million each fiscal year rather than the one percent set-aside established in ISTEA.

Section 1103(b) of SAFETEA-LU amended 23 U.S.C. 104(b)(1)(A) to provide the following set-aside of NHS funds for the THP for FYs 2005 through 2009:

FY	THP Authorization
2005	\$40,000,000
2006	\$40,000,000
2007	\$50,000,000
2008	\$50,000,000
2009	\$50,000,000

Under the provisions of section 1102(f) of SAFETEA-LU, the above authorized amounts will be reduced due to any obligation limitation imposed each year, as they were under TEA-21. In addition, the THP funds will continue to be allocated to the four territories using the same administrative formula that has been used since FY 1993: 1/10 each for American Samoa and the Northern Mariana Islands, and 4/10 each for Guam and the Virgin Islands.

Refer to the full guide for additional information.

APPENDIX A8

VEHICLE SAFETY PROGRAM PLAN		COVERED POLICIES AND PROCEDURES	ADDITIONAL ISSUES IN SSEP PROGRAM
SECTION	TITLE		
	INITIAL TRAINING	<ul style="list-style-type: none"> ➤ Agency Policies and Procedures ➤ Federal and State Guidelines and Regulations ➤ Pre and Post Trip Inspections ➤ Vehicle Familiarization ➤ Basic Operations and Maneuvering ➤ Special Driving Conditions ➤ Backing ➤ Bad Weather ➤ Boarding and Alighting Passengers ➤ Defensive Driving Course (DDC) ➤ Passenger Assistance Training – DRIVE Training ➤ On Road 	<ul style="list-style-type: none"> ➤ ADDITIONAL TRAINING TO ADDRESS SECURITY AWARENESS, REPORTING SUSPICIOUS ACTIVITY, REPORTS AND DOCUMENTATION, AND PRE AND POST TRIP INSPECTIONS
4	DRIVERS – ONGOING SUPERVISION AND TRAINING	<ul style="list-style-type: none"> ➤ Training - refresher/retraining ➤ Evaluation and supervision ➤ Motor vehicle record checks ➤ Annual physical examination ➤ Safety meetings ➤ Seat-belt usage ➤ Discipline/recognition ➤ Preventable accidents/injuries 	<ul style="list-style-type: none"> ➤ ADDITIONAL REFERSHER TRAINING AND “PROFICIENCY TESTS” FOR KNOWLEDGE OF EMERGENCY PROCEDURES ➤ ADDITIONAL RESPONSIBILITIES FOR SUPERVISION
5	EMERGENCY DRIVING PROCEDURES	<ul style="list-style-type: none"> ➤ Emergency driving procedures ➤ Accident causes <ul style="list-style-type: none"> ○ Slippery road surfaces ○ Driving at night 	<ul style="list-style-type: none"> ➤ EXPANSION OF EMERGENCY PROCEDURES TO INCLUDE ADDITIONAL SECURITY AND EMERGENCY CONDITIONS ➤ EXPANSION OF EMERGENCY PROCEDURES

VEHICLE SAFETY PROGRAM PLAN		COVERED POLICIES AND PROCEDURES	ADDITIONAL ISSUES IN SSEP PROGRAM
SECTION	TITLE		
		<ul style="list-style-type: none"> ○ Driving through water ○ Driving in very hot weather ➤ Vehicle breakdowns and unavoidable stops ➤ Vehicle fire/evacuation ➤ Hold up/robbery ➤ Natural disasters <ul style="list-style-type: none"> ○ Tornado ○ Flood procedures - vehicle 	<p>TO INCLUDE SUPPORT OF COMMUNITY RESPONSE TO A MAJOR EVENT OR EMERGENCY</p> <ul style="list-style-type: none"> ➤ EMERGENCY TRAINING AND EXERCISING
6	PASSENGER SAFETY	<ul style="list-style-type: none"> ➤ General guidelines ➤ Seat-belts ➤ Child safety seats ➤ Mobility device securement and passenger restraint systems ➤ Difficult passengers ➤ Medical condition ➤ First aid ➤ Bloodborne pathogens/infection control 	<ul style="list-style-type: none"> ➤ EXPANSION OF PROCEDURES FOR MANAGING DIFFICULT PASSENGERS ➤ CLARIFICATIONS REGARDING FIRST AID AND BLOODBORNE PATHOGENS/INFECTION CONTROL
7	VEHICLES & EQUIPMENT	<ul style="list-style-type: none"> ➤ Vehicles & equipment ➤ Preventive maintenance ➤ Program development ➤ Preventive maintenance needs ➤ Preventive maintenance program ➤ Format for preventive maintenance program for transit vehicles ➤ Master vehicle service and repair record – maintenance history 	<ul style="list-style-type: none"> ➤ EXPANSION OF VEHICLE SECURITY PROCEDURES ➤ EXPANSION OF MAINTENANCE PROCEDURES FOR IDENTIFYING AND REPORTING VANDALISM, SUSPICIOUS SUBSTANCES, OR VEHICLE TAMPERING ➤ EXPANSION OF VEHICLE PROCUREMENT

VEHICLE SAFETY PROGRAM PLAN		COVERED POLICIES AND PROCEDURES	ADDITIONAL ISSUES IN SSEP PROGRAM
SECTION	TITLE		
		<ul style="list-style-type: none"> ➤ Preventive maintenance intervals <ul style="list-style-type: none"> ○ A Level Inspection ○ B Level Inspection ○ C Level Inspection ➤ Pre & post trip inspections ➤ Emergency equipment on vehicles and usage ➤ Use of emergency equipment on vehicles ➤ Vehicle procurement <ul style="list-style-type: none"> ○ Exterior ○ Visibility ○ Interior ➤ Vehicle security ➤ Vehicle safety in and around the shop or yard 	PROCEDURES TO ADDRESS SECURITY TECHNOLOGY
8	ACCIDENT MANAGEMENT	<ul style="list-style-type: none"> ➤ Accident documentation packet ➤ Accident notification procedures – driver responsibility ➤ Accident investigation – management responsibility ➤ Accident investigation kit ➤ Reconstruction & analysis ➤ Drug and alcohol tests ➤ Media relations and crises communication after an accident 	<ul style="list-style-type: none"> ➤ ADDITIONAL TOOLS FOR ACCIDENT DOCUMENT PACKET TO ADDRESS SECURITY ➤ ADDITIONAL TOOLS FOR MEDIA RELATIONS
9	INSURANCE CLAIMS AND	<ul style="list-style-type: none"> ➤ Dealing with adjusters ➤ Dealing with attorneys – ours/theirs 	➤ ADDITIONAL CONSIDERATIONS FOR COVERAGE

VEHICLE SAFETY PROGRAM PLAN		COVERED POLICIES AND PROCEDURES	ADDITIONAL ISSUES IN SSEP PROGRAM
SECTION	TITLE		
	LITIGATION MANAGEMENT		
10	DAY TO DAY OPERATIONS – MONITORING FOR SAFETY	<ul style="list-style-type: none"> ➤ Record keeping ➤ Keeping informed <ul style="list-style-type: none"> ○ Websites ○ Publications 	<ul style="list-style-type: none"> ➤ ADDITIONAL REPORTS FOR SECURITY-RELATED INCIDENTS

APPENDIX A9

**Federal Highway Section Project Status Report
for the Month of August 2007**

HC NO.	PROJECT TITLE	PROJECT NUMBER	DATE	STATUS	PROJECT ENGINEER
1	Route 2 Agat , Emergency Installation of 36" RCP Drainage Overflow Contractor: J.M. Aquino /Tudor	GU-NH- 0002(103)	5/18/2007	Project accepted; final payment for vehicles processed. Change order being processed	Mary Rose Wilson
			6/15/2007	This project has been accepted ; Final payment for the Vehicles has been processed; Documents for the Change Order is being processed.	
			7/31/2007	This project is 100% completed. Project Engineer completed the draft package documents of the C.O. # 1 (final) and forwarded to FHW Financial Coordinator.	
			8/31/2007	This project is 100% complete . A new package documents of the C.O. # 1 doc. Was resubmitted to the Director's office via Highway Division Manager for review and signature. Submitted doc. Of CO # 1 on July 30, 2007 was misplaced.	
2	Route 4 Pago Bay Pavement Damage Restoration Contractor: techni-Con Inc.	GQ-ER- 04(006)	5/18/2007	Deductive change order approved; Contractors final payment being prepared	Mary Rose Wilson
			6/15/2007	Deductive change order has been approved; Contractors final payment being prepared	
			7/31/2007	This project is 100% completed. On June 27, 2007- Contractors final payment was processed and forwarded to FHWA financial coordinator	
			8/31/2007	This project is 100% completed. On June 27, 2007- Processed the contractors final payment was and forwarded to FHWA financial coordinator. To date, still waiting for FHWA to release the fund for the final payment.	
3	TMC Building Contractor: BCC	GU-NH- 1000(103)	5/18/2007	Project completed and accepted; final payment being prepared	Mary Rose Wilson
			6/15/2007	The project has been completed and accepted; Contractors final payment is being prepared.	
			7/31/2007	This project is 100% completed. Letter of Final acceptance is being prepared and contractor's final payment is being reviewed by the project engineer.	
			8/21/2007	This project is 100% completed. Letter of Final acceptance is being prepared and contractor's final payment was put on-hold for the remaining uncompleted punch list.	

Hamburger Hwy. Drainage Issue - GRP says they do Paving

**Federal Highway Section Project Status Report
for the Month of August 2007**

HC NO.	PROJECT TITLE	PROJECT NUMBER	DATE	STATUS	PROJECT ENGINEER
4	Eng'g Priority # 2 Route 6 (Maina - Nimitz Hill) Murray Road Embankment Restoration Contractor: GEO Engineering	GU-ER-006A(102)	5/18/2007	100% design completed; Specifications prepared under FP-96 and required to be upgraded (before 1 Aug)	Mary Rose Wilson
			6/15/2007	100% design complete; The Specifications was prepared under FP-96 and it's required to be upgraded to FP-03.	
			7/31/2007	This project is 100% design completed. July 19, 2007, consultant submitted revised revised specification from FP-92 to FP-03. Transmittal letter for for the revised sprcification ot FHWA is be being prepared.	
			8/21/2007	This probject is 100% design complete. July 23, 2007, A copy of the revised specification was forwarded to the FHWA for review and comments Awaiting for the review/ comments of FHWA on the revised specification..	
14	Eng'g Priority # 2 Route 2A Emergency Restoration of Gautali Bridge and Embankment	GU-NH-002A(001)	5/18/2007	Consultant's contract agreement prepared, waiting for account to be established	Isidro Duarosan
			6/15/2007	Consultant's contract agreement has been prepared; Just awaiting for the account # to be established	
			7/31/2007	6/29/07 - Ready to negotiate proposal but DBA proposed to resubmit a new fee proposal for the project;n mn07/05/07 - DBA resubmit fee proposal to DPW	Sagrado F. Bilong
			7/31/2007	Consultant's Purchase Order is being processed; 7/20/07 - NTP is expected to be issued.	Dindo Orbong
			8/21/2007	8/01/07 -NTP was issued to the consultant; 8/10/07 - DPW received dthe 60% design submittal; 8/15/07 - A copy of 60% dsign submittal was transmitted to FHWA for review and comments; 8/17/07 - Copies of 60% submittal were transmit-ted to GWA, GEPA, GTA & DLM for review & comments.	
40	Eng'g Priority # 2 Bile / Pigua Bridges Temp. Rplmnt (Rte 4)	GU-NH-NBIS(003)	7/31/2007	Assisted design Engineers compiled field verification Assess-ments for Federal-Aid Highway Design Prjects on Field Inves-tigation, As-Built Drawings, Presentation drawings and Plan /Detail revision	Edgardo L. Tolentino
		GU-NH-NBIS(004)	7/31/2007	Assisted design Engineers compiled field verification Assess-ments for Federal-Aid Highway Design Prjects on Field Inves-tigation, As-Built Drawings, Presentation drawings and Plan /Detail revision	Sagrado F. Bilong

**Federal Highway Section Project Status Report
for the Month of August 2007**

HC NO.	PROJECT TITLE	PROJECT NUMBER	DATE	STATUS	PROJECT ENGINEER
41	Eng'g Priority # 2 Bile / Pigua Bridges Temporary Replacement (Route 4)	GU-NH- NBIS(004)	5/18/2007	Test Pit requirement from DPR received by DPW (FHWA mail) Construction scheduled to be advertised; Fee proposal final comments received on 05/25/07 from the DPW review committee	Sagrado F. Bilong
			6/15/2007	Test Pit requirement from DPR was received by DPW thru FHWA mai); Construction scheduled to be advertised this month of June.	
			6/29/2007	Ready to negotiate fee proposal but DBA proposed to re-submit a new fee proposal for the project. On July 05/07, DBA resubmit fee proposal to DPW. On 7/13/07, DPW submitted SOW review comments to DBA.	
			7/31/2007	07/31/07 - DPW submitted SOW review comments to DBA	
			8/21/2007	On 6/06/07, IFB for advertisement submitted to OOE/DPW Director for approval; 6/14/07, Advertisement at Marianas Variety Guam Edition and availability of documents; 6/21/07 was Pre-Bid conference and 7/03/07 was the Bid Opening; 7/12/07, DPW Director approved Bid Analysis and 7/12/07, DPW Director approved bid rejection letter to Maeda Pacific Corp.	
46	Eng'g Priority # 2 Route 4 Permanent Replacement of Agfayan Bridge	N / A	5/18/2007	Waiting for approval of amendment #1(BBMR)	Arce Fontbuena
			6/15/2007	Amnedment # 1 is at the Governor's office for review and approval.	
			7/31/2007	7/3/07 - Amendment # 1 was approved by the Governor; 7/18/07 - NTP issued and kivkodd meeting w/ the Consultant to discuss Amendment # 1 SOW and acquiring the entry permits for construction of the Bypass Bridge.	
			8/21/2007	8/3/07 - DPW acknowledged receipt of the consultant 60% design submittals; 8/10/07 - Coonsultant had submitted Documentation for Categorical Exclussions; 8/20/07 - Copies of 60% design submittal were transmitted to DWA, DEPA, GPA, GTA and DLM for review and comments. Research by DPW for the Rights of Way documents to execute the required entry permit is in progress. Awaiting for the drawing from consultant to submit the design.	Dindo Orbong
9	Eng'g Priority # 3 Route 4 As-Alonzo) Temporary Restoration of Pavement	N / A	5/18/2007	Design awarded to DBA 03/15/2007; DBA Design fee proposal negotiation	Jeri Calaor
			6/15/2007	Design of this project awarded to DBA 03/15/2007; Awaiting for Duenas/Bordallo & Assoc. for Design fee proposal for negotiation	

**Federal Highway Section Project Status Report
for the Month of August 2007**

HC NO.	PROJECT TITLE	PROJECT NUMBER	DATE	STATUS	PROJECT ENGINEER
9	Eng'g Priority # 3 Route 4 As-Alonzo) Temporary Restoration of Pavement	N / A	7/31/2007	7/17/07 - The consultant csubmitted the design SOW and Fee Proposal; 7/20 - Tentative schedule for the Fee Prop. Negotiation.	Mary Rose Wilson
			8/21/2007	&/19/07 - DPW acknowledged receipt DBA's proposed De-sign SOW and Fee proposal; 7/23/07 - A copy of consultant design SOW w/ Fee proposal was transmitted to FHWA for review and comments; 08/07/07 - Govt. estimate was trans-mitted to FHWA for comments; To date, DPW is waiting for FHWA review and comments on the consultant's SOW and Fee Proposal; ROW research in progress by DPW; Nego-tiation and/or meeting w/ the consultant will be scheduled upon receipt of FHWA comments.	
27	Eng'g Priority # 3 Route 15 (front of DOC) Damaged Roadway Restoration	GU-NH- 0015(105)	5/18/2007	Design awarded to DBA on Mar 15, 2007; Waiting for DBA design Fee Proposal negotiation	Dindo Orbong
			6/15/2007	Design of this project was awarded to DBA on Mar 15, 2007; Awaiting for Duenas/Bordallo & Assoc. for Design fee proposal for negotiation .	
			7/31/2007	7/17/07The consultant submitted the Design SOW and Fee Proposal to DPW; 7/20 - Tentative schedule for the Fee Prop. Negotiation.	Marry rose Wilson
			8/21/2007	&/19/07 - DPW acknowledged receipt DBA's proposed De-sign SOW and Fee proposal; 7/23/07 - A copy of consultant design SOW w/ Fee proposal was transmitted to FHWA for review and comments; 08/07/07 - Govt. estimate was trans-mitted to FHWA for comments; To date, DPW is waiting for FHWA review and comments on the consultant's SOW and Fee Proposal; ROW research in progress by DPW; Nego-tiation and/or meeting w/ the consultant will be scheduled upon receipt of FHWA comments.	
13	Eng'g Priority # 3 Islandwide School Zone Signs	GU-NH- HE66(005)	5/18/2007	Pending contract documents to be re-packaged and readvertised for Invitation for Bid	Isidro Duarosan
			6/15/2007	Pending contract documents to be re-packaged and readvertised for Invitation for Bid	
			7/31/2007	No reoort submitted	
			8/21/2007	No reoort submitted	

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HC NO.	PROJECT TITLE	PROJECT NUMBER	DATE	STATUS	PROJECT ENGINEER
34	Eng'g Priority # 3 Route 15 Temporary Restoration of Roadway	GU-NH-00015103)	5/18/2007	Design awarded to DBA 03/15/07; Waiting for DBA design fee proposal negotiation	Mark Abrincia
			6/15/2007	Design awarded to DBA 03/15/07; Waiting for DBA design fee proposal negotiation	
			7/31/2007	7/17/07 - The consultant will submit the design SOW & Fee Proposal; 7/20/07 - Tentative schedule for Fee Proposal negotiation	
			8/21/2007	7/19/07 - DPW acknowledged receipt DBA's proposed design SOW and the Fee Proposal; 7/23/07 - A copy of consultant design SOW w/ Fee proposal was transmitted to FHWA for review & comments; 08/07/07 - Govt. estimate was trans-mitted to FHWA for comments; To date, DPW is waiting for FHWA review; To date, DPW is waiting for FHWA review and commentson the consultant SOW and Fee Proposal; Negotiation and/or meeting w/ consultant will be scheduled upon receipt of FHWA comments.	
33	Eng'g Priority # 3 Route 2 (Near Umatac Village) Replacement of 36" CMP to 36" RCP	GU-NH-0002102)	5/18/2007	Design awarded to DBA 03/15/07 Waiting for DBA design fee proposal negotiation	Mark Abrincia
			6/15/2007	Design awarded to DBA 03/15/07; Awaiting for DBA design fee proposal for negotiation	
			8/21/2007	7/19/07 - DPW acknowledge receipt of DBA's proposed design SOW and Fee Proposal; 7/23/07 A copy of consultant's design SOW w/ Fee Proposal was transmitted to FHWA for review and comments; 8/07/07 - Government estimate was transmitted to FHWA for review; To date, DPW is waiting for FHWA review and comments on the consultants SOW and Fee Proposal; Negotiation and/or meeting with the consultant will be scheduled upon receipt of FHWA acomments	
10	Islandwide Run-Off Clean Up (Swale and Drainage Line)		5/18/2007	Pending PMT to review and finalize preliminary Scope of Work for construction prepared by DPW	Jeri Calaor
			6/15/2007	Pending awaiting for the PMT to review and finalize preliminary Scope of Work prepared by A/E Consultant.	
	Roadway Restoration (Design by DBA)	N/A	5/18/2007	Waiting for DLM response - rights of way issues	Not Assigned
6/15/2007			Status Quo		

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HC NO.	PROJECT TITLE	PROJECT NUMBER	DATE	STATUS	PROJECT ENGINEER
8	Eng'g Priority # 5 Route 4 As-Alonzo area	N/A	5/18/2007	Consultant to submit 90% design by end of June 2007	Jeri Calaor
			6/15/2007	Consultant to submit 90% design submittal by the end of this month of June 2007; Awaiting for the response of DLM for rights of ways issues.	
			7/31/2007	Consultant's 90% submittals were distributed to GWA,GPA, GTA, GEPA and ACOE for review and comments; ROW lissues is being coordinatd by the Land Agent Supervisor.	Dindo Orbong
			8//21/07	Awaiting for review comments from GWA, GPA, GTA,GEPA and ACOE on the Consultant 90% design submittal; 8/29/07 - A meeting w/ consultant is scheduled to discuss LM comments on the proposed Real State Survey Map and other issues.	
5	Route 4 Jeff's Pirates Cove - Reconstruction and Widening Note: Highway Hazard Elimination Project	GU-NH-HE66(102)	5/18/2007	Consultant fee proposal negotiation on hold. Awaiting for the PMT to review Scope of Work	Mary Rose Wilson
			6/15/2007	Consultant fFe proposal negotiation on hold. Awaiting for the PMT to review Scope of Work	
			7/21/2007	July 17, 2007, per DPW, followed up with the consultant for the submittal of the revised SOW and Fee Proposal.; The con-sultant elected to work with PMY if there is conflict with the AG's opinion/ recommendation for the PMT proposed Consultant Agreement.	
			8/21/2007	Per our telephone coversation with the consultant on 8/14/07, they are going to resubmit a revise SOW and the Fee Prosposal on the first week of September.	
6	Route 14 Resurfacing, Rehabilitation and Repaving	GU-NH-HE66(003)	5/18/2007	May-June - Consultant fee proposal negotiation on hold' Awaiting for the PMT to review Scope of Work	Mary Rose Wilson
			7/21/2007	July 17, 2007, per DPW, followed up with the consultant for the submittal of the revised SOW and Fee Proposal.	
			8/21/2007	The consultant elected to work with PMY if there is conflict with the AG's opinion/recommendation for the PMT proposed Consultant Agreement; In 8/14/07, A lelecom meeting w/ the consultant was conducted; First week of September 2007, the consultant is scheduled to resubmit a revised SOW and Fee Proposal.	

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HC NO.	PROJECT TITLE	PROJECT NUMBER	DATE	STATUS	PROJECT ENGINEER
7	Route 27A Reconstruction and Widening	GU-NH-027A(002)	5/18/2007	Contractor refuses to sign deductive C.O.; Contractor's claim for additional cost rejected, Contractor to resubmit proposals for modification of the median and the construction of parking lot drainage.	Jeri Calaor
			6/15/2007	Contractor refuses to sign deductive C.O.; Contractor's claim for additional cost rejected, Contractor to resubmit proposals for modification of the median and the construction of parking lot drainage.	
			7/21/2007	7/19/07 - Contractor submitted the Cost proposal for the raise median modification in front of Great Mart Store and correction of Lot's drainage system behind Great Mart Store; 7/23/07 - Negotiated the contractor's cost proposal for the two work items; 7/23/07 - Followed up on the submittal of contractor's/consultant's justification for additional design cost.	Danny Galiza
11	Route 2 Reconstruction and Widening Route 2A to GWA Pump Station	GU-NH-0002(001)	5/18/2007	Pending PMT review and finalizing of preliminary scope of work prepared by A/E consultant	Jeri Calaor
			6/15/2007	Pending, Awaiting for PMT to review and finalize the preliminary design scope of work prepared by A/E consultant	
12	Inarajan North leg Bridge (As-Misa) Permanent Restoration	GQ-ER-0004(110)	5/18/2007	Waiting PMT to review and finalize preliminary Scope of Work prepared by DPW	Jeri Calaor
			6/15/2007	Pending, awaiting for PMT to review and finalize preliminary Scope of Work prepared by DPW	
15	Route 17 Reconstruction and Widening	GU-NH-0017(102)	5/18/2007	60% completed; continuing for the design on hold due to rights of way issues; waiting for the PMT to provide determination and direction	Isidro Duarosan
			6/15/2007	This project is 60% design complete; continuing for the design was put on hold due to rights of way issues; Awaiting for the PMT to review and provide determination and direction	
			7/30/2007	5/25/07-7/31/07 Still waiting for Project Mgt. Team ; 3/9/07 Met with PBS & J(Proj. Mgt. Team) and provide brief status of the project. ; 2/3/07 - Advised DPW that the PMT should continue the project. 8/8/06 - Design was on hold due to rights of ways issues; 4/3/06 - A/E Consultants submitted 60% Design.	

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HC NO.	PROJECT TITLE	PROJECT NUMBER	DATE	STATUS	PROJECT ENGINEER
16	Ylig Bridge, Replacement of	GU-NH-00043102)	5/18/2007	Waiting for the PMT to review and finalize preliminary design scope of work prepared by DPW	Isidro Duarosan
			6/15/2007	Pending. Awaiting for the PMT to review and finalize preliminary design scope of work prepared by DPW	
			7/30/2007	5/25/07-7/31/07 Still waiting for Project Mgt. Team ; 3/9/07 Met with PBS & J(Proj. Mgt. Team) and provide brief status of the project. ; 2/3/07 - Advised DPW that the PMT should continue the project; 1/31/06 - Consultant submitted fee proposal, SOW for archaeological inventory and Environmental Baseline Study; 11/7/04 - Duenas Bordallo & Assoc. Inc was selected to do the job.	
17	Masso River Bridge	N /A	5/18/2007	Waiting for the PMT to review and finalize the preliminary design scope of work	Isidro Duarosan
			6/15/2007	Pending. Awaiting for the PMT to review and finalize preliminary design scope of work.	
			7/30/2007	6/29/07-7/31/2007 -Waiting for PMT review and finalized Preliminary Design and SOW; 6/29/07 - Waiting for comments from FHWA; 3/27/07 Revised PS & E was sent to FHWA for comments. ; 1/16/07 - Submit PS & E to FHWA for comments.	
18	Route 3, Reconstruction and Widening	GU-NH-003(104)	5/18/2007	Waiting for FHWA comments of the final design submittal; construction to the RRR	Isidro Duarosan
			6/15/2007	Awaiting for FHWA comments on the final design submittal; Construction to be downgraded to RRR	
			7/30/2007	6/29/07 -7/31/07 - Waiting for final review/comments from FHWA; 5/25/07 - Waiting for the PMT; Project design is 100% complete. DPW comments forwarded to Maeda. Waiting for final review/comments from FHWA and other agencies to be incorporated in the final design.	
19	Aguada River Flow Restoration (Polaris Point)	GU-NH-0001(121)	5/18/2007	Waiting for the PMT to review and finalize preliminary scope of work prepared by DPW	Rigolberto Diaz
			6/15/2007	Pending awaiting for PMT to review and finalize preliminary design Scope of work prepared by DPW	
			7/30/2007	Preliminary design SOW is being reviewed; A letter to FHWA requesting for approval to advertise is being prepared.	
			8/21/2007	On-hold Waiting for the PMT to review and finalize Preliminary design of SOW	

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HC NO.	PROJECT TITLE	PROJECT NUMBER	DATE	STATUS	PROJECT ENGINEER
20	Route 25 (Alageta Street) Reconstruction and Widening	GU-NH-0025101)	5/18/2007	Comments pending from FHWA on 90% design (submitted) and from other GovGuam agencies	Rigolberto Diaz
			6/15/2007	Awaiting for the 90% design comments from FHWA and other gogernment agencies.	
			7/31/2007	6/27/07 - Met with consultant and went through the review of the 35% desin submittal; 7/16/07 - DPW,GPA >A reviewed comments on the 35% design submittal were transmitted to the consultant; GEPA and GWA did not submit comments.	
21	Route 11 (Cabras Island) Seawall Protection	GU-NH-0011()	5/18/2007	Meeting (June 11, 2007) to discuss final scope of work; Army Corps of Engineers to submit to DPW, the revised SOW and the engineering cost estimate for the preparation of conceptual design, final design, and construction cost	Rigolberto Diaz
			6/15/2007	DPW, ACOE & PAG met on June 11, 2007 for the final SOW. Engineering cost estimate for the preparation of Conceptual Design, Final Design and Construction Cost of the projct.	
			7/31/2007	6//11/07 - DPW,ACOE & PAG met for the final SOW; ACOE submitted revised SOW and Engineering Cost Estimate for the preparation of the Conceptual Design; Final Design and Construction cost oof the project.	
			8/21/2007	7/26/07 - Received ACOE's letter recommending the design of a rock revetment for the proposed restoration; FHWA and DPW Deirector recommended the construction lof a Seawall Toe Protection not the Single/Double layer rock revetment	
N.1	Route 8-10-16 Intersection Reconstruction; Traffic Signalization Upgrade and GMF Intersection Improvement		8/21/2007	Consultant Scope of Work and Fee Proposal is being reviewed by DPW and government estimate is being prepared.	Dindo Orbong
N.2	Route 4 As-Alonzo area Roadway Restoration (Under Design Duena & Bordallo)		8/21/2007	Awaiting for the review/comments form GWA, GPA, GTA, GEPA and ACOE; 8/29/07 - A meeting with the consultant is scheduled to discuss LM comments on the proposed Real Estate Survey Map and other issues,	Dindo Orbong

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HC NO.	PROJECT TITLE	PROJECT NUMBER	DATE	STATUS	PROJECT ENGINEER
22	Roure 4 Yona, Reconstruction and Widening (Yona to Ylig Bridge)	GU-NH-0004101	5/18/2007	Bid items reconciliation prepared - 60% completed ; Meeting with contractor to discuss remaining work issues and problem scheduled on June 29, 2007	Rigolberto Diaz
			6/15/2007	Bid items reconciliation prepared - 60% completed ; Meeting with contractor to discuss remaining work issues and problem scheduled on June 29, 2007	
			7/31/2007	Preparation of the Bid Items Reconciliation is about 65% completed; 6/29/07 Met w/ contractor and discussed Bid Items Reconciliation, remaining work and issues; 7/3007 - Scheduled a 2nd reeting w/ the contractor to discuss the prepared Bid Items Reconciliation and remaining work.	
			8/21/2007	Reconciliation of pay items that includes completed, uncom-pleted and deficiencies in corrdination w/ the contractor still in progress; Field verification and as-built for the pay items to be scheduled upon completion of coordination w/ the contractor.	
23	Route 1 Drainage Disposal System (Route 10A to Route !6	GU-NH-0001115)	5/18/2007	Waiting for the Pre-final FHWA and GEPA comments. Public hearing required to finalize design	Rigolberto Diaz
			6/15/2007	Awaiting for the Pre-final review comments from FHWA and GEPA. Public hearing required to finalize design.	
			7/31/2007	Awaiting for the Pre-final review comments from FHWA and GEPA. Public hearing required to finalize design.	
			8/21/2007	Awaiting for review comments from FHWA and GEPA on the Pre-final submittal. Public hearing required to finalize design.	
25	Northern Potholes Restoration - Primary Roads	PR-5-001-TER / GU-NH-HE66(104)	5/18/2007	100% completed; Change order #2 being prepared (price adjustment due to changes in SOW. New account number to be established for CO # 2	Dindo Orbong
			6/15/2007	STATUA QUO	
			7/31/2007	This project is 100% completed; C.O. # 2 (Final) Price Adjustment required due to the extrem reduction of pay item quantityies in the original SOW which was being prepared,	
HC NO.	PROJECT TITLE	PROJECT NUMBER	DATE	STATUS	PROJECT ENGINEER

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25	Northern Potholes Restoration - Primary Roads	HE66(104)	8/21/2007	This project is 100% completed; 8/21/07 - Prepared packaged of C.O. # 2 (Fina) for price Adjustment required due to the extrem reduction of pay item quantities in the original SOW was forwarded to the Director's Office via Highway Division Manager for review and signature	Dindo Orbong
26	Southern Potholes Restoration - Primary Roads	PR-5-002-TER / GU-NH-HE66(105)	5/18/2007	Final inspection scheduled - June 27, 2007; Change order #2 being prepared due to changes in SOW New account number being established for CO # 2	Dindo Orbong
6/15/2007			Final inspection scheduled - June 27, 2007; Change order #2 being prepared due to changes in SOW New account number being established for CO # 2		
7/31/2007			This project is 100% completed; C.O. # 2 (Final) Price Adjustment required due to the extrem reduction of pay item quantities in the original SOW which was being prepared,		
8/21/2007			This project is 100% completed; 8/21/07 - Prepared packaged of C.O. # 2 (Fina) for price Adjustment required due to the extrem reduction of pay item quantities in the original SOW was forwarded to the Director's Office via Highway Division Manager for review and signature		
28	Seashore Protection	W9128A-06-B-0008	5/18/2007	5/18/07-6/15/07 - Construction survey stake out in progress; DPW holding building permit. Construction drawings required stamp of Guam licensed engineer	Dindo Orbong
7/31/2007			Building permit on hold, awaiting Peals Board to issue the Guam License for two (2) Hawaii Engineers to stamp the Construction Plans; Contractor's dump truck capacity of 20 to 24 Tons have concern traversing Ylig Bridges; A letter to the contractor informing the limited capacity of the Ylig Bridge of 15 Tons per 2004 Bridge Inspection Report of FHWA is being prepared.		
8/21/2007			8/16/07 - Building permit was issued to the contractor; ACOE was informed about Ylig Bridge 15 Tons limited capacity . A copy 9f the 2004 FHWA Engineers Bridge Inspection report was provided; ACOE instructed DPW not to mention about the limited capacity of the bridge and the alternative route.		

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HC NO.	PROJECT TITLE	PROJECT NUMBER	DATE	STATUS	PROJECT ENGINEER
29	Route 2 Design and Construction for the Permanent Drainage System	N / A	5/18/2007	Preliminary design SOW to be prepared. Waiting for PMT	Danny Galiza
			6/15/2007	Preliminary design SOW is being prepared.	
			7/21/2007	No report submitted	Mark Abrincia
			8/21/2007	On hold, awaiting for the PMT.	
30	Route 26 Reconstruction and Widening	N / A	5/18/2007	60% design submittal prepared by the consultant; Land acquisition required to complete the 3 lane road design	Danny Galiza
			6/15/2007	60% design submittal is being prepared by the consultant; Land acquisition is required to complete the 3 lane road design	
			7/31/2007	7/16/07 - Follow-up on consultant 60% design submittal; 7/19/07 - Consultant to submit severance map, prepared by the surveyor for the property that requires Land Acquisition to complete the 3-Lane Road design.;	Mark Abrincia
			8/21/2007	8/6/07 - The consultant, (Serisola & Associates, Inc.) to submit their 65% submittal; 8/10/07 - DPW and consultant met and discussed the status of the design and the acquisition of the two private property lots; On 8/23/07, the consultant is scheduled to submit the 60% design submittal.	
31	Route 4 Rehabilitation and Widening (McDonald to Rt. 10)	N / A	5/18/2007	Waiting for the PMT to review and finalize the design SOW	Danny Galiza
			6/15/2007	Awaiting for the PMT to review and finalize the design SOW	
			6/30/2007	BBMR approved the contract document on 6/8/07; AG's approved Doc. Contract on 6/20/07; On 6/29/07 awaiting for Governor's approval;	Sagrado Bilong
			7/1/2007	7/21/07, Contract Document registered at DOA, Div. Of Accounts on 7/11/07.	
			8/21/2007	On hold awaiting for the PMT	

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HC NO.	PROJECT TITLE	PROJECT NUMBER	DATE	STATUS	PROJECT ENGINEER
32	Route 10A Reconstruction and Widening	GU-NH-010A(001)	5/18/2007	Waiting for the PMT to review and finalize the design SOW prepared by DPW	Danny Galiza
			6/15/2007	Waiting for the PMT to review and finalize the design SOW prepared by DPW	
			7/30/2007	2/10/05 - Pre-Proposal Conference was conducted; 03/09/05 - E/A firm evaluation was conducted; 07/07/06 - Scoping meeting w/ E/A was conducted; 02/03/07 - FHWA advised DPW that PMT will continue the project; 03/09/07 - Met w/ PBS & J (PMT) and provide bried status of the pro-ject; 5/25/07-06/29/07, still waiting for the PMT; 7/14/07 - Email fr. the director to rejuvenate the original contract; 7/16/07 - Re-ceived revised SOW from DBA; 7/17/07 - Re-ceived email from Richelle (FHWA) to negotiate the contract w/ DBA to perform topographic survey, environmental coor-dination and documentation and conceptual design.	
35	Route 2 Umatac Embankment Restoration	GQ-ER-0002(102)	5/18/2007	Waiting for PMT to review and finalize the preliminary SOW prepared by DPW	Mark Abrincia
			6/15/2007	Awaiting for PMT to review and finalize the preliminary SOW prepared by DPW	
			7/31/2007	Preliminary SOW is being reviewed and updated.	
			8/21/2007	On-hold . Awaiting for PMT to review and finalize the preliminary Scope of Work prepared by DPW.	
36	Route 15 Reconstruction and Widening (Route 26 to Route 29)	GU-NH-0015(103)	5/18/2007	ROW survey completed; Survey (ROW) reveals discrepancies; Waiting for PMT to resolve ROW issues and finalize design SOW	Mark Abrincia
			6/15/2007	ROW survey completed; Survey (ROW) shows discrepancies; Pending; Awaiting for PMT to resolve ROW issues and finalize design SOW	
			7/31/2007	ROW survey completed; Survey ROW alignment shows dis-crepancey but w/in the tolerable limit to preceed w/ the pro-posed road widening; Pending for review and finalization of the design SOW.	
			8/21/2007	ROW survey completed; Survey ROW alignment shows dis-crepancey but w/in the tolerable limit to preceed w/ the pro-posed road widening; Pending for review and finalization of the design SOW.	

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HC NO.	PROJECT TITLE	PROJECT NUMBER	DATE	STATUS	PROJECT ENGINEER
37	Route 29 (Gayinero Road) Reconstruction and Widening	GU-NH-029(101)	5/18/2007	Negotiation of the consultant's fee on hold; Waiting for PMT to review and finalize SOW	Mark Abrincia
			6/15/2007	The negotiation of the consultant's fee proposal was put on hold; Awaiting for the PMT to review and finalize SOW	
			7/31/2007	7/17/07 - DPW contacted the consultant to submit an updated Fee Proposal and SOW for the project.	
			8/21/2007	8/8/07 - Met w/ the consultant and discussed the updated status.; 9/6/07 - The consultant is rescheduled to resubmit the proposed SOW and Fee Proposal for review.	
38	Route 4 Reconstruction and Widdening (Route 1 to Mcdonald) Design-Build	GU-NH-0004(108)	5/18/2007	Contract forwarded to BBMR for review and signature	Sagrado F. Bilong
			6/15/2007	May 24, 2007, The contract Document was forwarded to BBMR for review and signature.	
	Route 4 Rehabilitation & Widdening (Fr. Mc Donald to Route 10)	N / A	8/21/2007	O n-Hold, Awaiting for PMT	Mark Abrincia
39	Route 5 and portions of Route 12 Reconstruction and Widening	GU-NH-0005(003)	5/18/2007	Comments from GPA, GTA, and NAVFAC received and forwarded to consultant to integrate; Consultant working on the final design submittal	Sagrado Bilong
			6/15/2007	Review comments from GPA, GTA, and NAVFAC were received and forwarded to consultant to integrate; The Consultant is working on the final design submittal.	
			7/1/2007	On 6/18/07-DPW submitted 100% pre-final review comments from NSVPAC and GPA; 6/28/07- GTA transmitted 100% Pre-final review comments to DPW; 6/29/07- E & A Engineers, consultant submitted sketch plan for proposed ponding basin (encroaching into navy property); 7/28/07- Awaiting review comments from EPA for 100% Pre-final submittal.	

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HC NO.	PROJECT TITLE	PROJECT NUMBER	DATE	STATUS	PROJECT ENGINEER
42	Route 14B Ypao Road Reconstruction and Widening	GU-NH-0014B(001)	5/18/2007	Rights of Way being researched. 60 feet wide ROW not initialed	Pedro Marquez III
			6/15/2007	Rights of Way being researched. 60 feet wide ROW not initialed	
			7/31/2007	7/01/07- DPW is still awaiting ROW certification, results of govt. rresearch for ROW ownership and prescriptive rights from Margarita Borja, DPW's Land Agent Supvr for ROW. 7/13/07 - The govt. must prove to have the five elements to acquire land by prescription accdg. to the AG's opinion such as: 1) Actual possession, 2) possession is exclusive, 3) possession is adverse, 4) possession continued fo for 20 yrs. 5) claimant has paid taxes for the last 5 yrs. Ms. Borja's research of the lots involoved is critical to the decision of the govt. whether to proceed with the road widening. It would be useless to proceed with the design if the govt. can't construct the project. The last communication with her was she believed even at the beginning of the project, the govt. does not seem to have clear possession.	
43	Tinaga (Pauliloc) Bridge Permanent Restoration	GQ-ER-022(018)	5/18/2007	FHWA concurrence to award	Pedro Marquez III
			6/15/2007	Bid opening conducted 05/31/07; Waiting for contractor's bid confirmation ; Bid Analysis to the forwarded to FHWA for review and concurrence	
			7/30/2007	DPW's acceptance of low responsive bid (issuance of Intent to Award wason 7/10/07; DPW received the contractors performance and payment bonds on 7/24/07.	
44	Santa Rita (Bordallo) Bridge Permanent Restoration	GQ-ER-22(020)	5/18/2007	FHWA concurrence to award	Pedro Marquez III
			6/15/2007	Bid opening conducted on 05/31/07 Waiting for FHWA's concurrence to award the project	
			7/30/2007	7/3/07-DPW's acceptance of low responsive bid (issuance of Intent to Award); 7/11/07-DPW receives contractor's Performance and Payment Bond; 7/19/07- Execution of Contract by DPW Cetifying Officer.	

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HC NO.	PROJECT TITLE	PROJECT NUMBER	DATE	STATUS	PROJECT ENGINEER
45	Route 4 Manell Channel (Barcinas Area)	GU-NH-004(008)	5/18/2007	FHWA NonConcurrence to award	Pedro Marquez III
			6/15/2007	A re-selection of A/E Consultant is to be conducted.; Previous selection was not conducted according to FHWA requirements	
	Led Traffic Signal Conversion Program Phase 1 (AAFB Front Gate to ITC Int.)	GU-NH-1000(019)	7/30/2007	Assisted design Engineers compiled field verification Assess-ments for Federal-Aid Highway Design Prjects on Field Inves-tigation and Plan /Detail revision	Edgardo L. Tolentino
	Islandwide School Zone Signs- Safety Improvement Project	GU-NH-HE66(005)	7/30/2007	7/31/07 - Waiting for the return of the complete bid files; 7/16/07 - Draft cancellation letter. To wait for the complete bid files and to find out the reason for cancellation; 7/09/07 - Requested the return of the complete bid files from Ms. Liberty A. Perez Former CIP Chief Engineer; 6/29/07 - Sent a letter to the contractor notifying that project was cancelled and to have it rebid. Bid Doc. to be revised and re-packaged.; 2/03/07 - Met with FHWA to re-package and re-bid the projjedt.; 10/06/07 Bid Opening ; Two companies bid on the project (Hub Tech and Highway Safety Services.)	Isidro C. Duarosan
	Route 2, Agat - Umatac Landslide	N / A	7/31/2007	Deductive Change Order # 2 is being processed.	Dindo Orbong
	Route 2, Agat Roadway Reconstruction	N / A	8/21/2007	On hold, Awaiting fo r the PMT.	
	Route 2, Umatac Embankment Restoration (Cetti Bay)	N / A	7/31/2007	Preliminary SOW is being reviewed and updated.	Mark Abrincia
8/21/2007			On-Hold, Awaiting for the PMT to review and finalize the Preliminary Scope of Work prepared by DPW.		

Installation of Traffic Signal

Traffic Signal Construction Schedule	QTY	Days	Total
Concrete Pole Foundation			
Excavation	4	3	12
Reinforcement Bar	4	3	12
Concrete Form	4	3	12
Concrete Placement	4	1	4
Conduit	4	3	12
TOTAL:			52
Concrete Controller Foundation			
Excavation	1	2	2
Reinforcement Bar	1	2	2
Concrete Form	1	1	1
Concrete Placement	1	1	1
Conduit	1	1	1
TOTAL:			7
Wiring			
TYPE - 1 & 2 Traffic Pole			
Excavation	4	2	8
Conduit	4	2	8
Wiring	4	4	16
Concrete Encasement	4	3	12
Termination	4	2	8
TOTAL:			52
Loop Installation			
Cutting	8	1	8
Wiring	8	1	8
Sealant	8	1	8
Excavation	8	1	8
TOTAL:			32
Testing			
Controller	1	4	4
TOTAL:			4
Traffic Pole			
Shipping	1	30	30
Delivery	1	3	3
TOTAL:			33
Calendar Days	7.5 Months		180

ITEM	UKUDU HIGH SCHOOL					ADAGAO ELEM. SCHOOL				
	Unit	QTY	Unit Cost	Total	No.of Days	Unit	QTY	Unit Cost	Total	No.of Days
Mobilization.	LS	1	\$ 45,000.00	\$ 45,000.00	12	LS	1	\$ 25,000.00	\$ 25,000.00	12
Soil Erosion Control	LS	1	\$ 12,000.00	\$ 12,000.00	3	LS	1	\$ 6,000.00	\$ 6,000.00	3
Watering fo Dust Control.	CY	1333	\$ 3.00	\$ 3,999.00		CY	222	\$ 3.00	\$ 666.00	0
Removal of Obstruction (Guardrail, Signs, Pavement Markers/ Markings and Other Obstructions to Complete the Work).	LS	1	\$ 8,500.00	\$ 8,500.00	3	LS	0	\$ 8,500.00	\$ -	0
Roadway Excavation.	CY	1333	\$ 45.00	\$ 59,985.00	20	CY	222	\$ 45.00	\$ 9,990.00	7
Aggregate Base, Grading "C", 8" Depth.	SY	5066	\$ 45.00	\$ 227,970.00	10	SY	666	\$ 45.00	\$ 29,970.00	7
Subbase, Grading "A", 12" Depth.	SY	5066	\$ 35.00	\$ 177,310.00	10	SY	666	\$ 35.00	\$ 23,310.00	7
Hot Asphalt Concrete Pavement Class "A", Type II Pavement Smoothness, 3" Depth.	SY	0	\$ 65.00	\$ -	0	SY	666	\$ 65.00	\$ 43,290.00	2
Hot Asphalt Concrete Friction Course, 3/4" Depth.	SY	5066	\$ 35.00	\$ 177,310.00	2	SY	3333	\$ 35.00	\$ 116,655.00	2
Tack Coat, Grade SS-1.	SY	5066	\$ 3.00	\$ 15,198.00	1	SY	3333	\$ 3.00	\$ 9,999.00	1
Plain Portland Cement Concrete Pavement, 8 Inches Depth.	SY	5066	\$ 120.00	\$ 607,920.00	10	SY	0	\$ 120.00	\$ -	0
Plain Portland Cement Concrete Pavement, 2 Inches Depth.	SY	0	\$ 35.00	\$ -		SY	0	\$ 35.00	\$ -	0
Portland Cement Concrete Curb, 21" Depth	LF	0	\$ 45.00	\$ -		LF	0	\$ 45.00	\$ -	0
Guardrail System	LF	400	\$ 20.00	\$ 8,000.00	7	LF	0	\$ 20.00	\$ -	0
Sign Installation, Type II (Single Facing)	EA	6	\$ 850.00	\$ 5,100.00	6	EA	6	\$ 850.00	\$ 5,100.00	6
Sign Installation, Type II (Two Facing)	EA	6	\$ 850.00	\$ 5,100.00	6	EA	6	\$ 850.00	\$ 5,100.00	6
Pavement Markings Type "H", 12" Wide, White or Yellow.	EA	800	\$ 4.00	\$ 3,200.00	7	EA	800	\$ 4.00	\$ 3,200.00	7
Pavement Markings Type "H", 4" Wide, White or Yellow.	SY	222	\$ 2.00	\$ 444.00	7	SY	222	\$ 2.00	\$ 444.00	7
Raised Pavement Markers, Type "A".	EA	0	\$ 6.00	\$ -		EA	0	\$ 6.00	\$ -	0
Raised Pavement Markers, Type "CR".	EA	50	\$ 6.00	\$ 300.00	2	EA	50	\$ 6.00	\$ 300.00	2
Raised Pavement Markers, Type "YY".	LS	300	\$ 6.00	\$ 1,800.00	2	LS	300	\$ 6.00	\$ 1,800.00	2
Pavement Markings, Directional Arrows, Single.	EA	18	\$ 85.00	\$ 1,530.00	2	EA	22	\$ 85.00	\$ 1,870.00	2
Pavement Markings, Directional Arrows, Double.	EA	0	\$ 85.00	\$ -		EA	0	\$ 85.00	\$ -	
Barricade Type I, 8' Long.	EA		\$ 100.00	\$ -		EA		\$ 100.00	\$ -	
Barricade Type II, 8' Long.	EA		\$ 100.00	\$ -		EA		\$ 100.00	\$ -	
Cone Plastic Delineator, 28" High With 2-4" Retroreflective Band.	EA	36	\$ 15.00	\$ 540.00	7	EA	36	\$ 15.00	\$ 540.00	2
Construction Signs.	EA	2	\$ 1,500.00	\$ 3,000.00	7	EA	2	\$ 1,500.00	\$ 3,000.00	2
Warning Light, Flashing Type "A", Low Intensity.	EA	8	\$ 150.00	\$ 1,200.00	7	EA	8	\$ 150.00	\$ 1,200.00	2
Temporary Markers Flexible Body.	EA	100	\$ 65.00	\$ 6,500.00	7	EA	100	\$ 65.00	\$ 6,500.00	2
TRAFFIC SIGNAL Installation	LS	1	\$ 246,500.00	\$ 246,500.00	1	LS	1	\$ 246,500.00	\$ 246,500.00	1
Construction Signs, Portable Changeable Massage.	EA	8	\$ 180.00	\$ 1,440.00	7	EA	8	\$ 180.00	\$ 1,440.00	2
DESIGN SERVICES	LS	1	\$ 145,000.00	\$ 145,000.00	210	LS	1	\$ 145,000.00	\$ 145,000.00	2
Construction Survey and Staking	LS	1	\$ 20,000.00	\$ 20,000.00	30	LS	1	\$ 20,000.00	\$ 20,000.00	15
Construction Testing	LS	1	\$ 15,000.00	\$ 15,000.00	30	LS	1	\$ 15,000.00	\$ 15,000.00	30
Adjust Water Valve Box	LS	1	\$ 450.00	\$ 450.00		LS	1	\$ 450.00	\$ 450.00	0
Temporary Traffic control	LS	1	\$ 15,000.00	\$ 15,000.00	7	LS	1	\$ 15,000.00	\$ 15,000.00	7
Field Office	LS	1	\$ 8,000.00	\$ 8,000.00	1	LS	- 1	\$ 8,000.00	\$ 8,000.00	1
GRAND TOTAL			\$ 2,568,620.00	TOTAL \$ 1,823,296.00	424			TOTAL \$ 745,324.00	139	

New Project

- Route 17 Culvert
- Route 2 Agat Permanent fix for Emergency Installation of 36” drainage culvert
- Route 2 Agat-Umatac Cetti Bay
- Route 1 Median Extension/Fencing by Skate Park

Attempted In-house Design

- Route 2 Umatac Culvert
- Route 15 in front of DOC
- Route 15 Tan Robit
- Route 4 Merizo Shoreline Protection
- Route 1 Wusstig Road Traffic Signal Installation – D/B Advertisement Cancelled

Under Design by Consultant

- Route 2A Gautali Bridge – Duenas Bordallo & Associates (DBA)
- Route 4 Bile/Pigua Bridge - DBA
- Route 4 Agfayan Bridge – Winzler & Kelly (WK)
- Route 8/16/10 Tri Intersection - WK
- Route 8 National Guard Intersection - WK
- Route 10A - DBA
- Rte 6A Murray Road Embankment - GeoEngineering
- Route 4 As-Misa Bridge – NC Macario & Associates
- Route 4 Ylig Bridge - DBA

Other Needed Project

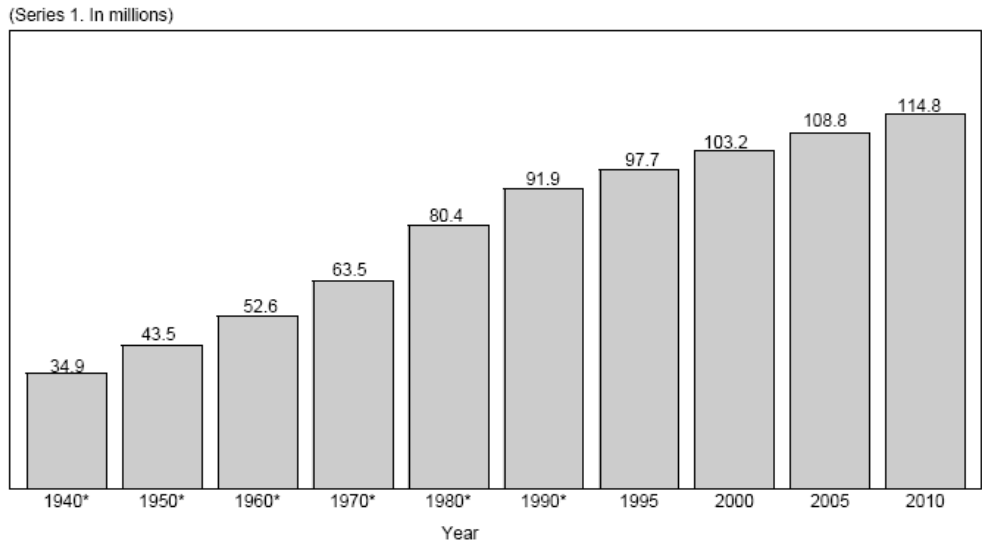
- Tiyan Parkway

APPENDIX A10

Projections of the Number of Households and Families in the United States: 1995 to 2010, U.S. Bureau of the Census, Current Population Reports, P25-1129, U.S. Government Printing Office, Washington, DC, 1996. By Jennifer Cheeseman Day

Examples of U.S. Household projections

Figure 1.
Number of Households: 1940 to 2010



* As of April 1, from population censuses.

Source: Table C.

Table D. Average Annual Percent Change in Households: 1940 to 2010

[Numbers in thousands. Reference date is July 1, except as noted]

Period	Series 1	Series 2	Series 3
CENSUS ESTIMATES			
1940-1950*	2.2	(X)	(X)
1950-1960*	1.9	(X)	(X)
1960-1970*	1.9	(X)	(X)
1970-1980*	2.4	(X)	(X)
1980-1990*	1.3	(X)	(X)
PROJECTIONS			
1990-1995	1.2	1.2	1.2
1995-1996	1.2	1.1	1.1
1996-1997	1.1	1.1	1.0
1997-1998	1.1	1.0	1.0
1998-1999	1.1	1.0	1.0
1999-2000	1.1	1.1	1.0
2000-2001	1.1	1.0	1.0
2001-2002	1.1	1.0	1.0
2002-2003	1.0	1.0	1.0
2003-2004	1.0	1.0	1.0
2004-2005	1.1	1.0	1.0
2005-2006	1.1	1.0	1.0
2006-2007	1.1	1.0	1.0
2007-2008	1.1	1.0	1.0
2008-2009	1.1	1.0	1.0
2009-2010	1.1	1.1	1.0

* As of April 1, from population censuses.

X Not applicable.

Source: Table C.

Table 1. Projections of Households by Type: 1995 to 2010
Series 1, 2, and 3

[Reference date is July 1]

Series and year	All households	Family households				Nonfamily households			Average number of persons—	
		Total	Married couple	Other family		Total	Female householder	Male householder	Per household	Per family
				Female householder	Male householder					
SERIES 1										
1995	97,722,883	68,382,680	53,432,915	11,438,681	3,511,084	29,340,203	16,084,937	13,255,266	2.62	3.15
1996	98,856,603	69,089,808	53,893,439	11,606,809	3,589,560	29,766,795	16,269,403	13,497,392	2.61	3.14
1997	99,965,175	69,760,723	54,319,173	11,773,519	3,668,031	30,204,452	16,463,794	13,740,658	2.61	3.14
1998	101,042,864	70,387,012	54,707,260	11,934,856	3,744,896	30,655,852	16,670,950	13,984,902	2.60	3.13
1999	102,118,600	71,014,836	55,091,779	12,100,806	3,822,451	31,103,764	16,875,311	14,228,453	2.60	3.13
2000	103,245,963	71,668,930	55,495,517	12,272,004	3,901,409	31,577,033	17,094,590	14,482,443	2.59	3.12
2001	104,344,445	72,310,665	55,885,976	12,446,308	3,978,381	32,033,780	17,304,585	14,729,195	2.59	3.11
2002	105,456,124	72,917,696	56,266,221	12,599,164	4,052,311	32,538,428	17,549,113	14,989,315	2.58	3.11
2003	106,586,127	73,511,099	56,626,719	12,757,287	4,127,093	33,055,028	17,801,273	15,253,755	2.58	3.10
2004	107,672,899	74,107,904	56,988,327	12,917,753	4,201,824	33,564,995	18,048,628	15,516,367	2.57	3.09
2005	108,818,659	74,732,880	57,370,994	13,083,981	4,277,905	34,085,779	18,301,408	15,784,371	2.57	3.09
2006	109,981,970	75,361,827	57,755,561	13,251,031	4,355,235	34,620,143	18,561,511	16,058,632	2.56	3.08
2007	111,162,259	75,997,067	58,147,607	13,418,598	4,430,862	35,165,192	18,828,993	16,336,199	2.55	3.07
2008	112,362,848	76,615,834	58,527,251	13,582,132	4,506,451	35,747,014	19,119,565	16,627,449	2.55	3.07
2009	113,567,967	77,241,400	58,908,364	13,751,082	4,581,934	36,326,567	19,405,806	16,920,761	2.54	3.06
2010	114,825,428	77,894,830	59,308,021	13,926,532	4,660,277	36,930,598	19,702,084	17,228,514	2.53	3.05
SERIES 2										
1995	97,694,760	68,637,033	54,267,416	11,154,518	3,415,099	28,857,727	15,913,381	12,944,346	2.62	3.14
1996	98,801,180	69,642,938	54,926,039	11,248,424	3,468,475	29,158,242	16,053,245	13,104,997	2.62	3.14
1997	99,879,980	70,413,821	55,553,244	11,339,611	3,520,966	29,466,159	16,201,540	13,264,619	2.61	3.13
1998	100,924,490	71,140,597	56,145,060	11,424,475	3,571,052	29,783,903	16,360,945	13,422,958	2.61	3.13
1999	101,965,560	71,870,306	56,736,808	11,512,401	3,621,097	30,095,254	16,516,369	13,578,885	2.60	3.12
2000	103,057,635	72,627,721	57,350,917	11,604,767	3,672,037	30,429,914	16,666,075	13,743,839	2.60	3.12
2001	104,119,045	73,374,380	57,955,355	11,698,670	3,720,355	30,744,665	16,845,060	13,899,605	2.59	3.11
2002	105,189,833	74,089,499	58,553,140	11,771,580	3,764,779	31,100,334	17,035,496	14,064,838	2.59	3.10
2003	106,259,988	74,792,966	59,134,015	11,849,247	3,809,704	31,467,022	17,233,314	14,233,708	2.58	3.10
2004	107,324,286	75,501,804	59,720,229	11,927,775	3,853,800	31,822,482	17,424,375	14,398,107	2.58	3.09
2005	108,425,541	76,240,892	60,331,974	12,010,490	3,898,428	32,184,649	17,619,226	14,565,423	2.57	3.09
2006	109,542,588	76,985,707	60,948,962	12,093,094	3,943,651	32,556,881	17,820,103	14,736,778	2.57	3.08
2007	110,675,857	77,737,669	61,574,606	12,175,879	3,987,184	32,938,186	18,027,943	14,910,245	2.56	3.08
2008	111,833,083	78,471,219	62,183,689	12,255,980	4,031,550	33,361,864	18,262,171	15,099,693	2.56	3.07
2009	112,991,783	79,215,593	62,800,539	12,340,240	4,074,804	33,776,180	18,488,895	15,287,285	2.55	3.07
2010	114,199,622	79,990,044	63,441,719	12,428,486	4,119,839	34,209,578	18,723,493	15,486,085	2.55	3.06
SERIES 3										
1995	97,574,189	68,872,603	54,064,426	11,336,429	3,471,748	28,701,586	15,799,625	12,901,961	2.62	3.14
1996	98,641,315	69,674,088	54,674,787	11,463,777	3,535,524	28,967,227	15,914,198	13,053,029	2.62	3.14
1997	99,680,030	70,439,696	55,252,827	11,568,373	3,598,496	29,240,334	16,037,537	13,202,797	2.62	3.13
1998	100,683,716	71,161,368	55,795,398	11,706,994	3,658,976	29,522,348	16,171,073	13,351,275	2.61	3.13
1999	101,683,469	71,885,581	56,338,766	11,827,365	3,719,450	29,797,888	16,300,363	13,497,525	2.61	3.12
2000	102,734,349	72,637,651	56,904,364	11,952,311	3,780,976	30,096,698	16,443,281	13,653,417	2.61	3.12
2001	103,754,014	73,378,966	57,461,517	12,077,637	3,839,812	30,375,048	16,574,784	13,800,264	2.60	3.11
2002	104,784,362	74,090,082	58,010,418	12,184,607	3,895,057	30,664,280	16,737,426	13,956,854	2.60	3.11
2003	105,813,805	74,789,113	58,543,186	12,295,128	3,950,799	31,024,692	16,907,152	14,117,540	2.60	3.10
2004	106,835,305	75,493,071	59,080,407	12,406,575	4,006,089	31,342,234	17,069,178	14,273,056	2.59	3.10
2005	107,892,079	76,227,200	59,642,441	12,522,567	4,062,192	31,664,879	17,233,807	14,431,072	2.59	3.09
2006	108,963,276	76,967,698	60,209,569	12,638,983	4,119,146	31,995,578	17,403,252	14,592,326	2.58	3.09
2007	110,051,064	77,716,383	60,784,900	12,756,689	4,174,794	32,334,681	17,579,493	14,755,188	2.58	3.08
2008	111,161,226	78,446,730	61,342,277	12,872,767	4,231,666	32,714,496	17,780,666	14,933,830	2.57	3.07
2009	112,270,638	79,187,519	61,906,394	12,993,258	4,287,867	33,083,119	17,973,497	15,109,622	2.57	3.07
2010	113,425,776	79,957,976	62,494,303	13,117,622	4,346,051	33,467,800	18,172,225	15,295,575	2.56	3.06

APPENDIX A11

2007 Master Plan Commercial Port of Guam. Progress Report #2. By: Parsons Brinkerhoff, Jose D. Leon Guerrero October 2007

Examples of Commercial Port of Guam Cargo Data and Forecasts

Table 3 – Guam Import Data (Current Dollars)

Group	2004	2005	2007	%
				2007
Food and Non-Alcoholic Beverages	\$210,887,031	\$163,587,900	\$189,848,060	33%
Alcoholic Beverages	\$20,445,918	\$22,752,348	\$18,916,221	3%
Transportation and Parts	\$82,110,117	\$111,165,444	\$130,698,026	22%
Home Appliances, Equipment and Others	\$11,731,590	\$9,413,220	\$10,355,204	2%
Construction Materials	\$28,334,139	\$19,734,012	\$30,347,915	5%
Men's and Women's Apparel	\$32,188,479	\$26,132,346	\$81,147,705	14%
Plastics, Leather and Paper	\$48,733,398	\$93,249,228	\$34,736,713	6%
Other Imports	\$68,952,768	\$86,652,573	\$87,495,925	15%
Grand Total	\$503,383,440	\$532,687,071	\$583,545,769	100%

Note: 2006 is not available

Source: Government of Guam, Bureau of Statistics and Plans

Table 6 – Vessel Call Summary for 2007 (Jan through mid-Aug)

Group	# Voyages	Lifts per Call (average)						Total
		Full In	Full Out	Full Total	Mty In	Mty Out	Mty Total	
USWC								
Matson	35	350	4	354	46	290	336	690
Horizon	35	250	2	252	58	204	262	514
Foreign								
CTS	33	122	2	123	75	77	152	275
Kyowa	29	43	8	51	14	34	48	99
Trans-shipment								
Seabridge	49	27	22	49	43	3	46	95
Matson	17	18	171	189	177	2	179	368

Source: Port Authority of Guam

Figure 11 – Horizon Service to Guam



Figure 13 – Port of Guam Container Trends (TEUs)

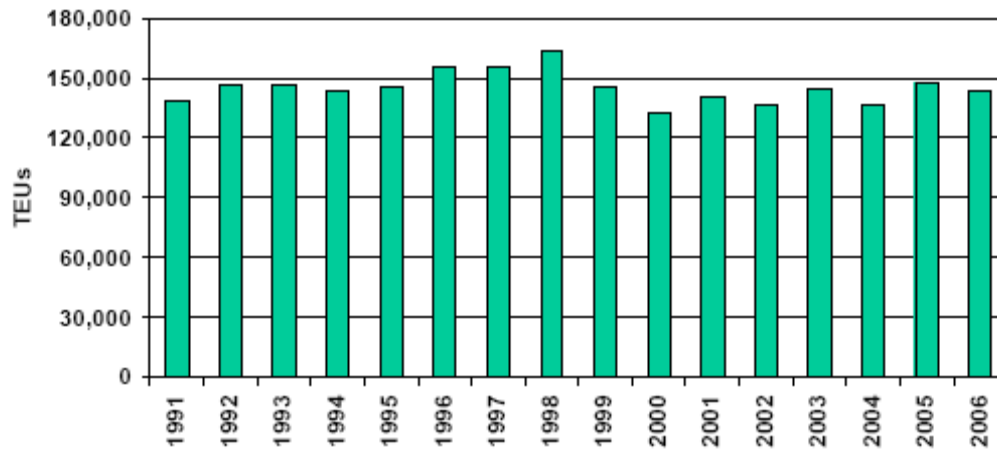


Table 8 – Guam Container Traffic Forecast – By Route (Boxes)

Year	CNMI	FSM/MI	Foreign	USWC	Total
2007	8,100	6,900	18,800	69,200	103,000
2008	6,500	6,900	19,500	71,800	104,700
2009	5,500	7,000	20,800	74,600	107,900
2010	4,500	7,100	28,500	88,300	128,400
2011	3,500	7,100	35,300	102,800	148,700
2012	3,500	7,200	43,000	118,300	172,000
2013	3,600	7,300	43,500	122,900	177,300
2014	3,700	7,400	42,700	128,400	182,200
2015	3,700	7,400	43,400	135,400	189,900
2016	3,800	7,500	36,800	132,500	180,600
2017	3,800	7,600	25,100	115,800	152,300
2018	3,900	7,600	22,000	111,800	145,300
2019	4,000	7,700	22,300	113,200	147,200
2020	4,000	7,800	22,700	114,500	149,000
2021	4,100	7,900	23,000	115,900	150,900
2022	4,100	7,900	23,400	117,300	152,700
2023	4,200	8,000	23,800	118,800	154,800
2024	4,200	8,100	24,100	120,200	156,600
2025	4,300	8,200	24,500	121,700	158,700
2026	4,400	8,200	24,900	123,200	160,700
2027	4,400	8,300	25,200	124,500	162,400
Compound Annual Growth Rate					
2007-12	-15.4%	0.9%	18.0%	11.3%	10.8%
2012-17	1.7%	1.1%	-10.2%	-0.4%	-2.4%
2017-27	1.5%	0.9%	0.0%	0.7%	0.6%
2007-27	-3.0%	0.9%	1.5%	3.0%	2.3%

Source: BST Associates using data from DOD

APPENDIX A12

DISTRIBUTION OF PRIVATE ESTABLISHMENTS BY EMPLOYMENT SIZE AND INDUSTRY
 Bureau of Labor Statistics, Department of Labor, Government of Guam

2000		EMPLOYMENT/ESTABLISHMENT COUNT					
INDUSTRY	TOTAL	1-4	5-9	10-19	20-49	50-99	100-UP
AGRICULTURE, FORESTRY, AND FISHING	24	8	9	*	4	*	*
CONSTRUCTION	385	185	84	56	47	8	5
MANUFACTURING	59	20	9	12	9	5	4
TRANSPORTATION AND PUBLIC UTILITIES	171	59	27	28	37	10	10
WHOLESALE TRADE	159	68	39	25	21	5	*
RETAIL TRADE	859	386	208	139	81	23	22
FINANCE, INSURANCE, AND REAL ESTATE	188	90	38	32	14	11	3
SERVICES	838	422	167	110	80	27	32
TOTAL PRIVATE ESTABLISHMENTS	<u>2,683</u>	<u>1,238</u>	<u>581</u>	<u>404</u>	<u>293</u>	<u>90</u>	<u>77</u>
TOTAL PRIVATE SECTOR EMPLOYEES	43,370	2,811	3,850	5,392	8,901	6,148	16,268

2001		EMPLOYMENT/ESTABLISHMENT COUNT					
INDUSTRY	TOTAL	1-4	5-9	10-19	20-49	50-99	100-UP
AGRICULTURE, FORESTRY, AND FISHING	24	11	6	3	*	*	*
CONSTRUCTION	339	152	80	55	44	4	4
MANUFACTURING	56	20	6	8	15	3	4
TRANSPORTATION AND PUBLIC UTILITIES	178	63	34	24	34	13	10
WHOLESALE TRADE	157	64	42	26	18	7	*
RETAIL TRADE	883	407	207	149	69	30	21
FINANCE, INSURANCE, AND REAL ESTATE	186	89	41	28	15	11	*
SERVICES	817	403	168	102	90	23	31
TOTAL PRIVATE ESTABLISHMENTS	<u>2,640</u>	<u>1,209</u>	<u>584</u>	<u>395</u>	<u>287</u>	<u>93</u>	<u>72</u>
TOTAL PRIVATE SECTOR EMPLOYEES	44,378	2,805	3,848	5,347	8,899	6,622	16,857

DISTRIBUTION OF PRIVATE ESTABLISHMENTS BY EMPLOYMENT SIZE AND INDUSTRY
 Bureau of Labor Statistics, Department of Labor, Government of Guam

2002		EMPLOYMENT/ESTABLISHMENT COUNT					
INDUSTRY	TOTAL	1-4	5-9	10-19	20-49	50-99	100-UP
AGRICULTURE, FORESTRY, AND FISHING	19	8	5	*	*	*	*
CONSTRUCTION	296	138	75	37	35	9	*
MANUFACTURING	58	20	10	9	11	3	5
TRANSPORTATION AND PUBLIC UTILITIES	174	58	33	29	35	12	7
WHOLESALE TRADE	146	62	38	23	14	7	*
RETAIL TRADE	802	354	204	126	72	32	14
FINANCE, INSURANCE, AND REAL ESTATE	179	85	36	31	15	9	3
SERVICES	819	398	190	102	75	26	28
TOTAL PRIVATE ESTABLISHMENTS	2,493	1,123	591	359	259	100	61
TOTAL PRIVATE SECTOR EMPLOYEES	40,106	2,631	3,795	4,856	7,799	7,039	13,986

2003		EMPLOYMENT/ESTABLISHMENT COUNT					
INDUSTRY	TOTAL	1-4	5-9	10-19	20-49	50-99	100-UP
AGRICULTURE, FORESTRY, AND FISHING	17	7	4	3	*	*	*
CONSTRUCTION	336	157	71	57	35	12	4
MANUFACTURING	57	18	10	12	9	4	4
TRANSPORTATION AND PUBLIC UTILITIES	173	61	31	29	32	11	9
WHOLESALE TRADE	143	52	43	23	17	7	*
RETAIL TRADE	805	356	210	116	77	35	11
FINANCE, INSURANCE, AND REAL ESTATE	167	81	32	30	13	7	4
SERVICES	804	396	171	110	74	27	26
TOTAL PRIVATE ESTABLISHMENTS	2,502	1,128	572	380	258	104	60
TOTAL PRIVATE SECTOR EMPLOYEES	40,617	2,663	3,746	5,080	7,926	7,493	13,709

DISTRIBUTION OF PRIVATE ESTABLISHMENTS BY EMPLOYMENT SIZE AND INDUSTRY
 Bureau of Labor Statistics, Department of Labor, Government of Guam

2004		EMPLOYMENT/ESTABLISHMENT COUNT					
INDUSTRY	TOTAL	1-4	5-9	10-19	20-49	50-99	100-UP
AGRICULTURE, FORESTRY, AND FISHING	15	8	*	*	*	*	*
CONSTRUCTION	353	146	87	57	42	11	10
MANUFACTURING	53	16	8	11	10	3	5
TRANSPORTATION AND PUBLIC UTILITIES	171	59	34	26	32	11	9
WHOLESALE TRADE	151	64	43	23	15	4	*
RETAIL TRADE	834	366	214	131	73	35	15
FINANCE, INSURANCE, AND REAL ESTATE	160	75	31	32	11	8	3
SERVICES	853	421	190	112	77	26	27
TOTAL PRIVATE ESTABLISHMENTS	<u>2,590</u>	<u>1,155</u>	<u>609</u>	<u>393</u>	<u>262</u>	<u>100</u>	<u>71</u>
TOTAL PRIVATE SECTOR EMPLOYEES	42,867	2,748	4,017	5,199	8,038	6,933	15,932

2005		EMPLOYMENT/ESTABLISHMENT COUNT					
INDUSTRY	TOTAL	1-4	5-9	10-19	20-49	50-99	100-UP
AGRICULTURE, FORESTRY, AND FISHING	16	8	4	*	*	*	*
CONSTRUCTION	319	151	66	53	30	13	6
MANUFACTURING	58	22	8	7	13	3	5
TRANSPORTATION AND PUBLIC UTILITIES	160	55	33	24	23	16	9
WHOLESALE TRADE	145	56	42	23	16	6	*
RETAIL TRADE	838	368	218	129	74	29	20
FINANCE, INSURANCE, AND REAL ESTATE	173	80	34	32	15	10	*
SERVICES	876	425	204	116	80	25	26
TOTAL PRIVATE ESTABLISHMENTS	<u>2,585</u>	<u>1,165</u>	<u>609</u>	<u>384</u>	<u>253</u>	<u>104</u>	<u>70</u>
TOTAL PRIVATE SECTOR EMPLOYEES	42,779	2,752	4,019	5,116	7,794	7,327	15,771

DISTRIBUTION OF PRIVATE ESTABLISHMENTS BY EMPLOYMENT SIZE AND INDUSTRY
 Bureau of Labor Statistics, Department of Labor, Government of Guam

2006		EMPLOYMENT/ESTABLISHMENT COUNT					
INDUSTRY	TOTAL	1-4	5-9	10-19	20-49	50-99	100-UP
AGRICULTURE, FORESTRY, AND FISHING	16	7	*	3	*	*	*
CONSTRUCTION	329	149	79	46	38	10	7
MANUFACTURING	55	22	8	7	9	4	5
TRANSPORTATION AND PUBLIC UTILITIES	152	54	24	24	26	15	9
WHOLESALE TRADE	153	53	47	32	12	7	*
RETAIL TRADE	818	364	208	128	72	28	18
FINANCE, INSURANCE, AND REAL ESTATE	169	76	40	27	15	8	3
SERVICES	883	434	195	117	81	27	29
TOTAL PRIVATE ESTABLISHMENTS	2,575	1,159	603	384	255	101	73
TOTAL PRIVATE SECTOR EMPLOYEES	43,583	2,722	3,954	5,202	7,805	6,919	16,981

2007		EMPLOYMENT/ESTABLISHMENT COUNT					
INDUSTRY	TOTAL	1-4	5-9	10-19	20-49	50-99	100-UP
AGRICULTURE, FORESTRY, AND FISHING	18	6	7	*	*	*	*
CONSTRUCTION	350	155	71	61	45	8	10
MANUFACTURING	49	18	7	7	9	3	5
TRANSPORTATION AND PUBLIC UTILITIES	150	53	26	26	24	11	10
WHOLESALE TRADE	148	46	53	24	16	7	*
RETAIL TRADE	785	344	194	130	71	30	16
FINANCE, INSURANCE, AND REAL ESTATE	161	73	37	22	18	8	3
SERVICES	826	373	193	121	81	26	32
TOTAL PRIVATE ESTABLISHMENTS	2,487	1,068	588	392	266	94	79
TOTAL PRIVATE SECTOR EMPLOYEES	44,453	2,526	3,824	5,226	8,307	6,499	18,071

* Denotes less than 3 establishments or no establishments reporting in respective category.

APPENDIX A13

EMPLOYEES ON PAYROLL BY OWNERSHIP AND INDUSTRY						EMPLOYMENT BY SEX		PRODUCTION WORKERS, WAGES, HOURS AND EARNINGS ¹			
	September ^r 2006	December ^r 2006	March ^r 2007	June ^r 2007	September ^p 2007	September 2007 Male	September 2007 Female	Production Workers	Average Hourly Earnings	Average Weekly Hours Paid	Average Weekly Earnings
PRIVATE SECTOR											
AGRICULTURE	<u>280</u>	<u>290</u>	<u>340</u>	<u>370</u>	<u>360</u>	<u>320</u>	<u>40</u>	<u>280</u>	<u>\$7.59</u>	<u>37.3</u>	<u>\$283.35</u>
CONSTRUCTION	<u>4,090</u>	<u>4,740</u>	<u>5,360</u>	<u>5,470</u>	<u>5,540</u>	<u>5,270</u>	<u>270</u>	<u>4,550</u>	<u>12.78</u>	<u>40.5</u>	<u>518.23</u>
General building contractors	3,060	3,660	4,040	4,370	4,550	4,340	210	3,840	12.41	39.5	490.83
Heavy construction, ex. building	590	600	460	380	390	370	20	300	14.92	51.4	767.11
Special trade contractors	440	480	860	720	600	560	40	410	13.41	33.4	448.05
MANUFACTURING	<u>1,620</u>	<u>1,640</u>	<u>1,680</u>	<u>1,610</u>	<u>1,610</u>	<u>1,260</u>	<u>350</u>	<u>990</u>	<u>12.39</u>	<u>38.2</u>	<u>473.64</u>
Food and kindred products	470	470	460	450	460	320	140	230	9.62	35.6	342.54
Printing and publishing	360	340	340	330	330	180	150	110	12.94	30.1	390.01
All other manufacturing	790	830	880	830	820	760	60	650	13.28	40.4	536.41
TRANSPORTATION & PUBLIC UTILITIES	<u>4,980</u>	<u>5,010</u>	<u>4,810</u>	<u>4,820</u>	<u>4,830</u>	<u>2,910</u>	<u>1,920</u>	<u>4,020</u>	<u>14.27</u>	<u>39.9</u>	<u>569.88</u>
WHOLESALE TRADE	<u>2,100</u>	<u>2,070</u>	<u>2,030</u>	<u>2,070</u>	<u>2,110</u>	<u>1,420</u>	<u>690</u>	<u>1,660</u>	<u>9.60</u>	<u>37.6</u>	<u>360.85</u>
RETAIL TRADE	<u>11,950</u>	<u>12,050</u>	<u>11,630</u>	<u>11,260</u>	<u>11,570</u>	<u>5,480</u>	<u>6,090</u>	<u>9,840</u>	<u>10.47</u>	<u>31.8</u>	<u>333.61</u>
FINANCE, INSURANCE & REAL ESTATE	<u>2,440</u>	<u>2,520</u>	<u>2,440</u>	<u>2,470</u>	<u>2,450</u>	<u>770</u>	<u>1,680</u>	<u>1,770</u>	<u>12.12</u>	<u>37.8</u>	<u>457.95</u>
SERVICES	<u>15,750</u>	<u>15,840</u>	<u>16,160</u>	<u>15,780</u>	<u>16,180</u>	<u>8,830</u>	<u>7,350</u>	<u>13,950</u>	<u>9.63</u>	<u>34.9</u>	<u>335.98</u>
Hotels and other lodging places	5,300	5,450	5,320	5,380	5,420	2,660	2,760	4,540	7.54	35.0	264.29
All other services	10,450	10,390	10,840	10,400	10,760	6,170	4,590	9,410	11.46	34.7	398.29
TOTAL PRIVATE SECTOR	<u>43,210</u>	<u>44,160</u>	<u>44,450</u>	<u>43,850</u>	<u>44,650</u>	<u>26,260</u>	<u>18,390</u>	<u>37,060</u>	<u>11.15</u>	<u>35.9</u>	<u>399.94</u>
PUBLIC SECTOR											
FEDERAL GOVERNMENT	<u>3,370</u>	<u>3,460</u>	<u>3,420</u>	<u>3,410</u>	<u>3,540</u>	<u>1,780</u>	<u>1,760</u>				
GOVERNMENT OF GUAM	<u>11,380</u>	<u>11,740</u>	<u>11,970</u>	<u>10,790</u>	<u>11,360</u>	<u>5,390</u>	<u>5,970</u>		18.41 ²	41.7 ²	768.34 ²
Executive branch (Includes G.P.S.S.)	7,170	7,540	7,640	6,580	7,180						
All others including autonomous	4,210	4,200	4,330	4,210	4,180						
TOTAL PUBLIC SECTOR	<u>14,750</u>	<u>15,200</u>	<u>15,390</u>	<u>14,200</u>	<u>14,900</u>	<u>7,170</u>	<u>7,730</u>				
TOTAL PAYROLL EMPLOYMENT	<u>57,960</u>	<u>59,360</u>	<u>59,840</u>	<u>58,050</u>	<u>59,550</u>	<u>33,430</u>	<u>26,120</u>				

¹ Wages, Hours, and Earnings information is reported for production (nonsupervisory) 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 stoppages. Due to the rounding of the Earnings and Hours Paid figures, their multiple may differ from the average weekly earnings rate shown.

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

^p Figures are preliminary ^r Revised estimates

^{up} Updated preliminary figures

APPENDIX A14

Table 1. General Statistics by Kind of Business for Guam: 2002

[Includes only establishments of firms with payroll. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see note at the end of the table.]

2002 NAICS code	Kind of business	Establishments (number)	Sales/ receipts/ revenue/ shipments ¹ (\$1,000)	Annual payroll (\$1,000)	First-quarter payroll (\$1,000)	Paid employees for pay period including March 12 (number)	Proprietors and partners ² (number)	Unpaid family workers ³ (number)
00	Total for all sectors	2 926	4 591 828	846 256	210 512	43 104	980	88
22	Utilities	4	D	D	D	b	D	D
23	Construction	244	261 641	54 131	13 329	3 136	90	10
236	Construction of buildings	147	132 355	29 075	7 025	1 934	49	7
237	Heavy and civil engineering construction	15	74 815	11 330	2 785	455	2	—
238	Specialty trade contractors	82	54 471	13 726	3 519	747	39	3
31-33	Manufacturing	49	116 410	32 183	7 740	1 155	10	1
311	Food manufacturing	14	26 733	6 504	1 599	253	2	—
312	Beverage and tobacco product manufacturing	4	D	D	D	c	D	D
314	Textile product mills	2	D	D	D	b	D	D
315	Apparel manufacturing	1	D	D	D	a	D	D
321	Wood product manufacturing	1	D	D	D	a	D	D
323	Printing and related support activities	12	7 382	1 826	430	110	5	1
324	Petroleum and coal products manufacturing	1	D	D	D	c	D	D
327	Nonmetallic mineral product manufacturing	1	D	D	D	b	D	D
331	Primary metal manufacturing	2	D	D	D	b	D	D
332	Fabricated metal product manufacturing	3	4 052	1 096	261	58	—	—
333	Machinery manufacturing	1	D	D	D	a	D	D
336	Transportation equipment manufacturing	2	D	D	D	e	D	D
337	Furniture and related product manufacturing	1	D	D	D	a	D	D
339	Miscellaneous manufacturing	4	317	104	25	17	1	—
42	Wholesale trade	187	515 868	42 522	10 485	1 920	28	—
423	Durable goods merchant wholesalers	66	106 341	9 509	2 382	417	6	—
424	Nonurable goods merchant wholesalers	117	406 810	32 352	7 927	1 478	22	—
425	Wholesale electronic markets and agents and brokers	4	2 717	661	176	25	—	—
44-45	Retail trade	632	1 250 439	122 655	31 343	7 402	177	34
441	Motor vehicle and parts dealers	40	163 832	16 210	3 935	620	5	—
4411	Automobile dealers	7	125 611	10 755	2 462	350	2	—
4412	Other motor vehicle dealers	2	D	D	D	b	D	D
4413	Automotive parts, accessories, and tire stores	31	D	D	D	e	D	D
442	Furniture and home furnishings stores	19	16 051	2 821	699	193	2	2
4421	Furniture stores	14	9 153	1 635	431	104	2	2
4422	Home furnishings stores	5	6 898	1 186	268	89	—	—
443	Electronics and appliance stores	34	50 170	8 055	2 473	351	13	3
4431	Electronics and appliance stores	34	50 170	8 055	2 473	351	13	3
44311	Appliance, television, and other electronics stores	16	28 457	4 578	1 633	164	4	3
44312	Computer and software stores	18	21 713	3 477	840	187	9	—
444	Building material and garden equipment and supplies dealers	27	44 256	5 729	1 411	346	5	3
4441	Building material and supplies dealers	18	36 787	4 977	1 219	306	1	1
44411	Home centers	1	D	D	D	a	D	D
44412	Paint and wallpaper stores	3	D	D	D	a	D	D
44413	Hardware stores	12	28 619	4 214	1 054	271	—	—
44419	Other building material dealers	2	D	D	D	a	D	D
4442	Lawn and garden equipment and supplies stores	9	7 469	752	192	40	4	2
44421	Outdoor power equipment stores	4	D	D	D	b	D	D
44422	Nursery, garden center, and farm supply stores	5	D	D	D	a	D	D
445	Food and beverage stores	134	258 522	22 976	5 960	1 623	56	14
4451	Grocery stores	117	251 714	21 392	5 587	1 493	50	12
4452	Specialty food stores	15	D	D	D	c	D	D
4453	Beer, wine, and liquor stores	2	D	D	D	a	D	D
446	Health and personal care stores	28	17 842	2 859	739	162	11	1
4461	Health and personal care stores	28	17 842	2 859	739	162	11	1
44611	Pharmacies and drug stores	12	11 283	1 628	426	79	7	—
44613	Optical goods stores	7	2 595	605	154	28	3	1
44619	Other health and personal care stores	9	3 964	626	159	55	1	—
447	Gasoline stations	32	82 931	8 406	1 979	467	5	—
448	Clothing and clothing accessories stores	149	227 844	19 286	4 936	1 241	30	2
4481	Clothing stores	81	63 573	6 611	1 685	489	23	2
44811	Men's clothing stores	4	D	D	D	a	D	D
44812	Women's clothing stores	28	31 587	2 837	745	190	4	—
44813	Children's and infants' clothing stores	1	D	D	D	a	D	D
44814	Family clothing stores	22	10 081	2 068	510	175	7	1
44815	Clothing accessories stores	5	D	D	D	b	D	D
44819	Other clothing stores	21	11 093	1 032	266	75	7	—
4482	Shoe stores	16	28 575	2 932	739	246	3	—
4483	Jewelry, luggage, and leather goods stores	52	135 696	9 743	2 512	506	4	—
44831	Jewelry stores	32	42 502	4 093	1 133	231	3	—
44832	Luggage and leather goods stores	20	93 194	5 650	1 379	275	1	—

See footnotes at end of table.

Table 1. General Statistics by Kind of Business for Guam: 2002—Con.

[Includes only establishments of firms with payroll. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see note at the end of the table.]

2002 NAICS code	Kind of business	Establishments (number)	Sales/receipts/revenue/shipments ¹ (\$1,000)	Annual payroll (\$1,000)	First-quarter payroll (\$1,000)	Paid employees for pay period including March 12 (number)	Proprietors and partners ² (number)	Unpaid family workers ³ (number)
44-45	Retail trade—Con.							
451	Sporting goods, hobby, book, and music stores	46	26 165	3 569	860	297	11	—
4511	Sporting goods, hobby, and musical instrument stores	33	20 652	2 897	695	225	8	—
45111	Sporting goods stores	29	16 673	2 496	600	204	8	—
45112	Hobby, toy, and game stores	1	D	D	D	a	D	D
45113	Sewing, needlework, and piece goods stores	3	D	D	D	a	D	D
4512	Book, periodical, and music stores	13	5 513	672	165	72	3	—
45121	Book stores and news dealers	6	4 266	561	145	60	—	—
45122	Prerecorded tape, compact disc, and record stores	7	1 247	111	20	12	3	—
452	General merchandise stores	35	299 013	23 733	6 020	1 521	4	3
4521	Department stores	2	D	D	D	f	D	D
4529	Other general merchandise stores	33	D	D	D	f	D	D
453	Miscellaneous store retailers	80	56 361	7 680	2 011	505	33	6
4531	Florists	11	3 007	766	206	54	6	—
4532	Office supplies, stationery, and gift stores	57	42 797	5 460	1 456	369	20	5
45321	Office supplies and stationery stores	6	3 607	352	85	27	1	1
45322	Gift, novelty, and souvenir stores	51	39 190	5 108	1 371	342	19	4
4533	Used merchandise stores	3	230	77	23	7	3	—
4539	Other miscellaneous store retailers	9	10 327	1 377	326	75	4	1
454	Nonstore retailers	8	7 452	1 331	320	76	2	—
4542	Vending machine operators	4	D	D	D	a	D	D
4543	Direct selling establishments	4	D	D	D	b	D	D
48-49	Transportation and warehousing	82	312 351	44 840	11 348	1 812	16	2
481	Air transportation ³	7	181 650	4 167	1 013	111	—	—
483	Water transportation	3	1 593	331	83	91	—	—
484	Truck transportation	14	24 913	7 601	1 848	322	6	—
485	Transit and ground passenger transportation	10	11 885	6 529	1 685	288	1	1
4853	Taxi and limousine service	4	D	D	D	b	D	D
4859	Other transit and ground passenger transportation	6	D	D	D	c	D	D
487	Scenic and sightseeing transportation	6	3 246	698	149	61	—	—
4871	Scenic and sightseeing transportation, land	1	D	D	D	a	D	D
4872	Scenic and sightseeing transportation, water	5	D	D	D	b	D	D
488	Support activities for transportation	31	82 485	21 466	5 597	753	5	1
4881	Support activities for air transportation	10	65 826	15 670	4 226	541	1	—
4883	Support activities for water transportation	1	D	D	D	b	D	D
4884	Support activities for road transportation	3	D	D	D	a	D	D
4885	Freight transportation arrangement	17	D	D	D	c	D	D
492	Couriers and messengers	7	5 644	2 237	524	97	2	—
493	Warehousing and storage	4	935	1 811	449	89	2	—
51	Information	48	75 085	19 712	4 768	766	9	—
511	Publishing industries (except Internet)	12	27 915	7 458	1 803	302	1	—
5111	Newspaper, periodical, book, and directory publishers	11	D	D	D	e	D	D
5112	Software publishers	1	D	D	D	a	D	D
512	Motion picture and sound recording industries	8	9 490	1 955	471	173	2	—
515	Broadcasting (except Internet)	8	10 557	4 717	1 142	174	—	—
516	Internet publishing and broadcasting	2	D	D	D	a	D	D
517	Telecommunications	17	26 817	5 510	1 335	112	4	—
5171	Wired telecommunications carriers	11	19 054	3 502	848	54	3	—
5172	Wireless telecommunications carriers (except satellite)	2	D	D	D	b	D	D
5173	Telecommunications resellers	4	D	D	D	b	D	D
518	Internet service providers, web search portals, and data processing services	1	D	D	D	a	D	D
52	Finance and insurance	141	465 703	73 715	18 900	2 216	22	—
522	Credit intermediation and related activities	71	197 999	37 579	9 293	1 130	8	—
5221	Depository credit intermediation	46	167 668	31 463	7 760	919	—	—
52211	Commercial banking	39	146 543	28 543	7 019	804	—	—
52212	Savings institutions	2	D	D	D	a	D	D
52213	Credit unions	5	D	D	D	c	D	D
5222	Nondepository credit intermediation	18	25 429	4 608	1 155	156	6	—
52221	Credit card issuing	1	D	D	D	a	D	D
52229	Other nondepository credit intermediation	17	D	D	D	c	D	D
5223	Activities related to credit intermediation	7	4 902	1 508	378	55	2	—
523	Securities, commodity contracts, other financial investments, and related activities	12	23 057	1 542	503	86	2	—
5231	Securities and commodity contracts intermediation and brokerage	5	22 316	1 364	454	76	—	—
5239	Other financial investment activities	7	741	178	49	10	2	—
524	Insurance carriers and related activities	58	244 647	34 594	9 104	1 000	12	—
5241	Insurance carriers	18	211 009	21 152	5 914	569	2	—
52411	Direct life, health, and medical insurance carriers	12	151 569	18 418	5 194	498	2	—
52412	Direct insurance (except life, health, and medical) carriers	6	59 440	2 734	720	71	—	—
5242	Agencies, brokerages, and other insurance related activities	40	33 638	13 442	3 190	431	10	—

See footnotes at end of table.

Table 1. General Statistics by Kind of Business for Guam: 2002—Con.

[Includes only establishments of firms with payroll. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see note at the end of the table.]

2002 NAICS code	Kind of business	Establishments (number)	Sales/ receipts/ revenue/ shipments ¹ (\$1,000)	Annual payroll (\$1,000)	First-quarter payroll (\$1,000)	Paid employees for pay period including March 12 (number)	Proprietors and partners ² (number)	Unpaid family workers ³ (number)
53	Real estate and rental and leasing	256	179 682	34 079	8 670	1 843	88	5
531	Real estate	160	129 986	21 040	5 436	1 013	50	2
5311	Lessors of real estate	130	101 077	15 861	4 130	827	42	1
5312	Offices of real estate agents and brokers	19	20 427	3 364	867	130	5	—
5313	Activities related to real estate	11	8 482	1 815	439	56	3	1
532	Rental and leasing services	94	D	D	D	f	D	D
5321	Automotive equipment rental and leasing	42	21 277	5 605	1 416	341	14	—
5322	Consumer goods rental	35	14 851	4 052	944	304	19	3
53221	Consumer electronics and appliances rental	1	D	D	D	a	D	D
53222	Formal wear and costume rental	2	D	D	D	b	D	D
53223	Video tape and disc rental	24	7 641	1 132	271	114	12	2
53229	Other consumer goods rental	8	6 038	2 346	552	162	4	1
5323	General rental centers	7	D	D	D	b	D	D
5324	Commercial and industrial machinery and equipment rental and leasing	10	D	D	D	b	D	D
533	Lessors of nonfinancial intangible assets (except copyrighted works)	2	D	D	D	b	D	D
54	Professional, scientific, and technical services	230	121 351	44 318	10 684	1 508	118	1
541	Professional, scientific, and technical services	230	121 351	44 318	10 684	1 508	118	1
5411	Legal services	53	33 848	12 536	3 010	317	51	1
5412	Accounting, tax preparation, bookkeeping, and payroll services	41	16 735	6 539	1 583	248	22	—
5413	Architectural, engineering, and related services	48	24 149	8 233	1 994	290	18	—
54131	Architectural services	13	5 586	2 240	545	71	9	—
54133	Engineering services	29	16 469	5 313	1 284	189	7	—
54135	Building inspection services	2	D	D	D	a	D	D
54136	Geophysical surveying and mapping services	1	D	D	D	a	D	D
54137	Surveying and mapping (except geophysical) services	3	738	220	54	14	1	—
5414	Specialized design services	7	3 890	732	177	52	1	—
5415	Computer systems design and related services	11	13 003	6 609	1 588	191	—	—
5416	Management, scientific, and technical consulting services	32	17 197	5 147	1 262	208	10	—
5417	Scientific research and development services	4	458	271	66	11	1	—
5418	Advertising and related services	17	7 214	2 691	649	92	10	—
54181	Advertising agencies	15	D	D	D	b	D	D
54185	Display advertising	1	D	D	D	a	D	D
54189	Other services related to advertising	1	D	D	D	a	D	D
5419	Other professional, scientific, and technical services	17	4 857	1 560	355	99	5	—
54191	Marketing research and public opinion polling	2	D	D	D	a	D	D
54192	Photographic services	8	1 387	418	81	33	2	—
54193	Translation and interpretation services	1	D	D	D	a	D	D
54194	Veterinary services	4	2 078	595	143	37	2	—
54199	All other professional, scientific, and technical services	2	D	D	D	a	D	D
55	Management of companies and enterprises	7	D	D	D	e	D	D
56	Administrative and support and waste management and remediation services	180	169 344	63 039	15 333	4 002	66	3
561	Administrative and support services	170	159 044	59 385	14 472	3 797	62	3
5611	Office administrative services	6	3 808	1 211	324	58	3	—
5613	Employment services	2	D	D	D	c	D	D
5614	Business support services	11	3 669	1 097	271	61	4	—
56141	Document preparation services	1	D	D	D	a	D	D
56143	Business service centers	3	D	D	D	b	D	D
56144	Collection agencies	5	D	D	D	b	D	D
56145	Credit bureaus	1	D	D	D	a	D	D
56149	Other business support services	1	D	D	D	a	D	D
5615	Travel arrangement and reservation services	89	98 833	31 911	7 809	1 329	17	—
56151	Travel agencies	32	20 702	4 204	1 090	174	—	—
56152	Tour operators	49	57 477	23 842	5 680	1 016	13	—
56159	Other travel arrangement and reservation services	8	20 654	3 865	1 039	139	4	—
5616	Investigation and security services	10	15 063	8 590	2 076	747	2	1
56161	Investigation, guard, and armored car services	6	7 468	4 693	1 089	495	—	—
56162	Security systems services	4	7 595	3 897	987	252	2	1
5617	Services to buildings and dwellings	49	33 424	14 184	3 535	1 471	33	2
5619	Other support services	3	D	D	D	b	D	D
562	Waste management and remediation services	10	10 300	3 654	861	205	4	—
61	Educational services	22	D	D	D	c	D	D
611	Educational services	22	D	D	D	c	D	D
62	Health care and social assistance	169	233 640	76 087	18 805	2 807	98	10
621	Ambulatory health care services	118	129 224	31 781	8 810	1 200	69	4
6211	Offices of physicians	50	82 819	17 661	5 434	617	31	2
6212	Offices of dentists	25	22 469	6 511	1 621	239	13	1
6213	Offices of other health practitioners	26	10 246	3 739	910	162	14	1
6214	Outpatient care centers	7	9 424	2 267	509	70	6	—
6215	Medical and diagnostic laboratories	4	1 998	502	87	14	2	—
6216	Home health care services	6	2 268	1 101	249	98	3	—
622	Hospitals	1	D	D	D	f	D	D
623	Nursing and residential care facilities	6	D	D	D	b	D	D
624	Social assistance	44	D	D	D	f	D	D
6241	Individual and family services	6	9 652	4 164	971	285	2	—
6242	Community food and housing, and emergency and other relief services	2	D	D	D	a	D	D
6244	Child day care services	35	5 322	2 079	533	252	25	6

See footnotes at end of table.

Table 1. General Statistics by Kind of Business for Guam: 2002—Con.

[Includes only establishments of firms with payroll. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see note at the end of the table.]

2002 NAICS code	Kind of business	Establishments (number)	Sales/receipts/revenue/shipments ¹ (\$1,000)	Annual payroll (\$1,000)	First-quarter payroll (\$1,000)	Paid employees for pay period including March 12 (number)	Proprietors and partners ² (number)	Unpaid family workers ³ (number)
71	Arts, entertainment, and recreation	51	D	D	D	f	D	D
711	Performing arts, spectator sports, and related industries	8	D	D	D	e	D	D
713	Amusement, gambling, and recreation industries	43	39 904	10 601	2 638	654	9	1
7131	Amusement parks and arcades	15	12 976	3 088	742	225	4	—
7132	Gambling industries	3	235	93	23	9	1	—
7139	Other amusement and recreation services	25	26 693	7 420	1 873	420	4	1
72	Accommodation and food services	392	629 672	168 623	40 560	11 199	145	14
721	Accommodation	42	356 096	90 961	21 830	5 463	9	—
722	Food services and drinking places	350	273 576	77 662	18 730	5 736	136	14
7221	Full-service restaurants	140	89 372	24 794	6 238	2 262	49	6
7222	Limited-service eating places	109	69 892	17 916	4 309	1 806	35	4
7223	Special food services	19	99 454	31 316	7 310	1 276	9	1
7224	Drinking places (alcoholic beverages)	82	14 858	3 636	873	392	43	3
81	Other services (except public administration)	232	167 628	37 667	8 905	1 963	93	7
811	Repair and maintenance	116	98 815	20 823	4 883	937	49	3
8111	Automotive repair and maintenance	69	51 637	10 156	2 552	540	35	2
81111	Automotive mechanical and electrical repair and maintenance	42	24 450	4 862	1 192	275	22	1
81112	Automotive body, paint, interior, and glass repair	16	4 523	1 345	326	73	8	—
81119	Other automotive repair and maintenance	11	22 664	3 949	1 034	192	5	1
8112	Electronic and precision equipment repair and maintenance	15	11 532	2 567	629	101	6	—
8113	Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance	17	19 765	5 661	1 156	191	1	—
8114	Personal and household goods repair and maintenance	15	15 881	2 439	546	105	7	1
81141	Home and garden equipment and appliance repair and maintenance	12	15 189	2 216	502	96	6	1
81142	Reupholstery and furniture repair	1	D	D	D	a	D	D
81149	Other personal and household goods repair and maintenance	2	D	D	D	a	D	D
812	Personal and laundry services	93	56 417	13 807	3 314	874	38	4
8121	Personal care services	49	10 283	4 389	1 069	329	24	1
8122	Death care services	9	8 865	2 152	542	131	—	—
8123	Drycleaning and laundry services	14	10 720	2 961	734	196	7	—
8129	Other personal services	21	26 549	4 305	969	218	7	3
813	Religious, grantmaking, civic, professional, and similar organizations	23	12 396	3 037	708	152	6	—
8132	Grantmaking and giving services	1	D	D	D	a	D	D
8133	Social advocacy organizations	5	6 093	1 396	330	65	2	—
8134	Civic and social organizations	6	D	D	D	b	D	D
8139	Business, professional, labor, political, and similar organizations	11	4 650	1 244	279	65	2	—

¹For explanation of terms and problems of duplication for construction and manufacturing, see Appendix A.

²Includes only those who worked 15 hours or more during week including March 12.

³Data do not include large certified passenger carriers that report to the Office of Airline Information, U.S. Department of Transportation.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling error. Data users who create their own estimates using data from this table should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For the full technical documentation, see Appendix C.

APPENDIX A15

Population and Housing Profile: 2000
Geography: Guam and Election District (Village)

Subject	Guam	Agana Heights	Agat	Asan - Maina	Barrigada	CPO	Dededo	Hagåtña	Inarajan	Mangilao	Merizo	MTM	Piti	Santa Rita	Sinajana	Talofofo	Tamuning	Umatac	Yigo	Yona
SEX AND AGE																				
Total population	154,805	3,940	5,656	2,090	8,652	5,923	42,980	1,100	3,052	13,313	2,163	5,845	1,666	7,500	2,853	3,215	18,012	887	19,474	6,484
Male	79,181	1,946	2,910	1,078	4,320	3,011	21,645	672	1,546	6,958	1,090	2,895	882	4,028	1,433	1,641	9,420	465	9,999	3,242
Female	75,624	1,994	2,746	1,012	4,332	2,912	21,335	428	1,506	6,355	1,073	2,950	784	3,472	1,420	1,574	8,592	422	9,475	3,242
Under 5 years	16,785	394	670	206	870	613	4,828	77	343	1,355	273	660	130	776	281	377	1,711	120	2,381	720
5 to 9 years	16,090	389	650	230	891	612	4,566	66	355	1,270	278	658	148	687	293	384	1,490	104	2,234	785
10 to 14 years	14,281	330	596	213	824	580	4,041	58	377	1,216	237	554	148	606	262	323	1,217	93	1,905	701
15 to 19 years	12,379	293	476	155	716	496	3,554	76	278	1,135	199	490	116	582	221	290	1,070	89	1,502	641
20 to 24 years	11,989	319	411	117	577	459	3,213	115	256	1,107	153	382	140	929	192	241	1,127	74	1,718	459
25 to 34 years	25,850	691	815	328	1,330	991	6,586	226	450	2,454	315	937	268	1,442	437	491	3,494	144	3,493	958
35 to 44 years	23,141	579	717	332	1,273	886	6,144	207	413	1,971	292	883	250	1,211	416	458	3,287	111	2,867	844
45 to 54 years	16,548	425	574	226	1,017	668	4,513	139	299	1,486	181	624	230	622	363	335	2,287	87	1,714	758
55 to 59 years	4,993	115	190	80	301	207	1,537	29	88	427	63	143	85	164	100	100	718	21	416	209
60 to 64 years	4,534	133	185	59	286	165	1,435	39	69	330	54	167	62	175	99	72	579	21	441	163
65 to 74 years	5,860	181	254	88	387	190	1,884	42	83	392	83	234	62	225	132	100	748	17	565	193
75 to 84 years	2,000	77	99	48	126	39	605	22	32	150	31	99	22	70	45	33	244	5	206	47
85 years and over	355	14	19	8	54	17	74	4	9	20	4	14	5	11	12	11	40	1	32	6
Median age (years)	27.4	28.1	25.3	28.9	28.3	27.3	27.0	31.8	23.5	27.4	23.3	27.1	30.3	26.3	28.7	24.8	32.0	21.9	25.0	24.3
18 years and over	99,951	2,638	3,445	1,338	5,600	3,818	27,345	861	1,803	8,745	1,239	3,648	1,161	5,160	1,875	1,930	12,941	508	12,044	3,852
Male	50,932	1,288	1,719	687	2,768	1,919	13,580	548	886	4,630	607	1,777	634	2,841	934	975	6,797	263	6,171	1,908
Female	49,019	1,350	1,726	651	2,832	1,899	13,765	313	917	4,115	632	1,871	527	2,319	941	955	6,144	245	5,873	1,944
21 years and over	92,802	2,465	3,178	1,265	5,242	3,501	25,342	797	1,652	8,131	1,150	3,386	1,091	4,610	1,763	1,798	12,328	460	11,104	3,539
62 years and over	10,789	348	484	178	741	340	3,368	88	164	752	152	452	119	404	237	177	1,372	39	1,046	328
65 years and over	8,215	272	372	144	567	246	2,563	68	124	562	118	347	89	306	189	144	1,032	23	803	246
Male	3,953	119	193	64	248	112	1,272	32	48	272	54	165	44	143	79	63	496	14	413	122
Female	4,262	153	179	80	319	134	1,291	36	76	290	64	182	45	163	110	81	536	9	390	124
ETHNIC ORIGIN AND RACE																				
Total population	154,805	3,940	5,656	2,090	8,652	5,923	42,980	1,100	3,052	13,313	2,163	5,845	1,666	7,500	2,853	3,215	18,012	887	19,474	6,484
One ethnicity or race	133,252	3,443	5,001	1,852	7,739	4,281	37,274	969	2,736	11,637	1,972	5,136	1,401	6,118	2,521	2,977	15,670	835	16,358	5,332
Native Hawaiian and Other Pacific Islander	69,039	2,662	3,430	1,431	4,994	3,129	14,644	643	2,587	6,983	1,840	3,510	895	2,134	2,035	2,575	4,446	809	5,882	4,410
Carolinian	123	2	6	-	3	1	17	2	1	15	2	18	1	8	4	2	13	-	24	4
Chamorro	57,297	2,374	3,269	1,328	4,383	2,803	11,068	455	2,515	5,565	1,804	2,769	841	2,051	1,854	2,408	2,556	801	4,278	4,175
Chuukese	6,229	159	90	42	325	208	2,037	143	44	604	-	319	20	19	113	66	1,035	5	863	137
Kosraean	292	-	-	-	44	8	41	1	-	8	-	36	-	8	2	6	91	-	40	7
Marshallese	257	10	6	-	5	-	26	1	-	30	3	54	-	-	2	2	61	-	55	2
Palauan	2,141	53	25	26	106	31	723	17	6	501	5	91	8	25	17	33	300	1	136	37
Pohnpeian	1,366	32	11	2	61	39	402	15	5	124	18	70	4	-	29	22	200	-	320	12
Yapese	686	11	10	18	27	28	150	3	10	84	2	104	18	8	5	13	96	-	86	13
Other Pacific Islander	648	21	13	15	40	11	180	6	6	52	6	49	3	15	9	23	94	2	80	23
Asian	50,329	494	1,362	208	2,249	825	20,778	275	91	3,971	49	1,330	202	1,595	321	143	9,382	11	6,579	464
Chinese	2,707	10	2	15	164	35	522	51	10	495	4	57	16	9	43	5	1,151	-	57	61
Filipino	40,729	411	1,324	164	1,622	637	19,322	171	71	2,948	31	934	113	1,497	194	101	4,723	7	6,124	335
Japanese	2,086	25	13	11	75	42	369	9	2	180	7	41	26	36	26	17	1,022	-	148	37
Korean	3,816	35	20	13	314	96	399	30	7	217	2	260	24	18	51	14	2,143	4	145	24
Other Asian	991	13	3	5	74	15	166	14	1	131	5	38	23	35	7	6	343	-	105	7
White	10,509	228	168	175	392	285	1,356	41	50	526	72	214	272	1,783	112	218	1,396	10	2,835	376
Black or African American	1,568	24	10	5	21	14	255	5	1	46	2	25	12	362	9	7	114	2	629	25
Some other race or ethnic group	1,807	35	31	33	83	28	241	5	7	111	9	57	20	244	44	34	332	3	433	57
Two or more races or ethnic groups	21,553	497	655	238	913	1,642	5,706	131	316	1,676	191	709	265	1,382	332	238	2,342	52	3,116	1,152
Chamorro and other group(s)	7,946	321	500	163	483	308	1,977	88	112	736	115	336	160	263	242	122	710	44	900	366
Asian and other group(s)	10,853	230	381	117	499	730	3,081	48	144	891	93	347	130	615	167	89	1,232	22	1,515	522

- Represents zero or rounds to zero

Source: U.S. Bureau of the Census, "Population and Housing Profile: 2000 Guam"

CPO = Chalan Pago-Ordot
 MTM = Mongmong-Toto-Maite

Population and Housing Profile: 2000
Geography: Guam and Election District (Village)

Subject	Guam	Agana Heights	Agat	Asan - Maina	Barrigada	CPO	Dededo	Hagåtña	Inarajan	Mangilao	Merizo	MTM	Piti	Santa Rita	Sinajana	Talofofo	Tamuning	Umatac	Yigo	Yona
RELATIONSHIP																				
Total population	154,805	3,940	5,656	2,090	8,652	5,923	42,980	1,100	3,052	13,313	2,163	5,845	1,666	7,500	2,853	3,215	18,012	887	19,474	6,484
In households	150,928	3,862	5,633	2,089	8,481	5,846	42,635	822	3,036	12,474	2,163	5,833	1,613	6,512	2,850	3,192	17,619	887	18,947	6,434
Householder	38,769	1,058	1,298	552	2,097	1,573	10,016	268	644	3,190	471	1,633	474	1,780	742	738	5,953	162	4,634	1,486
Spouse	22,693	543	707	287	1,269	793	6,343	116	389	1,750	268	760	253	1,296	372	434	2,872	88	3,247	906
Child	58,982	1,414	2,304	835	3,278	2,322	17,158	263	1,286	4,872	880	2,363	529	2,565	1,077	1,348	5,602	371	7,711	2,804
Own child under 18 years	42,353	946	1,582	581	2,225	1,594	11,933	183	872	3,549	625	1,779	372	1,965	683	970	4,237	228	6,059	1,970
Other relatives	24,258	670	1,044	318	1,503	886	7,681	119	586	2,054	450	813	261	704	511	519	2,088	215	2,818	1,018
Under 18 years	11,767	342	582	161	791	464	3,492	43	364	953	285	398	125	350	270	290	773	142	1,305	637
Nonrelatives	6,226	177	280	97	334	272	1,437	56	131	608	94	264	96	167	148	153	1,104	51	537	220
Unmarried partner	2,702	86	122	50	145	140	613	27	65	280	51	146	41	65	68	86	347	19	239	112
In group quarters	3,877	78	23	1	171	77	345	278	16	839	-	12	53	988	3	23	393	-	527	50
Institutionalized population	976	7	-	-	60	-	27	209	-	673	-	-	-	-	-	-	-	-	-	-
Noninstitutionalized population	2,901	71	23	1	111	77	318	69	16	166	-	12	53	988	3	23	393	-	527	50
HOUSEHOLDS BY TYPE																				
Total households	38,769	1,058	1,298	552	2,097	1,573	10,016	268	644	3,190	471	1,633	474	1,780	742	738	5,953	162	4,634	1,486
Family households (families)	32,367	858	1,119	464	1,820	1,248	8,874	184	587	2,653	417	1,248	366	1,557	612	653	4,031	150	4,202	1,324
With own children under 18 years	19,678	471	655	259	1,049	764	5,405	94	362	1,642	247	763	199	1,006	317	417	2,260	95	2,844	829
Married-couple families	22,693	543	707	287	1,269	793	6,343	116	389	1,750	268	760	253	1,296	372	434	2,872	88	3,247	906
With own children under 18 years	13,964	302	410	168	754	471	3,949	60	246	1,074	160	455	148	858	188	276	1,596	57	2,225	567
Female householder, no husband present	6,284	229	289	109	354	289	1,661	41	125	584	92	329	64	168	163	141	755	36	579	276
With own children under 18 years	3,753	114	170	55	192	185	970	21	69	378	54	205	30	89	88	91	452	20	390	180
Nonfamily households	6,402	200	179	88	277	325	1,142	84	57	537	54	385	108	223	130	85	1,922	12	432	162
Householder living alone	5,082	158	149	74	224	265	906	60	44	393	40	325	87	190	102	60	1,518	11	357	119
Householder 65 years and over	659	28	37	13	27	21	138	9	16	31	13	43	10	24	21	17	136	2	59	14
Households with individuals under 18 years	23,346	603	823	315	1,297	913	6,495	111	457	1,928	327	911	246	1,115	419	500	2,542	129	3,217	998
Households with individuals 65 years and over	6,247	209	295	104	377	193	1,935	48	99	433	95	262	72	229	153	107	796	22	618	200
Average household size	3.89	3.65	4.34	3.78	4.04	3.72	4.26	3.07	4.71	3.91	4.59	3.57	3.40	3.66	3.84	4.33	2.96	5.48	4.09	4.33
Average family size	4.27	4.06	4.62	4.10	4.32	4.21	4.51	3.71	4.85	4.27	4.83	4.15	3.85	3.93	4.20	4.52	3.62	5.49	4.28	4.57
SCHOOL ENROLLMENT																				
Population 3 years and over enrolled in school	46,828	1,141	1,846	672	2,736	1,883	12,867	217	1,067	4,034	723	1,915	488	2,127	858	1,086	4,394	285	6,174	2,315
Nursery school, preschool	1,782	51	81	35	125	67	437	8	37	132	19	54	24	103	36	43	217	9	223	81
Kindergarten	3,134	89	127	49	179	125	851	10	72	256	49	124	19	121	59	70	310	16	459	149
Elementary school (grades 1-8)	23,969	555	997	359	1,327	929	6,854	93	568	1,941	400	960	245	1,044	430	559	2,114	159	3,261	1,174
High school (grades 9-12)	10,664	252	411	133	632	466	2,929	58	268	970	194	511	106	415	198	262	938	82	1,235	604
College or graduate school	7,279	194	230	96	473	296	1,796	48	122	735	61	266	94	444	135	152	815	19	996	307
EDUCATIONAL ATTAINMENT																				
Population 25 years and over	83,281	2,215	2,853	1,169	4,774	3,163	22,778	708	1,443	7,230	1,023	3,101	984	3,920	1,604	1,600	11,397	407	9,734	3,178
Less than 9 th grade	7,843	166	276	75	421	230	2,718	70	152	717	89	277	69	198	115	139	1,029	20	892	190
9 th to 12 th grade, no diploma	11,862	264	543	166	610	492	3,483	132	311	1,257	186	482	119	302	250	236	1,271	95	1,131	532
High school graduate (includes equivalency)	26,544	699	970	413	1,625	1,162	6,893	229	593	2,241	450	1,082	282	1,222	565	607	3,336	213	2,820	1,142
Some college, no degree	16,611	473	512	236	919	589	4,393	130	228	1,348	182	589	207	1,035	312	272	2,217	56	2,385	528
Associate degree	3,787	109	119	45	191	129	979	22	37	295	26	129	37	263	57	54	535	5	626	129
Bachelor's degree	12,774	371	346	159	719	379	3,686	83	90	1,037	68	398	176	713	201	187	2,262	14	1,477	408
Graduate or professional degree	3,860	133	87	75	289	182	626	42	32	335	22	144	94	187	104	105	747	4	403	249
Percent high school graduate or higher	76.3	80.6	71.3	79.4	78.4	77.2	72.8	71.5	67.9	72.7	73.1	75.5	80.9	87.2	77.2	76.6	79.8	71.7	79.2	77.3
Percent bachelor's degree or higher	20.0	22.8	15.2	20.0	21.1	17.7	18.9	17.7	8.5	19.0	8.8	17.5	27.4	23.0	19.0	18.3	26.4	4.4	19.3	20.7

- Represents zero or rounds to zero

Source: U.S. Bureau of the Census, "Population and Housing Profile: 2000 Guam"

CPO = Chalan Pago-Ordot

MTM = Mongmong-Toto-Maite

Population and Housing Profile: 2000
Geography: Guam and Election District (Village)

Subject	Guam	Agana Heights	Agat	Asan - Maina	Barrigada	CPO	Dededo	Hagåtña	Inarajan	Mangilao	Merizo	MTM	Piti	Santa Rita	Sinajana	Talofofo	Tamuning	Umatac	Yigo	Yona
MARITAL STATUS																				
Males 15 years and over	54,872	1,381	1,876	742	3,005	2,073	14,692	568	980	5,007	671	1,957	669	2,973	998	1,079	7,145	294	6,638	2,124
Never married	20,570	586	812	314	1,170	868	5,155	242	436	2,031	298	827	274	1,038	423	465	2,389	154	2,204	884
Now married, except separated	29,829	676	890	345	1,592	993	8,495	235	468	2,547	328	944	323	1,733	455	506	4,093	123	3,990	1,093
Separated	608	13	15	13	27	32	143	17	13	55	4	22	4	34	11	13	114	3	54	21
Widowed	804	17	44	12	41	41	222	11	15	64	7	41	14	29	24	22	72	5	89	34
Divorced	3,061	89	115	58	175	139	677	63	48	310	34	123	54	139	85	73	477	9	301	92
Females 15 years and over	52,777	1,446	1,864	699	3,062	2,045	14,853	331	997	4,465	704	2,016	571	2,458	1,019	1,052	6,449	276	6,316	2,154
Never married	17,141	529	683	209	1,041	773	4,641	131	389	1,606	280	716	183	728	374	379	1,837	122	1,724	796
Now married, except separated	27,676	648	876	351	1,538	962	8,071	142	463	2,211	314	903	287	1,469	446	505	3,458	113	3,863	1,056
Separated	845	21	26	11	39	39	255	5	13	76	11	41	10	24	13	16	137	7	68	33
Widowed	3,449	126	152	58	229	124	1,020	19	75	256	47	147	43	122	89	74	394	18	325	131
Divorced	3,666	122	127	70	215	147	866	34	57	316	52	209	48	115	97	78	623	16	336	138
FERTILITY																				
Women 15 to 24 years	11,955	306	443	126	668	476	3,401	67	262	1,094	185	438	116	676	214	254	1,070	79	1,528	552
Children ever born	5,568	139	276	54	306	227	1,562	40	152	505	121	225	40	197	116	163	389	59	703	294
Per 1,000 women	466	454	623	429	458	477	459	597	580	462	654	514	345	291	542	642	364	747	460	533
Women ever married	1,867	50	48	18	76	58	518	13	33	157	20	45	15	139	26	36	162	8	375	70
Children ever born	2,104	51	64	19	110	66	609	23	38	189	29	70	12	112	39	56	161	10	351	95
Per 1,000 women	1,127	1,020	1,333	1,056	1,447	1,138	1,176	1,769	1,152	1,204	1,450	1,556	800	806	1,500	1,556	994	1,250	936	1,357
Women 25 to 34 years	12,539	353	404	158	641	475	3,314	67	215	1,077	154	469	129	650	213	245	1,702	70	1,714	489
Children ever born	22,342	536	906	301	1,133	841	6,099	82	496	1,961	389	880	191	1,042	353	461	2,253	165	3,160	1,093
Per 1,000 women	1,782	1,518	2,243	1,905	1,768	1,771	1,840	1,224	2,307	1,821	2,526	1,876	1,481	1,603	1,657	1,882	1,324	2,357	1,844	2,235
Women ever married	8,176	193	221	98	377	267	2,204	37	120	632	81	271	68	523	111	148	1,151	34	1,350	290
Children ever born	16,317	359	556	200	787	548	4,586	66	299	1,303	221	606	121	883	232	333	1,770	104	2,605	738
Per 1,000 women	1,996	1,860	2,516	2,041	2,088	2,052	2,081	1,784	2,492	2,062	2,728	2,236	1,779	1,688	2,090	2,250	1,538	3,059	1,930	2,545
Women 35 to 44 years	11,105	274	342	154	636	455	3,055	71	210	927	159	444	99	506	201	230	1,482	51	1,383	426
Children ever born	27,286	648	963	398	1,548	1,088	7,851	153	636	2,361	485	1,151	214	1,124	473	687	2,671	156	3,461	1,218
Per 1,000 women	2,457	2,365	2,816	2,584	2,434	2,391	2,570	2,155	3,029	2,547	3,050	2,592	2,162	2,221	2,353	2,987	1,802	3,059	2,503	2,859
No children	1,688	53	41	20	96	82	396	18	26	137	19	87	11	68	38	22	362	7	157	48
1 child	1,653	33	48	24	94	79	435	13	24	114	16	56	22	74	36	28	300	4	203	50
2 children	2,741	66	76	33	155	98	757	15	35	206	27	93	24	161	35	47	417	9	397	90
3 children	2,390	56	62	37	138	76	716	10	50	212	39	69	29	127	47	53	218	12	337	102
4 children	1,360	38	56	20	87	64	367	7	34	154	26	64	10	53	20	38	97	8	142	75
5 or more children	1,273	28	59	20	66	56	384	8	41	104	32	75	3	23	25	42	88	11	147	61
Women ever married	9,461	217	283	131	529	372	2,632	48	169	779	129	366	87	467	145	197	1,247	41	1,256	366
Children ever born	24,637	557	834	364	1,398	934	7,128	121	543	2,134	434	1,030	205	1,076	390	601	2,459	125	3,226	1,078
Per 1,000 women	2,604	2,567	2,947	2,779	2,643	2,511	2,708	2,521	3,213	2,739	3,364	2,814	2,356	2,304	2,690	3,051	1,972	3,049	2,568	2,945
GRANDPARENTS AS CAREGIVERS																				
Grandparents living in households with one or more grandchild under 18 years	9,145	255	383	117	572	327	2,940	36	222	743	186	294	94	305	193	226	670	103	1,036	443
Grandparent responsible for grandchild	3,709	115	157	48	223	138	1,091	15	126	297	106	130	40	136	91	121	217	53	394	211
Less than 6 months	334	14	11	4	15	8	101	2	11	22	9	7	1	15	4	11	24	8	41	26
6 to 11 months	299	5	9	3	17	13	90	-	9	23	7	8	3	11	7	22	22	5	26	19
1 or 2 years	834	20	27	7	32	37	221	1	30	77	24	25	6	38	17	35	60	15	100	62
3 or 4 years	636	19	32	15	48	24	200	7	19	56	15	20	6	24	20	9	24	7	65	26
5 years or more	1,606	57	78	19	111	56	479	5	57	119	51	70	24	48	43	44	87	18	162	78
VETERAN STATUS																				
Civilian population 18 years and over	95,510	2,537	3,419	1,312	5,573	3,767	26,671	859	1,792	8,661	1,230	3,612	1,112	3,849	1,846	1,916	12,661	506	10,369	3,818
Civilian veterans	8,962	332	387	153	551	363	1,680	78	191	733	169	315	190	922	250	254	784	52	1,069	489

- Represents zero or rounds to zero

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Population and Housing Profile: 2000
Geography: Guam and Election District (Village)

Subject	Guam	Agana Heights	Agat	Asan - Maina	Barrigada	CPO	Dededo	Hagåtña	Inarajan	Mangilao	Merizo	MTM	Piti	Santa Rita	Sinajana	Talofofo	Tamuning	Umatac	Yigo	Yona
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION																				
Population 5 to 20 years	44,525	1,059	1,806	617	2,540	1,805	12,721	206	1,057	3,763	739	1,795	441	1,845	809	1,040	3,967	307	5,784	2,224
With a disability	2,370	49	85	37	143	82	708	7	72	198	30	99	26	72	31	45	251	10	289	136
Population 21 to 64 years	79,930	2,107	2,782	1,097	4,645	3,207	22,176	538	1,517	6,878	1,024	3,007	957	3,262	1,545	1,640	11,022	435	8,831	3,260
With a disability	17,405	359	594	342	1,182	639	5,170	130	414	1,294	193	788	134	507	293	227	2,612	88	1,679	760
Percent employed	62.7	56.8	45.8	66.7	62.5	62.4	63.9	62.3	55.1	62.7	49.2	64.1	60.4	59.8	54.6	44.1	72.3	44.3	63.2	54.5
No disability	62,525	1,748	2,188	755	3,463	2,568	17,006	408	1,103	5,584	831	2,219	823	2,755	1,252	1,413	8,410	347	7,152	2,500
Percent employed	65.9	71.1	58.9	65.8	66.3	65.0	66.7	63.2	55.2	65.2	56.6	65.2	74.4	64.8	65.4	64.2	71.0	55.6	64.2	62.8
Population 65 years and over	8,156	272	372	144	510	246	2,563	68	124	560	118	347	89	306	189	144	1,032	23	803	246
With a disability	3,665	144	202	84	241	123	1,062	30	64	239	71	167	48	137	93	69	403	13	346	129
RESIDENCE IN 1995																				
Population 5 years and over	138,020	3,546	4,986	1,884	7,782	5,310	38,152	1,023	2,709	11,958	1,890	5,185	1,536	6,724	2,572	2,838	16,301	767	17,093	5,764
Same house	73,120	2,076	2,993	1,144	4,675	3,178	21,626	440	1,977	6,389	1,249	2,767	900	2,635	1,570	1,785	6,415	548	7,108	3,645
Different house in Guam	40,945	997	1,525	541	2,251	1,609	11,183	373	649	3,743	541	1,834	385	1,247	766	829	5,689	191	4,902	1,690
Same district	15,093	190	722	97	440	319	5,572	11	284	933	318	388	44	487	140	277	2,659	66	1,528	618
Different district	25,852	807	803	444	1,811	1,290	5,611	362	365	2,810	223	1,446	341	760	626	552	3,030	125	3,374	1,072
Outside Guam	23,955	473	468	199	856	523	5,343	210	83	1,826	100	584	251	2,842	236	224	4,197	28	5,083	429
Commonwealth of the Northern Mariana Islands	904	25	23	10	43	34	197	13	7	100	-	41	10	14	22	11	249	-	83	22
Federated States of Micronesia	1,817	43	37	5	149	60	441	31	4	231	5	114	13	15	34	27	355	2	219	32
Palau	267	5	1	6	13	2	54	2	-	65	-	6	-	47	3	-	32	-	29	2
Other Pacific Island	141	5	2	6	5	2	21	1	-	8	4	24	3	2	-	6	23	-	26	3
Asia	8,144	80	190	26	284	168	2,515	109	15	884	22	162	62	290	46	28	2,082	6	1,081	94
China	1,205	3	-	3	41	10	153	37	6	388	-	11	10	7	10	8	469	-	25	24
Japan	1,199	20	19	8	14	28	191	2	-	66	5	16	13	112	7	10	371	5	292	20
Korea	647	7	4	2	26	19	73	6	4	27	-	18	1	11	4	-	376	-	57	12
Philippines	4,822	46	166	10	190	90	2,072	58	4	369	17	103	37	142	22	5	805	1	654	31
United States	11,782	295	204	138	338	250	2,020	51	51	503	69	228	152	2,372	121	146	1,308	20	3,261	255
California	2,967	94	59	50	105	68	613	14	18	121	12	65	40	740	32	29	349	2	476	80
Elsewhere	900	20	11	8	24	7	95	3	6	35	-	9	11	102	10	6	148	-	384	21
NATIVITY, CITIZENSHIP STATUS, AND YEAR OF ENTRY																				
Total population	154,805	3,940	5,656	2,090	8,652	5,923	42,980	1,100	3,052	13,313	2,163	5,845	1,666	7,500	2,853	3,215	18,012	887	19,474	6,484
Native	105,186	3,322	4,539	1,831	6,393	4,724	24,617	703	2,904	8,924	2,088	4,228	1,426	6,022	2,432	2,972	8,273	866	13,078	5,844
Born in Guam	80,737	2,693	3,970	1,453	5,379	3,906	19,919	574	2,619	7,361	1,859	3,529	997	2,860	2,085	2,495	5,616	806	7,697	4,919
Born in United States	19,096	508	413	320	755	610	3,106	93	211	1,123	191	494	370	2,887	280	399	2,053	52	4,478	753
Born in Puerto Rico or other U.S. Island Area	2,377	37	77	27	131	108	759	17	40	247	13	119	19	64	36	47	235	4	303	94
Born abroad of U.S. parent(s)	2,976	84	79	31	128	100	833	19	34	193	25	86	40	211	31	31	369	4	600	78
Foreign born	49,619	618	1,117	259	2,259	1,199	18,363	397	148	4,389	75	1,617	240	1,478	421	243	9,739	21	6,396	640
Entered 1990 to 2000	28,989	382	464	153	1,213	741	9,749	307	80	2,685	45	949	172	980	266	146	6,444	11	3,847	355
Entered before 1990	20,630	236	653	106	1,046	458	8,614	90	68	1,704	30	668	68	498	155	97	3,295	10	2,549	285
Naturalized citizen	21,675	256	651	121	999	439	9,175	75	53	1,564	31	591	78	959	166	80	3,172	11	2,965	289
Entered 1990 to 2000	7,284	101	122	45	275	166	2,720	30	8	469	15	212	35	541	60	23	1,209	3	1,161	89
Entered before 1990	14,391	155	529	76	724	273	6,455	45	45	1,095	16	379	43	418	106	57	1,963	8	1,804	200
Not a citizen	27,944	362	466	138	1,260	760	9,188	322	95	2,825	44	1,026	162	519	255	163	6,567	10	3,431	351
Entered 1990 to 2000	21,705	281	342	108	938	575	7,029	277	72	2,216	30	737	137	439	206	123	5,235	8	2,686	266
Entered before 1990	6,239	81	124	30	322	185	2,159	45	23	609	14	289	25	80	49	40	1,332	2	745	85

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PLACE OF BIRTH																				
Total population	154,805	3,940	5,656	2,090	8,652	5,923	42,980	1,100	3,052	13,313	2,163	5,845	1,666	7,500	2,853	3,215	18,012	887	19,474	6,484
Born in Guam	80,737	2,693	3,970	1,453	5,379	3,906	19,919	574	2,619	7,361	1,859	3,529	997	2,860	2,085	2,495	5,616	806	7,697	4,919
Born outside Guam	74,068	1,247	1,686	637	3,273	2,017	23,061	526	433	5,952	304	2,316	669	4,640	768	720	12,396	81	11,777	1,565
Commonwealth of the Northern Mariana Islands	2,183	35	75	25	112	106	709	16	37	232	12	114	15	47	33	44	211	2	272	86
Federated States of Micronesia	6,983	164	88	55	407	289	1,983	135	53	733	26	417	41	35	121	96	1,161	4	1,019	156
Palau	1,334	28	16	24	53	32	403	14	3	336	9	56	6	13	16	24	194	3	87	17
Other Pacific Island	426	13	10	2	12	5	91	2	3	42	5	48	3	6	3	6	105	1	63	6
Asia	42,121	442	1,047	185	1,802	934	16,488	258	93	3,367	50	1,126	189	1,421	290	132	8,391	14	5,437	455
China	2,711	10	1	13	164	71	482	51	8	496	3	59	22	8	36	10	1,167	-	47	63
Japan	2,454	37	24	17	80	67	464	11	6	176	7	54	22	99	31	28	1,025	3	250	53
Korea	3,250	28	18	13	233	97	354	31	7	168	2	195	25	19	43	12	1,840	2	135	28
Philippines	32,625	351	998	127	1,264	670	15,010	153	62	2,389	36	770	111	1,265	162	73	4,008	9	4,893	274
United States	19,096	508	413	320	755	610	3,106	93	211	1,123	191	494	370	2,887	280	399	2,053	52	4,478	753
California	4,388	141	142	111	172	179	800	26	69	284	63	158	93	567	77	114	479	25	699	189
Hawaii	1,445	60	53	25	100	55	311	12	19	141	21	50	22	101	28	27	182	4	171	63
Elsewhere	1,925	57	37	26	132	41	281	8	33	119	11	61	45	231	25	19	281	5	421	92
MOTHER'S PLACE OF BIRTH																				
Total population	154,805	3,940	5,656	2,090	8,652	5,923	42,980	1,100	3,052	13,313	2,163	5,845	1,666	7,500	2,853	3,215	18,012	887	19,474	6,484
Born in Guam	62,804	2,468	3,506	1,368	4,461	3,511	12,564	503	2,564	5,846	1,822	2,866	912	2,410	1,953	2,349	3,265	795	5,073	4,568
Born in the United States	17,067	447	347	275	692	616	2,612	76	161	965	147	434	325	2,594	217	353	1,780	42	4,241	743
Born in Puerto Rico or other U.S. Island Area	4,112	70	155	55	233	186	1,390	21	68	401	50	196	34	136	55	97	275	6	481	203
Born elsewhere	70,822	955	1,648	392	3,266	1,610	26,414	500	259	6,101	144	2,349	395	2,360	628	416	12,692	44	9,679	970
FATHER'S PLACE OF BIRTH																				
Total population	154,805	3,940	5,656	2,090	8,652	5,923	42,980	1,100	3,052	13,313	2,163	5,845	1,666	7,500	2,853	3,215	18,012	887	19,474	6,484
Born in Guam	59,445	2,323	3,186	1,276	4,346	3,354	11,750	454	2,530	5,576	1,796	2,749	821	2,291	1,827	2,259	2,925	770	4,828	4,384
Born in the United States	20,111	534	454	320	776	668	3,341	110	154	1,162	177	529	442	2,793	274	394	2,211	65	4,886	821
Born in Puerto Rico or other U.S. Island Area	4,081	70	159	68	219	266	1,223	30	79	420	35	205	41	128	81	99	273	10	462	213
Born elsewhere	71,168	1,013	1,857	426	3,311	1,635	26,666	506	289	6,155	155	2,362	362	2,288	671	463	12,603	42	9,298	1,066
LANGUAGE SPOKEN AT HOME																				
Population 5 years and over	138,020	3,546	4,986	1,884	7,782	5,310	38,152	1,023	2,709	11,958	1,890	5,185	1,536	6,724	2,572	2,838	16,301	767	17,093	5,764
English only	52,831	1,572	2,050	929	2,976	2,221	12,505	318	874	4,340	690	2,021	804	3,848	1,107	1,362	4,491	291	7,817	2,615
Language other than English	85,189	1,974	2,936	955	4,806	3,089	25,647	705	1,835	7,618	1,200	3,164	732	2,876	1,465	1,476	11,810	476	9,276	3,149
Speak other language																				
Less frequently than English	21,114	761	911	327	1,416	964	5,191	167	651	1,874	482	815	299	954	497	549	1,872	196	2,083	1,105
Equally often with English	31,503	693	1,207	371	1,759	1,242	9,389	234	739	2,596	465	1,263	253	1,091	528	580	3,545	207	3,982	1,359
More frequently than English	31,654	519	816	253	1,592	869	10,926	282	437	2,860	251	1,074	167	828	436	344	6,102	73	3,162	663
Does not speak English	918	1	2	4	39	14	141	22	8	288	2	12	13	3	4	3	291	-	49	22
Chamorro	30,708	1,303	1,796	687	2,393	1,607	5,569	288	1,617	2,883	1,103	1,418	447	1,150	1,039	1,211	1,307	453	2,185	2,252
Philippine languages	30,588	319	938	102	1,206	507	14,477	144	46	2,226	26	701	93	1,115	131	67	3,730	8	4,505	247
Other Pacific Island languages	9,416	209	124	77	475	294	2,865	143	62	1,166	36	540	53	49	136	110	1,554	8	1,303	212
Asian languages	9,624	89	40	49	563	225	1,608	109	44	1,020	21	392	66	105	126	50	4,478	5	483	151

- Represents zero or rounds to zero

Source: U.S. Bureau of the Census, "Population and Housing Profile: 2000 Guam"

CPO = Chalan Pago-Ordot

MTM = Mongmong-Toto-Maite

Population and Housing Profile: 2000
Geography: Guam and Election District (Village)

Subject	Guam	Agana Heights	Agat	Asan - Maina	Barrigada	CPO	Dededo	Hagåtña	Inarajan	Mangilao	Merizo	MTM	Piti	Santa Rita	Sinajana	Talofofo	Tamuning	Umatac	Yigo	Yona
EMPLOYMENT STATUS																				
Population 16 years and over	105,014	2,762	3,638	1,400	5,904	4,026	28,787	884	1,918	9,239	1,332	3,853	1,214	5,339	1,965	2,063	13,368	552	12,633	4,137
In labor force	68,894	1,848	2,108	890	3,719	2,603	19,168	451	1,091	5,550	729	2,474	852	3,838	1,235	1,270	9,513	360	8,671	2,524
Civilian labor force	64,452	1,747	2,082	864	3,692	2,551	18,494	449	1,080	5,466	720	2,438	803	2,527	1,206	1,256	9,233	358	6,996	2,490
Employed	57,053	1,575	1,728	781	3,293	2,273	16,278	378	902	4,847	607	2,135	746	2,293	1,073	1,072	8,495	259	6,181	2,137
Also did subsistence activity	4,480	101	109	96	279	168	1,165	27	100	335	77	184	53	183	86	108	641	27	532	209
Unemployed	7,399	172	354	83	399	278	2,216	71	178	619	113	303	57	234	133	184	738	99	815	353
Percent of civilian labor force	11.5	9.8	17.0	9.6	10.8	10.9	12.0	15.8	16.5	11.3	15.7	12.4	7.1	9.3	11.0	14.6	8.0	27.7	11.6	14.2
Armed forces	4,442	101	26	26	27	52	674	2	11	84	9	36	49	1,311	29	14	280	2	1,675	34
Not in labor force	36,120	914	1,530	510	2,185	1,423	9,619	433	827	3,689	603	1,379	362	1,501	730	793	3,855	192	3,962	1,613
Subsistence activity only	2,382	68	87	30	170	92	616	17	68	257	49	86	35	99	42	82	219	13	255	97
Females 16 years and over																				
Population 16 years and over	51,478	1,408	1,817	682	2,978	2,003	14,493	324	970	4,346	684	1,961	559	2,413	992	1,016	6,331	270	6,144	2,087
In labor force	29,751	850	941	384	1,641	1,136	8,688	184	470	2,428	322	1,094	334	1,433	541	572	3,812	145	3,633	1,143
Civilian labor force	28,746	826	939	380	1,633	1,125	8,500	184	461	2,405	320	1,088	324	1,090	533	569	3,768	145	3,321	1,135
Employed	25,444	752	781	348	1,445	1,007	7,556	157	387	2,131	267	938	293	974	480	490	3,426	105	2,929	978
Also did subsistence activity	1,600	28	38	37	80	54	464	6	30	119	25	59	10	70	24	30	240	5	212	69
Unemployed	21,727	558	876	298	1,337	867	5,805	140	500	1,918	362	867	225	980	451	444	2,519	125	2,511	944
Subsistence activity only	1,125	22	34	12	77	36	313	9	25	140	18	51	16	42	19	27	110	7	124	43
Armed forces	900	24	10	4	14	28	188	4	9	41	6	23	4	120	12	14	172	40	392	108
Not in labor force	21,727	558	876	298	1,337	867	5,805	140	500	1,918	362	867	225	980	451	444	2,519	125	2,511	944
Subsistence activity only	1,125	22	34	12	77	36	313	9	25	140	18	51	16	42	19	27	110	7	124	43
Own children under 6 years																				
Population 16 years and over	17,359	407	644	217	909	633	4,900	76	332	1,400	277	701	129	838	285	387	1,813	103	2,567	741
All parents in family in labor force	9,751	295	317	138	581	384	2,813	37	181	770	132	371	82	360	165	236	1,030	58	1,424	377
Own children 6 to 17 years																				
Population 16 years and over	31,144	714	1,229	448	1,750	1,198	8,870	122	731	2,607	506	1,283	306	1,312	553	739	2,804	201	4,171	1,600
All parents in family in labor force	19,351	492	663	287	1,100	741	5,616	72	381	1,657	283	787	216	731	358	478	1,759	128	2,621	981
Population 16 to 19 years																				
Population 16 to 19 years	9,744	228	374	114	553	404	2,796	61	219	902	156	370	90	490	169	222	844	71	1,181	500
Not enrolled in school and not high school graduate	1,361	22	57	13	73	53	440	11	25	141	20	69	16	34	20	31	116	13	137	70
Unemployed or not in labor force	994	16	46	9	62	33	288	9	24	104	14	51	13	23	14	31	83	12	104	58
PLACE OF WORK																				
Workers 16 years and over																				
Population 16 years and over	60,607	1,654	1,738	797	3,253	2,296	16,671	378	896	4,853	601	2,148	791	3,582	1,084	1,071	8,647	259	7,743	2,145
Worked in Guam	60,335	1,645	1,730	794	3,245	2,287	16,615	377	895	4,837	599	2,140	788	3,560	1,079	1,067	8,602	258	7,680	2,137
Same district	16,808	179	343	192	456	152	3,112	31	194	722	138	268	164	1,572	90	132	5,812	29	3,029	193
Different district	43,527	1,466	1,387	602	2,789	2,135	13,503	346	701	4,115	461	1,872	624	1,988	989	935	2,790	229	4,651	1,944
Worked outside Guam	272	9	8	3	8	9	56	1	1	16	2	8	3	22	5	4	45	1	63	8
COMMUTING TO WORK																				
Workers 16 years and over																				
Population 16 years and over	60,607	1,654	1,738	797	3,253	2,296	16,671	378	896	4,853	601	2,148	791	3,582	1,084	1,071	8,647	259	7,743	2,145
Car, truck, or van - - drove alone	42,327	1,158	1,210	628	2,351	1,660	11,689	230	618	3,455	401	1,531	547	2,102	812	759	5,996	180	5,418	1,582
Car, truck, or van - - carpooled	14,087	358	425	135	727	527	4,180	97	224	1,130	157	491	141	975	219	276	1,862	66	1,588	509
Public transportation	425	5	13	2	7	5	110	4	1	17	8	18	4	70	5	7	76	2	63	8
Public van/bus	278	4	12	-	5	2	60	3	1	14	3	14	-	69	3	7	25	-	49	7
Boat	24	1	1	-	-	-	4	-	-	1	5	1	4	1	-	-	1	2	2	1
Taxicab	123	-	-	2	2	3	46	1	-	2	-	3	-	-	2	-	50	-	12	-
Motorcycle	86	3	2	-	-	2	10	-	-	5	1	3	3	15	-	-	7	-	35	-
Bicycle	202	3	5	2	1	2	11	2	-	5	-	3	1	56	1	2	25	-	82	1
Walked	1,483	60	29	11	82	30	184	30	7	68	8	38	37	302	7	6	352	6	218	8
Other means	1,208	34	39	3	30	31	336	5	26	110	14	34	43	36	16	3	195	1	237	15
Worked at home	789	33	15	16	55	39	151	10	20	63	12	30	15	26	24	18	134	4	102	22
Mean travel time to work (minutes)	19.2	15.5	22.3	17.5	17.1	19.5	20.3	15.0	29.3	19.7	31.6	15.6	16.6	16.8	16.5	28.2	14.2	30.3	20.5	24.7

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Population and Housing Profile: 2000
Geography: Guam and Election District (Village)

Subject	Guam	Agana Heights	Agat	Asan - Maina	Barrigada	CPO	Dededo	Hagåtña	Inarajan	Mangilao	Merizo	MTM	Piti	Santa Rita	Sinajana	Talofofo	Tamuning	Umatac	Yigo	Yona
OCCUPATION																				
Employed civilian pop. 16 years and over	57,053	1,575	1,728	781	3,293	2,273	16,278	378	902	4,847	607	2,135	746	2,293	1,073	1,072	8,495	259	6,181	2,137
Management, professional, related occupations	15,852	557	450	261	1,021	628	3,612	109	248	1,384	162	660	292	811	364	367	2,603	57	1,515	751
Service occupations	12,654	268	334	130	654	488	3,997	87	225	1,033	157	383	93	443	160	212	2,016	63	1,562	349
Sales and office occupations	16,027	455	500	241	941	653	4,962	98	220	1,304	164	641	178	538	327	292	2,130	81	1,722	580
Farming, fishing, and forestry occupations	212	3	6	5	6	13	29	1	15	25	5	5	40	2	2	12	21	1	16	5
Construction, extraction, maintenance	6,771	167	197	76	355	251	2,035	51	101	619	71	240	81	277	87	79	1,059	31	769	225
Production, transportation, and material moving	5,537	125	241	68	316	240	1,643	32	93	482	48	206	62	222	133	110	666	26	597	227
INDUSTRY																				
Employed civilian population 16 years and over	57,053	1,575	1,728	781	3,293	2,273	16,278	378	902	4,847	607	2,135	746	2,293	1,073	1,072	8,495	259	6,181	2,137
Agriculture, forestry, fishing and hunting, mining	296	6	21	6	12	17	42	1	9	33	6	20	11	9	6	16	49	2	21	9
Construction	5,532	93	148	50	296	162	1,771	38	49	519	35	186	46	124	64	58	1,106	14	601	172
Manufacturing	1,155	34	35	19	57	57	344	7	10	124	9	41	40	35	20	14	147	3	129	30
Wholesale trade	1,948	35	52	30	115	76	604	11	10	137	21	93	20	62	31	40	347	7	190	67
Retail trade	7,558	155	223	84	404	268	2,612	43	62	576	55	251	74	270	137	97	1,121	37	902	187
Transportation and warehousing, and utilities	4,319	126	146	75	261	222	1,168	30	82	396	43	194	44	122	84	95	619	22	393	197
Information	1,540	48	52	29	111	71	369	11	30	141	21	78	33	64	37	30	190	7	147	71
Finance, insurance, real estate and rental and leasing	3,053	109	62	51	205	137	842	21	35	273	37	145	60	70	69	56	472	6	279	124
Professional, scientific, management, administrative, and waste management services	4,277	137	108	65	254	182	1,113	32	73	368	57	144	72	123	78	87	761	9	449	165
Educational, health, and social services	8,412	276	318	125	638	378	1,891	53	234	780	127	323	119	398	210	254	839	54	907	488
Arts, entertainment, recreation, accommodation and food services	10,278	177	178	82	464	294	3,733	67	87	843	88	301	69	205	106	98	2,047	26	1,203	210
Other services (except public administration)	2,158	73	60	31	117	91	530	33	28	172	13	114	29	78	52	38	387	9	234	69
Public administration	6,527	306	325	134	359	318	1,259	31	193	485	95	245	129	733	179	189	410	63	726	348
CLASS OF WORKER																				
Employed civilian population 16 years and over	57,053	1,575	1,728	781	3,293	2,273	16,278	378	902	4,847	607	2,135	746	2,293	1,073	1,072	8,495	259	6,181	2,137
Private wage and salary workers	39,382	893	989	448	2,239	1,431	12,420	274	398	3,287	339	1,421	440	1,006	621	559	6,998	96	4,325	1,198
Employees in own incorporated business	1,141	35	18	18	116	32	257	11	5	82	6	54	26	33	28	18	290	1	81	30
Government workers	15,122	599	710	299	910	713	3,213	81	478	1,326	246	593	249	1,215	403	468	969	158	1,623	869
Self-employed in own not incorporated business	2,403	75	25	32	131	118	617	23	24	217	20	115	55	70	48	42	504	5	218	64
Unpaid family workers	146	8	4	2	13	11	28	-	2	17	2	6	2	2	1	3	24	-	15	6

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Population and Housing Profile: 2000
Geography: Guam and Election District (Village)

Subject	Guam	Agana Heights	Agat	Asan - Maina	Barrigada	CPO	Dededo	Hagåtña	Inarajan	Mangilao	Merizo	MTM	Piti	Santa Rita	Sinajana	Talofofo	Tamuning	Umatac	Yigo	Yona	
INCOME IN 1999																					
Households	38,769	1,058	1,298	552	2,097	1,573	10,016	268	644	3,190	471	1,633	474	1,780	742	738	5,953	162	4,634	1,486	
Less than \$2,500	3,110	31	65	37	121	267	679	31	53	311	35	241	17	56	48	50	650	9	316	93	
\$2,500 to \$4,999	698	13	35	8	24	38	185	9	15	70	8	34	9	11	21	18	110	6	66	18	
\$5,000 to \$9,999	1,768	45	78	31	77	80	472	11	26	167	20	105	18	33	32	34	291	10	172	66	
\$10,000 to \$14,999	2,128	49	110	18	93	77	608	19	38	158	34	118	17	56	31	31	358	12	229	72	
\$15,000 to \$24,999	4,758	122	174	51	186	155	1,350	48	77	360	49	210	50	219	67	74	781	23	634	128	
\$25,000 to \$34,999	4,842	126	140	63	209	146	1,330	27	64	360	48	161	51	320	67	81	754	23	729	143	
\$35,000 to \$49,999	6,357	171	223	73	339	205	1,737	43	108	495	81	221	57	371	114	92	949	16	883	179	
\$50,000 to \$74,999	7,175	204	252	102	412	259	1,904	39	126	597	106	248	89	370	146	149	948	24	892	308	
\$75,000 to \$99,999	3,982	139	117	74	275	174	1,005	17	69	358	51	137	60	177	93	98	486	17	422	213	
\$100,000 or more	3,951	158	104	95	361	172	746	24	68	314	39	158	106	167	123	111	626	22	291	266	
Median household income (dollars)	39,317	47,396	37,398	48,611	49,974	36,506	37,654	31,136	42,361	39,754	39,940	31,134	54,167	41,928	48,750	47,885	35,347	34,286	37,415	52,955	
Mean household income (dollars)	49,617	57,723	45,306	62,476	62,234	46,943	45,872	42,129	51,861	48,207	48,347	46,866	71,191	51,521	59,090	56,255	48,423	51,748	44,848	62,161	
Households	38,769	1,058	1,298	552	2,097	1,573	10,016	268	644	3,190	471	1,633	474	1,780	742	738	5,953	162	4,634	1,486	
With earnings	32,821	934	1,045	457	1,845	1,108	8,676	212	534	2,651	379	1,233	428	1,637	620	613	5,006	128	4,049	1,266	
Mean earnings (dollars)	49,337	52,507	42,679	61,256	58,062	54,371	45,768	40,365	49,087	49,002	44,524	49,648	67,143	47,563	56,045	55,604	50,610	52,720	44,498	59,030	
With Social Security income	4,147	139	204	72	255	107	1,327	32	76	291	59	174	60	138	92	57	498	15	418	133	
Mean Social Security income (dollars)	7,758	8,099	7,033	7,510	7,201	6,866	7,680	6,669	5,874	8,017	6,572	8,941	6,407	7,884	8,745	7,776	8,759	6,210	7,488	8,022	
With Supplemental Security Income	248	10	20	6	17	9	63	-	4	11	3	9	2	7	7	7	32	3	25	13	
Mean Supplemental Security Income (dollars)	6,067	9,617	5,160	3,646	4,956	8,679	5,198	-	3,684	8,729	7,676	4,950	6,636	4,617	5,725	5,662	7,049	2,215	7,240	5,907	
With public assistance income	4,211	98	281	63	218	165	1,208	29	119	351	86	219	32	90	91	107	381	51	411	211	
Mean public assistance income (dollars)	5,291	6,438	7,010	5,120	4,420	5,093	5,513	4,219	4,230	5,303	8,271	4,152	5,251	5,693	4,074	6,225	3,950	5,718	5,199	5,387	
With retirement income	6,889	279	409	139	511	361	1,465	48	222	582	151	272	107	375	212	192	470	60	605	429	
Mean retirement income (dollars)	21,750	23,563	19,587	24,243	23,800	24,149	18,930	28,988	23,413	22,297	22,222	24,619	23,045	22,332	23,025	23,555	21,056	17,406	19,605	24,715	
Families	32,367	858	1,119	464	1,820	1,248	8,874	184	587	2,653	417	1,248	366	1,557	612	653	4,031	150	4,202	1,324	
Less than \$2,500	1,982	22	50	23	79	151	440	15	46	220	26	129	14	39	33	50	314	8	248	75	
\$2,500 to \$4,999	512	12	21	5	22	29	139	6	15	57	8	26	6	9	12	11	63	6	50	15	
\$5,000 to \$9,999	1,461	35	68	27	62	73	421	7	22	149	14	83	15	22	24	31	185	11	149	63	
\$10,000 to \$14,999	1,734	40	94	17	71	55	530	10	29	134	27	86	17	44	26	35	233	13	203	70	
\$15,000 to \$24,999	3,923	92	152	35	159	125	1,185	28	70	296	47	167	30	178	58	63	537	19	567	115	
\$25,000 to \$34,999	4,082	92	114	55	179	119	1,217	22	62	299	44	126	32	277	50	67	510	17	683	117	
\$35,000 to \$49,999	5,400	139	192	70	295	172	1,561	32	95	405	75	165	40	331	94	79	667	16	812	160	
\$50,000 to \$74,999	6,267	169	227	87	370	225	1,758	31	124	502	100	204	66	339	128	124	679	25	829	280	
\$75,000 to \$99,999	3,536	118	107	62	254	150	930	13	63	316	39	126	51	161	84	93	365	18	392	194	
\$100,000 or more	3,470	139	94	83	329	149	693	20	61	275	37	136	95	157	103	100	478	17	269	235	
Median family income (dollars)	41,229	49,625	39,107	50,000	51,991	40,583	39,336	36,111	43,365	40,839	41,477	35,473	61,500	43,794	51,500	48,304	38,011	36,250	38,190	53,704	
Mean family income (dollars)	51,674	60,034	46,716	64,164	64,065	51,000	47,443	47,701	52,605	49,667	49,187	51,959	76,588	53,450	61,608	56,247	52,937	50,722	45,542	62,606	
Nonfamily households	6,402	200	179	88	277	325	1,142	84	57	537	54	385	108	223	130	85	1,922	12	432	162	
Median nonfamily income (dollars)	22,712	32,083	17,917	25,000	24,821	12,153	17,035	19,167	14,063	26,302	14,167	14,955	32,500	26,938	29,000	31,964	26,146	15,000	20,208	33,000	
Mean nonfamily income (dollars)	31,264	39,906	23,936	40,546	36,480	23,619	23,564	27,867	24,657	32,165	26,917	23,128	45,382	31,393	36,515	37,820	35,646	25,403	28,426	45,017	
Per capita income (dollars)	12,722	15,803	10,471	16,507	15,210	13,052	10,791	11,514	10,959	11,768	10,528	13,124	20,359	14,474	15,374	12,977	16,328	9,451	11,018	14,389	
Median earnings (dollars):																					
Male full-time, year-round workers	28,125	31,711	29,907	33,295	31,706	30,556	25,056	25,625	27,232	27,975	33,125	29,712	35,139	27,854	34,917	32,197	30,765	26,750	25,635	35,152	
Female full-time, year-round workers	24,118	28,786	24,844	29,423	28,023	27,230	21,122	22,250	25,852	25,951	23,333	25,851	27,417	21,558	28,250	28,580	24,575	23,750	22,011	29,167	

- Represents zero or rounds to zero

Source: U.S. Bureau of the Census, "Population and Housing Profile: 2000 Guam"

CPO = Chalan Pago-Ordot
 MTM = Mongmong-Toto-Maite

Population and Housing Profile: 2000
Geography: Guam and Election District (Village)

Subject	Guam	Agana Heights	Agat	Asan - Maina	Barrigada	CPO	Dededo	Hagåtña	Inarajan	Mangilao	Merizo	MTM	Piti	Santa Rita	Sinajana	Talofofo	Tamuning	Umatac	Yigo	Yona
	Number Below Poverty Level	Number Below Poverty Level	Number Below Poverty Level	Number Below Poverty Level	Number Below Poverty Level	Number Below Poverty Level	Number Below Poverty Level	Number Below Poverty Level	Number Below Poverty Level	Number Below Poverty Level	Number Below Poverty Level	Number Below Poverty Level	Number Below Poverty Level	Number Below Poverty Level	Number Below Poverty Level	Number Below Poverty Level	Number Below Poverty Level	Number Below Poverty Level	Number Below Poverty Level	Number Below Poverty Level
POVERTY STATUS IN 1999																				
Families	6,466	113	254	79	260	320	1,802	44	134	637	90	357	48	124	116	144	872	49	762	261
With related children under 18 years	5,420	97	224	67	213	265	1,528	32	110	540	81	312	37	104	96	127	664	45	644	234
With related children under 5 years	3,180	61	140	36	124	144	894	17	65	322	51	178	17	62	58	81	388	33	379	130
Families with female householder, no husband present	2,434	59	133	27	96	134	640	15	48	260	37	162	16	48	57	64	285	20	221	112
With related children under 18 years	2,189	48	123	25	87	115	584	12	42	238	35	145	14	43	50	61	240	19	201	107
With related children under 5 years	1,287	29	81	12	53	61	349	4	26	148	20	76	6	26	32	38	134	13	122	57
Individuals	34,792	599	1,400	423	1,525	1,644	9,745	294	715	3,301	477	1,915	265	618	620	790	4,666	280	4,092	1,423
18 years and over	19,143	332	682	216	884	957	5,158	207	392	1,831	221	983	179	348	332	396	3,078	144	2,151	652
65 years and over	1,302	29	51	23	65	52	392	16	29	89	18	63	10	29	25	36	191	8	141	35
Related children under 18 years	15,509	266	711	203	633	676	4,545	87	320	1,459	253	930	85	264	283	384	1,575	135	1,933	767
Related children 5 to 17 years	10,247	177	463	151	427	456	3,002	54	224	945	162	633	58	174	198	249	968	83	1,295	528
Unrelated individuals 15 years and over	3,203	76	135	38	220	158	705	76	81	300	36	110	74	66	60	84	621	19	255	89
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
HOUSING OCCUPANCY																				
Total housing units	47,677	1,193	1,499	660	2,307	1,920	12,119	395	701	3,926	535	2,102	576	2,517	857	849	8,108	179	5,489	1,745
Occupied housing units	38,769	1,058	1,298	552	2,097	1,573	10,016	268	644	3,190	471	1,633	474	1,780	742	738	5,953	162	4,634	1,486
Vacant housing units	8,908	135	201	108	210	347	2,103	127	57	736	64	469	102	737	115	111	2,155	17	855	259
For seasonal, recreational, or occasional use	196	3	6	1	7	8	53	-	1	12	3	8	2	3	4	-	49	1	32	3
Homeowner vacancy rate (percent)	1.6	0.4	1.8	2.9	0.3	2.0	1.3	-	-	1.1	1.1	1.6	0.4	-	1.0	0.4	2.1	-	4.4	1.6
Rental vacancy rate (percent)	19.3	15.8	14.7	8.4	12.5	14.6	16.2	36.1	7.7	25.2	18.2	24.3	29.1	4.2	19.8	8.6	28.2	9.5	9.2	26.7
HOUSING TENURE																				
Occupied housing units	38,769	1,058	1,298	552	2,097	1,573	10,016	268	644	3,190	471	1,633	474	1,780	742	738	5,953	162	4,634	1,486
Owner-occupied housing units	18,747	527	641	334	1,304	878	5,550	82	465	1,601	278	626	269	660	410	484	1,514	105	2,014	1,005
Renter-occupied housing units	20,022	531	657	218	793	695	4,466	186	179	1,589	193	1,007	205	1,120	332	254	4,439	57	2,620	481
Average household size of occupied units	3.89	3.65	4.34	3.78	4.04	3.72	4.26	3.07	4.71	3.91	4.59	3.57	3.40	3.66	3.84	4.33	2.96	5.48	4.09	4.33
Average household size of owner-occupied units	4.32	4.21	4.59	4.11	4.22	4.09	4.51	3.27	4.90	4.28	4.82	4.01	3.87	4.23	4.27	4.55	3.35	5.84	4.53	4.39
Average household size of renter-occupied units	3.50	3.09	4.10	3.28	3.76	3.24	3.94	2.98	4.23	3.53	4.26	3.30	2.80	3.32	3.31	3.89	2.82	4.81	3.75	4.20
UNITS IN STRUCTURE																				
Total housing units	47,677	1,193	1,499	660	2,307	1,920	12,119	395	701	3,926	535	2,102	576	2,517	857	849	8,108	179	5,489	1,745
1-unit, detached	24,470	643	964	448	1,601	1,219	6,980	98	583	1,995	407	816	349	1,369	536	683	1,164	158	3,090	1,367
1-unit, attached	8,505	189	207	116	243	268	3,299	24	76	368	50	261	37	950	76	71	545	16	1,572	137
2 units	1,634	57	61	35	125	64	306	22	16	163	20	89	6	76	50	58	151	5	297	33
3 or 4 units	2,292	79	113	40	88	44	457	53	5	263	9	126	16	67	41	9	636	-	212	34
5 to 9 units	2,306	71	65	14	118	93	272	70	-	214	1	133	8	14	20	13	1,108	-	68	24
10 to 19 units	2,446	77	41	4	47	3	264	104	1	151	13	224	11	12	27	-	1,408	-	58	1
20 or more units	5,344	68	2	-	37	187	379	20	-	697	25	435	133	5	103	-	3,020	-	110	123
Mobile home	395	8	21	2	38	24	86	3	8	42	4	9	8	10	3	7	59	-	46	17
Container	198	1	4	1	8	16	62	1	11	26	2	8	1	2	1	7	9	-	29	9
Boat, RV, van, etc.	87	-	21	-	2	2	14	-	1	7	4	1	7	12	-	1	8	-	7	-

- Represents zero or rounds to zero

Source: U.S. Bureau of the Census, "Population and Housing Profile: 2000 Guam"

CPO = Chalan Pago-Ordot

MTM = Mongmong-Toto-Maite

Population and Housing Profile: 2000
Geography: Guam and Election District (Village)

Subject	Guam	Agana Heights	Agat	Asan - Maina	Barrigada	CPO	Dededo	Hagåtña	Inarajan	Mangilao	Merizo	MTM	Piti	Santa Rita	Sinajana	Talofofo	Tamuning	Umatac	Yigo	Yona
YEAR STRUCTURE BUILT																				
Total housing units	47,677	1,193	1,499	660	2,307	1,920	12,119	395	701	3,926	535	2,102	576	2,517	857	849	8,108	179	5,489	1,745
1999 to March 2000	1,960	15	70	66	103	113	567	9	31	203	13	56	54	46	13	65	67	11	403	55
1995 to 1998	5,990	75	129	76	254	291	1,926	37	97	559	56	171	39	319	55	145	560	18	939	244
1990 to 1994	8,696	150	244	73	449	567	2,420	23	171	975	119	318	57	176	91	175	1,551	27	864	246
1980 to 1989	10,486	161	364	91	489	426	2,414	59	138	999	136	575	68	248	108	151	2,592	57	1,064	346
1970 to 1979	14,557	461	468	217	783	388	3,148	170	179	961	158	681	274	1,334	437	203	2,550	45	1,388	712
1960 to 1969	4,771	264	177	103	198	122	1,457	73	51	188	42	204	67	296	129	92	648	14	524	122
1950 to 1959	979	55	26	21	25	12	164	18	16	38	7	86	14	79	21	13	121	4	249	10
1940 to 1949	154	8	9	12	3	1	16	3	5	-	3	5	2	17	3	4	12	2	41	8
1939 or earlier	84	4	12	1	3	-	7	3	13	3	1	6	1	2	-	1	7	1	17	2
ROOMS																				
Total housing units	47,677	1,193	1,499	660	2,307	1,920	12,119	395	701	3,926	535	2,102	576	2,517	857	849	8,108	179	5,489	1,745
1 room	2,449	60	79	17	79	89	629	34	33	212	25	87	26	47	29	36	672	5	227	63
2 rooms	5,979	92	249	53	276	207	1,307	119	91	561	67	293	30	158	67	89	1,567	19	585	149
3 rooms	9,892	226	331	94	544	411	2,644	42	138	839	104	398	56	277	177	184	2,075	30	1,026	296
4 rooms	9,641	253	268	124	365	412	2,357	124	136	915	103	539	124	423	150	136	1,858	25	1,022	307
5 rooms	10,039	278	316	196	449	427	2,937	27	143	696	123	372	153	700	197	195	1,085	55	1,287	403
6 rooms	5,917	146	155	92	314	224	1,475	22	90	419	62	210	107	651	123	108	521	30	841	327
7 rooms	2,238	74	61	37	138	82	491	11	34	172	31	116	45	183	66	54	191	7	321	124
8 rooms	909	39	20	20	74	33	171	8	25	76	8	59	23	50	24	31	76	5	123	44
9 or more rooms	613	25	20	27	68	35	108	8	11	36	12	28	12	28	24	16	63	3	57	32
Median (rooms)	4.1	4.4	3.8	4.7	4.2	4.1	4.1	3.5	4.2	3.9	4.2	4.0	4.8	5.0	4.5	4.3	3.4	4.7	4.4	4.6
BEDROOMS																				
Total housing units	47,677	1,193	1,499	660	2,307	1,920	12,119	395	701	3,926	535	2,102	576	2,517	857	849	8,108	179	5,489	1,745
No bedroom	3,860	67	123	28	148	112	1,038	37	49	323	47	93	31	148	38	55	1,090	9	334	90
1 bedroom	7,685	182	286	94	407	323	1,680	132	119	705	112	493	51	171	112	137	1,647	31	753	250
2 bedrooms	15,311	396	484	181	630	601	3,670	147	227	1,348	140	709	142	691	248	248	3,124	44	1,850	431
3 bedrooms	14,443	377	422	270	724	649	3,774	52	217	1,041	168	519	207	1,044	312	297	1,742	68	1,969	591
4 bedrooms	4,945	130	149	65	310	179	1,470	15	57	395	43	210	125	422	94	83	363	19	483	333
5 or more bedrooms	1,433	41	35	22	88	56	487	12	32	114	25	78	20	41	53	29	142	8	100	50
SOURCE OF WATER																				
Total housing units	47,677	1,193	1,499	660	2,307	1,920	12,119	395	701	3,926	535	2,102	576	2,517	857	849	8,108	179	5,489	1,745
Public system only	46,734	1,176	1,458	650	2,256	1,889	11,859	393	678	3,820	524	2,078	562	2,462	847	827	7,991	176	5,381	1,707
Public system and catchment	586	14	11	7	41	21	124	1	9	81	5	16	10	43	7	14	95	1	61	25
Individual well	35	-	3	1	1	-	5	-	1	7	-	1	-	-	-	-	3	1	10	1
Catchment, tanks, or drums only	118	-	11	1	2	2	58	-	1	8	1	3	-	-	-	2	7	-	18	4
Some other source	204	3	16	1	7	8	73	1	12	10	5	4	4	12	2	6	12	1	19	8
SEWAGE DISPOSAL																				
Total housing units	47,677	1,193	1,499	660	2,307	1,920	12,119	395	701	3,926	535	2,102	576	2,517	857	849	8,108	179	5,489	1,745
Public sewer	34,055	1,008	1,237	390	1,209	778	8,986	367	153	2,271	383	1,577	469	2,009	766	217	7,712	114	3,514	895
Septic tank or cesspool	12,381	183	173	259	1,058	1,048	2,706	26	509	1,544	135	485	88	460	87	585	350	56	1,825	804
Other means	1,241	2	89	11	40	94	427	2	39	111	17	40	19	48	4	47	46	9	150	46
MATERIAL USED FOR OUTSIDE WALLS																				
Total housing units	47,677	1,193	1,499	660	2,307	1,920	12,119	395	701	3,926	535	2,102	576	2,517	857	849	8,108	179	5,489	1,745
Poured concrete	12,996	163	140	139	480	404	3,799	113	90	803	61	394	253	795	209	101	3,030	30	1,540	452
Concrete blocks	29,661	989	1,115	487	1,639	1,215	6,607	262	442	2,617	355	1,573	258	1,549	618	630	4,818	103	3,272	1,112
Metal	2,541	15	119	12	58	142	939	9	111	274	72	69	23	60	20	67	97	24	313	117
Wood	1,930	19	70	19	110	145	639	10	31	183	35	57	26	53	7	37	144	7	297	41
Other	549	7	55	3	20	14	135	1	27	49	12	9	16	60	3	14	19	15	67	23

- Represents zero or rounds to zero

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Population and Housing Profile: 2000
Geography: Guam and Election District (Village)

Subject	Guam	Agana Heights	Agat	Asan - Maina	Barrigada	CPO	Dededo	Hagåtña	Inarajan	Mangilao	Merizo	MTM	Piti	Santa Rita	Sinajana	Talofofo	Tamuning	Umatac	Yigo	Yona	
MATERIAL USED FOR ROOF																					
Total housing units	47,677	1,193	1,499	660	2,307	1,920	12,119	395	701	3,926	535	2,102	576	2,517	857	849	8,108	179	5,489	1,745	
Poured concrete	39,889	1,082	1,110	590	1,985	1,486	9,629	342	454	3,226	369	1,852	481	2,193	789	649	7,641	118	4,406	1,487	
Metal	6,036	88	288	52	242	355	2,037	46	191	560	137	184	71	186	54	169	340	44	791	201	
Wood	681	11	26	10	33	45	195	3	20	48	7	33	9	38	6	9	46	2	123	17	
Other	1,071	12	75	8	47	34	258	4	36	92	22	33	15	100	8	22	81	15	169	40	
MATERIAL USED FOR FOUNDATION																					
Total housing units	47,677	1,193	1,499	660	2,307	1,920	12,119	395	701	3,926	535	2,102	576	2,517	857	849	8,108	179	5,489	1,745	
Concrete	46,471	1,180	1,424	652	2,234	1,827	11,802	391	667	3,801	513	2,055	555	2,473	853	820	8,014	167	5,326	1,717	
Wood pier or pilings	962	10	39	7	68	87	248	4	22	105	16	45	14	23	3	25	77	2	144	23	
Other	244	3	36	1	5	6	69	-	12	20	6	2	7	21	1	4	17	10	19	5	
SELECTED CHARACTERISTICS																					
Total housing units	47,677	1,193	1,499	660	2,307	1,920	12,119	395	701	3,926	535	2,102	576	2,517	857	849	8,108	179	5,489	1,745	
Lacking complete plumbing facilities	3,732	81	233	41	211	186	1,147	13	131	329	75	161	47	123	53	114	202	32	368	185	
Lacking complete kitchen facilities	4,400	57	230	49	198	236	1,437	38	159	378	89	183	64	111	59	101	303	42	504	162	
Without air conditioning	8,320	140	415	68	304	387	2,733	94	147	732	112	414	62	173	127	157	707	60	1,126	362	
YEAR HOUSEHOLDER MOVED INTO UNIT																					
Occupied housing units	38,769	1,058	1,298	552	2,097	1,573	10,016	268	644	3,190	471	1,633	474	1,780	742	738	5,953	162	4,634	1,486	
1999 to March 2000	10,635	263	287	140	416	391	2,395	88	77	855	87	440	99	599	156	163	2,236	28	1,626	289	
1995 to 1998	11,250	242	338	124	545	474	2,847	74	164	891	117	459	121	587	165	185	1,963	37	1,543	374	
1990 to 1994	5,786	147	205	71	344	256	1,582	30	149	562	99	246	86	150	89	155	734	29	602	250	
1980 to 1989	5,199	150	187	80	320	219	1,588	21	93	482	83	199	61	146	102	99	569	38	501	261	
1970 to 1979	4,728	179	217	84	375	179	1,379	31	127	340	67	214	83	243	181	99	314	20	325	271	
1969 or earlier	1,171	77	64	53	97	54	225	24	34	60	18	75	24	55	49	37	137	10	37	41	
VEHICLES AVAILABLE																					
Occupied housing units	38,769	1,058	1,298	552	2,097	1,573	10,016	268	644	3,190	471	1,633	474	1,780	742	738	5,953	162	4,634	1,486	
None	2,996	61	173	35	133	107	670	32	82	250	61	193	22	52	61	57	566	24	313	104	
1	14,180	404	470	185	641	582	3,353	117	180	1,139	158	679	166	664	261	214	2,773	47	1,713	434	
2	13,237	370	365	203	748	549	3,458	84	224	1,080	136	482	161	730	252	274	1,882	42	1,658	539	
3 or more	8,356	223	290	129	575	335	2,535	35	158	721	116	279	125	334	168	193	732	49	950	409	
Vehicles per household	1.8	1.8	1.7	1.9	2.0	1.8	1.9	1.5	1.8	1.8	1.8	1.6	1.9	1.9	1.9	1.9	1.5	1.9	1.8	2.0	
OCCUPANTS PER ROOM																					
Occupied housing units	38,769	1,058	1,298	552	2,097	1,573	10,016	268	644	3,190	471	1,633	474	1,780	742	738	5,953	162	4,634	1,486	
1.00 or less	25,462	793	737	408	1,368	1,086	5,896	194	348	2,017	274	1,171	391	1,375	547	451	4,368	79	3,002	957	
1.01 to 1.50	5,902	139	232	79	295	221	1,855	28	109	510	82	243	43	208	88	123	672	31	686	258	
1.51 or more	7,405	126	329	65	434	266	2,265	46	187	663	115	219	40	197	107	164	913	52	946	271	
VALUE																					
Specified owner-occupied units	16,467	482	584	314	1,185	757	5,083	59	437	1,396	256	552	251	603	370	458	792	104	1,840	944	
Less than \$10,000	133	-	4	3	7	4	62	-	7	18	-	4	1	5	2	3	1	8	2	7	
\$10,000 to \$19,999	178	3	5	2	5	7	82	-	8	19	3	1	2	4	5	6	1	1	17	7	
\$20,000 to \$29,999	126	-	5	-	8	6	49	-	5	10	-	6	-	4	2	5	3	7	12	4	
\$30,000 to \$39,999	126	-	7	2	6	8	34	-	8	17	2	4	-	2	3	6	2	-	18	7	
\$40,000 to \$59,999	362	4	20	-	12	13	127	-	9	28	9	11	-	9	6	18	8	9	62	17	
\$60,000 to \$79,999	574	14	25	8	24	33	183	-	28	47	10	18	3	22	8	17	14	10	81	29	
\$80,000 to \$99,999	591	10	37	7	36	25	189	4	15	31	13	22	6	27	11	21	11	8	78	40	
\$100,000 to \$149,999	2,969	73	119	52	163	141	1,095	3	75	173	57	77	29	94	54	88	73	15	429	159	
\$150,000 to \$199,999	5,702	155	204	75	378	235	2,090	10	116	496	63	195	42	224	118	133	126	23	670	349	
\$200,000 to \$299,999	3,783	150	115	78	319	181	915	22	119	417	53	147	70	144	118	109	220	24	367	215	
\$300,000 to \$499,999	1,256	51	22	47	162	78	195	14	26	84	29	38	79	47	32	27	178	5	73	69	
\$500,000 or more	667	22	21	40	65	26	62	6	21	56	17	29	19	21	11	26	153	1	25	46	
Median (dollars)	171,869	194,231	162,681	209,756	190,918	175,902	163,071	266,071	172,679	182,721	171,795	179,870	271,354	174,018	189,831	170,370	273,577	152,083	161,813	173,103	

- Represents zero or rounds to zero

Source: U.S. Bureau of the Census, "Population and Housing Profile: 2000 Guam"

CPO = Chalan Pago-Ordot

MTM = Mongmong-Toto-Maite

Population and Housing Profile: 2000
Geography: Guam and Election District (Village)

Subject	Guam	Agana Heights	Agat	Asan - Maina	Barrigada	CPO	Dededo	Hagåtña	Inarajan	Mangilao	Merizo	MTM	Piti	Santa Rita	Sinajana	Talofofo	Tamuning	Umatac	Yigo	Yona
SELECTED CHARACTERISTICS																				
Occupied housing units	38,769	1,058	1,298	552	2,097	1,573	10,016	268	644	3,190	471	1,633	474	1,780	742	738	5,953	162	4,634	1,486
Without telephone service	2,587	42	113	25	94	122	806	24	58	258	33	132	26	38	30	42	287	15	349	93
Without a battery operated radio	3,953	68	129	59	185	120	1,161	33	69	284	37	159	25	143	50	55	759	29	473	115
MORTGAGE STATUS AND SELECTED MONTHLY OWNER COSTS																				
Specified owner-occupied units	16,467	482	584	314	1,185	757	5,083	59	437	1,396	256	552	251	603	370	458	792	104	1,840	944
With a mortgage	11,226	342	378	216	857	526	3,403	30	277	958	144	366	185	431	245	334	505	71	1,286	672
Less than \$200	6	-	-	-	-	1	2	-	-	-	1	-	-	-	-	-	-	-	-	2
\$200 to \$299	68	-	3	2	5	5	26	-	2	6	1	4	1	1	1	1	1	-	8	1
\$300 to \$399	202	7	3	-	12	14	79	-	9	13	3	3	-	8	4	3	7	1	33	3
\$400 to \$499	375	8	18	4	20	15	143	3	16	15	4	14	1	24	8	8	5	4	51	14
\$500 to \$599	506	18	18	5	33	21	183	1	11	23	3	10	5	17	17	19	10	5	78	29
\$600 to \$799	1,299	44	61	17	74	43	445	3	33	104	22	48	16	54	30	23	40	6	184	52
\$800 to \$999	1,406	35	48	33	89	57	504	4	32	115	19	42	21	43	31	33	50	13	164	73
\$1,000 or more	7,364	108	131	65	266	182	1,130	10	88	335	54	106	46	133	67	115	150	16	429	233
Median (dollars)	1,239	122	96	90	358	188	891	9	86	347	37	139	95	151	87	132	242	26	339	265
Not mortgaged	5,241	1,264	1,134	1,333	1,383	1,269	1,141	1,313	1,193	1,319	1,190	1,271	1,531	1,266	1,202	1,335	1,466	1,148	1,145	1,356
Median (dollars)	251	140	206	98	328	231	1,680	29	160	438	112	186	66	172	125	124	287	33	554	272
		294	236	280	291	268	232	338	250	259	260	259	295	260	318	203	346	204	215	263
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999																				
Specified owner-occupied units	16,467	482	584	314	1,185	757	5,083	59	437	1,396	256	552	251	603	370	458	792	104	1,840	944
Less than 10.0 percent	4,044	119	165	75	284	176	1,244	12	116	307	83	157	65	150	109	97	209	25	431	220
10.0 to 14.9 percent	2,204	81	90	38	153	80	662	11	59	177	34	67	33	95	49	69	122	13	229	142
15.0 to 19.9 percent	2,123	82	64	43	170	96	669	10	54	200	25	64	32	68	48	50	81	16	226	125
20.0 to 24.9 percent	1,847	57	62	36	135	74	565	4	41	171	26	61	23	83	44	58	71	14	212	110
25.0 to 29.9 percent	1,438	39	56	32	115	80	450	7	37	123	17	38	27	51	28	42	47	6	158	85
30.0 to 34.9 percent	979	27	34	14	71	40	295	5	24	87	13	32	14	38	26	25	45	4	127	58
35.0 percent or more	3,293	70	104	64	235	155	1,047	5	95	287	46	102	54	109	60	92	194	24	369	181
Not computed	539	7	9	12	22	56	151	5	11	44	12	31	3	9	6	25	23	2	88	23
GROSS RENT																				
Renter-occupied units	20,022	531	657	218	793	695	4,466	186	179	1,589	193	1,007	205	1,120	332	254	4,439	57	2,620	481
Less than \$200	236	8	24	2	9	17	66	-	1	15	6	12	-	2	8	5	37	-	19	5
\$200 to \$299	567	17	50	5	22	11	163	4	4	41	11	42	2	15	10	13	84	5	55	13
\$300 to \$399	869	24	52	9	23	30	266	8	7	76	13	78	1	13	16	13	96	10	87	47
\$400 to \$599	2,577	75	115	25	98	83	713	48	18	257	23	171	14	35	37	33	470	6	268	88
\$600 to \$799	3,670	115	102	41	145	84	858	43	20	366	22	221	24	74	53	29	1,054	5	345	69
\$800 to \$999	2,871	76	61	34	148	124	531	33	21	246	23	208	34	47	46	36	969	3	189	42
\$1,000 or more	4,030	86	65	54	207	193	639	21	20	293	23	154	87	190	100	56	1,395	2	317	128
No cash rent	5,202	130	188	48	141	153	1,230	29	88	295	72	121	43	744	62	69	334	26	1,340	89
Median (dollars)	774	718	585	814	837	884	695	665	768	741	679	732	1,025	1,006	852	797	855	413	719	724
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999																				
Renter-occupied units	20,022	531	657	218	793	695	4,466	186	179	1,589	193	1,007	205	1,120	332	254	4,439	57	2,620	481
Less than 10.0 percent	748	30	24	9	39	27	172	9	7	68	8	41	8	15	18	11	165	3	71	23
10.0 to 14.9 percent	1,532	58	68	25	79	50	368	15	7	119	14	76	21	43	34	17	332	1	161	44
15.0 to 19.9 percent	1,846	58	70	29	80	46	463	18	15	155	17	91	22	46	24	23	470	3	162	54
20.0 to 24.9 percent	1,661	49	47	12	82	33	369	19	10	142	18	96	15	50	32	31	462	5	153	36
25.0 to 29.9 percent	1,289	38	56	17	61	31	280	11	8	108	13	61	15	48	19	11	349	-	131	32
30.0 to 34.9 percent	1,003	24	32	6	55	22	204	13	1	85	6	54	8	30	14	17	318	3	83	28
35.0 percent or more	5,431	132	163	58	212	210	1,116	58	37	474	39	358	69	129	115	66	1,596	15	431	153
Not computed	6,512	142	197	62	185	276	1,494	43	94	438	78	230	47	759	76	78	747	27	1,428	111

- Represents zero or rounds to zero

Source: U.S. Bureau of the Census, "Population and Housing Profile: 2000 Guam"

CPO = Chalan Pago-Ordot
 MTM = Mongmong-Toto-Maite

APPENDIX A16

U.S. Bureau of the Census, International Data Base

Table 001. Total Midyear Population

 Country: Guam

Year	Population	Year	Population	Year	Population
-----		-----		-----	
1950	59900	1984	117296	2018	198942
1951	63400	1985	120615	2019	201095
1952	63600	1986	122880	2020	203216
1953	68700	1987	125724	2021	205312
1954	67100	1988	127545	2022	207380
1955	68700	1989	130947	2023	209409
1956	69200	1990	134125	2024	211394
1957	66500	1991	138159	2025	213329
1958	66700	1992	142326	2026	215212
1959	67800	1993	143825	2027	217043
1960	66900	1994	143157	2028	218816
1961	66400	1995	144190	2029	220526
1962	69100	1996	145324	2030	222166
1963	72000	1997	146799	2031	223736
1964	72500	1998	149724	2032	225245
1965	74100	1999	152590	2033	226697
1966	79200	2000	155324	2034	228089
1967	81400	2001	158330	2035	229417
1968	83800	2002	161057	2036	230677
1969	83700	2003	163593	2037	231875
1970	86470	2004	166090	2038	233018
1971	92287	2005	168564	2039	234106
1972	96755	2006	171019	2040	235135
1973	105550	2007	173456	2041	236105
1974	101302	2008	175877	2042	237020
1975	102110	2009	178287	2043	237886
1976	102478	2010	180692	2044	238703
1977	101167	2011	183081	2045	239472
1978	101960	2012	185435	2046	240194
1979	103941	2013	187754	2047	240874
1980	106869	2014	190042	2048	241518
1981	109166	2015	192302	2049	242124
1982	109275	2016	194541	2050	242692
1983	114080	2017	196757		

 Source: U.S. Bureau of the Census, International
 Data Base.

APPENDIX A17

Guam Census of Population and Housing - Population: 1970, 1980, 1990 and 2000

GUAM	Population: 1970, 1980, 1990 and 2000				Numeric Change			Percent Change			Annual Growth Rate *		
	01-Apr-70	01-Apr-80	01-Apr-90	01-Apr-00	70-80	80-90	90-00	70-80	80-90	90-00	70-80	80-90	90-00
TOTAL POPULATION	84,996	105,979	133,152	154,805	20,983	27,173	21,653	24.69%	25.64%	16.26%	2.21%	2.28%	1.51%
VILLAGE													
Agana Heights	3,156	3,284	3,646	3,940	128	362	294	4.06%	11.02%	8.06%	0.40%	1.05%	0.78%
Agat	4,308	3,999	4,960	5,656	-309	961	696	-7.17%	24.03%	14.03%	-0.74%	2.15%	1.31%
Asan-Maina	2,629	2,034	2,070	2,090	-595	36	20	-22.63%	1.77%	0.97%	-2.57%	0.18%	0.10%
Barrigada	6,356	7,756	8,846	8,652	1,400	1,090	-194	22.03%	14.05%	-2.19%	1.99%	1.31%	-0.22%
Chalan Pago-Ordot	2,931	3,120	4,451	5,923	189	1,331	1,472	6.45%	42.66%	33.07%	0.62%	3.55%	2.86%
Dededo	10,780	23,644	31,728	42,980	12,864	8,084	11,252	119.33%	34.19%	35.46%	7.85%	2.94%	3.04%
Hagåtña	2,119	896	1,139	1,100	-1,223	243	-39	-57.72%	27.12%	-3.42%	-8.61%	2.40%	-0.35%
Inarajan	1,897	2,059	2,469	3,052	162	410	583	8.54%	19.91%	23.61%	0.82%	1.82%	2.12%
Mangilao	3,228	6,840	10,483	13,313	3,612	3,643	2,830	111.90%	53.26%	27.00%	7.51%	4.27%	2.39%
Merizo	1,529	1,663	1,742	2,163	134	79	421	8.76%	4.75%	24.17%	0.84%	0.46%	2.16%
Mongmong-Toto-Maite	6,057	5,245	5,845	5,845	-812	600	0	-13.41%	11.44%	0.00%	-1.44%	1.08%	0.00%
Piti	1,284	2,866	1,827	1,666	1,582	-1,039	-161	123.21%	-36.25%	-8.81%	8.03%	-4.50%	-0.92%
Santa Rita	8,109	9,183	11,857	7,500	1,074	2,674	-4,357	13.24%	29.12%	-36.75%	1.24%	2.56%	-4.58%
Sinajana	3,506	2,485	2,658	2,853	-1,021	173	195	-29.12%	6.96%	7.34%	-3.44%	0.67%	0.71%
Talofofo	1,935	2,006	2,310	3,215	71	304	905	3.67%	15.15%	39.18%	0.36%	1.41%	3.31%
Tamuning	10,218	13,580	16,673	18,012	3,362	3,093	1,339	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	11,542	10,359	14,213	19,474	-1,183	3,854	5,261	-10.25%	37.20%	37.02%	-1.08%	3.16%	3.15%
Yona	2,599	4,228	5,338	6,484	1,629	1,110	1,146	62.68%	26.25%	21.47%	4.87%	2.33%	1.94%
NORTH	32,540	47,583	62,614	80,466	15,043	15,031	17,852	46.23%	31.59%	28.51%	3.80%	2.75%	2.51%
Dededo	10,780	23,644	31,728	42,980	12,864	8,084	11,252	119.33%	34.19%	35.46%	7.85%	2.94%	3.04%
Tamuning	10,218	13,580	16,673	18,012	3,362	3,093	1,339	32.90%	22.78%	8.03%	2.84%	2.05%	0.77%
Yigo	11,542	10,359	14,213	19,474	-1,183	3,854	5,261	-10.25%	37.20%	37.02%	-1.08%	3.16%	3.15%
CENTRAL	31,266	34,526	40,965	45,382	3,260	6,439	4,417	10.43%	18.65%	10.78%	0.99%	1.71%	1.02%
Agana Heights	3,156	3,284	3,646	3,940	128	362	294	4.06%	11.02%	8.06%	0.40%	1.05%	0.78%
Asan-Maina	2,629	2,034	2,070	2,090	-595	36	20	-22.63%	1.77%	0.97%	-2.57%	0.18%	0.10%
Barrigada	6,356	7,756	8,846	8,652	1,400	1,090	-194	22.03%	14.05%	-2.19%	1.99%	1.31%	-0.22%
Chalan-Pago-Ordot	2,931	3,120	4,451	5,923	189	1,331	1,472	6.45%	42.66%	33.07%	0.62%	3.55%	2.86%
Hagåtña	2,119	896	1,139	1,100	-1,223	243	-39	-57.72%	27.12%	-3.42%	-8.61%	2.40%	-0.35%
Mangilao	3,228	6,840	10,483	13,313	3,612	3,643	2,830	111.90%	53.26%	27.00%	7.51%	4.27%	2.39%
Mongmong-Toto-Maite	6,057	5,245	5,845	5,845	-812	600	0	-13.41%	11.44%	0.00%	-1.44%	1.08%	0.00%
Piti	1,284	2,866	1,827	1,666	1,582	-1,039	-161	123.21%	-36.25%	-8.81%	8.03%	-4.50%	-0.92%
Sinajana	3,506	2,485	2,658	2,853	-1,021	173	195	-29.12%	6.96%	7.34%	-3.44%	0.67%	0.71%
SOUTH	21,190	23,870	29,573	28,957	2,680	5,703	-616	12.65%	23.89%	-2.08%	1.19%	2.14%	-0.21%
Agat	4,308	3,999	4,960	5,656	-309	961	696	-7.17%	24.03%	14.03%	-0.74%	2.15%	1.31%
Inarajan	1,897	2,059	2,469	3,052	162	410	583	8.54%	19.91%	23.61%	0.82%	1.82%	2.12%
Merizo	1,529	1,663	1,742	2,163	134	79	421	8.76%	4.75%	24.17%	0.84%	0.46%	2.16%
Santa Rita	8,109	9,183	11,857	7,500	1,074	2,674	-4,357	13.24%	29.12%	-36.75%	1.24%	2.56%	-4.58%
Talofofo	1,935	2,006	2,310	3,215	71	304	905	3.67%	15.15%	39.18%	0.36%	1.41%	3.31%
Umatac	813	732	897	887	-81	165	-10	-9.96%	22.54%	-1.11%	-1.05%	2.03%	-0.11%
Yona	2,599	4,228	5,338	6,484	1,629	1,110	1,146	62.68%	26.25%	21.47%	4.87%	2.33%	1.94%

Source: Bureau of the Census, U.S. Department of Commerce

*: Average annual (exponential) growth rate

Prepared by: OP&E, DPHSS and Commerce

Modified by: Bureau of Planning

July 2, 2001

July 5, 2001

Guam Census of Population and Housing - Housing Units: 1970, 1980, 1990 and 2000

GUAM	Housing Units: 1970, 1980, 1990 and 2000				Numeric Change			Percent Change			Annual Growth Rate *		
	01-Apr-70	01-Apr-80	01-Apr-90	01-Apr-00	70-80	80-90	90-00	70-80	80-90	90-00	70-80	80-90	90-00
Total Housing Units	16,680	28,249	35,223	47,677	11,569	6,974	12,454	69.36%	24.69%	35.36%	5.41%	2.23%	3.07%
VILLAGE													
Agana Heights	669	971	1,008	1,193	302	37	185	45.14%	3.81%	18.35%	3.80%	0.37%	1.70%
Agat	819	990	1,300	1,499	171	310	199	20.88%	31.31%	15.31%	1.91%	2.76%	1.43%
Asan-Maina	581	589	620	660	8	31	40	1.38%	5.26%	6.45%	0.14%	0.51%	0.63%
Barrigada	1,307	1,930	2,140	2,307	623	210	167	47.67%	10.88%	7.80%	3.97%	1.04%	0.75%
Chalan Pago-Ordot	526	738	1,047	1,920	212	309	873	40.30%	41.87%	83.38%	3.44%	3.56%	6.25%
Dededo	2,295	5,558	7,541	12,119	3,263	1,983	4,578	142.18%	35.68%	60.71%	9.25%	3.10%	4.86%
Hagåtña	515	384	416	395	-131	32	-21	-25.44%	8.33%	-5.05%	-2.89%	0.80%	-0.52%
Inarajan	321	455	553	701	134	98	148	41.74%	21.54%	26.76%	3.55%	1.97%	2.40%
Mangilao	740	2,067	2,699	3,926	1,327	632	1,227	179.32%	30.58%	45.46%	10.82%	2.70%	3.82%
Merizo	271	398	469	535	127	71	66	46.86%	17.84%	14.07%	3.92%	1.66%	1.33%
Mongmong-Toto-Maite	896	1,490	1,742	2,102	594	252	360	66.29%	16.91%	20.67%	5.22%	1.57%	1.90%
Piti	239	503	554	576	264	51	22	110.46%	10.14%	3.97%	7.73%	0.97%	0.39%
Santa Rita	1,610	2,253	2,343	2,517	643	90	174	39.94%	3.99%	7.43%	3.42%	0.39%	0.72%
Sinajana	680	619	712	857	-61	93	145	-8.97%	15.02%	20.37%	-0.94%	1.41%	1.87%
Talofofo	350	445	548	849	95	103	301	27.14%	23.15%	54.93%	2.43%	2.10%	4.48%
Tamuning	2,208	4,788	6,296	8,108	2,580	1,508	1,812	116.85%	31.50%	28.78%	8.05%	2.78%	2.56%
Umatac	130	147	188	179	17	41	-9	13.08%	27.89%	-4.79%	1.24%	2.49%	-0.49%
Yigo	2,056	2,898	3,686	5,489	842	788	1,803	40.95%	27.19%	48.91%	3.49%	2.43%	4.06%
Yona	467	1,026	1,361	1,745	559	335	384	119.70%	32.65%	28.21%	8.19%	2.87%	2.52%
NORTH	6,559	13,244	17,523	25,716	6,685	4,279	8,193	101.92%	32.31%	46.76%	7.28%	2.84%	3.91%
Dededo	2,295	5,558	7,541	12,119	3,263	1,983	4,578	142.18%	35.68%	60.71%	9.25%	3.10%	4.86%
Tamuning	2,208	4,788	6,296	8,108	2,580	1,508	1,812	116.85%	31.50%	28.78%	8.05%	2.78%	2.56%
Yigo	2,056	2,898	3,686	5,489	842	788	1,803	40.95%	27.19%	48.91%	3.49%	2.43%	4.06%
CENTRAL	6,153	9,291	10,938	13,936	3,138	1,647	2,998	51.00%	17.73%	27.41%	4.21%	1.65%	2.45%
Agana Heights	669	971	1,008	1,193	302	37	185	45.14%	3.81%	18.35%	3.80%	0.37%	1.70%
Asan-Maina	581	589	620	660	8	31	40	1.38%	5.26%	6.45%	0.14%	0.51%	0.63%
Barrigada	1,307	1,930	2,140	2,307	623	210	167	47.67%	10.88%	7.80%	3.97%	1.04%	0.75%
Chalan-Pago-Ordot	526	738	1,047	1,920	212	309	873	40.30%	41.87%	83.38%	3.44%	3.56%	6.25%
Hagåtña	515	384	416	395	-131	32	-21	-25.44%	8.33%	-5.05%	-2.89%	0.80%	-0.52%
Mangilao	740	2,067	2,699	3,926	1,327	632	1,227	179.32%	30.58%	45.46%	10.82%	2.70%	3.82%
Mongmong-Toto-Maite	896	1,490	1,742	2,102	594	252	360	66.29%	16.91%	20.67%	5.22%	1.57%	1.90%
Piti	239	503	554	576	264	51	22	110.46%	10.14%	3.97%	7.73%	0.97%	0.39%
Sinajana	680	619	712	857	-61	93	145	-8.97%	15.02%	20.37%	-0.94%	1.41%	1.87%
SOUTH	3,968	5,714	6,762	8,025	1,746	1,048	1,263	44.00%	18.34%	18.68%	3.71%	1.70%	1.73%
Agat	819	990	1,300	1,499	171	310	199	20.88%	31.31%	15.31%	1.91%	2.76%	1.43%
Inarajan	321	455	553	701	134	98	148	41.74%	21.54%	26.76%	3.55%	1.97%	2.40%
Merizo	271	398	469	535	127	71	66	46.86%	17.84%	14.07%	3.92%	1.66%	1.33%
Santa Rita	1,610	2,253	2,343	2,517	643	90	174	39.94%	3.99%	7.43%	3.42%	0.39%	0.72%
Talofofo	350	445	548	849	95	103	301	27.14%	23.15%	54.93%	2.43%	2.10%	4.48%
Umatac	130	147	188	179	17	41	-9	13.08%	27.89%	-4.79%	1.24%	2.49%	-0.49%
Yona	467	1,026	1,361	1,745	559	335	384	119.70%	32.65%	28.21%	8.19%	2.87%	2.52%

Source: Bureau of the Census, U.S. Department of Commerce

Layout by: OP&E, DPHSS
 Created by: Bureau of Planning
 Modified by: Bureau of Planning

July 2, 2001
 August 9, 2001
 February 18, 2002

* Average annual (geometric) growth rate

APPENDIX A18

**2000 Census of Population and Housing - GUAM
Population Density by Tract**

TRACT	Population	Sq. Miles	Density
9501	2,866	8.43	340
9502	1,612	10.99	147
9503	1,759	14.08	125
9504	9,080	3.41	2,664
9505	6,985	4.81	1,451
9506	8,011	9.39	853
9507	8,615	4.74	1,819
9508	8,296	3.60	2,302
9509	6,338	0.73	8,693
9510	2,599	0.27	9,755
9511	6,293	1.94	3,243
9512	0	1.69	0
9513	15	0.52	29
9514	5,463	4.39	1,246
9515	29	0.87	33
9516	0	2.99	0
9517	2,219	1.10	2,024
9518	19	2.72	7
9519	7,179	3.30	2,174
9520	1,781	0.50	3,582
9521	1,056	0.20	5,369
9522	3,885	0.36	10,895
9523	2,695	0.76	3,557
9524	1,416	0.53	2,681
9525	0	0.27	0
9526	2,044	0.58	3,523
9527	4,965	1.27	3,899
9528	8	0.80	10
9529	4,799	2.54	1,889
9530	2,999	1.07	2,811
9531	5,923	5.67	1,045
9532	2,853	0.85	3,375
9533	3,801	0.99	3,844
9534	1,100	0.90	1,225
9535	208	0.22	965
9536	3,732	0.81	4,580
9537	2,046	4.28	478
9538	44	1.25	35
9539	4,375	14.21	308
9540	2,109	6.00	351
9541	0	6.50	0
9542	4,153	3.76	1,103
9543	1,528	1.07	1,422
9544	138	6.33	22
9545	2,767	4.95	559
9546	580	0.90	642
9547	2,692	0.68	3,944
9548	2,964	5.03	589
9549	0	4.75	0
9550	0	2.11	0
9551	3,215	15.52	207
9552	3,052	18.78	162
9553	2,163	6.31	343
9554	887	6.40	139
9555	0	1.66	0
9556	1,449	0.37	3,955
TOTAL	154,805	209.13	740

APPENDIX A19



GUAM DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS
 CURRENT LABOR FORCE SURVEY

UNEMPLOYMENT SITUATION OF GUAM: 1974 - 2006

YEAR	MONTH	TOTAL CIV NONINST'L POPULATION	TOTAL		CIVILIAN LABOR FORCE		% OF LF UNEMPLOYED	NOT IN LABOR FORCE
			TOTAL	EMPLOYED	UNEMPLOYED	UNEMPLOYED		
2006	Mar	104,830	65,940	61,390	4,550	6.9	38,890	
2005	Dec	104,980	64,130	59,630	4,500	7.0	40,850	
2004	Mar	99,780	61,520	56,810	4,710	7.7	38,260	
2002	Mar	99,500	62,050	54,980	7,070	11.4	37,450	
2001	Mar	104,320	69,560	60,520	9,040	13.0	34,760	
2001	Sept	100,470	64,800	56,040	8,760	13.5	35,670	
2000	Jul	104,480	70,800	59,950	10,850	15.3	33,680	
1999	Mar	105,320	72,460	62,350	10,110	14.0	32,860	
1999	Jun	105,270	72,700	61,640	11,060	15.2	32,570	
1998	Mar	71,930	48,060	44,340	3,720	7.7	23,870	
1997	Mar	71,150	48,190	43,530	4,660	9.7	22,960	
1997	Jun	71,400	49,820	44,830	4,990	10.0	21,580	
1997	Sept	71,420	49,540	44,990	4,550	9.2	21,880	
1996	Mar	71,520	47,330	44,000	3,330	7.0	24,190	
1996	Jun	71,600	49,030	44,870	4,160	8.5	22,570	
1996	Sept	70,770	48,850	44,640	4,210	8.6	21,920	
1996	Dec	71,290	49,180	44,770	4,410	9.0	22,110	
1995	Mar	71,190	48,590	44,530	4,060	8.4	22,600	
1995	Jun	71,380	50,100	44,650	4,450	8.9	21,280	
1995	Sept	71,510	48,120	44,950	3,170	6.6	23,390	
1995	Dec	71,500	47,890	44,150	3,740	7.8	23,610	
1994	Mar	69,880	46,970	43,800	3,170	6.7	22,910	
1994	Jun	70,280	48,700	44,140	4,560	9.4	21,580	
1994	Sept	70,400	47,930	44,690	3,240	6.8	22,470	
1994	Dec	70,630	47,930	44,430	3,500	7.3	22,700	
1993	Mar	69,090	47,350	45,200	2,150	4.5	21,740	
1993	Jun	70,090	48,180	45,760	2,420	5.0	21,900	
1993	Sept	69,970	47,770	44,640	3,130	6.6	22,200	
1993	Dec	69,810	47,030	44,210	2,820	6.0	22,780	
1992	Mar	68,830	47,500	46,140	1,360	2.9	21,330	
1992	Jun	68,800	48,540	46,720	1,820	3.7	20,260	
1992	Sept	70,070	47,020	44,870	2,150	4.6	23,050	
1992	Dec	70,470	47,500	46,710	2,030	4.2	21,730	
1991	Mar	67,300	46,680	45,230	1,450	3.1	20,620	
1991	Jun	67,390	48,030	46,070	1,960	4.1	19,360	
1991	Sept	67,670	46,970	45,260	1,710	3.6	20,700	
1991	Dec	67,680	46,960	45,460	1,500	3.2	20,710	
1990	Mar	61,490	40,560	39,800	760	1.9	20,930	
1990	Jun	68,090	46,750	44,940	1,810	3.9	21,340	
1990	Sept	67,590	45,540	44,240	1,300	2.9	22,050	
1990	Dec	67,980	46,930	45,710	1,220	2.6	21,050	
1989	Mar	61,240	38,410	37,400	1,010	2.6	22,830	
1989	Jun	61,280	39,940	38,260	1,680	4.2	21,340	
1989	Sept	61,230	39,340	38,420	920	2.3	21,890	
1989	Dec	61,370	40,050	39,230	820	2.1	21,320	
1988	Mar	60,120	37,440	35,740	1,700	4.5	22,680	
1988	Jun	59,970	38,280	36,240	2,040	5.3	21,690	
1988	Sept	60,530	37,960	36,520	1,440	3.8	20,570	
1988	Dec	61,010	38,240	37,060	1,770	3.1	22,770	
1987	Mar	59,660	36,250	34,270	1,970	5.4	23,420	
1987	Jun	59,650	36,320	34,300	2,020	5.6	23,320	
1987	Sept	59,690	36,230	34,140	1,090	3.0	23,460	
1987	Dec	59,920	36,540	35,190	1,350	3.7	23,380	
1986	Mar	58,930	35,590	33,460	2,130	6.0	23,340	
1986	Jun	59,020	36,880	33,870	3,010	8.2	22,140	
1986	Sept	59,640	35,830	33,930	1,900	5.3	23,800	
1986	Dec	59,710	35,990	34,230	1,760	4.9	23,720	
1985	Mar	56,660	33,440	31,270	2,170	6.5	23,220	
1985	Jun	56,840	36,280	32,260	4,020	11.1	20,560	
1985	Oct	57,340	34,260	31,900	2,360	6.9	23,080	
1985	Dec	58,320	34,400	32,190	2,210	6.4	23,920	



GUAM DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS
 CURRENT LABOR FORCE SURVEY

UNEMPLOYMENT SITUATION OF GUAM: 1974 - 2006

YEAR	MONTH	TOTAL CIV NONINST'L POPULATION	TOTAL CIVILIAN LABOR FORCE		% OF LF UNEMPLOYED	NOT IN LABOR FORCE	
			TOTAL	UNEMPLOYED			
			EMPLOYED NUMBER	NUMBER			
1984	Mar	56,360	33,490	30,670	2,820	8.4	22,870
1984	Jul	56,280	34,960	31,740	3,220	9.2	21,320
1984	Oct	56,390	33,640	30,740	2,900	8.6	22,750
1984	Dec	56,660	33,880	31,200	2,680	7.9	22,780
1983	Mar	56,320	33,860	30,830	3,040	9.0	22,460
1983	Jul	56,330	36,380	32,700	3,680	10.1	19,950
1983	Nov	56,410	34,310	31,020	3,290	9.6	22,100
1982	Mar	56,210	33,000	30,120	2,880	8.7	23,210
1982	Jul	56,040	36,080	31,700	4,380	12.2	19,960
1982	Nov	56,150	34,850	31,720	3,130	9.0	21,290
1981	Mar	56,030	34,470	32,230	2,240	6.5	21,560
1981	Jul	56,060	36,480	32,700	3,770	10.4	19,570
1981	Nov	56,200	34,980	31,800	3,180	9.1	21,220
1980	Mar	55,080	33,800	30,890	2,910	8.6	21,280
1980	Jun	55,290	36,690	31,980	4,710	12.8	18,600
1980	Sept	55,280	35,050	31,600	3,450	9.8	20,770
1980	Dec	56,010	35,010	32,060	2,950	8.4	21,000
1979	Mar	54,020	33,840	31,470	2,380	7.0	20,180
1979	Jun	54,260	36,500	32,370	4,130	11.3	17,760
1979	Sept	54,970	34,870	32,430	2,440	7.0	19,100
1979	Dec	54,830	34,960	32,700	2,260	6.5	19,870
1978	Mar	49,830	30,020	27,990	2,030	6.8	19,810
1978	Jun	50,110	33,450	29,380	4,070	12.2	16,660
1978	Sept	50,300	32,000	29,560	2,440	7.6	18,300
1978	Dec	50,570	31,420	29,490	1,930	6.1	19,150
1977	Mar	44,430	26,760	24,850	1,910	7.2	17,660
1977	Sept	47,370	29,090	26,840	2,260	7.8	18,280
1977	Dec	46,820	28,420	26,460	1,960	6.9	18,400
1976	May	46,140	27,270	23,640	3,630	13.3	18,870
1976	Sept	43,680	26,910	24,600	2,320	8.6	16,770
1976	Dec	43,830	27,080	25,100	1,980	7.3	16,750
1975	May	44,800	28,570	26,210	2,360	8.3	16,230
1975	Sept	45,130	28,090	25,390	2,700	9.6	17,040
1974	Sept		29,960	27,090	2,860	9.6	

APPENDIX A20

HH-4. Households by Size: 1960 to Present
(Numbers in thousands)

Year	All households	One person	Two persons	Three persons	Four persons	Five persons	Six persons	Seven or more persons	Persons per household
2006	114,384	30,453	37,775	18,924	15,998	7,306	2,562	1,366	2.57
2005	113,343	30,137	37,446	18,285	16,382	7,166	2,497	1,430	2.57
2004	112,000	29,586	37,366	17,968	16,066	7,150	2,476	1,388	2.57
2003	111,278	29,431	37,078	17,889	15,967	7,029	2,521	1,364	2.57
2002	109,297	28,775	36,240	17,742	15,794	6,948	2,438	1,360	2.58
2001	108,209	28,207	35,917	17,444	15,692	6,978	2,555	1,415	2.58
2000	104,705	26,724	34,666	17,172	15,309	6,981	2,445	1,428	2.62
1999	103,874	26,606	34,262	17,386	15,030	6,962	2,367	1,261	2.61
1998	102,528	26,327	32,965	17,331	15,358	7,048	2,232	1,267	2.62
1997	101,018	25,402	32,736	17,065	15,396	6,774	2,311	1,334	2.64
1996	99,627	24,900	32,526	16,724	15,118	6,631	2,357	1,372	2.65
1995	98,990	24,732	31,834	16,827	15,321	6,616	2,279	1,382	2.65
1994	97,107	23,611	31,211	16,898	15,073	6,749	2,186	1,379	2.67
1993r	96,426	23,558	31,041	16,964	14,997	6,404	2,217	1,244	2.66
1993	96,391	23,642	31,175	16,895	14,926	6,357	2,180	1,215	2.63
1992	95,669	23,974	30,734	16,398	14,710	6,389	2,126	1,338	2.62
1991	94,312	23,590	30,181	16,082	14,556	6,206	2,237	1,459	2.63
1990	93,347	22,999	30,114	16,128	14,456	6,213	2,143	1,295	2.63
1989	92,830	22,708	29,976	16,276	14,550	6,232	2,003	1,084	2.62
1988	91,066	21,889	29,295	16,163	14,143	6,081	2,176	1,320	2.64
1987	89,479	21,128	28,602	16,159	13,984	6,162	2,176	1,268	2.66
1986	88,458	21,178	27,732	16,088	13,774	6,276	2,138	1,272	2.67
1985	86,789	20,602	27,389	15,465	13,631	6,108	2,299	1,296	2.69
1984	85,407	19,954	26,890	15,134	13,593	6,070	2,372	1,394	2.71
1983	83,918	19,250	26,439	14,793	13,303	6,105	2,460	1,568	2.73
1982	83,527	19,354	26,486	14,617	12,868	6,103	2,480	1,619	2.72
1981	82,368	18,936	25,787	14,569	12,768	6,117	2,549	1,643	2.73
1980	80,776	18,296	25,327	14,130	12,666	6,059	2,519	1,778	2.76
1979	77,330	17,201	23,928	13,392	12,274	6,187	2,573	1,774	2.78
1978	76,030	16,715	23,334	13,040	11,955	6,356	2,723	1,906	2.81
1977	74,142	15,532	22,775	12,794	11,630	6,285	2,864	2,263	2.86
1976	72,867	14,983	22,321	12,520	11,407	6,268	3,001	2,367	2.89
1975	71,120	13,939	21,753	12,384	11,103	6,399	3,059	2,484	2.94
1974	69,859	13,368	21,495	11,913	10,900	6,469	3,063	2,651	2.97
1973	68,251	12,635	20,632	11,804	10,739	6,426	3,245	2,769	3.01
1972	66,676	12,189	19,482	11,542	10,679	6,431	3,374	2,979	3.06
1971	64,778	11,446	18,892	11,071	10,059	6,640	3,435	3,234	3.11
1970	63,401	10,851	18,333	10,949	9,991	6,548	3,534	3,195	3.14
1969	62,214	10,401	18,034	10,769	9,778	6,387	3,557	3,288	3.19
1968	60,813	9,802	17,377	10,577	9,623	6,319	3,627	3,488	3.23
1967	59,236	9,200	16,770	10,403	9,559	6,276	3,491	3,550	3.28
1966	58,406	9,093	16,679	9,993	9,465	6,257	3,465	3,465	3.30
1965	57,436	8,631	16,119	10,263	9,269	6,313	3,327	3,514	3.31
1964	56,149	7,821	15,622	10,034	9,565	6,328	3,373	3,405	3.33
1963	55,270	7,501	15,279	9,989	9,445	6,240	3,473	3,342	3.33
1962	54,764	7,473	15,461	10,077	9,347	6,016	3,368	3,022	3.31
1961	53,557	7,112	15,185	9,780	9,390	6,052	3,085	2,953	3.36
1960	52,799	6,917	14,678	9,979	9,293	6,072	3,010	2,851	3.33

r Revised based on population from the decennial census for that year

Source: U.S. Census Bureau, Current Population Survey, March and Annual Social and Economic Supplements, 2006 and earlier.

FOR FURTHER INFORMATION contact:
Fertility and Family Statistics Branch
301-763-2416

APPENDIX A21

Demographic Indicators

(Figures refer to calendar years.)

Indicators	2007	1995	2005	2015	2025
Population					
Midyear population	173,456	144,190	168,564	192,302	213,329
Growth rate (percent)	1.4	1.5	1.5	1.2	0.9
Fertility					
Total fertility rate (births per woman)	2.6	3.8	2.6	2.3	2.1
Crude birth rate (per 1,000 population)	19	29	19	17	15
Births	3,219	4,200	3,208	3,248	3,221
Mortality					
Life expectancy at birth (years)	79	76	78	80	81
Infant mortality rate (per 1,000 births)	7	9	7	6	5
Under 5 mortality rate (per 1,000 births)	8	10	8	7	6
Crude death rate (per 1,000 population)	5	4	4	5	6
Deaths	791	627	743	1,002	1,312
Migration					
Net migration rate (per 1,000 population)	-	-10	-	-	-
Net number of migrants	-	-1,391	-	-	-
- Represents or rounds to zero.					
Source: U.S. Census Bureau, International Data Base.					

APPENDIX A22

**3.19 Department of the Interior
US Geological Survey
Guam Quad Maps
(2000)**



Source: Mapquest

Apra Harbor



U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

U.S. DEPARTMENT OF DEFENSE
NATIONAL IMAGERY AND MAPPING AGENCY

APRA HARBOR QUADRANGLE
MARIANA ISLANDS-ISLAND OF GUAM
7.5-MINUTE SERIES (TOPOGRAPHIC)



THE MAP COLLECTION
THE QUALITY OF THE DATA
THE QUALITY OF THE DATA
PROPERTY OF U.S. GOVERNMENT
AID 0-2-833

Produced by the United States Geological Survey
in cooperation with National Imagery and Mapping Agency
Topography compiled 1966. Photography derived from aerial
photographs and other sources. Survey control carried on 1976
triangulation control as of 2000.
Subsided hydrographic data compiled from NOS/NOAA charts 8136
1961 and 4171 (1962) and bathymetric survey 11945.
This information is not intended for navigational purposes.
North American Datum of 1983 (NAD 83). World Geodetic System of 1984
Projection and 1 000 000 datum. Universal Transverse
Mercator and UTM Zone 58N Coordinate System as of 1983.
There may be private buildings within the boundaries of
the National Air State reservation shown on this map.
Names of worship, schools, and other labeled buildings verified 1968.



SCALE 1:24 000

CONTOUR INTERVAL 30 FEET
SUPPLEMENTARY CONTOUR INTERVAL 10 FEET
DONTON IS MEAN SEA LEVEL
DEPTH CURVES AND SOUNDINGS IN FEET DATUM IS MEAN LOWER LOW WATER
ON HIGH WINDS OF THIS IS APPROXIMATELY 1 FEET
50 CORRECT FROM FEET TO METERS, MULTIPLY BY 0.3048

ROAD CLASSIFICATION

Primary highway
Secondary highway
Tertiary highway
Unimproved road

Highway road, hard or
improved surface
Unimproved road

Symbol Name

G
9415
S24
US
APRA
HARBOR
2000
PCL MAP

THIS MAP COMPIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, P.O. BOX 246, DENVER, COLORADO 80225
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

APRA HARBOR, GU
2000
NADA 508 IN 7E SERIES 5084



Dededo



USGS U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

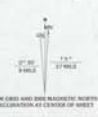
U.S. DEPARTMENT OF DEFENSE
NATIONAL IMAGERY AND MAPPING AGENCY

DEDEDO QUADRANGLE
MARIANA ISLANDS-ISLAND OF GUAM
7.5-MINUTE SERIES (TOPOGRAPHIC)



G 9415
S24
US
DEDEDO
2000
PCL MAP

Produced by the United States Geological Survey
in cooperation with National Imagery and Mapping Agency
Topographic compilation 1966. Planimetry derived from imagery
taken 2000 and other sources. Survey control corners as of 1968.
Boundaries correct as of 2000.
Selected hydrographic data compiled from NOS/NOAA chart 4194 (1967).
This information is not intended for navigational purposes.
North American Datum of 1983 (NAD 83)/World Geodetic System of 1984.
Elevations of 1000 meters and above are based on the datum of 1929.
Elevations of 1000 meters and below are based on the datum of 1929.
Elevations of 1000 meters and below are based on the datum of 1929.
There may be private buildings within the boundaries of the
National or State reservations shown on this map.



CONTOUR INTERVAL 20 FEET
SUPPLEMENTARY CONTOUR INTERVAL 10 FEET
BASED ON MEAN SEA LEVEL
DEPTH CURVES AND SOUNDINGS IN FEET DATUM IS MEAN LOWER LOW WATER
THE HIGHER RANGE OF FEET IS APPROXIMATELY 1 FEET
TO CONVERT FEET TO METERS, MULTIPLY BY 0.3048

ROAD CLASSIFICATION

Primary highway
Secondary highway
Light-duty road, based on
improved surface
Unimproved road
Dashed Route

DEDEDO, GU
2000
NIMA 5011 NE-DEDEDO 5000

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Inarajan



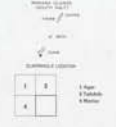
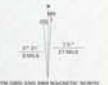
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

INARAJAN QUADRANGLE
MARIANA ISLANDS-ISLAND OF GUAM
7.5-MINUTE SERIES (TOPOGRAPHIC)



MAP COLLECTION
THE NATIONAL LIBRARY OF GEOGRAPHY
JUL 0 2 2007
PROPERTY OF NATIONAL LIBRARY OF GEOGRAPHY

Produced by the United States Geological Survey
Topography compiled 1967. Planimetry derived from imagery
2000 and other sources. Survey control corners as of 1968.
Soundings current as of 2000.
Natural hydrographic data compiled from NOAA/NEAAS chart 4176 (1967)
and hydrographic surveys 11 945, 1950.
This information is not intended for navigational purposes.
North American Datum of 1983 (NAD 83)-World Geodetic System of 1984
(WGS 84) and 1:50,000 scale and Localized Topographic Map, area 55
1:750,000 scale. Coast Contourline System of 1983.
Names of woods, schools, and other labeled buildings verified 1968.



CONTOUR INTERVAL BY FEET
SUPPLEMENTARY CONTOUR INTERVAL BY FEET
DEPTH CONTOUR AND SOUNDING INTERVALS IN METERS AT MEAN LOW WATER
THE MEAN RANGE OF TIDE IS APPROXIMATELY 1.5 METERS
EQUivalent TO 5 FEET TO METERS, RESPECTIVELY

THIS MAP CONFORMS WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, P.O. BOX 2588, DENVER, COLORADO 80216
A FOLDER ENCOMPASSING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

MAPSHEET 17 QUADRANGLE

INARAJAN, GU
2000
NSA 524 9 IN 2 SERIES 9344



Piti Point



APPENDIX A23

**Guam Police Department
Summary of Crash Statistics (2001 - 2007)**

	2001	2002	2003	2004	2005	2006	2007
Total Number of Traffic Crashes	6729	6615	6760	6561	6587	6250	
Total Number of DUI Crashes	203	163	139	61	103	233	
Total Number of Fatalities	19	10	25	15	24	13	16
Total Number of DUI Related Fatalities	11	6	7	6	11	5	7
Total Number of DUI Arrests	900	972	743	538	817	836	
Total Number of Crashes w/Injuries					908*	913*	
Total Number of Speed/Imprudent Driving Related Crashes							
Total Number youth arrested for DUI							
Total Number of Auto-Ped Crashes					47		
Total Number of DUI Auto-Ped Fatalities					7	2	2
Total Number of Auto-Ped Fatalities					11	4	6**
Number of Victims (Violators)			10	5	5		
Number of Victims (Not Violators)			6	5	6		
Number of Violators (Not Victim)			8	4	7		

Crash Type (Fatalities)	2001	2002	2003	2004	2005	2006	2007
Auto-Auto	5	1	8	3	4	2	2
Auto Ran Off Roadway	7	4	5	3	6	3	6
Auto-Pedestrian	2	4	3	5	10	2	6
Motorcycle Crash	1	0	3	3	0	0	2
Auto Object	1	0	1	1	1	1	0
Auto-Bicycle	0	0	1	0	0	1	0
Other	3	1	4	0	3	4	0
TOTAL:	19	10	25	15	24	13	16

* Does not include Fatalities

** As of Sept. 5, 2007

Note: Request from OHS Refer to PDF file.

APPENDIX A24

Guam Visitors Arrivals 2002-2006

	FY2002	FY2003	FY2004	FY2005	FY 2006
OCTOBER	47,213	88,712	83,254	86,057	93,680
NOVEMBER	56,659	95,441	97,489	91,155	99,441
DECEMBER	73,563	37,949	93,934	101,147	102,678
JANUARY	84,361	57,826	101,809	114,446	119,562
FEBRUARY	91,749	84,739	112,053	109,628	106,924
MARCH	100,077	68,269	97,433	103,785	114,075
APRIL	75,597	57,325	79,556	88,602	87,016
MAY	94,004	61,175	86,704	92,472	92,459
JUNE	88,233	50,872	87,298	97,951	88,919
JULY	88,188	73,150	102,463	115,136	109,723
AUGUST	111,182	86,577	113,611	09,465	114,982
SEPTEMBER	103,211	94,896	100,595	100,303	87,652
TOTAL	1,014,037	856,931	1,156,199	1,210,147	1,217,111

Country of Origin	FY2002	FY2003	FY2004	FY2005	FY 2006
Japan	751,506	606,100	897,046	938,731	962,007
Korea	121,185	94,429	92,559	104,844	114,471
Taiwan, R.O.C.	21,317	17,576	24,471	23,048	17,018
US Mainland	31,669	33,870	35,885	38,035	34,651
Hawaii	8,423	8,008	8,907	9,115	8,850
CNMI	20,280	17,817	18,978	18,622	18,070
Palau	3,334	3,109	3,353	3,530	3,121
FSM	7,802	9,500	8,715	8,334	8,173
RMI	752	681	818	912	997
Philippines	6,427	6,381	7,135	6,598	7,980
Australia	1,703	1,900	2,663	2,741	2,380
Canada	1,424	547	582	514	579
Europe	1,361	1,361	1,432	1,737	1,421
Hong Kong	8,893	5,054	5,150	4,293	5,455
Nauru	14	6	14	5	10
Thailand	242	219	272	161	217
China, PRC	1,284	733	827	867	1,068
Vietnam	53	27	38	31	24
Other	2,941	2,832	3,386	3,031	3,399
Total Air	990,610	810,150	1,112,231	1,165,149	1,189,891
Total Sea	23,427	46,781	43,968	44,998	27,220
Total Air & Sea	1,014,037	856,931	1,156,199	1,210,147	1,217,111

Source: Customs Declaration Forms, Customs & Quarantine Agency Compiled by the GVB Research Department

APPENDIX A25

Department of Public Works
Project Listing

Notes	Active	Phase	Consultant OR In-house OR ACOE	PROJ NO		DESCRIPTION	PE_DT	CONST_DT	PGM_CD	Funding Type	OBLIGATED TOTAL COST	EXPEND AMT	UNEXPEND BAL
JC Tenorio - Ponding Basin Design	Active	PE	Consultant	0001113-00	GU-NH-0001(113)	MARINE DR: AIRPORT RD TO Y-SENGSONG RD, CON FOR RECON & WIDEN 6-LN DIV HWY		9/1/1999	QT10	NHS-Territories-TEA21	14,103,366.00	13,688,143.46	415,222.54
Winzler Kelly - decide scope	Active	PE	Consultant	0002101-00	GU-NH-0002(101)	ROUTE 2, NAMO RIVER BRIDGE TO SANTA ANA CHAPEL, PE FOR RECONSTRUCTION AND WIDENING.	6/27/2002		QT10	NHS-Territories-TEA21	350,000.00	6,000.00	344,000.00
DPW negotiating settlement with Contractor	Active	D/B cancel after PE		0003104-00	GU-NH-0003(104)	ROUTE 3 RECONSTRUCTION AND WIDENING, DESIGN/BUILD		10/21/2005	QT10	NHS-Territories-TEA21	6,120,000.00	218,898.90	5,901,101.10
In final design phase	Active	D/B		0004108-00	GU-NH-0004(108)	ROUTE 4, REHABILITATION AND WIDENING (ROUTE 1 TO ROUTE 10)		8/30/2005	QT10	NHS-Territories-TEA21	10,251,823.00	0.00	10,251,823.00
NC. Macario - wetland issue	Active	PE	Consultant	0004110-00	GQ-ER-0004(110)	ROUTE 4 AS-MISA BRIDGE (INARAJAN NORTH LEG), WINGFALL, ABUTMENT AND APPROACH RESTORATION. TYPHOON PONGSONA (DEC. 8, 2002)	9/9/2003	9/9/2003	09V0	ER	200,000.00	0.00	200,000.00
Winzler Kelly - 60% design	Active	PE	Consultant	0004113-00	GQ-ER-0004(113)	ROUTE 4, AGFAYAN BRIDGE (PERMANENT REPAIR), TYPHOON CHATA'AN (JULY 5, 2002); PE	8/28/2003		09V0	ER	540,000.00	173,115.50	366,884.50
E&A Engineers	Active	PE	Consultant	0005003-00	GU-NH-0005(003)	ROUTE 5 AND PORTION OF ROUTE 12, RECONSTRUCTION AND WIDENING (DESIGN); PRELIMINARY ENGINEERING	8/5/2004		HT10	NHS Territories STEA3	300,000.00	160,219.02	139,780.98
selection cancelled violation of procurement law	Active	PE	Consultant	0005101-00	GU-NH-0005(101)	ROUTE 5, ROUTE 2A TO ROUTE 17; PE FOR RECONSTRUCTION AND WIDENING.	6/27/2002		QT10	NHS-Territories-TEA21	120,000.00	0.00	120,000.00
Winzler Kelly	Active	PE	Consultant	0008003-00	GU-NH-0008(003)	ROUTE 8/ROUTE 10 (RADIO BARRIGADA ROAD) TRAFFIC SIGNAL INSTALLATION	7/13/2005		HT10	NHS Territories STEA3	120,000.00	0.00	120,000.00
EMPSCO on-hold for Tiyan	Active	PE	Consultant	0010001-00	GU-NH-0010(001)	ROUTE 10/SABANA MAGAS ROAD AND ROUTE 8/NORTH BIANG STREETS INTERSECTIONS	7/13/2005		HT10	NHS Territories STEA3	110,000.00	0.00	110,000.00
T.G. Engineers Only ROW maps generated. PE cancelled for D/B	Active	PE (ROW only)		0015102-00	GU-NH-0015(102)	ROUTE 15, ROUTE 26 TO ROUTE 29; PE FOR RECONSTRUCTION AND WIDENING.	6/27/2002		QT10	NHS-Territories-TEA21	500,000.00	87,677.00	412,323.00
Cancelled; potholes fixed SOW determine after military build-up	Active	D/B on-hold		0015103-00	GU-NH-0015(103)	ROUTE 15, RECONSTRUCTION, PHASE I (ROUTE 26 TO ROUTE 29), DESIGN/BUILD		8/30/2005	HT10	NHS Territories STEA3	2,900,000.00	0.00	2,900,000.00
DBA	Active	PE	Consultant	0017102-00	GU-NH-0017(102)	ROUTE 17, ROUTE 5 TO ROUTE 4; PE FOR RECONSTRUCTION AND WIDENING.	6/27/2002		QT10	NHS-Territories-TEA21	430,652.00	231,259.00	199,393.00
TG Engineers	Active	PE	Consultant	0025101-00	GU-NH-0025(101)	ROUTE 25; ALAGETA ROAD (ROUTE 26 TO BELLO ROAD); PE FOR RECONSTRUCTION & WIDENING.	6/27/2002		QT10	NHS-Territories-TEA21	254,273.00	114,474.50	139,798.50
Serisola & Associates	Active	PE	Consultant	0026004-00	GU-NH-0026(004)	ROUTE 26 (MACHETE ROAD) RECONSTRUCTION AND WIDENING (ROUTE 1 TO ROUTE 15)	8/22/2005		HT10	NHS Territories STEA3	192,839.00	51,390.90	141,448.10
Not sure	Active	PE	Consultant	0026102-00	GU-NH-0026(102)	ROUTE 26, INTERSECTION OF ROUTE 26 AND ROUTE 25; PE FOR PHASE I, TRAFFIC SIGNAL INSTALLATION AT THE INTERSECTION.	6/27/2002		QT10	NHS-Territories-TEA21	35,000.00	31,657.50	3,342.50
Not sure	Active	CON?		0026103-00	GU-NH-0026(103)	ROUTE 26, INTERSECTION OF ROUTE 26 AND ROUTE 25; CON FOR PHASE I, TRAFFIC SIGNAL INSTALLATION AT THE INTERSECTION.		9/10/2002	QT10	NHS-Territories-TEA21	1,007,000.00	0.00	1,007,000.00
No consultant selected	Active	PE		0027004-00	GU-NH-0027(004)	ROUTE 27 (FINEGAYAN ROAD) RECONSTRUCTION (ROUTE 1 TO ROUTE 16)	7/13/2005		HT10	NHS Territories STEA3	230,000.00	0.00	230,000.00

Department of Public Works
Project Listing

Notes	Active	Phase	Consultant OR In-house OR ACOE	PROJ NO		DESCRIPTION	PE_DT	CONST_DT	PGM_CD	Funding Type	OBLIGATED TOTAL COST	EXPEND AMT	UNEXPEND BAL
TG Engineers	Active	PE	Consultant	0029001-00	GU-NH-0029(001)	ROUTE 29 RECONSTRUCTION AND WIDENING (ROUTE 1 TO ROUTE 15)	7/13/2005		HT10	NHS Territories STEA3	249,000.00	0.00	249,000.00
DBA 90% design	Active	PE	Consultant	002A001-00	GU-NH-002A(001)	ROUTE 2A, TEMPORARY RESTORATION OF GUATALI BRIDGE AND EMBANKMENT	6/8/2007		QT10	NHS- Territories- TEA21	20,000.00	0.00	20,000.00
Geo 100% design	Active	PE	Consultant	006A102-00	GQ-ER-006A(102)	ROUTE 6A, MURRAY ROAD SCOUR TEMPORARY TRAFFIC CONTROL; PERMANENT RESTORATION, TYPHOON PONGSONA		8/18/2003	09V0	ER	285,820.00	9,788.00	276,032.00
J.C. Tenorio selected no SOW waiting for Conceptual Design	Active	PE	Consultant	00TP001-00		TIYAN PARKWAY, DESIGN	9/15/2006		LT10	NHS- Territories (FY06+)	300,000.00	0.00	300,000.00
DBA fee negotiated	Active	PE	Consultant	010A001-00	GU-NH-010A(001)	ROUTE 10A (AIRPORT ROAD) PORTION REHABILITATION (DESIGN); PRELIMINARY ENGINEERING	8/5/2004		HT10	NHS Territories STEA3	300,000.00	0.00	300,000.00
EM Chen ROW needed	Active	PE	Consultant	014B001-00	GU-NH-014B(001)	ROUTE 14B (IPAO ROAD) RECONSTRUCTION AND WIDENING (DESIGN); PRELIMINARY ENGINEERING	8/5/2004		HT10	NHS Territories STEA3	300,000.00	100,231.20	199,768.80
	Active	CON	ACOE	0981015-00	GQ-ER-098-1(015)	RT 1 MARINE DR, ADELUP SHORE PROTECTION; PE AND CON FOR SHORELINE REVETMENT AND ROADWAY SHOULDR IMPROVEMENTS	4/1/2001		0980	ER	150,000.00	150,000.00	0.00
	Active	CON	ACOE	0981016-00	GQ-ER-098-1(016)	RT 4 TALOFOFO SHORE PROTECTION FROM SOUTH, PE/CON FOR SHORELINE REVETMENT/RDWY	4/1/2001	4/1/2001	09V0	ER	312,167.00	312,167.20	-0.20
	Active	CON	ACOE	0981016-00	GQ-ER-098-1(016)	RT 4 TALOFOFO SHORE PROTECTION FROM SOUTH, PE/CON FOR SHORELINE REVETMENT/RDWY	4/1/2001	4/1/2001	0980	ER	446,162.00	446,161.88	0.12
	Active	CON	ACOE	0981016-00	GQ-ER-098-1(016)	RT 4 TALOFOFO SHORE PROTECTION FROM SOUTH, PE/CON FOR SHORELINE REVETMENT/RDWY	4/1/2001	4/1/2001	09Q0	ER	2,268,672.00	2,268,670.92	1.08
	Active	PE	ACOE	0981017-00	GQ-ER-098-1(017)	RT 11 COMMERCIAL PORT RD, PITI POWER PLANT, CON FOR SHORELINE REVETMENT AND SHOULDER IMPROVEMENTS		4/1/2001	09Q0	ER	1,743,917.00	1,743,916.64	0.36
	Active	PE	ACOE	0981018-00	GQ-ER-098-1(018)	RT 11 COMMERCIAL PORT RD, CABRAS ISLAND SECTI, CON FOR SHORELINE REVETMENT/RDWY SH	10/29/2007		09V0	ER	549,000.00	0.00	549,000.00
	Active	PE	ACOE	0981018-00	GQ-ER-098-1(018)	RT 11 COMMERCIAL PORT RD, CABRAS ISLAND SECTI, CON FOR SHORELINE REVETMENT/RDWY SH	10/29/2007		09Q0	ER	0.00	0.00	0.00
	Active	CON	ACOE	0981020-00	GQ-ER-098-1(020)	ROUTE 4, INARAJAN BAY; PE FOR SHORELINE REVETMENT AND ROADWAY SHOULDER IMPROVEMENTS (850 L.F.)	9/4/2002		0980	ER	1,520,000.00	1,520,000.00	0.00
	Active	CON	ACOE	0981020-00	GQ-ER-098-1(020)	ROUTE 4, INARAJAN BAY; PE FOR SHORELINE REVETMENT AND ROADWAY SHOULDER IMPROVEMENTS (850 L.F.)	9/4/2002		09Q0	ER	286,000.00	286,000.00	0.00
0% design	Active	PE	In-house	0ADA001-00	GU-NH-OADA(001)	ADA COMPLIANCE PROJECT, ROUTE 1 (ROUTE 30 TO ROUTE 16)		8/29/2005	HT10	NHS Territories STEA3	400,000.00	0.00	400,000.00
0% design	Active	PE	In-house	0ADA002-00	GU-NH-OADA(002)	ADA COMPLIANCE PROJECT, ROUTE 30, ROUTE 30A AND ROUTE 16 (ROUTE 1 TO ROUTE 10A)	8/29/2005		HT10	NHS Territories STEA3	146,000.00	0.00	146,000.00
DBA	Active	PE	Consultant	0PES001-00	GU-NH-OPES(001)	PROFESSIONAL ENGINEERING SERVICES			LT10	NHS- Territories (FY06+)	49,000.00	0.00	49,000.00
Fibert component under PBI	Active	PE/CON	In-house	1000002-00	GU-NH-1000(002)	GUAM TERR FA SYS, CON TMC CTR & TRAFFIC CONTROL SYS; EMERGENCY/PERMANENT REPAIRS TO TRAFFIC SYS DAMAGED BY SUPER TYPHOON PONGSONA		9/1/1996	QT10	NHS- Territories- TEA21	6,868,214.00	6,599,998.03	268,215.97
Fibert component under PBI	Active	PE/CON	In-house	1000002-00	GU-NH-1000(002)	GUAM TERR FA SYS, CON TMC CTR & TRAFFIC CONTROL SYS; EMERGENCY/PERMANENT REPAIRS TO TRAFFIC SYS DAMAGED BY SUPER TYPHOON PONGSONA		9/1/1996	09V0	ER	994,000.00	929,968.81	64,031.19
Fibert component under PBI	Active	PE/CON	In-house	1000002-00	GU-NH-1000(002)	GUAM TERR FA SYS, CON TMC CTR & TRAFFIC CONTROL SYS; EMERGENCY/PERMANENT REPAIRS TO TRAFFIC SYS DAMAGED BY SUPER TYPHOON PONGSONA		9/1/1996	31E0	NHS Allocation to Territories	3,500,000.00	3,362,208.32	137,791.68

Department of Public Works
Project Listing

Notes	Active	Phase	Consultant OR In-house OR ACOE	PROJ NO	DESCRIPTION	PE_DT	CONST_DT	PGM_CD	Funding Type	OBLIGATED TOTAL COST	EXPEND AMT	UNEXPEND BAL
No action	Active	ROW	In-house	1000008-00	GU-NH-1000(008)			QT10	NHS- Territories- TEA21	60,000.00	0.00	60,000.00
No action	Active	PE		1000013-00	GU-NH-1000(013)	8/5/2004		HT10	NHS Territories STEAS3	100,000.00	0.00	100,000.00
No action	Active	PE	In-house	1000014-00	GU-NH-1000(014)		9/8/2004	HT10	NHS Territories STEAS3	54,768.00	0.00	54,768.00
No action	Active	PE	In-house	1000014-00	GU-NH-1000(014)		9/8/2004	QT10	NHS- Territories- TEA21	245,232.00	0.00	245,232.00
	Active	CON Advertised		1000015-00	GU-NH-1000(015)			HT10	NHS Territories STEAS3	300,000.00	103,305.48	196,694.52
	Active	CON Advertised		1000016-00	GU-NH-1000(016)		8/29/2005	HT10	NHS Territories STEAS3	764,400.00	558,531.00	205,869.00
	Active	CON Advertised		1000017-00	GU-NH-1000(017)		9/7/2004	QT10	NHS- Territories- TEA21	120,691.00	80,132.29	40,558.71
	Active	CON Advertised		1000017-00	GU-NH-1000(017)		9/7/2004	HT10	NHS Territories STEAS3	242,772.00	242,771.66	0.34
EMCE Consulting Engineers	Active	PE	Consultant	1000018-00	GU-NH-1000(018)	7/13/2005		HT10	NHS Territories STEAS3	360,000.00	0.00	360,000.00
DBA - 60% design	Active	PE	Consultant	ER22016-00	GQ-ER22(016)	7/24/2002		09V0	ER	522,000.00	209,162.00	312,838.00
DBA - 60% design	Active	PE	Consultant	ER22016-00	GQ-ER22(016)	7/24/2002		QT10	NHS- Territories- TEA21	522,000.00	0.00	522,000.00
Winzler Kelly - 60% design	Active	PE	Consultant	ER22017-00	GQ-ER22(017)	7/24/2002		09V0	ER	180,000.00	73,458.87	106,541.13
Winzler Kelly - 60% design	Active	PE	Consultant	ER22017-00	GQ-ER22(017)	7/24/2002		QT10	NHS- Territories- TEA21	0.00	0.00	0.00
	Active	CON Advertised		ER22018-00	GQ-ER22(018)	7/24/2002	9/17/2006	09J0	ER	220,000.00	0.00	220,000.00
	Active	CON Advertised		ER22018-00	GQ-ER22(018)	7/24/2002	9/17/2006	09V0	ER	55,000.00	49,800.00	5,200.00
	Active	CON Advertised		ER22018-00	GQ-ER22(018)	7/24/2002	9/17/2006	QT10	NHS- Territories- TEA21	0.00	0.00	0.00
	Active	CON Advertised		ER22020-00	GQ-ER22(020)	7/24/2002	9/17/2006	09J0	ER	165,000.00	0.00	165,000.00
	Active	CON Advertised		ER22020-00	GQ-ER22(020)	7/24/2002	9/17/2006	09V0	ER	24,500.00	24,500.00	0.00
	Active	CON Advertised		ER22020-00	GQ-ER22(020)	7/24/2002	9/17/2006	QT10	NHS- Territories- TEA21	0.00	0.00	0.00
DBA - 60% design	Active	PE	Consultant	GQ02001-00	GU-ER-GQ-2(001)	6/27/2002		09V0	ER	60,734.00	0.00	60,734.00

Department of Public Works
Project Listing

Notes	Active	Phase	Consultant OR In-house OR ACOE	PROJ NO		DESCRIPTION	PE_DT	CONST_DT	PGM_CD	Funding Type	OBLIGATED TOTAL COST	EXPEND AMT	UNEXPEND BAL
Jess T. Lizama & Associates	Active	PE	Consultant	HE66003-00	GU-NH-HE66(003)	HIGHWAY HAZARD ELIMINATION PROJECT: ROUTE 1 (DEAD MAN'S CURVE) & ROUTE 4 (JEFF'S PIRATE COVE)	7/13/2005		HT10	NHS Territories STEA3	150,000.00	0.00	150,000.00
PE in-house Advertisement Cancelled	Active	CON		HE66004-00	GU-NH-HE66(004)	SAFETY IMPROVEMENT PROJECT ON PRIMARY ROADS (PAVEMENT MARKERS AND MARKINGS REPLACEMENT, ISLAND-WIDE)		5/19/2006	HT10	NHS Territories STEA3	4,560,000.00	0.00	4,560,000.00
PE in-house Advertisement Cancelled	Active	CON		HE66005-00	GU-NH-HE66(005)	SAFETY IMPROVEMENT PROJECT, ISLAND-WIDE SCHOOL ZONE SIGNS		9/15/2006	HT10	NHS Territories STEA3	261,708.00	0.00	261,708.00
PE in-house Advertisement Cancelled	Active	CON		HE66006-00	GU-NH-HE66(006)	VILLAGE STREET RESTORATION, TRAFFIC SIGNS, ISLAND-WIDE		9/15/2006	HT10	NHS Territories STEA3	281,130.00	0.00	281,130.00
EMPSCO	Active	PE	Consultant	HE66101-00	GU-NH-HE66(101)	ISLANDWIDE; PE FOR HIGHWAY HAZARD ELIMINATION	6/27/2002		QT10	NHS- Territories- TEA21	44,872.00	28,946.34	15,925.66
Jess T. Lizama & Associates	Active	PE	Consultant	HE66102-00	GU-NH-HE66(102)	GUAM ISALND-WIDE, HIGHWAY HAZARD ELIMINATION PROGRAM		9/7/2004	HT10	NHS Territories STEA3	1,406,786.00	106,601.00	1,300,185.00
	Active	CON Advertised		HE66104-00	GU-NH-HE66(104)	ISLANDWIDE POTHOLES REPAIR (PRIMARY ROADS, NORTHERN REGION)		2/9/2006	HT10	NHS Territories STEA3	1,000,278.00	0.00	1,000,278.00
	Active	CON Advertised		HE66105-00	GU-NH-HE66(105)	ISLANDWIDE POTHOLES REPAIR (PRIMARY ROADS, SOUTHERN REGION)		2/9/2006	HT10	NHS Territories STEA3	692,000.00	0.00	692,000.00
PBI/PTG	Active	PE	Consultant	IPMS002-00	GU-NH-IPMS(002)	ISLANDWIDE PROGRAM MANAGEMENT SERVICES			HT10	NHS Territories STEA3	4,000,000.00	0.00	4,000,000.00
PBI/PTG	Active	PE		IPMS002-00	GU-NH-IPMS(002)	ISLANDWIDE PROGRAM MANAGEMENT SERVICES			31E0	NHS Allocation to Territories	5,000,000.00	0.00	5,000,000.00
PBI/PTG	Active	PE		IPMS002-00	GU-NH-IPMS(002)	ISLANDWIDE PROGRAM MANAGEMENT SERVICES			LT10	NHS- Territories (FY06+)	1,107,497.00	0.00	1,107,497.00
Advertised not selected	Active	PE	Consultant	IRLS001-00	GU-NH-IRLS(001)	ISLAND-WIDE, REGISTERED LAND SURVEYOR SERVICES			LT10	NHS- Territories (FY06+)	49,000.00	0.00	49,000.00
DBA - 30% design	Active	PE	Consultant	NBIS003-00	GU-NH-NBIS(003)	PIGUA BRIDGE REPLACEMENT AND ROAD APPROACHES IMPROVEMENTS	8/29/2005		HT10	NHS Territories STEA3	400,000.00	49,750.00	350,250.00

Appendix C

Model Assumptions Report

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General Overview

The purpose of this paper is to present the assumptions that were made in the development of the 2013 Construction Peak travel demand scenario and the 2015 Military Build-up scenario. The modeling procedure consists of using an existing 3-step gravity model to forecast travel demand (i.e. produce trip tables) for local residents and then develop additional trip tables for military travel using information provided by the military. The combined trip tables are then assigned to the existing, plus committed highway network, using a standard equilibrium-based assignment technique provided by the TransCAD software application. The 2013 Construction Peak scenario and the 2015 Military Build-up scenario are used to understand the impact of the construction and military build-up on traffic volumes and congestion.

The military information was sent by NavFacPac on February 1, 2008. This information was given in the form of a spreadsheet referred to in this document as the “Data Needs Worksheet” (DNW) ([Appendix A](#)).

According to the Census Bureau’s population projections, Guam’s population in 2013 is expected to be 187,753 persons. This represents an approximate 1.5% annual growth rate from year 2000 levels. However, in the 2013 Construction Peak scenario, off-island workers (construction and others) forecasted to fill the construction and indirect jobs created due to the increased military presence are added to the local population, resulting in a total population of 215,000. By 2015 a majority of the construction workers have left and the indirect worker population is smaller as well; however, the Marine and Army personnel have arrived and thus the population will be approximately 225,000 people. The off-island workers, the construction and indirect employment, and the assumptions related to their locations are discussed below, followed by a discussion of the military trip table development.

Number of Off-island Workers

According to the DNW, the number of direct new civilian construction jobs expected from the military build-up in 2013 is 15,913. In addition, the number of indirect jobs expected in 2013 is 20,095, with 15,545 workers coming from off-island to fill them. In 2015 the number of construction jobs is expected to drop to 6,240 and the number of indirect jobs is expected to be 14,354 (9,804 filled by off-island workers). There will also be approximately 5,000 direct Department of Defense (DOD) civilian jobs by 2015.

Table 1: Number of jobs expected during Construction Peak (2013) and Military Build-up (2015)

Year	Total Construction Jobs Expected	Total Indirect Jobs Expected	DoD Civilian Jobs filled by Guam residents	Total Jobs
2013	15,913	20,095	250	36,258
2015	6,240	14,354	2500	23,094

Source: Data Needs Worksheet – February 1, 2008

Applying the year 2000 labor participation rate to the 2013 population gives a labor pool of approximately 86,000 workers. Assuming the military does not increase troop levels, an unemployment rate of 15% was forecasted (12,900 people in the labor force will not have a job). However, assuming the planned military relocation, the unemployment rate is assumed to drop to 4% (3,400 unemployed persons). This implies that 9,400 existing residents become available to fill military and construction related jobs, and thus 26,800 workers will be needed from off-island to fill the remaining positions. The same calculations were done for 2015 to estimate the off-island workforce.

Table 2: Number of workers expected during Construction Peak and Military Build-up

Year	Population	Labor Force	Number unemployed – no military build-up	Number unemployed – with military build-up	Number of unemployed who become employed due to military build-up	Off-island labor force	Total Workers
2013	187,753	85,868	12,880	3,435	9,445	26,812	36,257
2015	192,302	87,949	13,192	3,517	9,674	13,419	23,093

Because the DNW stated that 15,545 workers will come from off-island to fill the indirect jobs in 2013, it was assumed that the remaining 11,267 workers will fill the construction jobs. In 2015, 9,804 off-island workers will fill indirect jobs (3,615 workers are filling construction jobs).

Assumptions	Consequences	Comments
250 DoD jobs need to be filled by 2013.	250 jobs will need to be filled which adds to the number of workers coming from off-island.	The jobs are located at NCTS.
Labor force participation rate in 2000 applies to 2013 and 2015.	Number of workers coming from off-island can go up or down depending on this assumption.	2000 was used because there was a census population count and an official employment number for that year.
Unemployment rate will be 15% without military and will drop to 4% with the military.	Number of workers coming from off-island can go up or down depending on this assumption.	Based on an official Guam unemployment history document, an unemployment rate of 15% is not unreasonable (current unemployment is around 11%). The drop to 4% also is consistent with other periods of high military presence in Guam.

Home Locations of Off-island Workers

The off-island indirect workers were added to the Traffic Analysis Zones (TAZs) around the construction sites and were assumed to have travel characteristics similar to other Guam residents. The first step in the 3-step gravity model is to generate four types of auto trips: home-based work, home-based other, non-home-based, and commercial vehicle trips. The trip generation rates are based on the trip type and the household size; typically the larger the household, the more trips it generates and in general households make more home-based other and non-home-based trips than work trips. It should be noted that Guam has an above average household size, and therefore most of these workers are anticipated to live in households with at least two to three other workers.

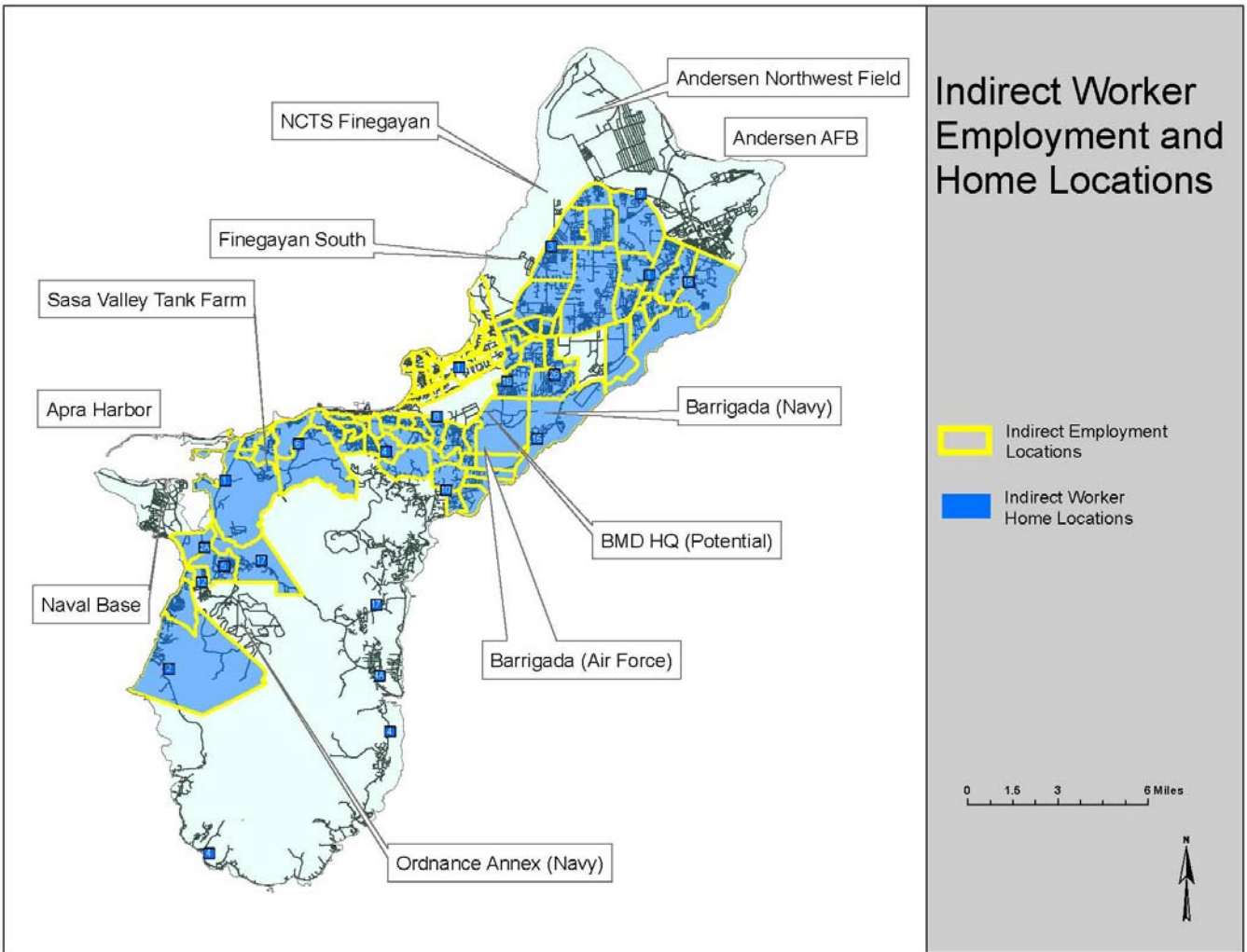
Table 3: Trip Production Rates in the Model

	Daily Vehicle Trips Per Household		
	HH Size 1-2	HH Size 3-4	HH Size 5+
Home-based Work Trips (HBW)	1.298	2.175	3.004
Home-based Other Trips (HBO)	1.873	3.983	6.561
Non-Home-Based Trips (NHB)	The NHB productions are equal to the NHB attractions (see table below)		
Commercial Vehicle Trips (CV)	The CV productions are equal to the CV attractions (see table below)		

Source: PTG – Rebased Model – July 2008

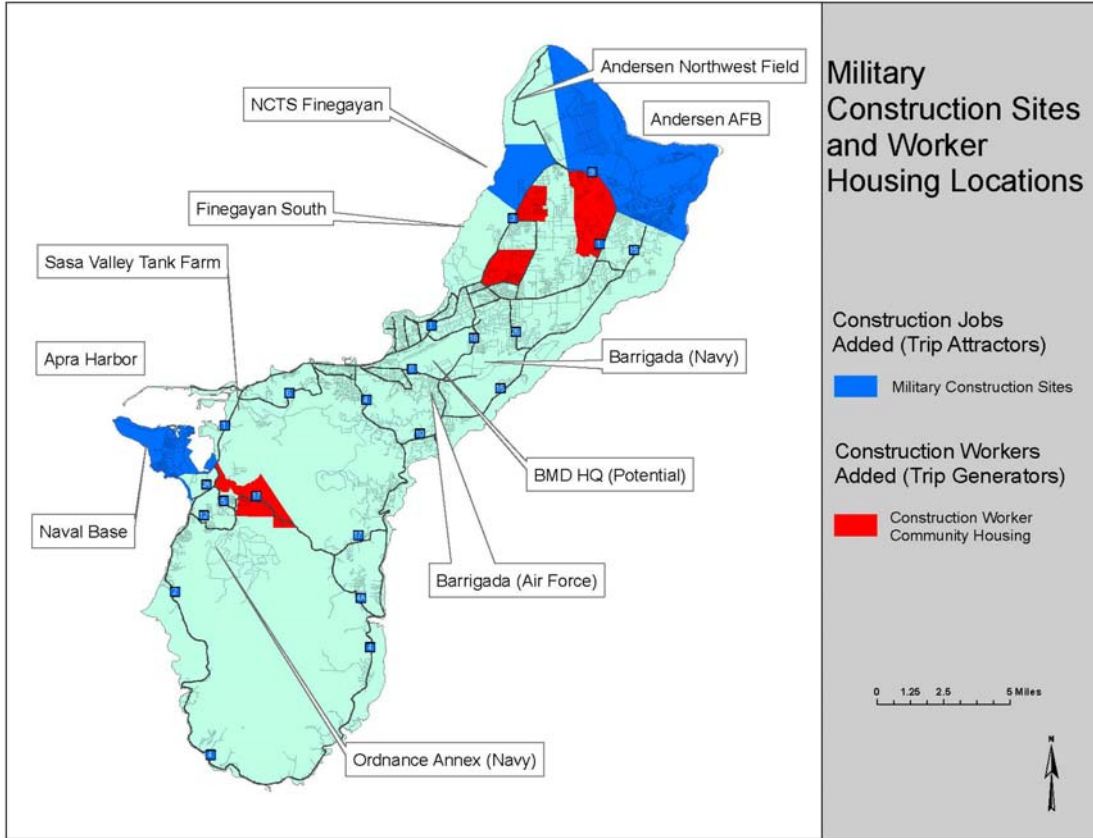
Indirect Workers

The off-island workers coming to Guam to fill the indirect jobs were distributed to TAZs near the construction sites based on the 2013 forecasted population distribution. It was assumed that these workers will not bring additional members of their families, but that they will actually live together forming households of various sizes (based on 2013 distribution in each TAZ) in order to economize. As noted above, it was assumed that they will be responsible for their own transportation to and from their work locations and that they will make home-based other and non-home-based trips at the same rates as other Guam residents. The presence of these households contributes to the number of commercial vehicle trips produced as well. The map below shows the location of the indirect workers as well as where the indirect jobs were located.



Construction Workers

The construction workers coming from off-island were assumed to live in community housing in TAZs located adjacent to the major construction areas (see map below). They will be transported to the worksites using a fleet of 10-passenger vans, 20-passenger shuttles, and 40-passenger buses during off-peak hours.



Assumptions	Consequences	Comments
Off-island construction workers live in community housing near the work sites and do not own personal vehicles.	Very little impact on the road system.	The only construction worker travel that was modeled was going to and from work sites.
Construction workers make no trips on the island other than work trips.	Very little impact.	Given the assumption that construction workers don't own vehicles, the model does not account for any trips other than work trips using the vans, shuttles, and buses.
The off-island indirect worker Population only accounts for workers, not non-workers	The population only grows by 15,545 but in theory there could be some additional dependents that are not accounted for in the population estimates	School enrollment was adjusted to account for the increase in households. However, none of the indirect worker data was included in the DAR eligibility analysis.
Off-island workers live together and form households of all sizes, not just households of size 1.	The number of trips increases with household size so the overall number of trips is greater than it would be if everyone lived in a single-person household.	For the purposes of DAR eligibility, the indirect worker assumptions are not relevant.

Indirect and Construction Jobs

In a gravity model the number of jobs in each TAZ is an important factor for determining trip distribution. Above it was discussed how the indirect workers impacted trip production (the number of trips being made and their origin zone) but it is the location, magnitude, and type of employment that is an important factor in determining where these trips end up (i.e. their destination zone). This model considers three types of employment: retail, hotel, and other. Each type of trip (home-based work, home-based other, non-home-based, and commercial vehicle) weights the employment types in a TAZ to come up with an “attraction” factor. As the name implies, the “gravity” model distributes trips based on the gravitational pull of each zone.

Table 4: Trip Attraction Variables and Weights

Trip Purpose	Total Employment	Retail Employment	Hotel Employment	Other Employment	School Enrollment	Total Households
HBW	1.00					
HBO		2.180	0.703	0.703	0.600	0.403
NHB		6.672	3.400	1.290	0.137	0.709
CV		0.202	0.062	0.062		0.105

Source: Guam 2020 Highway Master Plan Report; October 26, 2005; prepared by Duenas Bordello and Associates.

Indirect Jobs

The DNW gave a total of indirect jobs but did not break the jobs into the model categories. Because retail employment has a greater weight than hotel or other employment, 30% of the indirect jobs were assigned to the “retail” category and the rest were classified as “other.” The split was based on historical proportions. These new jobs were distributed to TAZs in the Northern and Central part of the island based on the 2013 forecasted employment locations. (See map above.)

Construction Jobs

The 15,000+ construction jobs were classified as “other.” Since the majority of those jobs are filled by the off-island workers whose work trips are being accounted for explicitly, only the jobs filled by Guam residents were added to four main construction sites: Andersen (TAZs 1 and 2), NCTS Finegayan (TAZ 16), and Apra Harbor (TAZ 135). The resident jobs were proportioned based on the total construction dollars spent at each site.

TAZ	Location	Total Construction Dollars (in billions)	Total Number of Construction Jobs in 2013	Number of Construction Jobs Filled by Residents
1	AAFB	1.0	1958	572
2	AAFB – air field	0.5	979	286
16	NCTS Finegayan	6.0	11485	3353
135	Apra Harbor	1.0	1492	435
Total		8.5	15913	

Source: PB construction job distribution based on dollar figures given to PB by Tom McLemore in June 2008.

The amount of “other” employment added to NCTS Finegayan makes that zone very attractive in the trip distribution step of the model and therefore that zone attracts a large number of trips.

Assumptions	Consequences	Comments
Construction jobs are distributed to only four sites.	The jobs are concentrated in the northern part of the island which leads to heavy congestion in this area.	In particular the roads around NCTS Finegayan are congested in the AM and PM peak periods.

Fixed Military Trip Tables

In addition to the residential trips, additional trips based on specific information in the same Data Needs Worksheet (DNW) discussed above were added before the trips were assigned to the network. The original information was based on the AIP+ alternative which had 13,235 Marines and 10,653 dependents. In a subsequent phone call after the IGIA meetings in Washington DC, it was determined that we should be using the AIP numbers (8,000 Marines – 9,000 Dependents) instead. However the underlying assumptions were never updated, nor was the other information changed to reflect this change in personnel levels.

From the DNW, the following trip tables were produced:

- Construction cargo trips (peak and off-peak).
- Miscellaneous cargo trips (peak and off-peak).
- Construction worker trips (off-peak).
- CVN port call trips (peak and off-peak).
- Miscellaneous privately owned vehicle (POV) trips (off-peak).
- Marine work trips (peak and off-peak) – 2015 only.
- Marine/Army and dependent home-based other trips (peak and off-peak) – 2015 only.
- Marine/Army dependent DoD work trips (peak) – 2015 only.
- Off-base training trips (peak and off-peak) – 2015 only.
- School trips (peak and off-peak) – 2015 only.
- Marine/Army dependent civilian work trips (peak and off-peak) – 2015 only.
- Marine/Army dependent university trips (off-peak) – 2015 only.

In order to develop the two scenarios, some basic assumptions were made since most of the data was relevant only to the 2030 timeframe.

Main Assumptions:

- In 2013, 400 Marines will be relocated to Guam but there will be no dependents.
- All Marines in 2013 will live and work at NCTS Finegayan so there will be no work trips.
- In 2015 all 8,000 Marines and the 9,000 dependants along with the Army forces will be relocated.
- 25% of the 3,520 family housing units will be at South Finegayan; the rest at NCTS Finegayan.
- Any personnel not living in family housing will live in BEQ at NCTS Finegayan.
- No build-up would occur in the other service branches – current levels were carried forward.
- 1 bus = 2 passenger cars.
- 1 cargo truck = 4 passenger cars.
- When in doubt, model the “worst case.”
- The PM Peak trip table is the transpose of the AM Peak trip table unless otherwise noted.

To develop each trip table listed above, additional assumptions were made which will be outlined as each trip table is discussed below.

Trip Table: On-base Construction and Military Supply Truck Trips From the Port

Data Needs Worksheet Cell: 2

Excel Worksheet Name: Construction Cargo Trips

<p>Assume 3-axle tractor-trailer with 60,000-gross weight. Distribution:</p> <ul style="list-style-type: none"> ▪ Port-Naval Base (random times 0600-1800): X trips/day ▪ Naval Base-NCTS Finegayan (random times 0600-1800): X trips/day ▪ NCTS Finegayan to following locations (random times 0600-1800): AAFB (via new gate) X trips/day, Andersen South X trips/day, Barrigadas (Navy/AF) X trips/day, Ordnance Annex X trips/day <p>Existing Ordnance Transport:</p> <ul style="list-style-type: none"> ▪ Trailer trucks (2-axle) Naval Base to Ordnance Annex: X trips/month, weekday, (random times) ▪ Trailer trucks (2-axle) Naval Base to AAFB: X trips/month, weekday, (random times) <p>Proposed Ordnance Transport:</p> <ul style="list-style-type: none"> ▪ Trailer trucks (2-axle) Naval Base to Ordnance Annex: X% of existing frequency ▪ Trailer trucks (2-axle) Naval Base to AAFB: X% of existing frequency ▪ Trailer trucks (2-axle) Naval Base to Andersen South (Alt. A1): X trips/month, weekday, (random times)
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The construction truck estimates were developed by PTG after analyzing the amounts of materials needed to replicate the facilities in Okinawa. The materials needed for island road construction was also included in the estimates. The following table was provided by PTG showing the number of trucks and their origins and destinations. For the “Quarry to Roads” entry, the trucks were distributed to the TAZ nearest to the predicted road construction site. In 2013 all of the trucks below were assigned (approximately 400 to the peak periods and the rest to off-peak), whereas in 2015 only 40% of the trucks were assigned.

			100% Payload	30% Payload		1,460 days Average	Peak @ 170%
1 Port to NTSC	9,000.000 tons	25 Miles	450,000 trucks	375,000 trucks	825,000 trucks	570 trucks	970 trucks
2 Apra to NTSC	5,000.000 tons	25 Miles	250,000 trucks	208,333 trucks	458,333 trucks	320 trucks	550 trucks
3 Port to Anderson	3,000.000 tons	27 Miles	150,000 trucks	125,000 trucks	275,000 trucks	190 trucks	330 trucks
4 Apra to Anderson	1,000.000 tons	27 Miles	50,000 trucks	41,667 trucks	91,667 trucks	70 trucks	120 trucks
5 NTSC to Anderson	1,000.000 tons	29 Miles		208,333 trucks	208,333 trucks	150 trucks	260 trucks
6 Pit to Anderson	500,000 tons	1 Miles	31,250 trucks		31,250 trucks	30 trucks	60 trucks
7 Quarry to Anderson	500,000 tons	4 Miles	31,250 trucks		31,250 trucks	30 trucks	60 trucks
8 Quarry to NTSC	4,500.000 tons	6 Miles	281,250 trucks		281,250 trucks	200 trucks	340 trucks
9 Quarry to Roads	9,108.000 tons	18 Miles	569,250 trucks		569,250 trucks	390 trucks	670 trucks

Source: PTG – Colman Mullin 6/24/08

Assumptions	Consequences	Comments
2015 still had construction cargo since the DNW showed 6000+ construction workers in 2015.	The 2015 scenario still includes some construction related traffic.	
The Peak levels were used in the model.	The peak is higher than the “average” and so potentially too many trucks are being assigned.	
All tonnage is loaded onto 48,000 lbs trucks and the trucks are assumed to be of legal weight	There may be a variety of truck sizes; therefore there could be more or less trucks depending on the truck types.	More information from the military and/or the construction companies is needed to refine the truck forecast.

Trip Table: Miscellaneous Cargo From the Port**Excel Worksheet Name: Cargo Trips**

In both 2013 and 2015 construction activities will be occurring on the island due to the military build-up. This includes worker housing (off-base) and other infrastructure. The Port of Guam Master Plan was used to estimate the additional amount of cargo coming into the port in support of these activities. The port plan forecasted cargo assuming that the military would be increasing their force levels on the island – at the time the estimate was 12,510 active duty personnel and 11,450 dependents. The plan forecasted three types of cargo: break-bulk (which includes construction materials), containers, and bulk cement. Below is a summary of the existing and forecasted annual amounts of each type.

Year	Break-bulk (revenue tons)	Containers (boxes)	Bulk Cement (tons)
2007	150,000	100,000	100,000
2011	270,000	150,000	500,000
2012	325,000	170,000	480,000
2013	310,000	175,000	450,000
2015	175,000	180,000	140,000

Source: Port of Guam Report (Draft) – PAG-Report-PartI&2-Draft_Public-Review_Rev-0.pdf

Assuming worst case, the peak amounts during the construction years were used for the truck calculations, not just the 2013 values. It was further assumed that all cargo above the 2007 level was material related to construction on sites outside the gates. The annual tonnage was converted to pounds; 48,000 pounds were assigned to a truck and the number of annual trucks was calculated. In the case of the containers, it was assumed that 1 container = 1 truck. The annual trucks were converted into daily trucks by dividing by 260 annual work days. This resulted in 400 trucks per day during peak construction coming from the Port in 2013 and 200 trucks per day in 2015.

The trucks were distributed to various sites around the island such as the Construction Worker community housing areas and the main road construction sites. 6% of the outbound and 6% of the inbound daily trucks (approximately 30 trucks) were assigned to each peak hour, while the rest (88%) were assigned to the network during the off-peak.

Assumptions	Consequences	Comments
Cargo amounts above the 2007 levels are military build-up related.	More trucks are forecasted than the “actual” number.	More information regarding the amount of construction materials imported would allow for better forecasting.
All tonnage is loaded onto 60,000 lbs trucks (48,000 lb load).	There may be a variety of truck sizes, and therefore there could be more or less trucks depending on the truck types.	More information from the military is needed to refine the truck forecast.

Trip Table: Construction Worker Trips

No Data Needs Worksheet Cell

Excel Worksheet Name: ConstructionWorkersV2

The transportation of the construction workers to the construction sites was assumed to occur using a fleet of vans, shuttles and buses that will be located at each community housing site. It was assumed that there will be a limited number of buses since they require a special license to operate. Therefore the majority of the workers will be transported in a van or a shuttle. It was also assumed that there will be two work shifts – 6AM to 3PM and 3PM to 12AM. This implies that the work trips will take place in the off-peak time period.

Off PEAK		AAFB	Housing Site	Housing Site	NCTS Fin	Housing Site	Housing Site	Naval Base	Housing Site	Total
		1	3	4	16	18	23	135	136	
AAFB	1		45	45						90
AAFB	2									
Housing Site	3	45								45
Housing Site	4	45								45
NCTS Fin	16					350	350			700
Housing Site	18				350					350
Housing Site	23				350					350
Naval Base	135								45	45
Housing Site	136							45		45
	Total	90	45	45	700	350	350	45	45	

Assumptions	Consequences	Comments
Construction workers will live in community housing near the construction sites.	Less traffic as construction workers will not have access to personal vehicles and will be relatively self-contained in the community housing area.	There has not been formal consensus on this issue between JGPO and NavFacPac. There is considerable impact if this assumptions turns out to be false.
Construction workers will be transported to work using vans, shuttles and buses during off peak.	Peak congestion around the military bases is reduced considerably by this assumption.	More information from the military is needed as no information was given as to the actual hours of work.

Trip Table: Marine Non-Home-Based (NHB) Work Trips

Data Needs Worksheet Cell: 1

<p>Miscellaneous daily POV trips from NCTS Finegayan, random days/times:</p> <ul style="list-style-type: none"> ▪ South Finegayan 10 ▪ AAFB 30 ▪ Andersen South 10 ▪ AF/Navy Barrigada 10 ▪ Ordnance Annex 5 ▪ Naval Hospital 5 ▪ Naval Base 30
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Excel Worksheet Name: MarineNHBWork

These trips were assumed to depart and return during the off-peak; therefore there are no AM or PM peak trips associated with this data. The off-peak trip table is shown below:

Off PEAK	AAFB	AAFB	Anderson South	NW Field	NCTS Fin	South Fin	Andersen South	Barrigada Navy	Andersen South	Barrigada AF	Naval Hospital	Naval Base	Ordnance Annex	Naval Base	Total
	1	2	14	15	16	20	36	77	79	83	106	135	140	155	
AAFB	1				30										
AAFB	2														
Andersen South	14				5										
NW Field	15														
NCTS Fin	16	30	5			10	5	5		5	5	15	5	15	100
South Fin	20				10										
Andersen South	36				5										
Barrigada Navy	77				5										
Andersen South	79														
Barrigada AF	83				5										
Naval Hospital	106				5										
Naval Base	135				15										
Ordnance Annex	140				5										
Naval Base	155				15										
Total					100										

Assumptions	Consequences	Comments
All trips were assigned to the off-peak.	None of these trips will be considered in the overall military impact.	Need more specific information from the military about the timing of these trips.

Trip Table: USMC Work Trips (applies to year 2015 ONLY)

Data Needs Worksheet Cell: 1

Work commute POV trips, South Finegayan or NCTS Finegayan-AAFB North Ramp: <ul style="list-style-type: none"> ▪ Weekday, peak a.m.: 633 trips ▪ Weekday, peak p.m.: 633 trips ▪ Weekday, off hours (round trips): 106 ▪ Weekend (round trips): 106
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Excel Worksheet Name: MarineWork

In addition to the 633 trips from Finegayan to Andersen, work trips from South Finegayan to NCTS Finegayan and intrazonal trips from the housing area at NCTS Finegayan to the work area of NCTS Finegayan are accounted for.

The resulting AM Peak trip table is shown below:

From	To Zone	AAFB	AAFB	NCTS Finegayan	Total
		1	2	16	
NCTS Finegayan	16	316		5189	5505
South Finegayan	20	317		343	660
Total		633		5532	6165

Out of the 633 trips, 316 went from NCTS Finegayan (zone 16) to the front Andersen Air Force Base Gate (AAFB, zone 1), and 317 went from South Finegayan (zone 20) to AAFB. According to the DNW, 75% of Marines have a regular weekday work schedule. Therefore, 343 trips go from South Finegayan to NCTS Finegayan and the other 5,189 stay within the NCTS Finegayan area. These intrazonal trips do not actually get assigned to the network and are not included in the volume numbers that are produced by the model.

Assumptions	Consequences	Comments
Army work trips are not modeled.	Given the small number of Army personnel assumed to be on the island, their impact is assumed to be negligible.	Information regarding housing and workplace locations for Army is needed if their work trips are to be included.

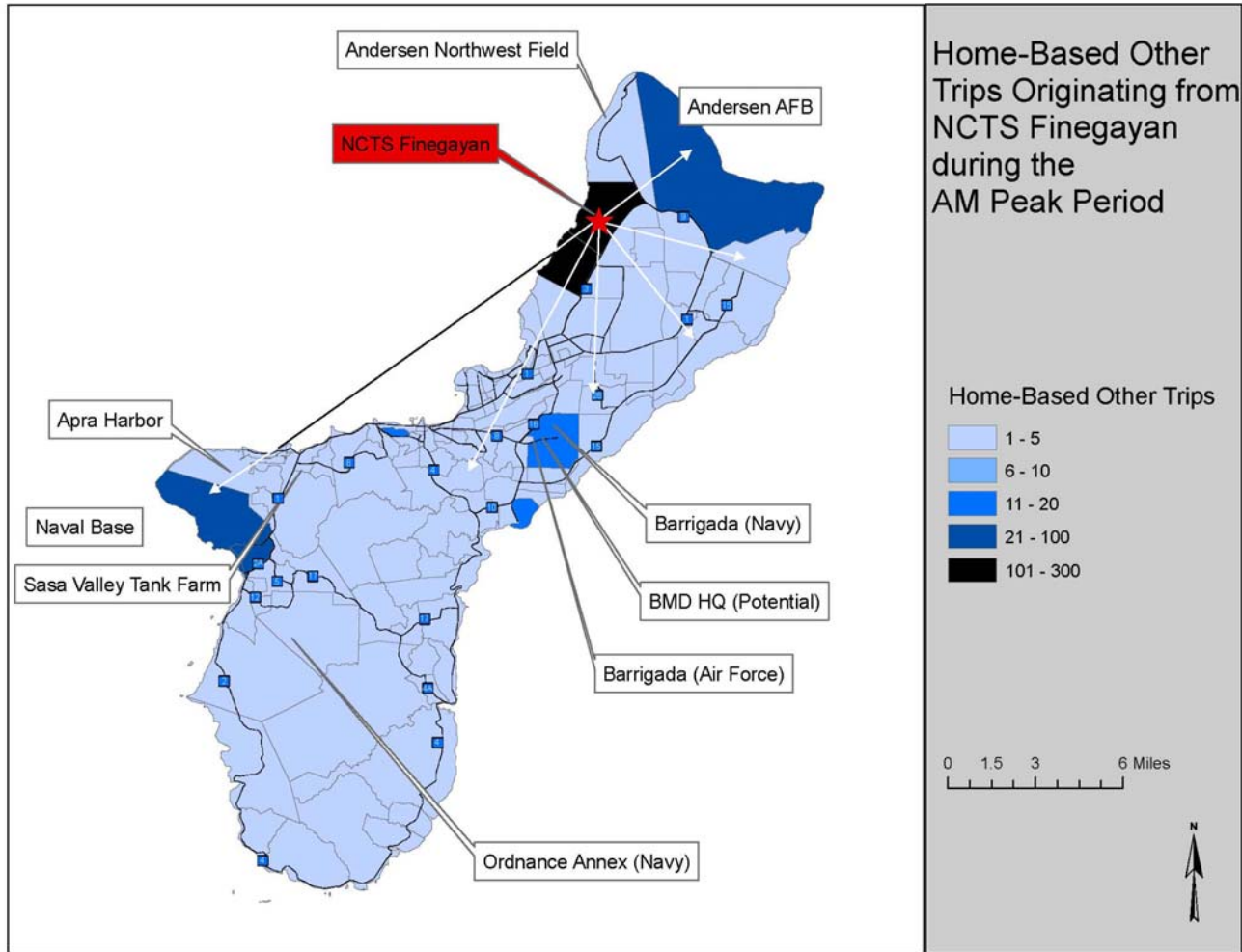
Trip Table: Military Home-Based Other (HBO) Trips (APPLIES TO 2015 ONLY)

Data Needs Worksheet Cell: 13

Other: <ul style="list-style-type: none"> ▪ Unknown
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Excel Worksheet Name: MarineHBOPATable, 8000Marines_HBOPA, 8000Marines_HBOTripTable

It was assumed that the military personnel and their dependents (11,148 people in total) will make trips off-base for recreation, doctor's appointments, shopping, etc. These trips are characterized as home-based other. Neither the question in DNW cell 13 nor the answer really helped to provide an estimate of the number of these types of trips or their destinations. It was assumed that the majority (75%) of these trips will be to military facilities, whereas the other 25% will be to other locations. For large households, the number of home-based other trips can be significant. In general the HBO production rates were applied to the military households, and the military zone attractions were weighted more heavily than non-military zones. The results showed that the 11,148 persons generated approximately 2,000 HBO trips in the AM Peak and approximately 1,800 HBO trips in the PM Peak. The following maps show the distribution of trips in the AM Peak.



Assumptions	Consequences	Comments
The HBO trip production rates that apply to residents of Guam also apply to military households.	These trips are included in the impacts.	Will these trips be accepted by DDC in their impact evaluation? If yes, we need more specific information regarding number of households by size and trip production/attraction rates.
75% of the HBO trips are distributed to military zones.	The majority of these trips impact military access points.	While these trips might not be considered by the DAR process, they should somehow be incorporated in the Impact Analysis. The military will need to provide better trip production rates if the resident model numbers are not approved.

Trip Table: Marine Dependent DoD Work Trips (APPLIES TO 2015 ONLY)

Data Needs Worksheet Cell: 7

Direct DoD civilian jobs: <ul style="list-style-type: none"> • USMC: 5,000 • Army: unknown • Assume 75% live offbase, 25% are dependents living onbase

Data Needs Worksheet Cell: 1

DoD civilian work commute POV trips from offbase (unknown locations) to onbase: <ul style="list-style-type: none"> • Weekday, peak a.m.: 141 South Finegayan, 2,391 NCTS Finegayan, 281 AAFB • Weekday, peak p.m.: 141 South Finegayan, 2,391 NCTS Finegayan, 281 AAFB • Weekday, off hours (round trips): 23 South Finegayan, 398 NCTS Finegayan, 47 AAFB • Weekend (round trips): 23 South Finegayan, 398 NCTS Finegayan, 47 AAFB

Excel Worksheet Name: MarineDepWork

In 2015 approximately 800 families will be living at South Finegayan, and the other 2,700 families will be living at NCTS Finegayan. It was assumed that the 1,250 DoD jobs filled by dependents will be located at South Finegayan, NCTS Finegayan, and Andersen Air Force Base proportional to the work commute trips listed above. It was also assumed that 300 of the dependents filling the DoD jobs will live at South Finegayan, and the rest will live at NCTS Finegayan.

The resulting AM Peak trip table is shown below:

From	To Zone	AAFB	AAFB	NCTS Finegayan	South Finegayan	Total
		1	2	16	20	
NCTS Finegayan	16	62		888	0	950
South Finegayan	20	63		174	63	300
Total		125		1062	63	1250

Assumptions	Consequences	Comments
5% of the jobs are located at South Finegayan, 85% at NCTS Finegayan and 10% at Andersen.	174 trips are assigned to Route 3 from South Finegayan to NCTS Finegayan.	Need more specific information from the military about where the dependents are coming from to fill the jobs and where the jobs are located.

Trip Table: Military Training Trips (APPLIES ONLY TO 2015)

Data Needs Worksheet Cell: 3b

<p>AAV Training - 4 times/year, 3 weeks each, weekday training:</p> <ul style="list-style-type: none"> ▪ NCTS Finegayan-Naval Base (Polaris Point): 4 bus trips and 30 POV trips per day, peak a.m./p.m. ▪ NCTS Finegayan-Naval Base (Polaris Point): 4 bus trips and 30 POV trips per day, peak a.m./p.m. ▪ NCTS Finegayan-Naval Base (Polaris Point): 12 tractor trailer trips per event, first trip weekday, pre-peak a.m., return trip weekday post-peak p.m. ▪ Tractor trailer weight = 70,000 lbs. approx. (tractor 12,000 + AAV 46,000 + trailer 10,000) <p>LCAC Training - 2 times/year, 3 weeks each, weekday training:</p> <ul style="list-style-type: none"> ▪ NCTS Finegayan-Naval Base (Polaris Point): 2 bus trips and 0 POV trips per day, peak a.m./p.m. ▪ NCTS Finegayan-Naval Base (Polaris Point): 0 tractor trailer trips per event (LCACs transported via ship to Apra Harbor) <p>MOUT Training - each week, weekday training:</p> <ul style="list-style-type: none"> ▪ NCTS Finegayan-Andersen South (Bivouac - stay for 5 days): 23 bus trips (Monday, peak a.m.), 23 bus trips (Friday, peak p.m.), and 20 POV trips per day, (peak a.m./p.m.) ▪ NCTS Finegayan-Andersen South (OPFOR - stay for 5 days): 1 bus trip (Monday, peak a.m.), 1 bus trip (Friday, peak p.m.), and 10 POV trips per day, (peak a.m./p.m.) <p>General Training at Andersen South - each week, weekday training:</p> <ul style="list-style-type: none"> ▪ NCTS Finegayan-Andersen South (Shooters): 12 bus trips and 100 POV trips per day, (peak a.m./p.m.) ▪ NCTS Finegayan-Andersen South (Coaches): 0 bus trips and 15 POV trips per day, (peak a.m./p.m.) ▪ NCTS Finegayan-Andersen South (Range Management): 0 bus trips and 40 POV trips per day, (peak a.m./p.m.) ▪ NCTS Finegayan-Andersen South (Maneuver Training): 5 bus trips and 10 POV trips per day, (peak a.m./p.m.)

Excel Worksheet Name: Off-base Training

Because of the “worst case” assumption, all of the training was assumed to occur simultaneously on the model day, with most movement happening during the AM and PM peak time frame. The only exception to that is the 12 70,000 lb tractor trailer movements associated with the AAV training – these trips were assigned to the off-peak period.

AM Peak – Auto	To	Andersen South	Andersen South	Naval Base	Total
From	Zone	14	36	135	
NCTS Finegayan	16	30 ¹	165 ²	30 ³	225

AM Peak – Bus	To	Andersen South	Andersen South	Naval Base	Total
From	Zone	14	36	135	
NCTS Finegayan	16	24 ¹	17 ²	4 + 2 ⁴	47

1. **MOUT Training** 2. **General Training** 3. **AAV Training** 4. **LCAC Training**

Trip Table: Dependent School Trips (APPLIES ONLY TO 2015)

Data Needs Worksheet Cell: 1

School trips (weekdays unless otherwise noted):

- Finegayan South - NCTS Finegayan: 3 bus trips peak a.m., 3 bus trips peak p.m.
- Finegayan South - NCTS Finegayan: 170 car trips peak a.m., 170 car trips peak p.m.
- Finegayan South - NCTS Finegayan: 20 car trips between peak, 20 car trips off peak
- Finegayan South - NCTS Finegayan: 10 car trips per weekend day

Excel Worksheet Name: DepSchoolTrips

The information from the DNW was used directly.

AM Peak - Auto	To	NCTS Finegayan	Total
From	Zone	16	
South Finegayan	20	170	170

AM Peak - Bus	To	NCTS Finegayan	Total
From	Zone	16	
South Finegayan	20	3	3

The remaining trips tables (CVN Port Call, Military Dependent Work Trips, and the Military Dependent University trips) are not discussed as they contribute less than 0.5% of AM or PM peak trips and are therefore of little consequence.

