

Appendix D

Socioeconomic Impact Assessment Study (SIAS)

1. Socioeconomic Impact Assessment Study	D-1
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Final

Socioeconomic Impact Assessment Study

Guam and CNMI Military Relocation (2012 Roadmap Adjustments)

Prepared for:

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EXECUTIVE SUMMARY

INTRODUCTION

The purpose and need for the proposed action evaluated in this Socioeconomic Impact Assessment Study (SIAS) is to ensure that the relocated Marines are organized, trained, and equipped as mandated in § 5063 of Title 10 of the United States Code, to satisfy individual live-fire training requirements as described in the 2010 Guam and Commonwealth of the Northern Mariana Islands (CNMI) Military Relocation Final Environmental Impact Statement (EIS) (2010 Final EIS), and to establish an operational United States (U.S.) Marine Corps presence on Guam in accordance with the April 2012 adjustments to the May 2006 U.S.-Japan Roadmap for Realignment Implementation.

The proposed action is needed to ensure consistency with the new force posture adopted by the U.S. Department of Defense (DoD) in accordance with the April 2012 Roadmap adjustments, which provides for a materially smaller force on Guam than that assessed in the 2010 Final EIS, while fulfilling U.S. national security obligations to provide mutual defense, deter aggression, and dissuade coercion in the Western Pacific Region.

This SIAS supplements information and incorporates by reference the 2010 Guam and CNMI Military Relocation Final SIAS (2010 Final SIAS), which is Appendix F to the 2010 Final EIS.

Compared to the 2010 Final SIAS, this SIAS evaluates the socioeconomic impacts of constructing and operating a smaller Marine Corps cantonment area (including family housing), a similarly sized Live-Fire Training Range Complex (LFTRC), and reduced-scale infrastructure requirements to support the smaller number of Marines and dependents relocating to Guam.

Some of the proposed actions that were analyzed in the 2010 Final SIAS are not analyzed in this SIAS because they are no longer considered reasonably foreseeable actions, such as: the construction of a wharf to accommodate the Navy's temporary berthing of a Nuclear-powered Aircraft Carrier (CVN) and the Army Air and Missile Defense Task Force (AAMDTF). Impacts from utilities and roadways projects, that are not located at main cantonment or LFTRC project sites, are also not analyzed in this SIAS because they are independent actions, and the Roadmap Adjustment does not change the decision made in the 2010 Record of Decision regarding these actions.

This SIAS was prepared as a stand-alone technical study to support the Supplemental Environmental Impact Statement (SEIS) for the Guam and CNMI Military Relocation (2012 Roadmap Adjustments). As a stand-alone study, this SIAS does not address some of the concepts that are required in a National Environmental Policy Act (NEPA) compliant document, such as cumulative analysis, the significance of impacts, and potential mitigations. These issues are addressed in the SEIS, as appropriate.

The purpose of this study is to provide estimates of the potential impact of the proposed relocation on the social and economic conditions on Guam. While the significance of impacts is not determined with specificity, some generalized statements are made as to the magnitude of impacts.

The socioeconomic impact analyses conducted in this study reflect the major concerns and issues identified by local residents and the Government of Guam (GovGuam) during the public scoping meetings for the SEIS held at various locations on Guam from November 8-10, 2012. Therefore, the analysis is focused on the following five categories:

- Population Change
- Economic Activity
- Public Services
- Sociocultural Issues
- Land Acquisition

The forecasts of population change, economic activity, public services, and sociocultural issues are made for the entire island rather than for specific geographic locations because the impacts are of an island-wide nature. The one exception to this island-wide concept is for the impacts of land acquisition. Specific parcels of land, not currently federally owned, would need to be acquired to meet the training requirements associated with four of the five LFTRC alternatives and therefore, the impact analysis of land acquisition is geography specific.

SUMMARY OF IMPACTS

Population Change: The population change associated with the proposed Military Relocation would reach a maximum of 9,721 in 2023 and thereafter decline to a steady-state population increase of 7,412 by 2028. Population change associated with this proposed action is of a far lesser magnitude than was projected in association with the 2010 FEIS, which showed a peak population increase of 79,178 and a steady-state population increase of 33,608.

Economic Activity: The economic impacts from the Military Relocation would be beneficial, leading to increased employment and standards of living as compared to baseline conditions. Impacts to Guam's housing stock and availability would likely not bring about additional development.

Public Services: Guam's public services and permitting agencies would require additional staff to meet the additional demand associated with the proposed action. Estimated increases in GovGuam tax revenues would likely compensate for any increased demand on these public services that would occur.

Sociocultural Issues: There is a potential for sociocultural impacts to occur, but the magnitude of the impacts are difficult to predict and could vary substantially based on policy and program choices yet to be made as how to address them. Any sociocultural impacts would be substantially lower than assessed in the 2010 Final EIS because population increases associated with this action would be much smaller.

Land Acquisition: The potential for land acquisition impacts has been analyzed from both a sociocultural and economic perspective. The sociocultural impacts are found to be potentially adverse to individual landowners, particularly in those cases where a forced sale of land might be required. Potential economic impacts to landowners are neutral because of existing federal regulations regarding land acquisition, which automatically provides fair compensation for land that is sold by individual landowners, and provides relocation assistance for occupants.

More detailed impact summaries for the five socioeconomic categories analyzed in the SIAS are presented below.

Population Change

The proposed action evaluated in this SIAS is different from the proposed action analyzed in the 2010 Final SIAS. The population projections in this SIAS are of a substantially lesser magnitude than those presented in the 2010 Final SIAS due to a change in the proposed actions being analyzed; these changes include:

1. Fewer Active Duty Marines – compared to the 2010 Final SIAS, the number of Active Duty Marines is 42% lower in this SIAS (from 8,552 to 5,000).
2. Fewer military dependents of Active Duty Marines – military dependents are lower by 86% (from 9,000 to 1,300). The large decline in the number of dependents (as compared to the decline in active duty marines) is due to a change in composition of Active Duty Marines. In the action being analyzed in this SIAS, two-thirds of Active Duty Marines would be rotational – spending 6 months per deployment to Guam – and therefore would not bring any dependents to Guam.
3. This SIAS does not assess impacts related to a potential U.S. Navy CVN berthing or a potential AAMDTF because these actions are no longer considered reasonably foreseeable. Impacts from utilities and roadways projects, that are not located at main cantonment or LFTRC project sites, are also not analyzed in this SIAS because they are independent actions, and the Roadmap Adjustment does not change the decision made in the 2010 Record of Decision regarding these actions.
4. An extended construction period – Construction work resulting from implementation of the proposed action is expected to begin in 2015; construction activity would increase over the next couple of years, with an extended period of construction activity occurring from 2017 through 2023, and then begin to taper off from 2024 until the final year of construction in 2027. Overall, this proposed action would have a 13-year construction period compared to the 7-year construction period that was projected for the proposed actions in the 2010 Final EIS.

The analysis in the 2010 Final SIAS assumed that a massive in-migration would occur due to labor shortages brought on by the relatively short construction period and the rapid military relocation schedule of Marines and their dependents to Guam. In addition, the analysis presented in the 2010 Final SIAS used the U.S. Census population projections that have since been substantially revised downward. This combination of factors contributed to the large population peak identified in the 2010 Final SIAS. The proposed action analyzed in this SIAS would avoid such a large population peak, and thus many of the social problems that can result from rapid population increases and subsequent sharp declines in population (referred to as a “Boomtown” economy in the 2010 Final SIAS) would not occur with this proposed action.

The estimated total population increases from this proposed action are shown in Table ES-1. As a result of the changes identified above, this SIAS forecasts population impacts that are of a far lesser magnitude than those that were presented in the 2010 Final SIAS. Differences between this SIAS and the 2010 Final SIAS are summarized below in Table ES-2, explained in greater detail in Section 4.2.4, and illustrated in Figure ES-1.

Table ES-1. Estimated Total Population Increase on Guam from the SEIS Proposed Action														
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Direct DoD Population¹														
Active Duty Marine Corps ²	25	35	35	35	387	2,990	3,319	3,319	4,282	4,282	4,779	5,000	5,000	5,000
Marine Corps Dependents	8	11	11	11	118	908	1,008	1,008	1,300	1,300	1,300	1,300	1,300	1,300
Civilian Military Workers	4	5	38	75	113	150	188	225	263	300	338	338	338	338
Civilian Military Worker Dependents	4	5	35	71	107	143	179	214	249	285	320	320	320	320
Off-Island Construction Workers (DoD Projects)	161	1,071	2,301	3,227	2,871	2,587	3,175	2,978	2,205	1,350	618	46	0	0
Dependents of Off-Island Construction Workers (DoD Projects)	56	343	667	839	660	517	635	596	507	351	179	15	0	0
Direct DoD Subtotal	258	1,470	3,087	4,259	4,256	7,295	8,504	8,339	8,806	7,868	7,533	7,019	6,959	6,959
Indirect and Induced Population														
Off-Island Workers for Indirect/Induced Jobs ³	46	130	271	338	349	455	548	529	462	361	308	257	228	227
Dependents of Off-Island Workers for Indirect/Induced Jobs	43	124	260	325	337	441	533	517	453	355	304	255	227	227
Indirect/Induced Subtotal	89	254	531	663	686	897	1,082	1,046	915	716	612	513	455	453
Total Population	347	1,724	3,618	4,922	4,941	8,191	9,585	9,386	9,721	8,584	8,145	7,532	7,414	7,412

Notes: ¹ DoD population includes military personnel, DoD civilian workers and dependents from off-island.

² Active Duty Marine Corps numbers do not include transient Marines. There would be 200 additional transient marines visiting five times per year for 2-3 weeks at a time.

³ Population figures do not include Guam residents who obtain employment as a result of the proposed action.

Table ES-2. Summary of Comparative Analysis																			
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2010 Final SIAS																			
Total Population	11,038	27,835	44,301	52,575	79,178	64,918	41,919	33,431	33,431	33,608	33,608	33,608	33,608	33,608	33,608	33,608	33,608	33,608	33,608
SEIS Proposed Action																			
Total Population	0	0	0	0	0	347	1,724	3,618	4,922	4,941	8,191	9,585	9,386	9,721	8,584	8,145	7,532	7,414	7,412

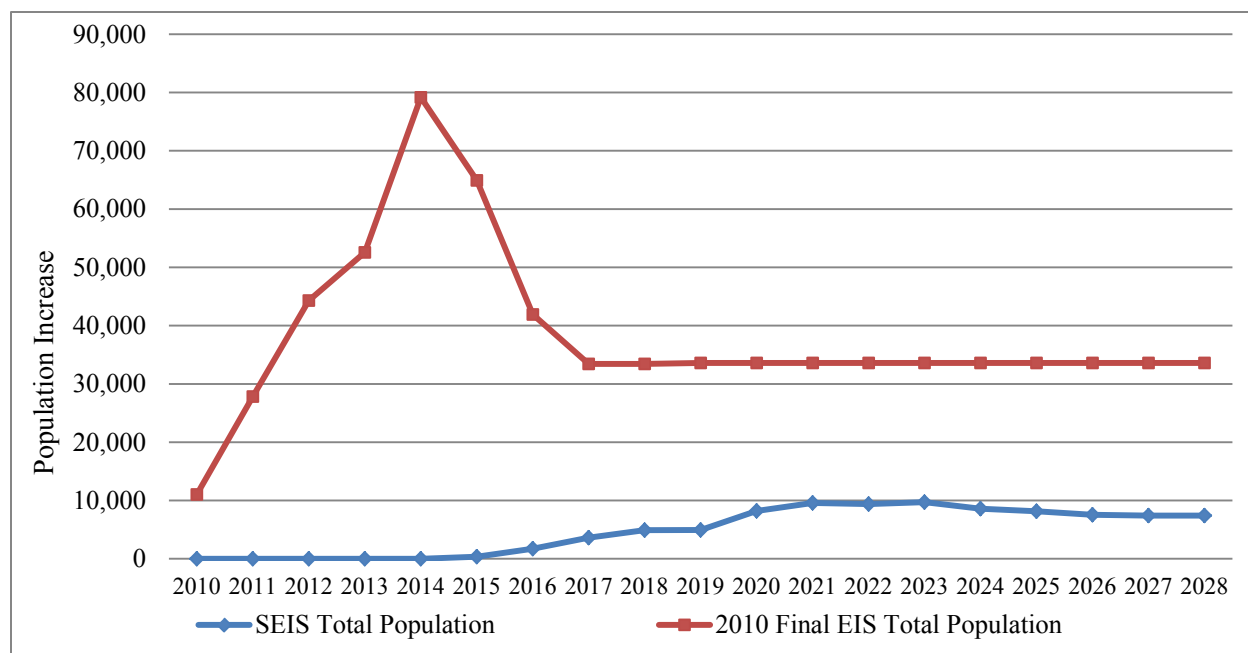


Figure ES-1. Guam Total Population Increase Comparison - 2010 Final EIS and SEIS

Economic Impacts

Table ES-3 summarizes the economic impacts of the proposed action during the year that economic impacts would be largest (2021) and the first year of steady-state operations (2028); impacts during the steady-state period are projected to continue at a consistent annual level for the foreseeable future.

Civilian Labor Force Demand

Civilian labor force demand is expected to increase by a maximum of 7,031 full-time jobs in 2021 (6,150 related to construction and 881 related to operations); of the 7,031 jobs, 3,058 are estimated to be taken by Guam residents. At steady-state, by 2028, labor force demand is expected to increase by 1,438 full-time jobs (all related to operations); 762 of the jobs are estimated to be taken by Guam residents.

Civilian Labor Force Income

Civilian labor force income is expected to increase by a maximum of \$296 million in 2021 and reach a steady-state level of \$67 million in 2028. The estimated average salaries for jobs related to the construction phase (\$38,600) and the military operational phase (\$46,000) would be considerably higher than the 2012 Guam median salary of \$28,074.

Government of Guam Tax Revenues

GovGuam tax revenues are expected to increase by a maximum of \$86.4 million in 2021 and reach a steady-state level of \$40 million in 2028. Personal income tax revenues, which include estimated Section 30 revenues, is estimated to be the primary driver of GovGuam tax revenue impacts associated with the proposed action (72% of total tax revenue impacts in 2021 and over 90% of revenue impacts during the steady-state).

Civilian Housing Demand

Housing demand associated with the proposed action is estimated to reach a maximum of 770 units in 2021 and decline to a steady state demand of 285 units in 2028. No new housing units are expected to be required to meet the additional civilian housing demand that would be generated by the proposed action.

Gross Island Product

Gross Island Product (GIP) is expected to increase by a maximum of \$635 million in 2021 and decline to a steady-state level of \$75 million by 2028. The primary driver of GIP impacts in 2021 would be DoD construction activity. During the steady-state period, GIP impacts would be primarily driven by expenditures related to Marine Corps operations.

Table ES-3. Summary of Economic and Housing Impacts		
	Impact	
	Maximum⁴	Steady-State⁵
Civilian Labor Force Demand ¹	7,031	1,438
– Expected for Guam Residents	3,058	762
Civilian Labor Force Income ²	\$296	\$67
Gross Receipts Tax ²	\$16.4	\$1.8
Corporate Income Tax ²	\$7.4	\$0.8
Personal Income Tax ²	\$62.6	\$37.4
Total Tax Revenue ²	\$86.4	\$40.0
Civilian Housing Demand ³	770	285
GIP ²	\$635	\$75

Notes: ¹ Full time equivalent (FTE) jobs.

² Dollar figures in millions of 2012 dollars.

³ Units of housing required by civilian in-migrants, disregarding housing supply.

⁴ Maximum impacts estimated to occur in 2021.

⁵ Steady-state impacts projected to begin in 2028.

Public Services Impacts

The analysis of public services impacts in this SIAS evaluates two groups of public service agencies. The first group of agencies would be impacted by increasing population. The second group of agencies would be impacted by the increased development that would be both directly and indirectly related to the proposed action.

Public Services Agencies Affected by Increasing Population

Analysis is conducted for the following agencies:

- Guam Public School System
- Guam Community College (GCC)
- University of Guam (UoG)
- Guam Memorial Hospital Association (GMHA)
- Guam Department of Public Health and Social Services (GDPHSS)
- Guam Behavioral Health and Wellness Center (GBHWC)
- Guam Department of Integrated Services for Individuals with Disabilities (GDISID)
- Guam Police Department (GPD)
- Guam Fire Department (GFD)

- Guam Department of Corrections (GDoC)
- Guam Department of Youth Affairs (GDYA)
- Guam Department of Parks and Recreation (GDPR)
- Guam Public Library System (GPLS)
- Judiciary of Guam (JoG)

In addition, two Guam public service agencies provided estimates of staffing impacts as part of the public comment process for the SEIS. These agencies include:

- Guam Department of Administration
- Guam Customs and Quarantine

Table ES-4 provides a summary of the increase in service population projected for each public service agency for which analysis was conducted. Increases in service populations are expected to be at maximum in either 2021 or 2023. (In general, maximum service population numbers occur for an agency in 2021 if the agency would not be affected by direct DoD population and in 2023 if the agency would be affected by direct DoD population increases.) A long-term steady-state would be reached for all agencies in 2028.

Table ES-4. Summary of Public Agency Service Population		
	<i>Impact¹</i>	
	<i>Maximum</i>	<i>Steady-State</i>
Guam Public School System	562	268
Guam Community College	55	39
University of Guam	99	70
Guam Memorial Hospital Association	5,137	895
Guam Department of Public Health and Social Services	5,137	895
Guam Behavioral Health and Wellness Center	1,934	337
Guam Department of Integrated Services for Individuals with Disabilities	1,934	337
Guam Police Department	9,585	7,412
Guam Fire Department (Fire Suppression Division)	5,285	1,112
Guam Department of Corrections	30	26
Guam Department of Youth Affairs	562	268
Guam Department of Parks and Recreation	9,585	7,412
Guam Public Library System	9,585	7,412
Judiciary of Guam	9,585	7,412

Note: ¹ Numbers represent projected increase in service population for each public services agency that would be generated by the proposed action.

Table ES-5 shows a summary of the increase in number of staff that would be required by GovGuam public service agencies to service the projected increases in demand for services. Although the percent of increase in additional staffing varies, the highest percentage among agency categories affected by population growth would be 9% during the maximum time period and 3.3% for steady-state.

Table ES-5. Summary of Public Service Agency Key Staffing Requirements					
Agency Category	Baseline Staffing	Impact ¹			
		Max	Max %	Steady-State	Steady-State %
Agencies Affected by Population Growth					
Public Education Agencies	2,641	49	1.9%	25	0.9%
Public Health and Human Services	1,140	38	3.3%	7	0.6%
Public Safety	820	40	4.9%	27	3.3%
Judiciary of Guam ² and Selected Agencies Driven by Population Growth ³	322	29	9.0%	3	0.9%
Totals	4,923	156	3.2%	62	1.3%

Notes: ¹ Numbers represent projected increase in key staff for each public services agency that would be required to maintain current levels of service.

² The JoG is a branch of GovGuam, co-equal with the executive and legislative branches.

³ Includes JoG, Guam Department of Recreation, Guam Public Library System, Guam Department of Administration, and Guam Customs and Quarantine Agency.

Public Services Agencies Affected Development

Analysis is also conducted for agencies that would directly and indirectly be influenced by increased development associated with the proposed action. The following agencies work to regulate development through the permitting process and are expected to see an increase in permit requests:

- Guam Department of Public Works (GDPW), Building Permits and Inspection
- Guam Department of Land Management (GDLM)
- Guam Environmental Protection Agency (GEPA)
- Guam Coastal Management Program (GCMP), within Guam Bureau of Statistics and Plans (GBSP)
- Guam Power Authority (GPA)
- Guam Waterworks Authority (GWA)
- GFD, Permitting Staff
- State Historic Preservation Office (SHPO), within the GDPR
- Guam Division of Environmental Health (DEH) (within the GDPHSS)
- Guam Alien Labor Processing and Certification Division (ALPCD) within the Guam Department of Labor (GDoL)

Table ES-6 summarizes impacts on permitting and regulatory agencies.

Table ES-6. Summary of Permitting and Regulatory Agency Key Staffing Requirements					
Agency Category	Baseline Staffing	Impact			
		Max	Max %	Steady-State	Steady-State %
Agencies Affected by Development					
GDPW	6	0.8	13%	0.1	1.7%
Guam Department of Land Management	5	1.7	34%	1.4	28.0%
GEPA	48	9.7	20%	0.7	1.5%
Guam Coastal Management Program	6	0.9	15%	0.6	10.0%
GPA	6	0.7	12%	0.1	1.7%
GWA	5	0.9	18%	0.1	2.0%
GFD	14	0.8	6%	0.3	2.1%
Guam Division of Environmental Health	11	0.8	7%	0.5	4.5%
SHPO	6	0.6	10%	0.1	1.7%
Guam Alien Labor Processing & Certification Division	5	11	220%	0	0.0%
Totals	112	28	25%	4	3.6%

Note: ¹ Numbers represent projected increase in key staff for each permitting agency that would be required to maintain current levels of service.

Sociocultural Impacts

There is a potential for sociocultural impacts to occur, but the magnitude of the impacts are difficult to predict and could vary substantially based on policy and program choices yet to be made as how to address them. Any sociocultural impacts would be substantially lower than assessed in the 2010 Final EIS because population increases associated with this action would be much smaller.

Potential impacts include the following:

- In proportion to the increase in on-island population, there would likely be impacts on the overall number of crimes and on social order.
- There is a potential for social friction to occur due both to more military personnel and more off-island civilian in-migrants, especially in the initial stages of construction and the new military personnel coming to Guam.
- Guam's indigenous Chamorro population has concerns about whether incoming military populations would recognize them as American by nationality, and also as a unique ethnic culture worthy of respect and preservation. Potential military-civilian and cultural conflict can be alleviated through concerted efforts to orient new arrivals to the local culture and encourage continued cultural exchange.
- Chamorro concerns involving becoming a political minority are impacted by the potential increase in non-Chamorro populations related to the proposed action; more non-Chamorro and local voters could potentially impact ongoing and future issues undergoing votes that do not limit participation to Native Inhabitants as defined by the Organic Act.

Land Acquisition Impacts

Land acquisition impact analysis (Chapter 5) has a focus on the economic and sociocultural aspects of federal land acquisition with particular emphasis on how land acquisition could impact individual landowners/occupants, the community at large, and GovGuam.

Seven LFTRC alternatives were identified in the Department of the Navy's (DON's) Notice of Intent (NOI) (October 11, 2012); two of these alternatives have been dismissed from consideration. The Route 15B and Finegayan LFTRC preliminary alternatives were considered but eliminated from further analysis in the SEIS.

Four of the remaining five alternatives would require some acquisition of land for DoD use. Table ES-7 describes the characteristics of the land that would be acquired for each of the five alternatives that remain under consideration.

One of the alternatives, Andersen Air Force Base (AAFB), Northwest Field (NWF) (hereinafter NWF), is already federally owned and would not require land acquisition; instead there would be a transfer of custody and control of the land from the U.S. Department of the Interior (DoI) to DoD.

Of the four alternatives that would require land acquisition, the Naval Base Guam, Munitions Site (hereinafter "Naval Magazine [NAVMAG]") (East/West) alternative would require the largest amount of land (1,894 acres [766.5 hectares]), the NAVMAG (L-Shaped) alternative would require the next largest amount of land acquisition (974 acres [281.3 hectares]), followed by the Route 15 alternative (896 acres [362.6 hectares] required), and the NAVMAG (North/South) alternative would require the acquisition of the least amount of land (252 acres [102 hectares]).

Depending on the alternative selected, sociocultural impacts have the potential to be adverse to individual landowners who do not want to sell their land. While condemnation of land would be unlikely under the proposed action, if it were to occur, some of those individuals who did not want to sell their land would perceive the acquisition of their land through a process of condemnation adversely because the loss of property at a particular site would disrupt their ties to community and connection with the land.

Economic impacts to landowners/occupants were found to be neutral since existing federal regulations regarding land acquisition automatically provides compensation for the economic impacts experienced by individual landowners and occupants.

Table ES-7. Summary of Land Acquisition Impacts¹

	<i>LFTRC Alternatives</i>				
	<i>Route 15</i>	<i>NAVMAG (East/West)</i>	<i>NAVMAG (North/South)</i>	<i>NAVMAG (L-Shaped)</i>	<i>NWF²</i>
Potential Increase in Federal Land (acres) ³	896	1,894	252	974	0
Private Land Potentially Acquired (acres)	0	1,498	156	695	0
Government of Guam Land Potentially Acquired (acres) ⁴	23	360	46	205	0
Guam Ancestral Land Commission Land Potentially Acquired (acres)	197	0	0	0	0
Chamorro Land Trust Commission Land Potentially Acquired (acres)	676	0	0	0	0
Unknown Ownership Land Potentially Acquired (Acres)	0	36	51	74	0
Number of Lots Potentially Acquired	7	19	23	30	0
Government of Guam Lots Potentially Acquired	7	1	2	3	0
Private Lots Potentially Acquired	0	17	4	9	0
Unknown Lot Ownership	0	1	17	18	0
Potential Loss of Property Tax Revenues (annual)	\$0	\$263,500	\$27,436	\$122,232	\$0
Decrease in Debt Ceiling ⁵	\$0	\$27.9 million	\$2.9 million	\$12.9 million	\$0

Notes: ¹ Based on Version Control 4 Geographic Information Systems (GIS) data.

² The NWF parcel (268 acres [108.5 hectares]) is owned by the federal government and is currently managed by the DoI.

³ Increases in federal land include acreages for partial parcels. There is potential that more land would need to be acquired if remaining (non-acquired) portions of parcels would be rendered useless after acquisition.

⁴ GovGuam data does not include data for the Guam Ancestral Lands Committee (GALC) and the Chamorro Land Trust Commission (CLTC).

⁵ The GovGuam debt ceiling is the maximum amount of money that GovGuam may borrow. The value of the GovGuam debt ceiling may be reduced due to federal land acquisition because as land becomes federally owned it becomes un-taxable by GovGuam and thus does not contribute to the calculation on the overall size of the debt ceiling.

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Guam and CNMI Military Relocation (2012 Roadmap Adjustments)

Socioeconomic Impact Assessment Study

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ACRONYM AND ABBREVIATION LIST

AAFB	Andersen Air Force Base	GBSP	Guam Bureau of Statistics and Plans
AAMDTF	Army Air and Missile Defense Task Force	GCA	Guam Contractors Association
ADA	Americans with Disabilities Act	GCC	Guam Community College
ALPCD	Alien Labor Processing and Certification Division (GDoL)	GCMP	Guam Coastal Management Program
ARC	Application Review Committee	GDA	Guam Department of Agriculture
BCDC	Bureau of Communicable Disease Control (GDPHSS)	GDCA	Guam Department of Chamorro Affairs
BFHNS	Bureau of Family Health and Nursing Services (GDPHSS)	GDID	Guam Department of Integrated Services for Individuals with Disabilities
BPCS	Bureau of Primary Care Services (GDPHSS)	GDLM	Guam Department of Land Management
BRAC	Base Realignment and Closure	GDoC	Guam Department of Corrections
CFR	Code of Federal Regulations	GDoE	Guam Department of Education
CHC	Community Health Center	GDoL	Guam Department of Labor
CLTC	Chamorro Land Trust Commission	GDPHSS	Guam Department of Public Health and Social Services
CNMI	Commonwealth of the Northern Mariana Islands	GDPR	Guam Department of Parks and Recreation
CPI	Consumer Price Index	GDPW	Guam Department of Public Works
CVN	Nuclear-powered Aircraft Carrier	GDYA	Guam Department of Youth Affairs
DDESS	Domestic Dependent Elementary and Secondary Schools	GEDA	Guam Economic Development Authority
DEH	Division of Environmental Health (GDPHSS)	GEPA	Guam Environmental Protection Agency
DoD	Department of Defense	GFD	Guam Fire Department
DoI	U.S. Department of the Interior	GHURA	Guam Housing and Urban Renewal Authority
DON	U.S. Department of the Navy	GIP	Gross Island Product
DOT	Direct Observed Therapy	GIS	Geographic Information System
DPH	Department of Public Health	GLUC	Guam Land Use Commission
EIS	Environmental Impact Statement	GMHA	Guam Memorial Hospital Authority
FAS	Freely Associated States of Micronesia	GovGuam	Government of Guam
FSM	Federated States of Micronesia	GPA	Guam Power Authority
FTE	Full-time equivalent	GPD	Guam Police Department
FY	Fiscal Year	GPLS	Guam Public Library System
GALC	Guam Ancestral Land Commission	GRMC	Guam Regional Medical City
GBHWC	Guam Behavioral Health and Wellness Center	GRT	gross receipts tax
		GVAO	Guam Veterans Affairs Office
		GVB	Guam Visitors Bureau
		GWA	Guam Waterworks Authority

HIV	Human Immunodeficiency Virus	PIU	Pacific Islands University
IMPLAN	Impact Analysis for Planning	P.L.	Public Law
IRR	Impoverishment Risks and Reconstruction	PUMS	Public Use Microdata Sample
JoG	Judiciary of Guam	SEIS	Supplemental Environmental Impact Statement
LFTRC	Live-Fire Training Range Complex		
mgd	millions of gallons per day	SHPO	State Historic Preservation Office (GDPR)
MIG	Minnesota IMPLAN Group, Inc.	SIAS	Socioeconomic Impact Assessment Study
MOU	Memorandum of Understanding	SOFA	U.S. Status of Forces Agreement
NAVFAC	Naval Facilities Engineering Command	SRCHC	Southern Region Community Health Center
NAVMAG	Naval Magazine	STD	Sexually Transmitted Disease
NEPA	National Environmental Policy Act	SY	School Year
NHSC	National Health Service Corporation	TB	Tuberculosis
NOI	Notice of Intent	U.S.	United States
NPDES	National Pollutant Discharge Elimination System	UoG	University of Guam
NRCHC	Northern Region Community Health Center (GDPHSS)	USEPA	U.S. Environmental Protection Agency
NWF	Northwest Field	WWII	World War II
PI	Permanent Injunction	WWTP	Wastewater Treatment Plant

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GLOSSARY

2010 Final Environmental Impact Statement (EIS): Final EIS for the Guam and Commonwealth of Northern Marianas Islands (CNMI) Military Relocation.

2010 Final Socioeconomic Impact Assessment Study (SIAS): SIAS; Volume 9 Appendix F of the 2010 Final EIS.

Boomtowns: The boomtown effect is a growth and decline scenario where an existing community “experiences a period of extraordinary growth and expects a rapid decline as the project is phased out” (Hua 1985). This SIAS makes note of common socioeconomic boomtown effects that have been observed in the past in other locations. These include direct and indirect employment and business opportunities, in-migration resulting in population increase, labor shortages, inflation, social and cultural change, expectations for the future that may not be realistic, housing shortages, and a loss of employment opportunities once the construction is over (Cocklin and Kelly 1992, Detomasi 1997, Hua 1985, Offshore Oil and Gas Research Group 2004, Yamaguchi and Kuczek 1984).

Combined Total Impacts: Sum of the impacts of the construction phase and the operational phase.

Cantonment Area: The area where the Marine base is proposed, including: housing, administrative, maintenance and repair; warehousing and where other associated support facilities would be located.

Direct Expenditures: This is the first round of spending. These include expenditures related to the construction phase first, and then ongoing military expenditures during the operational phase.

Direct Impacts: Impacts that come from *direct expenditures*. It also refers to the expenditures by construction contractors or the military. Most tables in this SIAS show direct, indirect, and total impact results for both the construction and operational components.

H-2B Workers: The H-2B non-immigrant program permits employers to hire foreign workers to come temporarily to the U.S. and perform temporary nonagricultural services or labor on a one-time, seasonal, peak load or intermittent basis.

Indirect Expenditures: These are subsequent rounds of spending (after direct expenditures). These expenditures circulate through the economy, generating spin-off sales and businesses. Indirect expenditures include induced expenditures, which is spending of wages and salaries.

Indirect Impacts: Impacts created by *indirect expenditures*. The term “indirect impacts” is used in this SIAS to cover both *indirect effects* and *induced effects*. *Indirect effects* are those that occur when the first businesses to receive new outside money spend some of it to buy things from other businesses, and *induced effects* occur when workers at the new/growing businesses spend their added earnings on goods and services, such as kitchen supplies or haircuts. Most tables in this SIAS show direct, indirect, and total impact results for both the construction and operational components.

Induced Impacts: The result of spending from wages and salaries derived from jobs generated by the proposed action. Spending of wages and salaries can be on items such as food, housing, transportation, and medical services. The spending creates induced employment in nearly all sectors of the Guam economy, especially service sectors.

In-migrant Worker: Worker coming in from another region often for purposes of obtaining employment (also, “off-island worker”).

Live-Fire Training Range Complex (LFTRC): The proposed action includes construction and operation of a complex of live-fire training ranges and associated range operation and control facilities required to meet the military mission of sustaining a combat-ready Marine force.

Multiplier: A multiplier is used in economic impact analysis to provide an estimate of indirect and induced economic effects that occur following the spending of money; the Impact Analysis for Planning (IMPLAN) Model applies numerous multipliers, depending on what money is spent on.

Over-Supply Scenario (Housing): Scenario where the housing demand is met, but results in a subsequent over-supply of housing, as population declines when construction ends. The proposed action is not expected to lead to an over-supply condition.

Proxy Group: Populations with expectedly similar characteristics for whom data are available to analyze.

Socioeconomic Impact Assessment Study (SIAS): The SIAS is a stand-alone study (i.e., it does not cover all aspects of analysis conditional to meet National Environmental Policy Act [NEPA] standards) to support the SEIS for the Guam and CNMI Military Relocation (2012 Roadmap Adjustments).

Supplemental Environmental Impact Statement (SEIS): SEIS for the Guam and CNMI Military Relocation.

Sociocultural: Relating to, or involving a combination of social and cultural factors.

Stay-behind Workers: Workers that migrate to Guam for construction-period jobs and remain on island.

Steady-state: A stable condition that does not change over time. For analysis in this SIAS, the steady-state begins in the year 2028 as no new project-related construction would occur, and population and base operational expenditures would not change. Impact results presented for the year 2028 are considered steady-state results as the socioeconomic conditions predicted for 2028 would be expected to continue, annually, for the foreseeable future.

Total Impacts: Sum of direct and indirect/induced impacts. Most tables in this SIAS show direct, indirect/induced, and total impact results for both the construction and operational components.

Under-Supply Scenario (Housing): Scenario where little or no construction occurs to meet civilian market housing demand during the military construction period. The proposed action is not expected to lead to an under-supply condition.

CHAPTER 1. INTRODUCTION

1.1 PURPOSE OF THE STUDY

This Socioeconomic Impact Assessment Study (SIAS) is prepared as a stand-alone technical study to support the Supplemental Environmental Impact Statement (SEIS) for the Guam and Commonwealth of the Northern Mariana Islands (CNMI) Military Relocation (2012 Roadmap Adjustments). As a stand-alone study this SIAS does not address some of the concepts that are required in a National Environmental Policy Act (NEPA) compliant document, such as cumulative analysis, the significance of impacts, and potential mitigations. These issues are addressed in the SEIS as appropriate. The purpose of the study is to provide estimates of the potential impact of the proposed relocation on the social and economic conditions on Guam.

1.2 BACKGROUND

1.2.1 Overview of the Proposed Action

The purpose and need for the proposed action evaluated in this SIAS is to ensure that the relocated Marines are organized, trained, and equipped as mandated in § 5063 of Title 10 of the United States Code, to satisfy individual live-fire training requirements as described in the 2010 Final Environmental Impact Statement (EIS), and to establish an operational United States (U.S.) Marine Corps presence on Guam in accordance with the April 2012 adjustments to the May 2006 U.S.-Japan Roadmap for Realignment Implementation.

The proposed action is needed to ensure consistency with the new force posture adopted by the U.S. Department of Defense (DoD) in accordance with the April 2012 Roadmap adjustments, which provides for a materially smaller force on Guam, while fulfilling U.S. national security obligations to provide mutual defense, deter aggression, and dissuade coercion in the Western Pacific Region.

This SIAS supplements information and incorporates by reference the 2010 Final SIAS, which is Appendix F to the 2010 Guam and CNMI Military Relocation EIS.

Compared to the 2010 Final SIAS, this SIAS evaluates the socioeconomic impacts of constructing and operating a smaller Marine Corps cantonment area (including family housing), a similarly sized Live-Fire Training Range Complex (LFTRC), and reduced-scale infrastructure requirements to support a reduced number of relocating Marines and dependents than originally planned.

Some of the proposed actions that were analyzed in the 2010 Final SIAS are not analyzed in this SIAS because they are no longer considered reasonably foreseeable actions, such as: the construction of a wharf to accommodate the Navy's temporary berthing of a Nuclear-powered Aircraft Carrier (CVN) and the Army Air and Missile Defense Task Force (AAMDTF). Impacts from utilities and roadways projects, that are not located at main cantonment or LFTRC project sites, are also not analyzed in this SIAS because they are independent actions, and the Roadmap Adjustment does not change the decision made in the 2010 Record of Decision regarding these actions.

1.2.2 The "Boomtown Effect"

A rapid and relatively large increase in population and related economic activity can lead to what is called the "Boomtown Effect." The boomtown effect is a growth and decline scenario where a community "experiences a period of extraordinary growth and expects a rapid decline as the project is phased out"

(Hua 1985). The boomtown effect scenario was discussed, in detail, in the 2010 Final SIAS; however, given that the proposed action for this SIAS (and SEIS) is of a much reduced magnitude and a longer duration, a boomtown scenario is no longer applicable. For a more detailed discussion of the Boomtown Effect see Section 1.2.2 of the 2010 Final SIAS.

1.2.3 Issues and Concerns from Environmental Impact Statement and Supplemental Environmental Impact Statement Public Scoping

Socioeconomic issues were expressed by the citizens of Guam and CNMI during a series of public EIS scoping meetings held on Guam, Saipan, and Tinian on April 17-20, 2007 and were expressed again at the scoping meetings for the SEIS, which were held in Guam from November 8-10, 2012. At the SEIS scoping meetings, a variety of socioeconomic issues of concern were expressed by both local residents and the Government of Guam (GovGuam).

The three most common socioeconomic concerns expressed during the 2012 scoping period included the economy (20%), cultural identity (19%), and population growth (18%). Issues covered in this SIAS that were identified by the public during the scoping period include:

- *Socioeconomics*: potential impacts to the economy.
- *Tourism*: potential impacts to the tourism sector.
- *Crime*: potential rise in crime rate.
- *Cultural Identity*: the people and Chamorro culture of Guam.
- *Infrastructure*: potential impacts to the existing infrastructure of Guam.
- *Population Growth*: increased population associated with the proposed action alternatives.
- *Guam Self Determination*: Guam and its citizens having the right to determine the future of Guam.
- *Public Services*: potential impacts to existing public services.
- *Land Acquisition*: The general consensus was that the U.S. Department of the Navy (DON) should look at all possible alternatives within federally owned land before it considers the use of other public or private lands.

1.2.4 Issues Identified by Federal Agencies in 2008

In September of 2008, the SIAS research team met with members of the Federal Regional Council Region IX in San Francisco and with the U.S. Department of Agriculture in Washington, D.C. as a launch to the SIAS research. These meetings were facilitated by the DoD's Office of Economic Adjustment with the goal of establishing the basis for an objective analysis of the needs, impacts, and financial challenges posed by the proposed action for GovGuam. Issues that were identified are presented in Section 1.2.4 of the 2010 Final SIAS. For this SIAS, updates were sought by reviewing data and reports available on the Federal Regional Council's website.

1.3 SCOPE OF IMPACT ANALYSES

The following general scope parameters are fundamental to the investigation of the aforementioned socioeconomic issues: 1) consideration of direct, indirect and induced impacts (defined below) and 2) analysis of impacts from both construction and operational phases of the proposed action. Impacts for five major topics are presented: 1) Population Change, 2) Economic Activity, 3) Public Services 4) Sociocultural Issues, and 5) Land Acquisition.

1.3.1 Direct, Indirect, and Induced Impacts

Direct impacts

Direct impacts are associated with the project-related construction and operations. These results are based on data relating to initial purchases of locally provided construction, and operations and maintenance services and supplies (such as contract expenditures).

Indirect impacts

Indirect impacts are generated through the expenditures of businesses that supply goods and services for construction and/or operational activities that would be associated with the proposed action. Indirect labor income includes the income earned in those jobs, and indirect output includes the total sales volume related to the supply of goods and services to suppliers.

Induced impacts

Induced impacts are the result of spending from wages and salaries derived from jobs generated by the proposed action. Spending of wages and salaries can be on items such as food, housing, transportation, and medical services. The spending creates induced employment in nearly all sectors of the Guam economy, especially service sectors.

1.3.2 Construction and Operational Components

The SIAS addresses both the construction and operational phases of the proposed action to include the overlap between those two phases, which is when the largest impacts occur. To capture the separate impacts of the construction and operational phases, as well as to show their combined impacts, most quantitative analyses in the study will present results for 2015 through 2028 (which is the first year of steady-state operations) for:

- Construction Phase – Direct, Indirect/Induced, and Total Impacts
- Operational Phase – Direct, Indirect/Induced, and Total Impacts
- Combined (Construction and Operational) – Direct, Indirect/Induced, and Total Impacts

1.3.3 Population Change

Analyses related to population change address impacts related to the following topics:

- Project-related population
- Demographic characteristics
- Comparative analysis (comparing project-related population projected in the 2010 Final EIS to project-related population projected in this SIAS).

1.3.4 Economic Activity

Analyses related to economic activity address impacts on the following topics:

- Employment and income
- Housing
- Local Government Revenues
- Gross Island Product (GIP)

- Utility rates
- Local Business Contract Opportunities and Constraints
- Tourism

1.3.5 Public Services

Analyses related to public services address impacts on the following topics:

- Public Education
- Public Health and Human Services
- Public Safety
- Judiciary of Guam (JoG) and Selected Other Service Agencies
- Growth Permitting and Regulatory Agencies

1.3.6 Sociocultural Issues

Sociocultural issues evaluated in this SIAS include the potential for increases in crime and social disorder, issues of concern to the Chamorro population, and community cohesion. Chamorro issues include the trend toward the Chamorros becoming a minority of the Guam population and the potential decline in respect for the Chamorro culture and people by incoming populations.

1.3.7 Land Acquisition

The land acquisition impacts in this SIAS are evaluated from two perspectives: economic and sociocultural. Impacts from both of these perspectives are assessed as pertinent to individual landowners and occupants, the community as a whole, and GovGuam. Impact analysis focuses on the four parcels of land that could be potentially acquired by the federal government for the LFRTC alternative locations. The fifth potential LFTRC alternative location – Andersen Air Force Base (AAFB), Northwest Field (NWF) (hereinafter NWF) – is already owned by the federal government, so more limited analysis is conducted for that alternative.

1.4 ORGANIZATION OF THE SIAS REPORT

The remainder of this report is organized as follows:

- Chapter 2 presents an overview of the approach to analysis for the population, economic, public service, and sociocultural categories;
- Chapter 3 describes the baseline existing conditions;
- Chapter 4 identifies the potential impacts of the proposed action; and
- Chapter 5 provides an overview of the land acquisition impact methodology, baseline conditions, and potential impacts.

CHAPTER 2. APPROACH TO ANALYSIS

This SIAS was initiated in September of 2012 with a series of meetings with representatives of the DON to determine the necessary updates to the 2010 Final SIAS (2010 Final SIAS) document, in light of changes in the proposed action. These meetings provided context for and helped shape the approach and analyses that are applied in this SIAS document.

After meetings with the DON representatives, SIAS researchers met with the GovGuam's Director of the Military Buildup, Office of the Governor, in order to establish appropriate protocols for interaction with GovGuam agencies. In November of 2012, a series of questionnaires were distributed through the Director of Military Buildup to GovGuam agencies. In January 2013, on-island meetings and interviews were conducted with GovGuam agency representatives and other non-governmental representatives (e.g., Chamber of Commerce, Contractors Association, Bank of Guam, etc.).

As noted in Chapter 1, the socioeconomic impact analyses conducted in this study reflect the major concerns and issues identified by local residents and GovGuam during the public scoping meetings for the SEIS held at various locations on Guam from November 8-10, 2012. The socioeconomic impacts that are estimated in this SIAS fall under five general categories:

- Population Change
- Economic Activity
- Public Services
- Sociocultural Issues
- Land Acquisition

Following is an overview of the approach to analysis for each of the five categories.

2.1 APPROACH TO ANALYSIS: POPULATION CHANGE

2.1.1 Project-Related Population

Direct DoD population includes the number of active duty personnel and civil-service government employees (and their respective dependents) that would in-migrate to Guam. Data used to derive direct DoD population is based on planned deployment composition and scheduling.

The remaining project-related population is based on economic modeling results of the expected increase in non-direct DoD jobs – these job estimates include part-time jobs. In order to equate the number of jobs to a number of persons, jobs are converted into full-time equivalents (FTE's), so that one FTE job equals one person. A population growth estimation procedure was used to forecast the number of people that would migrate to Guam to fill the new jobs, as well as the dependents that would accompany them.

2.1.1.1 Population Growth Forecast

The procedure that was used to forecast population growth applied data from two sources: economic modeling results and Guam labor force statistics. The economic model (the Impact Analysis for Planning [IMPLAN] Model, discussed below) produced estimates on the number and types of jobs that would be generated by the proposed action while the proportion of those jobs that would be captured by the Guam workforce were estimated using Guam labor force statistics.

Jobs that would not be filled by the Guam labor force were assumed to be filled by in-migrant workers. Jobs that would be filled by in-migrant workers were split into two broad categories – construction jobs and other jobs (i.e., indirect and induced jobs in industries including healthcare, retail, and hotels/restaurants, etc.). The procedures for forecasting total population growth associated with these two categories differed but, in general, the population growth forecasting procedure followed three steps:

1. Determine the capacity of current Guam residents to take jobs.
2. Determine the number of in-migrants who would move to Guam, enter the workforce, and be hired for jobs made available as a direct or indirect result of the proposed action.
3. Determine the identity and characteristics of the in-migrant labor pool (also discussed under Demographic Impacts below).

Construction Jobs

Determining the capacity of current Guam residents to take jobs

March 2012 labor force data was used to determine the number of construction workers currently living on Guam who would work on DoD projects. Current Guam residents that were considered as potential participants in DoD construction work included:

- The currently unemployed.
- Those who are not looking for work because they believe no jobs are available.
- Those who have stopped looking for work because they have not been able to find work.
- Those with other reasons that they are not looking for work (due to lack of information as to what the “other reasons” are, only a portion, 25%, of this group was included).

This set of workers constituted the total estimated available labor on Guam. Based on a ratio of the construction employment on Guam to overall employment on Guam as of June 2012, 14% of this group was projected to have requisite skill sets needed to participate in DoD construction work. While these workers were assumed to re-enter the workforce to work on DoD construction projects, they were not assumed to re-enter the workforce all at once – re-entry rates, over time, were determined to be consistent with the timing of construction – more local construction workers would re-enter the workforce as construction activity increased and as construction activities declined local workers would re-exit the workforce.

Determining the number of in-migrants who would move to Guam to enter the workforce

The number of local workers who were projected to take DoD construction jobs was subtracted from the number of total FTE jobs associated with DoD construction to produce the estimated number of in-migrant workers for DoD construction jobs.

Determining the identity and characteristics of the in-migrant labor pool

Data gathered in interviews with the Guam Department of Labor (GDoL) and the Guam Contractors Association (GCA) indicated that a large portion of in-migrant construction workers would be H-2B Visa workers and that H-2B workers rarely bring dependents. Also indicated in those interviews was that the proportion of H-2B workers (relative to the total in-migrant construction workforce) would increase as the magnitude of construction activities increased.

The number of dependents that were estimated to accompany each in-migrating construction worker was between 0.2 and 0.35. These ratios take into account the assumption that H-2B workers would not bring

any dependents with them to Guam. Lower dependent ratios (nearer to 0.2) were applied in years when construction activity would be relatively high and higher dependent ratios (nearer to 0.35) were applied for years when the construction activity would be relatively low. Low dependent ratios were applied to years with relatively high levels of construction activity (and vice versa) because relatively high levels of construction activity would require relatively high utilization of H-2B workers, who would not bring any dependents to Guam.

Other jobs (i.e., indirect and induced jobs)

Determining the capacity of current Guam residents to take jobs

Indirect and induced jobs include a variety of occupations within a number of industries. As examples, one type of indirect or induced job could be an additional doctor needed to provide health services to an increasing population, and another type of indirect or induced job might be an additional waiter position that opens up because a restaurant has increased business due to greater demand in the food services industry. This sort of detail was provided by the economic model.

Data gathered in interviews with experts on Guam's employment situation provided a guide on how to determine whether jobs in certain industries would be taken by Guam residents and which likely would not. For instance, interviews with health services providers on Guam indicated that there was a shortage of physicians on Guam and that if there becomes a requirement for additional doctors that this requirement would likely need to be met by in-migrating physicians.

Determining the number of in-migrants who would move to Guam to take jobs

Jobs estimates, produced by the economic model, were reviewed, by industry, to determine whether the jobs expected to be generated in particular industries could be staffed by Guam's existing labor force. Then, estimates were made as to the proportion of jobs in particular industries that would need to be filled by off-Guam sources. The number of jobs that would need to be filled by off-Guam workers was converted to FTEs so that one FTE job equated to one in-migrating worker. Each in-migrating worker was included in the estimate of population change.

Determining the identity and characteristics of the in-migrant labor pool

Since estimates of in-migrating workers for indirect or induced jobs were based on the specialty, or industry by which labor would be demanded, it was determined that no indirect or induced jobs would be taken by H-2B workers and that few would be taken by workers in-migrating from nearby Pacific islands. The specialty jobs that would demand higher skilled workers were determined to be, mostly, staffed by workers from Hawaii and Continental U.S. Interviews with Guam agencies indicated that workers from these places, who would work in more specialized occupations, would bring more dependents than a construction worker would (the estimates used for dependent ratios was between 0.95 and 1 dependent per in-migrant worker for indirect or induced jobs).

2.1.2 Demographic Characteristics

Projections were made on how many people would in-migrate to Guam and the characteristics of that new population. These projections, in turn, fed into forecasts of the demographic impacts of the proposed action. Demographic characteristics are presented comparatively – characteristics of the new population are compared to the existing population, and the impact is presented as the change in characteristics brought about by the proposed action.

Unlike other impact analyses in this SIAS, demographic characteristics are presented with a civilian employment component and a military component (not construction and operations as other impacts are presented). The employment component focuses on the impacts from new populations who move to Guam for work related to the proposed action and the military operational component focuses on the military population impacts.

To establish the characteristics for the employment component proxy group, U.S. Census Bureau year 2010 cross tabulations for Guam were used. To establish characteristics for the military operational component, the Census Bureau's American Community Survey 3-yr average, 2009-2011 Public Use Microdata Sample (PUMS) data for Hawaii were used.

PUMS data, in general, provide census data at the individual responder level, allowing analyses to be done at a greater level of detail. For example, if an analyst is interested in gathering information on 65 year olds, PUMS data screens data for every respondent who reported that they were 65 years old, so analysis can be run on that group alone. Cross tabulations do not provide this sort of information and thus yielded fewer data upon which to base analysis on – demographic analysis related to the employment component is limited in comparison to analysis in the 2010 Final SIAS and household analysis could not be conducted at all for this SIAS. Cross tabulations were used for employment component analysis because the U.S. Census Bureau has not yet, and may never, publish 2010 PUMS data for Guam¹.

To determine demographic impacts, the characteristics determined for each proxy group were compared to Guam's current characteristics (presented in the Affected Environment chapter). Impacts are presented as the net difference between the proxy group and the current situation, i.e., characteristics are explained relative to the current situation (larger than or less than).

2.2 APPROACH TO ANALYSIS: ECONOMIC ACTIVITY

Economic impacts primarily include topics where numerical estimates can be made, including:

- Civilian employment and income
- Housing for civilian population
- GovGuam revenues
- GIP

Due to lack of available data needed to make reliable quantified projections, only qualitative analysis is presented for the following economic topics:

- Potential effects on standard of living
- Unemployment rate
- Local business contract opportunities and constraints
- Effects on tourism

2.2.1 Economic Model

For economic impacts, the IMPLAN Model (Minnesota IMPLAN Group, Inc. [MIG] 2013) was used in conjunction with input provided by DoD for measurement of impacts related to both construction and

¹ In order to initiate data collection for the Survey of Business Owners, the primary source of characteristics information on small businesses, the Census Bureau received permission to reprogram \$2.25 million of 2010 Census funds to the Survey of Business Owners, part of the Economic Census. As a result of this reduction, the 2010 PUMS files will be delayed and possibly cancelled (Census 2013a).

operational phases of the proposed action. IMPLAN is maintained and licensed by MIG. IMPLAN organizes the economy into 440 separate industries and has comprehensive data on every state and county in the U.S. It is widely used by economists to assess impacts of economic activities on the local economy. In addition to providing estimates of multiplier effects, IMPLAN has a detailed database which makes it possible to estimate the direct jobs and incomes associated with any given dollar amount of vendor purchases. Social Accounting Matrix multipliers were used with the amount of recycled spending limited to private sector spending.

Because there is no economic model specifically tailored for Guam, the IMPLAN model was fitted with year 2010 data for Honolulu County, Hawaii and then modified internally – using factors gathered in published data and interviews with Guam sources – to represent the Guam economy. Hawaii-based economic models are commonly used to estimate economic impacts of projects on Guam. A Hawaii-based model was recently used in the Economic Contribution Study for A.B. Won Pat International Airport (Jacobs Consultancy 2007). Other Guam economic impact studies that used HI models include the Socio-Economic Impact Assessment of New U.S. Navy Activities on Guam (Naval Facilities Engineering Command [NAVFAC] Pacific 1993), the Kilo Wharf Extension EIS/OEIS (NAVFAC Pacific 2007), the Economic Impact of Navy Base Closures and Outsourcing on Guam (Earth Tech 1999) and the Revised Guam Tourism Impact, Preliminary Results (Global Insight 2007).

While Honolulu County has a larger and more diversified economy than Guam, the two places match up well in a structural capacity as both are economic hubs for island chains and both are places where tourism and military activity are important industries. Guam and Honolulu County have both experienced high levels of construction activity and have construction equipment available on-island, which is an important factor for estimating the economic impacts of construction. Also, Guam and Honolulu County are similar in that they are banking centers; Guam has its own local banks and it is the center for banking in the Mariana Islands. Honolulu County also has its own local banks and it is the center for banking in the Hawaiian Islands; this similarity is important as the banking system is a facilitator of intra-industry commerce, which is a major underlying factor in capturing accurate multiplier effects.

Adjustments to the Honolulu County model were made to compensate for Honolulu's larger size and more diversified economy. Industry compositions were compared and where the IMPLAN model included industries present in Honolulu County that are not present in Guam, those industries were removed from the model so that they would not contribute to intra-industry expenditures or multiplier effects. With the IMPLAN model adjusted to represent the Guam economy, spending associated with the proposed action that would stimulate the Guam economy and generate economic activity versus spending that would "leak" off-island or never reach the island at all could be accounted for.

The IMPLAN model generates various outputs (economic output, labor income, and employment) and provides specific detail on the nature of those outputs – whether the effects are direct, indirect, or induced.

Model Inputs

Data was categorized into two major categories – construction and operations – and input into the IMPLAN model to represent spending and income patterns for particular portions of the proposed action. Construction input data was allocated into three distinctive industries – non-residential construction (to represent construction of base operations and training facilities), residential construction (to represent construction of cantonment housing), and furnishings and equipment handling and installation (to represent the installation of furnishings and equipment into newly constructed facilities).

For operational aspects of the proposed action, base operations expenditures were input into the model as contributing to federal defense operations spending (a spending pattern developed as part of the economic model). Permanent Marine and civilian military pay was input into the IMPLAN model as employee compensation (a category that does not contribute to direct labor income, though civilian pay was later added to labor income results as direct labor income).

Because rotational Marines would live only part of the year on Guam, it was assumed that 20% of their income would be spent on Guam; this spending was input into the model using a spending pattern similar to the spending pattern of visitors. Transient Marine spending was estimated based on the number of transients and their length of stay; this data was input into the economic model using a spending pattern similar to the spending pattern of visitors.

Construction Inputs

Table 2.3-1 shows the categories and dollar values for construction-related economic model inputs for the years 2015, 2021, and 2028; additional descriptive notes are provided as well.

Table 2.3-1. Economic Model – Construction Inputs, 2015, 2021, and 2028 (Millions of 2012 \$'s)				
Model Category	2015	2021	2028	Notes
Non-residential construction	\$33	\$539	\$0	First Year of construction 2015; 2021 is maximum construction; by 2028 construction is complete.
Residential construction	\$0	\$112	\$0	
Furnishings and equipment handling and installation	\$31	\$42	\$0	

Source: Naval Facilities Engineering Command (NAVFAC) Pacific 2012.

Operations Inputs

Table 2.3-2 shows the categories and dollar values for operations related economic model inputs for the years 2015, 2021, and 2028; additional descriptive notes are provided as well.

Table 2.3-2. Economic Model – Operations Inputs, 2015, 2021, and 2028 (Millions of 2012 \$'s)				
Model Category	2015	2021	2028	Notes
Federal Defense Operations	\$16	\$29	\$51	Standard military base operations spending pattern (source: MIG) customized to reflect Guam economy.
Permanent Marine Payroll	\$0	\$40	\$60	Typical resident spending pattern. Since this is military income, this income does not contribute to the measure of civilian Labor Force Income.
Civilian Military Worker Payroll	\$0	\$13	\$24	Typical resident spending pattern. This income does contribute to measure of civilian Labor Force Income (though not via the IMPLAN model).
Rotational Marine Spending	\$0.2	\$16	\$25	Spending pattern customized to represent a visitor. Assumes 20% of rotational marine income is spent on Guam. Not included in measure of civilian Labor Force Income.
Transient Marine Spending	\$0.25	\$0.25	\$0.25	Spending pattern customized to represent a visitor. Accounts for total transient spending on Guam. Not included in measure of civilian Labor Force Income. Not included in income tax base.

Source: NAVFAC Pacific 2012.

Model Outputs

The IMPLAN model generated estimates of economic output, jobs, and labor income that would accrue in the Guam economy in association with the proposed action.

Employment (Civilian Labor Force Demand)

Civilian military jobs were estimated as part of the project description and were not generated by the IMPLAN model. Other civilian jobs – associated with construction and support activities, as well as indirect and induced jobs – are estimated by the IMPLAN model based on increases in output that are derived from increases in project related expenditures. Employment impacts generated by the IMPLAN model are combined with civilian military employment to equal the total impact to civilian labor force demand. Jobs, as estimated by the IMPLAN model, are calculated as all jobs (not FTE jobs) and then converted to, and reported as FTE jobs.

It is noted that jobs associated with military service are not considered civilian jobs and are not included in civilian labor force demand impact results.

Labor Income

Labor income includes earnings by employees and profits of proprietors. Total labor income is derived from two sources: 1) military and civilian military worker payroll as projected by DoD and 2) labor income generated by increases in industry output attributable to the proposed action. While the entire amount of military and civilian military worker payroll is reported in study results as labor income, the IMPLAN model does not assume that all of that money is spent on Guam, and thus, not all of that payroll feeds into secondary rounds of spending.

The IMPLAN model also estimates labor income associated with jobs that are not directly provided by DoD; i.e., construction jobs and indirect/induced jobs also generate labor income. While all of this income is included in the measure of labor income impacts, because it is income that is earned on Guam, the IMPLAN model does not assume all of this income is spent on Guam and, as such, some of the income is assumed to leak out of the Guam economy and does not generate secondary (indirect/induced) economic impacts.

Economic Output

Economic output is the sum of purchases from Guam industries plus four “value-added” components: employee compensation, proprietors’ income, other property income, and indirect business taxes. The first two value-added elements combined equal labor income, which is reported as a separate IMPLAN output. IMPLAN accounts for the fact that some consumption expenditures accrue to businesses off Guam. Likewise, the model captures the fact that some intermediate products and services are provided by entities off Guam.

In other words, the model considers regional “leakages” due to interregional commerce. Since very few products are manufactured on Guam, but all labor provided on Guam does provide revenue to the businesses that supply labor, leakages are greater when considering the purchases of products than when considering the provision of services.

The value added components represent the dollar value of all goods and services produced for final demand on Guam. Value added excludes the value of intermediate goods and services purchased as inputs to final production. Given the makeup of the value added components of economic output, it is used as a proxy measure for GIP; the measures of GIP impacts, therefore, come directly from the IMPLAN Model, without adjustment.

2.2.1.1 Tax Revenues for Government of Guam

This SIAS includes broad estimates of GovGuam tax revenues that would be associated with the proposed action. These estimates stem from economic modeling results of value added and labor income. Value added results served as the tax base for Gross Receipts Tax (GRT) and Corporate Income Tax revenue analysis. Civilian labor income results (along with direct military pay) served as the tax base for income tax revenue analysis. Section 30 funds are included in the analysis of GovGuam income tax revenues. Section 30 funds are derived from the income tax payments of active duty military personnel that are stationed on Guam. When personnel stationed on Guam pay income taxes to the federal government, the federal government remits those tax payments to GovGuam.

2.2.1.2 Additional Economic Topics – In-migration, Constraints, and Capture Rates

The 2010 Final SIAS and 2010 Final EIS included detailed discussion of potential scenarios that may have occurred in relation to the (much larger) action that it analyzed. The potential ramifications of those scenarios were, in most part, theoretically tied to the magnitude of that action. Issues of massive in-migration, constraints that potentially stood as obstacles to the feasibility of the action, and economic activity so excessive that it may have overflowed from Guam and leaked to other areas causing a loss of projected benefits, were valid in relation to that action; however, given the reduced scope of what is being analyzed in this SIAS, these issues are not anticipated and thus not re-addressed in this document. For information on these topics see Sections 2.1.1.2, 2.1.1.3, 2.1.1.4, 2.2.2, 2.2.3, and 2.2.4 of the 2010 Final SIAS.

2.2.2 Approach to Analysis: Housing

Analysis of impacts to housing demand and supply was based on the following in-migrating populations during project construction and operation phases:

- Construction Phase:
 - non-foreign (non-H-2B visa) military project construction workers
 - non-foreign (non-H-2B visa) workers on non-military construction-related projects
- Operation Phase:
 - civilian military workers
 - in-migrating direct and indirect workers

Federal contracts would require construction contractors to provide temporary workforce housing for H-2B construction workers. The housing analysis does not quantify demand for, or provision of, temporary housing for H-2B construction workers because this type of housing would primarily be provided by construction firms and would likely not noticeably change demand for housing units in the Guam housing market. Temporary workforce housing is analyzed qualitatively in Section 4.3.3.4.

2.2.2.1 Civilian Housing Demand

The primary focus of the housing demand analysis is to assess whether demand within the private-sector Guam housing market would be affected by in-migrating civilian populations during construction and operation of the proposed action, exclusive of active duty military and their dependents (who are assumed to live in the Main Cantonment) and H-2B construction workers. Civilian housing demand impacts are based on population impacts. The total population impacts are divided by an estimated (based on U.S. Census data) number of persons per household yielding the number of new housing units required.

2.2.2.2 Civilian Housing Supply

If there is an on-island shortage of housing units needed to meet the projected demand associated with the proposed action, then additional housing units would be required. In the case of a housing shortfall, the island economy would either generate housing that may remain vacant thereafter, or the disincentives for such short-term housing production could result in a shortage of housing during the construction period.

2.3 APPROACH TO ANALYSIS: PUBLIC SERVICES

The analysis of public services impacts seeks to address public concern about the capacity of GovGuam to accommodate the new population associated with the proposed action. While this concern affects all types of governmental functions, this SIAS focuses on traditionally “social” public services including:

- Public education
- Public health and human services
- Public safety services
- Other selected services driven by population growth
- Growth permitting and regulatory services that are driven by upcoming construction

Discussion of the affected environment for Guam public services is principally based on primary data collection. As part of the SIAS, primary data collection took place; a set of questionnaires were sent to GovGuam agencies and in-person interviews with these agencies were conducted in order to gather primary data. The affected environment section relies heavily on this data; therefore, sometimes anecdotal information from these sources is not directly cited. However, when specific data points are referred to, the questionnaires and interviews are cited. Citations for these data sources reference appendices to the SIAS – “SIAS Appendix A” includes agency questionnaire responses and “SIAS Appendix B” includes meeting records of agency interviews.

In addition to primary data, some information from published sources is used in the discussion of the affected environment for Guam public services. The focus of the impact analysis is not on actual health impacts, for example, but on the capacity of the public health agencies to address additional staffing demands.

2.3.1 Critical Inputs for Agency Impacts Driven by Population Growth

For most agencies, analysis involved establishing a ratio of key professional staff to “service population”. To determine the ratios, an existing ratio of key professional staff to service population was determined. Baseline data was gathered from each agency to accurately represent current conditions. Then, the agency’s service population was determined, with care being taken to ensure these determinations captured only those populations that were eligible to receive services (such as civilians only or children only). From these two calculations, the ratio of key professional staff to service population was determined for each agency.

The population increase associated with the proposed action could then be applied to this ratio in order to determine the required number of professional staff that would be needed to meet demand of increased population associated with the proposed action. Baseline data for staffing and service populations that are applied are from the year 2010. Since the U.S. Census was conducted in 2010, population estimates from this year are the most accurate available and they provide the most precise basis for analysis.

This procedure of establishing baseline conditions in 2010 also worked to ensure that stated impacts are just those due to the proposed action, not pre-existing problems or deficits. However, the existence of such deficits for individual agencies is noted where applicable in the affected environment section. The critical inputs for these sections included:

- Information on specific service population(s) and historical staffing patterns – this was gathered using structured questionnaires that were distributed in late 2012, and personal interviews and phone calls conducted in early 2013. The questionnaires were standardized in content, with minor modifications to make them appropriate to each agency, and they also gathered information about agency facilities. Questions about service population established the nature of that population – e.g., general population, children only, etc.
- Estimates of service population growth, attributable to the proposed action, were based on the population growth estimates (discussed in Section 2.1), with adjustments and estimates made as needed for service population segments that may have been only a portion of the overall population increase.

2.3.2 Critical Inputs for Agency Impacts Driven by Development

Impact analysis for GovGuam agencies responsible for issuing, monitoring, and enforcing development permits on Guam is driven by increases in expected development and associated permit applications that would be expected in advance of development.

Because actions taken on federal land typically do not require local development permits, most of the impact on GovGuam development permitting functions would come from off-base growth generated indirectly by the proposed action (i.e., purchases from construction or operations and from indirect growth). In some cases, certain proposed actions requiring federal permits such as Section 401 of the Clean Water Act, Coastal Zone Management, that are environmental regulations that involve enforcement of federal requirements by GovGuam agencies (Guam Environmental Protection Agency [GEPA], Coastal Zone Division, Department of Agriculture) so time and resources for review of the action and permitting/approval does increase certain GovGuam agencies participation, and so the direct project impacts also affect local permitting, monitoring, and enforcement.

Agency-specific approaches to analysis were developed based on agency questionnaires and interviews because of the wide range of aspects that are involved in permit applications, depending on the agency and type of permit. In general, the analytical steps were as follows:

- Collect data through questionnaires and interviews. In November 2012, the data collected during the 2010 Final SIAS development were provided to agencies along with a new questionnaire requesting an update of data. Based on the responses received, agendas for agency interviews were developed. The agency interviews occurred in January 2013 and focused on requests for clarification and/or additional information.
- Translate the different types of development associated with the proposed action into the number of predicted building and related permits. These numbers were based on projected population and employment impacts, as well as assumptions on permits per housing unit or square foot of commercial/industrial development. Table 2.3-3 shows how the overall numbers of building permits were estimated for the military relocation, using a variety of information sources.
- Calculate the number of permits reviewed by each permitting agency using data collected from agencies on historical permits and staffing levels by function.

- Develop estimates of total agency staffing needed to meet projected demand for agency actions, based on historical staffing per permit data. For example, if it was determined that five staff were handling 500 permit applications per year, the staff ratio would be one FTE per 100 permit applications.
- Apply the calculated staff ratio to the number of permit applications projected for the proposed action. Using the number of permits and the staff-to-permit ratios, the number of new staff necessary to handle project-related development permitting was calculated. Monitoring/enforcement staffing was estimated based on overall population growth attributable to the proposed action.

Table 2.3-3. Drivers for Deriving Numbers of Permits from Proposed Action

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Population without proposed action	161,785	162,742	163,875	165,177	166,658	168,322	170,071	171,799	173,494	175,152	176,770	178,348	179,888	181,384
Population increase due to proposed action	347	1,724	3,618	4,922	4,941	8,191	9,585	9,386	9,721	8,584	8,145	7,532	7,414	7,412
Percent population increase from proposed action	0.21%	1.06%	2.21%	2.98%	2.96%	4.87%	5.64%	5.46%	5.60%	4.90%	4.61%	4.22%	4.12%	4.09%
Numbers of H-2B Workers	114	761	1,634	2,291	2,039	1,837	2,255	2,114	1,566	959	438	33	0	0
Year to Year Construction Needed to Eliminate Housing Deficit	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Drivers for Commercial Permits														
Total number jobs located off base	200	566	1,183	1,474	1,521	1,985	2,390	2,308	2,014	1,573	1,341	1,122	995	988
Square foot required/employee	166	166	166	166	166	166	166	166	166	166	166	166	166	166
Total square feet required	33,200	93,956	196,378	244,684	252,486	329,510	396,740	383,128	334,324	261,118	222,606	186,252	165,170	164,008
Existing available usable commercial square footage	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Commercial square footage deficit	0	0	0	44,684	52,486	129,510	196,740	183,128	134,324	61,118	22,606	22,606	22,606	22,606
Year to year impact	0	0	0	44,684	7,802	77,024	67,230	-13,612	-48,804	-73,206	-38,512	0	0	0
Cost per square foot	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300
Total impact, construction value of new permits (\$millions)	\$0	\$0	\$0	\$13.41	\$2.34	\$23.11	\$20.17	\$1.34	\$1.34	\$1.34	\$1.34	\$1.34	\$1.34	\$1.34

Notes: ¹ From 2022-2028, non-residential construction was assumed to be for minor replacement/enhancement only, at 10% of the value in 2018.

² Year-to-year impact figures below zero defaulted to Note ¹.

For on-base development, where no permits would be required (except as delegated to Guam agencies by responsible federal agencies) but plan review and coordination/oversight would be required, calculations were based on more subjective estimates of the permit-equivalent in demands for plan review/development and coordination. In addition, information from the relevant agency contacts on estimated staff needs for these functions related to the project was used.

2.3.3 Additional Methodological Notes

The overall quantitative analysis in the public service section was kept to key professional staffing to maintain consistency between each agency, and to take a uniform approach to the proposed action's impact on those agencies. Calculations were applied to both construction and operations phases and summed on a year-by-year basis.

It should be noted that the approach taken here is necessarily limited in key aspects:

- The focus only on “key professional staff” (e.g., teachers in public schools and not educational assistants or administrative support staff, or sworn police officers and not clerical support) does not include all staffing needs; and
- The analysis sometimes mentions but does not attempt a complete inventory or quantification of non-staffing requirements, such as new facilities or equipment associated with the expansion of government. Nor does it attempt a comprehensive quantification of infrastructure costs.

Additional information on these issues is noted in the discussion of Public Services impacts. When data were available, each section's “additional discussion” portion discusses other possible impacts.

2.4 APPROACH TO ANALYSIS: SOCIOCULTURAL ISSUES

The analysis of sociocultural issues focused on the following topics:

- Crime and social disorder
- Political and Chamorro issues
- Community cohesion

2.4.1 Critical Inputs

Critical inputs to the sociocultural impact analyses included:

- Available evidence from Guam history, often based on key interviews, if quantitative data was unavailable.
- Information from published sources or experts, gathered through standard research and interview approaches. Information gathered directly for this SIAS are included in Appendices A (agency questionnaire responses) and B (meeting records of agency interviews).
- Best available information on Guam relative to the existing military population. Because currently there are only a few Marines on Guam, data regarding Marine-specific sociocultural impacts does not exist, and therefore, data on the existing military population was used as a proxy for potential impacts.

2.4.2 Crime and Social Disorder

For purposes of this analysis, “crime” means actions subject to arrest by police, and “social disorder” means conflicts, such as physical fights, that could disrupt the public order whether or not known to police.

The key drivers that could affect crime and social disorder are:

- For the construction component, the inherent nature of increases in population during construction periods, as well as the identity of in-migrant populations (e.g., H-2B construction workers or in-migrant groups coming to take indirect jobs); and
- For the operations component, the inherent nature of large military bases/populations, as well as the identity of in-migrant populations (e.g., Marine Corps personnel vis-à-vis other military services already represented on Guam or, again, in-migrants coming to take indirect jobs).

Crime consists of either Part I or Part II offenses as designated by the Federal Bureau of Investigation’s *Uniform Crime Reporting Handbook* (U.S. Department of Justice 2004).

Part I offenses are major crimes that are more likely to be reported and recorded consistently over time and geographic locations. These include the “violent crimes” of criminal homicide, rape, robbery, and aggravated assault, as well as the “property crimes” of burglary, larceny-theft, motor vehicle theft, and arson.

Part II crimes are all other reportable offenses not covered by Part I. Recording or reporting of these crimes may vary greatly from place to place and from year to year as law enforcement policies change. Enforcement and regulation of Part II offenses are influenced by local policies or availability of federal resources – i.e., the current national emphasis on substance abuse. Part II offenses are more numerous, and examples include other assaults, prostitution and commercialized vice, drug abuse violations, offenses against the family and children, liquor laws, drunkenness, and disorderly conduct. For the purposes of this section, Part II offenses are considered violations of social order.

A critical distinction when analyzing crime impacts is between the total *volume* of crime (number of crimes committed) and the actual crime *rate* (number of crimes divided by population). Population increases normally bring with them increases in the volume of crime, but the crime rate would increase only if new populations are disproportionately likely to commit crimes.

2.4.3 Political and Chamorro Issues

Scoping comments received during the 2012 scoping period included concerns about impacts on various political and Chamorro issues, often reflecting concerns about the cultural continuity and/or degree of political self-determination of the island’s indigenous and local populations. Most of the information for this SIAS came from interviews and correspondence with agencies with expertise in Chamorro issues on Guam including the University of Guam (UoG), Chamorro Land Trust Commission (CLTC), and the Guam Department of Chamorro Affairs (GDCA).

2.4.4 Community Cohesion

Community cohesion refers to positive or negative interactions between individuals or groups that allow people to maintain connection to, and a sense of identification with, their communities. Because no quantitative data are available regarding this issue as it relates to the construction or military component,

this SIAS presents a qualitative discussion based primarily on interviews with local stakeholders. These interviews provided insight into collateral impacts on social relationships.

2.5 APPROACH TO LAND ACQUISITION IMPACT ANALYSIS

The analysis of land acquisition impacts focuses on the potential economic and sociocultural effects of federal land acquisition. The land acquisition analysis differs from the analyses addressed in previous sections because the potential impacts are geographically specific to each action alternative.

The SEIS Notice of Intent (NOI) (October 2012) described five action alternatives for main cantonment/housing and seven for LFTRC. Since the publication of the SEIS NOI, one main cantonment alternative has been removed from consideration and two LFTRC alternatives have been removed from consideration, leaving four cantonment alternatives and five LFTRC alternatives that are analyzed in the SEIS.

No land acquisition is proposed for the main cantonment alternatives and one of the LFTRC alternatives (NWF) would not require federal land acquisition, rather a transfer of custody and control of land that is already federally owned. Therefore, land acquisition impact analysis is primarily focused on the remaining four LFTRC alternatives – the Route 15 alternative and the three Naval Magazine (NAVMAG) alternatives (East/West, North/South, and L-Shaped).

Impact analysis for each alternative is divided into three sections, which focus on the following stakeholders:

Individual Owner/Occupants: defined as directly affected land owners, claimants, and tenants (including lessees and licensees) whose lots would be potentially acquired due to the proposed action.

Community: defined as members of the Guam island-wide community, who might be impacted by the proposed land acquisition.

GovGuam: defined as a large land owner who leases property and maintains properties in trust or for the benefit of the larger community. The potential impacts of land acquisition could be discussed under construction or operations phase of the proposed action. In this analysis they are considered operational long-term impacts.

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CHAPTER 3. AFFECTED ENVIRONMENT

3.1 HISTORICAL AND ECONOMIC OVERVIEW

The discussion in this report is limited to the time post World War II (WWII). However, it should be noted that Guam's socioeconomic history was heavily influenced by over 300 years of Spanish rule (including the Spanish concept of *reduccion*), 20th century Japanese occupation (during WWII), and battles during WWII.

Post-war reconstruction and the formation of new U.S. military bases were the basis for Guam's first major economic expansion and the initial placement of contemporary infrastructure. During this time, Guam's population experienced a major increase – from a pre-1940 level of 22,900 (with a military and dependent population of 1,427) to 59,498 (with a military and dependent population of 26,617) in 1950.

The 1950s saw a shift in military governance, presence, and focus on Guam. Two important events took place in 1950: the U.S. Congress enacted the Organic Act of 1950 and the Korean War began. The Organic Act re-designated the island of Guam as an unincorporated territory of the U.S., passing its governance from the Navy to the U.S. Department of the Interior (DoI) and granting a greater measure of self-governance to the people of Guam. The destruction caused by Typhoon Alice in 1954 required that the U.S. military shift its focus on Guam from base construction to the island's public works. Although the ongoing Korean War and the Cold War with the Soviet Union required a continued military presence, Guam's military population experienced an overall decline of 15% between 1950 and 1960 (Table 3.1-1).

Table 3.1-1. Combined Military and their Dependent Population on Guam, Selected Years					
1950	1960	1970	1980	1987	1990
26,617	23,300	19,777	20,000	23,790	19,610
1993	1994	1997	2000	2007	2013
22,077	15,865	13,002	11,624	12,337	10,507

Sources: Census 2008, Guam Bureau of Statistics and Plans (GBSP) 2013a, JRM Total Force Manpower 2013 (for 2013 data).

Three major events took place in 1962: Super Typhoon Karen wrought devastation on Guam with winds in excess of 160 miles per hour, U.S. President John F. Kennedy lifted security clearance requirements for visitors to Guam, and the Military Sealift Command Office opened.

While the typhoon brought major damage to Guam, the lifting of visitor security clearance requirements opened some doors to economic diversification. The initiation of Pan American Airway services from Japan to Guam in 1967 sparked growth in Guam's visitor industry. This growth led to expansion in related industries such as construction, recreational fishing and diving, commercial fishing, and retail trade.

Finally, the opening of Sealift Command operations meant that Guam's tactical utility now included the provision of sea transportation for military equipment, supplies and ammunition (Global Security 2007). During the late 1960s and 1970s, Guam played a strategic role in the Vietnam War including its use by B-52 bombers during the war and its provision of a home for Vietnam refugees at the end of the war.

Guam's economy stagnated in the 1970s and early 1980s, partially in response to the 1973 Organization of the Petroleum Exporting Countries oil embargo. Construction activity and visitor arrivals declined over the decade. The inflation-adjusted income of Guamanians began to drop in 1973, and continued to decline until 1984, with a brief respite from 1976-1978 due to military-supported reconstruction after the 1976 Typhoon Pamela (Bank of Hawaii 1987). Poor economic conditions escalated in the early 1980s –

Guam's economy experienced inflation-adjusted declining growth from 1978 to 1982, including an extended period of declining growth unadjusted for inflation from 1980 to 1982.

However, this declining trend began to change in 1982 when the island's inflation-adjusted growth stabilized from 1982 to 1984 and skyrocketed between 1985 and the end of the decade. Japan's emergence as a global economic superpower strengthened Guam's visitor and construction industries. In the latter part of the 1980s, Cold War military spending and the closing of U.S. bases in the Philippines increased Guam's military population to a level not seen since the 1960s (23,800, including dependents, in 1987), thereby adding to its economic base.

The late 1980s brought fluctuation and eventual decrease to military population levels on Guam that lasted through the 1990s. At the end of the 1980s, relocated troops were temporarily transplanted from closed Philippine bases, which resulted in a new post-war military population low of 19,600 in 1990.

While events in the Middle East did lead to a few years of increase in military population, the Base Realignment and Closure (BRAC) process quickly negated this increase. The BRAC led to the closure of Naval Air Station Hagåtña causing the military population on Guam to fall from 22,077 in 1993 to 15,865 in 1994 (Global Security 2007). By 2000, Guam's military and dependent population stood at 11,624.

The economic effects of the BRAC decisions on Guam were initially offset by growing private-sector strength, buoyed by the tourism industry. Guam's Asia-oriented visitor base expanded and peaked between 1995 and 1997, generating substantial increases in the construction of hotels and condominiums. However, the 1997 collapse of Asian financial markets, compounded by the crash of a Korean Air Lines Flight 801, led to a 12.4% decline on Guam's primary Japanese market and an 83% decline in its secondary Korean market from 1997 to 1998.

In 2000, the visitor industry appeared poised to regain health. However, this was stymied by the attacks of September 11, 2001, the costly Super Typhoon Pongsona in 2002, and the pandemic of severe acute respiratory syndrome in 2003. During this brief 3-year period, Guam's economy contracted: unadjusted for inflation, total payroll declined by 2%, employment declined by 2,250 payroll jobs, and individual salaries increased by only 1%. From 2004 to 2006, partially in response to the announcement of the proposed action that was analyzed in the 2010 Final EIS, Guam's economy once again showed signs of expansion.

However, while growth on Guam's overall business activity had been strong, high inflation eroded gains in workers' wages, causing slower growth in consumer oriented business. As of the end of 2008, Guam's real estate market has shown signs of slowing. Commercial real estate on Guam has declined in value due to world-wide issues of tight credit and declines in consumer discretionary spending. Reports show that Guam real estate sales and construction activity dropped from 2007 levels due to world-wide economic conditions coupled with a moratorium on development in the Tumon Bay area (Captain Real Estate 2008). By the end of 2008, international economic conditions plus other market and demographic factors produced declining year-over-year trends for a variety of key tourism indicators, including total arrivals, hotel occupancy rates and taxes, and hotel room-nights sold (Guam Visitors Bureau [GVB] 2008, Guam Hotel and Restaurant Association 2008).

Between 2008 and 2011, Guam's tourism industry continued to show weakness. Following the March 11, 2011 Japanese earthquake and tsunami, the decline in tourism activity culminated with a large decline in visits from Japan. This large decline in Japanese tourism set the stage for a turnaround. In response to weak tourism data (primarily a product of weak Japanese visitor numbers) the GVB made a decision to attempt to attract visitors from other countries. GVB increased Guam's visibility in Korea and Taiwan by

increasing marketing activities. There was a good response to the additional promotion and Korean and Taiwanese markets responded; visitor arrivals from those two nations began to improve in 2011. As the Japanese economy began to recover, Japanese tourism visits to Guam also began to recover. In conjunction – additional visits from Korea and Taiwan and a return to normalcy for Japanese visits – the three Asian markets generated enough visits to make 2012 and early 2013 record breaking in terms of numbers of visitors, surpassing levels set in the mid to late 1990's.

Not all of Guam's major economic sectors have recovered so well from recent economic turmoil. Guam's real estate market remains stagnant in part due to the investments in real estate and projects that were started in anticipation of the military buildup but stopped and/or re-directed when plans for the buildup were delayed. As investor expectations related to the buildup have been fading, so has activity in the real estate market. In 2012, real estate sales volume on Guam eclipsed 2008 sales volume for the first time, but this data masked a continuing weakness – over half of 2012 sales volume was made up of only five large transactions; without these five large sales, total sales volume would have been down by 25% from 2011, and down by 67% from the 2007 peak. Also showing weakness in the real estate market in 2012 were single family home sales, which declined from 2011 levels (Captain Real Estate 2013a).

Questions about the military buildup have contributed to feelings of concern about the long-term future of Guam's economy. Many firms and individuals that made speculative investments in preparation for the buildup incurred losses as the Relocation Roadmap was adjusted. These speculative investments were not simply bets on future profits, for the most part, they were business decisions that had to be made in order for firms to properly position themselves for a changed economic landscape. As these forward-looking investors incurred losses, the appetite to invest on Guam in preparation for the buildup has been viewed as more risky.

The reduced scope and longer timeframe for the buildup, as presented here as a supplement to the 2010 Final EIS, would present less of a need for a restructuring of Guam's industry capacity and allow firms to fit their expectations to plans with greater knowledge, but the large profits and business expansions are considered by some in Guam's business community as an opportunity lost.

However, the opportunity for economic expansion associated with a military buildup on Guam is not lost because the relocation and buildup is still proposed, albeit not at the magnitude initially envisioned. The question that remains is, what sort of economy would the buildup be interacting with? If Guam's tourism industry is strong at the time of the buildup, the economic activity associated with the buildup would likely cumulate with an already healthy economy to generate historically good economic times for Guam. If Guam's tourism industry were to have fallen off by the time of the buildup, economic activity associated with the buildup could stabilize a potentially perilous economic situation.

3.2 POPULATION CHARACTERISTICS

3.2.1 Overall Trends

Guam's population as of the 2010 U.S. Census was 159,358. The island's population has grown since becoming a U.S. Territory. From 1950 to 2010, Guam's population grew at an average rate of 18% per decade (about 1.8% annually). However, as is shown in Table 3.2-1, population growth has tapered off since 1990 and is expected to be stable over the next 20 years at around 1.5% per year.

Table 3.2-1. Annual Rate of Increase on Guam's Population								
	1950- 1960	1960- 1970	1970- 1980	1980- 1990	1990- 2000	2000- 2010	2010- 2020¹	2020- 2030¹
Annual Population Increase	1.2%	2.4%	2.2%	2.3%	1.5%	1.3%	1.5%	1.6%

Note: ¹ Estimated.

Source: Census 2008, 2010, 2012a.

3.2.2 Demographics

Table 3.2-2 shows Guam's population growth and changing ethnic mix from 1920 to 2010. Between 1990 and 2000, the percentage of Chamorro and Caucasian ethnicities on Guam's population declined, while Filipino and "Other" ethnicities (most often comprised of other Asian or Pacific Islander ethnicities) increased. Some changes in ethnic percentages reflect differences in Census definitions over time. However, the dramatic changes in the Chamorro and Caucasian percentages from 1940 to 1950 are a product of WWII and the in-migrating construction workers that provided labor for the rebuilding of Guam post WWII. The ethnic makeup of Guam changed little from 2000 to 2010.

Table 3.2-2. Guam-Wide Total Population and Ethnicity, 1920-2010										
	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010
Total Population	13,275	18,509	22,290	59,498	67,044	84,996	105,979	133,152	154,805	159,358
Ethnicity										
Chamorro/Part - Chamorro	92%	89%	91%	46%	52%	NA	45%	43%	42%	43%
Caucasian	2%	7%	4%	39%	31%	NA	8%	14%	7%	7%
Filipino	3%	2%	3%	12%	13%	NA	21%	23%	26%	26%
Other	3%	3%	3%	4%	4%	NA	26%	20%	25%	23%

Source: Census 2000, 2008, 2010.

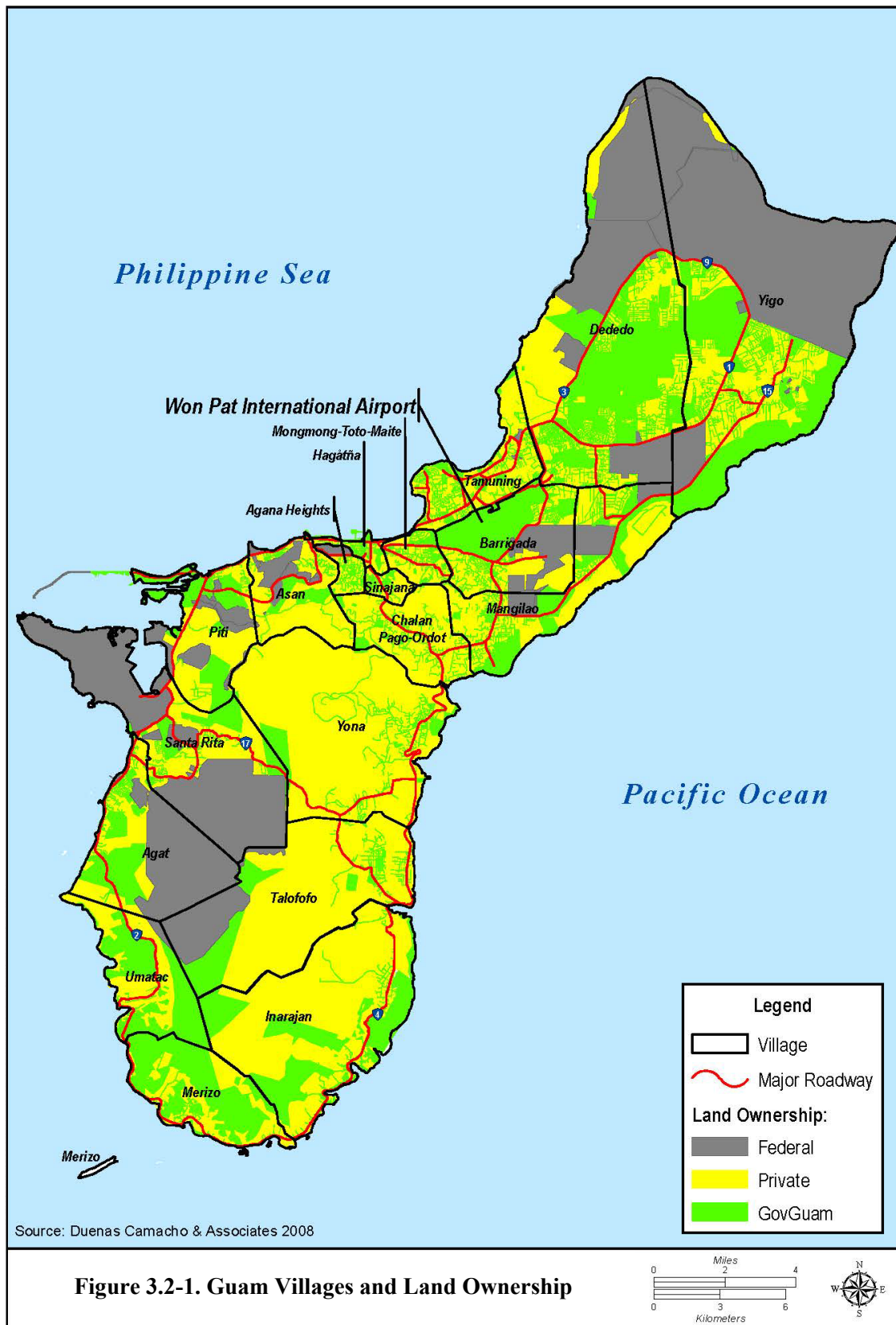
Demographic information for Guam and the island's individual villages for the year 2010 are provided in Table 3.2-3.

Table 3.2-3. Demographic Characteristics 2010, Guam Total and Individual Villages

	Population/Gender			Ethnicity					Median Age	Place of Birth				
	Total		Male	Female	Chamorro/ Part Chamorro	Filipino	Caucasian	Other Pacific Islander		Other	Guam	Other U.S.	Philippines	Other Pacific Islands
Guam Totals	159,358		81,568	77,790	43%	26%	7%	12%	11%	29.5	53%	14%	18%	8%
North	Dededo	44,943	22,486	22,457	33%	43%	3%	13%	8%	28.8	49%	9%	29%	8%
	Yigo	20,539	10,461	10,078	29%	36%	11%	14%	10%	26.7	43%	19%	24%	9%
	Tamuning	19,685	10,568	9,117	19%	26%	9%	14%	31%	34.8	32%	16%	20%	10%
Central	Barrigada	8,875	4,475	4,400	54%	19%	6%	10%	11%	32	61%	12%	13%	6%
	Mangilao	15,191	7,847	7,344	49%	20%	5%	17%	9%	28	57%	13%	13%	11%
	Mongmong-Toto-Maite	6,825	3,460	3,365	54%	15%	4%	17%	10%	28.3	60%	13%	10%	11%
	Hagåtña	1,051	625	426	48%	11%	4%	23%	14%	33.6	51%	13%	9%	18%
	Sinajana	2,592	1,326	1,266	71%	10%	4%	8%	7%	30.7	53%	12%	7%	5%
	Agana Heights	3,808	1,929	1,879	68%	8%	7%	10%	7%	30.8	69%	14%	6%	7%
	Chalan Pago-Ordot	6,822	3,452	3,370	65%	13%	6%	8%	7%	30.3	69%	14%	8%	5%
	Asan	2,137	1,084	1,053	68%	7%	12%	7%	5%	30.9	66%	21%	5%	4%
	Piti	1,454	752	702	59%	8%	16%	7%	10%	31.6	61%	24%	4%	4%
	Yona	6,480	3,227	3,253	71%	7%	7%	8%	6%	27.2	73%	14%	5%	5%
South	Agat	4,917	2,491	2,426	63%	22%	3%	7%	5%	30	68%	9%	15%	5%
	Santa Rita	6,084	3,363	2,721	41%	15%	28%	3%	14%	25.9	43%	40%	10%	1%
	Talofofo	3,050	1,557	1,493	73%	5%	10%	7%	6%	29	71%	17%	3%	5%
	Umatac	782	393	389	87%	2%	2%	5%	3%	25.5	88%	7%	1%	3%
	Inarajan	2,273	1,130	1,143	87%	3%	4%	4%	2%	27.4	84%	9%	2%	2%
	Merizo	1,850	942	908	88%	3%	3%	4%	2%	25	85%	9%	2%	3%

Source: Census 2010.

Figure 3.2-1 shows a graphic depiction of the 19 Guam villages and land ownership patterns.



3.2.2.1 North

As of 2010, 41% of Guam's population resided in the Northern region (villages of Dededo and Yigo). The region was 50.3% male and 49.7% female compared to the overall Guam population (51.2% male and 48.8% female).

Ethnically, the Northern region was less Chamorro than the rest of Guam (32% compared to 43%). Dededo was far more Filipino than the rest of Guam (43% vs. 26%) and Yigo was more heavily populated with Caucasians than the Guam average (11% vs. 7%).

The median age of the population in the northern region was younger than that of Guam's overall population; Dededo's median age was 28.8 years old and Yigo's is 26.7 years old compared to Guam's overall median age of 29.5 years old.

A lower percentage of people in the Northern region were born on Guam compared to the rest of the Island; a relatively large percentage of Dededo's population was born in the Philippines (29%) and a relatively large percentage of Yigo's population was born in other areas of the U.S. (19%).

3.2.2.2 Central

As of 2010, 43% of Guam's population resided in the Central region. Of the ten total villages making up the Central region, the most populous villages were Tamuning (19,685) and Mangilao (15,191). Piti and Hagåtña were the least populous (1,454 and 1,051, respectively).

The Central region was 51.9% male and 48.1% female compared to Guam's overall population (51.2% male and 48.8% female).

Ethnically, the Central region was slightly more Chamorro than the rest of Guam (46% vs. 43%) with the largest Chamorro populations residing in Mangilao and Barrigada. On a percentage basis, Sinajana and Asan were the most heavily Chamorro. Tamuning had the largest Filipino population. In 2010 the Central region was less Filipino than Guam overall (18.5% vs. 26%).

The population of the Central region was older than the Guam overall median age; the median age in the region was 31.1 years old compared to the overall median age of 29.5 years old. Tamuning had the average oldest population on Guam with a median age of 34.8 years old.

All but two of the villages in the Central region (Tamuning at 32% and Hagåtña at 51%) had a higher percentage of residents born on Guam than Guam's overall rate of 53%. Within the Central region, Agana Heights and Chalan Pago-Ordot both had the highest percentage of residents born on Guam (69% for each).

3.2.2.3 South

As of 2010, about 16% of Guam's population resided in the Southern region, which is composed of seven villages. The most populous villages in the region were Yona (6,480) and Santa Rita (6,084). Umatac was the least populous (782).

The Southern region was 51.5% male and 48.5% female as compared to Guam's overall population (51.2% male and 48.8% female).

The Southern region was 66% Chamorro in 2010, by far the most heavily Chamorro of the three regions. Umatac, Merizo, and Inarajan were each over 85% Chamorro. Agat was over 20% Filipino, while Santa Rita had the highest percentage of Caucasians in all of Guam (28%).

The population of the Southern region tended to be younger than Guam overall; the median age in the region was 27.1 years old compared to the Guam overall median age of 29.5 years old. Merizo had the youngest median age population on Guam at 25 years old.

All but one of the Southern region villages (Santa Rita at 43%) had higher percentages of residents born on Guam than Guam overall (53%). In Umatac, Merizo, and Inarajan, over 84% of residents were born on Guam.

3.2.3 Educational Attainment

Table 3.2-4 provides educational attainment information for Guam and for the island's individual villages for the year 2010.

Table 3.2-4. Educational Attainment in 2010, Guam Total and Individual Villages					
		Educational Attainment			
		<i>Did not complete high school</i>	<i>High school or equivalent, no college</i>	<i>Some college or associates degree</i>	<i>Bachelor's degree or advanced degree</i>
Guam Totals		20.6%	33.8%	25.3%	20.4%
North	Dededo	24.1%	33.1%	24.2%	18.5%
	Yigo	21.9%	31.6%	28.6%	17.8%
Central	Tamuning	16.3%	30.7%	25.3%	27.7%
	Barrigada	17.8%	36.1%	23.1%	22.9%
	Mangilao	20.6%	33.6%	26.2%	19.6%
	Mongmong-Toto-Maite	21.9%	36.5%	25.0%	16.6%
	Hagåtña	28.6%	33.7%	22.5%	15.2%
	Sinajana	19.5%	37.8%	23.4%	19.3%
	Agana Heights	17.1%	34.5%	28.0%	20.3%
	Chalan Pago-Ordot	18.2%	36.1%	25.2%	20.4%
	Asan	16.7%	32.5%	27.9%	22.9%
	Piti	12.5%	30.2%	29.1%	28.2%
South	Yona	19.7%	35.8%	23.7%	20.7%
	Agat	23.3%	37.7%	23.4%	15.6%
	Santa Rita	13.5%	31.4%	29.3%	25.7%
	Talofofo	18.7%	38.4%	23.0%	19.9%
	Umatac	20.1%	50.8%	16.8%	12.4%
	Inarajan	21.5%	44.8%	21.9%	11.8%
	Merizo	24.0%	47.2%	18.6%	10.2%

Note: Educational attainment for those 25 years of age and older.

Source: Census 2010.

In 2010, the Northern region was similar to the rest of Guam in terms of the educational attainment. Both Dededo and Yigo had slightly lower percentages of people who had completed high school or attained a Bachelor's degree or higher, compared to Guam overall. However, both villages had a slightly higher share of people who did not complete high school, compared to Guam as a whole.

The Central region was also similar to the rest of Guam, in terms of educational attainment. Only three of the ten villages had a higher share of residents over 25 years old who had not completed high school, compared to Guam overall. Half of the villages had more high school graduates (or equivalent) than Guam and half of the villages had more residents with Bachelor's degrees or higher compared to Guam as a whole.

In 2010, three of the seven villages in the Southern region had a higher percentage of residents over 25 who had not completed high school (Agat, Inarajan, and Merizo) compared to Guam. Six of the seven villages had a higher percentage of high school graduates (or equivalent) compared to Guam's 33.8% total. However, only one village (Santa Rita) had more residents with some college or a college degree, compared to Guam as a whole.

3.2.4 Household Characteristics

Table 3.2-5 provides demographic information for Guam and the island's individual villages for the year 2010.

3.2.4.1 North

As of 2010, 42.5% of Guam's population living in households resided in the Northern region. Dededo was the single largest village on Guam in terms of population in households and number of households. Both villages in the Northern region had larger average household sizes (Dededo, 4.03 and Yigo, 4.0) than Guam's overall household counts (3.67). Compared to Guam overall, Dededo and Yigo had a higher percentage of family households, married family households, and married family households with children.

Household incomes in Dededo (\$43,896) and Yigo (\$47,095) were lower than Guam overall (\$48,274); also, each had lower incomes per household member. Dededo had a higher percentage of family households living below the poverty line than Guam overall (21.3% and 19%, respectively), but Yigo had a lower percentage (17.7%) of households living below the poverty line than Guam overall.

3.2.4.2 Central

The Central region accounted for 44% of Guam's population living in households. Tamuning and Mangilao were the largest villages in the region in terms of population living in households and number of households.

The Central region had a lower number of persons per household than Guam overall (3.4 vs. 3.67). The low number for the region was greatly influenced by Tamuning, which had only 2.75 persons per household – the lowest rate on Guam.

The Central region had lower percentages of households that were family households, except for Barrigada (85.3%) and Chalan Pago-Ordot (82.9%) than did Guam overall (81.4%). Barrigada was the only village with more married family households than Guam overall, and Mangilao was the only village with the same percentage or greater married family households with children, compared to Guam overall.

Six of the ten Central region villages had higher average household incomes than Guam overall. The highest average household income was Piti (\$61,094) and the lowest was Hagåtña (\$37,083). The village of Piti also had the highest income per household member on Guam. Seven of the ten villages had a lower percentage of families below the poverty line than Guam overall. The highest percentage of families living below the poverty level in the Central region was in Mongmong-Toto-Maite (25.4%) and the lowest was Piti (12.8%).

Table 3.2-5. Household Characteristics 2010, Guam Total and Individual Villages

		<i>Population in HHs¹</i>	<i>Number of HHs</i>	<i>Avg. HH Size</i>	<i>Number of Families</i>	<i>% of HHs that are Family HHs</i>	<i>% of HHs that are Married Family HHs</i>	<i>% of HHs that are Married Family HH's with Children</i>	<i>Median HH Income</i>	<i>Income per HH member</i>	<i>% Families below Poverty Level</i>
Guam Totals		154,060	42,026	3.67	34,199	81.4%	54.3%	28.6%	\$48,274	\$13,154	19.0%
North	Dededo	44,943	11,028	4.03	9,595	87.0%	57.9%	30.3%	\$43,896	\$10,892	21.3%
	Yigo	20,539	4,960	4	4,384	88.4%	64.7%	38.4%	\$47,095	\$11,774	17.7%
Central	Tamuning	19,685	6,670	2.75	4,264	63.9%	44.9%	22.4%	\$44,213	\$16,077	18.0%
	Barrigada	8,875	2,253	3.8	1,922	85.3%	55.0%	27.9%	\$60,323	\$15,874	15.8%
	Mangilao	15,191	3,874	3.72	3,191	82.4%	52.7%	28.6%	\$49,091	\$13,197	21.0%
	Mongmong-Toto-Maite	6,825	1,938	3.47	1,509	77.9%	45.4%	24.0%	\$39,674	\$11,433	25.4%
	Hagåtña	1,051	286	2.87	192	67.1%	38.5%	16.4%	\$37,083	\$12,921	24.5%
	Sinajana	2,592	752	3.45	586	77.9%	47.5%	21.5%	\$53,289	\$15,446	17.6%
	Agana Heights	3,808	1,096	3.42	850	77.6%	47.7%	23.4%	\$51,389	\$15,026	15.4%
	Chalan Pago-Ordot	6,822	1,852	3.64	1,535	82.9%	52.6%	27.2%	\$56,429	\$15,502	16.4%
	Asan	2,137	639	3.34	495	77.5%	50.1%	24.1%	\$56,576	\$16,939	14.5%
	Piti	1,454	445	3.23	321	72.1%	49.4%	25.6%	\$61,094	\$18,915	12.8%
South	Yona	6,480	1,635	3.94	1,384	84.6%	54.9%	27.8%	\$60,321	\$15,310	17.8%
	Agat	4,917	1,259	3.82	1,066	84.7%	52.0%	12.2%	\$45,179	\$11,827	22.9%
	Santa Rita	6,084	1,448	3.57	1,254	86.6%	63.9%	36.2%	\$59,914	\$16,783	12.2%
	Talofofo	3,050	781	3.83	686	87.8%	61.2%	32.8%	\$64,083	\$16,732	14.6%
	Umatac	782	171	4.57	147	86.0%	45.0%	23.4%	\$48,750	\$10,667	25.9%
	Inarajan	2,273	534	4.26	477	89.3%	59.4%	28.1%	\$55,750	\$13,087	14.7%
	Merizo	1,850	405	4.5	341	84.2%	49.4%	24.4%	\$55,673	\$12,372	20.5%

Note: ¹ Population in households excludes population living in group quarters (e.g. prisons and military barracks).

Source: Census 2010.

3.2.4.3 South

As of 2010, the Southern region was home to 19% of Guam's population living in households. Santa Rita and Yona were the largest villages in the region in terms of population living in households and number of households.

The Southern region had more persons per household than Guam overall (4.07 vs. 3.67). Umatac had the most persons per household on Guam (4.57).

Compared to Guam overall, the Southern region had higher percentages of households that were family households, with all of the villages exceeding Guam's (81.4%). Four of the seven villages had higher percentages of married family households than Guam as a whole, and two had higher percentages of family households than Guam overall (Santa Rita and Talofofo).

Households in the Southern region had higher incomes than Guam overall and the region also had slightly higher income per household member (\$13,825 vs. \$13,154). On average, incomes in the Southern region were higher than Guam overall, however, the village of Umatac had the highest percentage of families living below the poverty line in all of Guam at 25.9%.

3.2.5 Military Demographics

Military populations can affect the composition and growth of villages on Guam. Dededo and Yigo cover military-owned land and have high proportions of military residents relative to other villages. Between 1990 and 2000, these two villages experienced rapid population growth: Yigo's by 37% and Dededo's by 35%. The more service- and tourism-based village, Tamuning, experienced population growth of 8% during the same period. However, population growth drastically slowed for Yigo and Dededo between 2000 and 2010, growing by only 5.5% and 4.6%, respectively. Tamuning's population grew by 9.3% during the same decade.

Table 3.2-6 shows Guam's active duty military population from 1998-2013. Over this period, active duty military population on Guam has been fairly stable, ranging from a low of 5,315 (in 2012) to a high of 6,531 (in 2008). As of 2013, active duty military population on Guam was 5,537, which was near to the low end of the range.

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total Active Duty	6,379	6,155	5,806	5,974	5,820	5,944	6,242	6,518	6,253	6,285	6,531	6,432	6,408	6,272	5,315	5,537
Navy	3,946	3,902	3,741	3,626	3,810	3,760	3,944	4,089	3,867	3,878	3,785	3,577	3,542	3,579	2,812	3,222
Air Force	2,119	1,964	1,752	1,981	1,670	1,828	1,950	1,844	1,596	1,596	1,930	2,042	2,071	1,865	2,007	1,997
Army	178	158	172	183	200	217	211	422	606	632	624	618	618	615	260	82
Coast Guard	134	130	136	180	136	136	134	160	180	175	188	191	191	208	223	223
Marine Corps	2	1	5	4	4	3	3	3	4	4	4	4	4	5	13	13

Note: Numbers do not include transient personnel.

Sources: GBSP 2013a, JRM Total Force Manpower 2013 (for 2013 data).

Table 3.2-7 below shows demographic characteristics for active duty military and dependents of active duty military that lived on Guam as of 2010. This group was more male than female (56% male and 44% female). No racial or ethnic group made up the majority of active duty population – 49% were white, 18% Chamorro, and 13% were Filipino.

Table 3.2-7. Active Duty Military and Military Dependent Demographic Characteristics, 2010									
Gender		Ethnic Origin or Race							
Male	Female	Native Hawaiian and Other Pacific Islander			Asian				
%	%	Chamorro	Chuukese	Other Native Hawaiian and Other Pacific Islander	Filipino	Korean	Other Asian	White	Other
56%	44%	18%	1%	2%	13%	1%	2%	49%	15%

Source: Census 2013a.

3.3 ECONOMIC CHARACTERISTICS

3.3.1 Employment and Income

3.3.1.1 Employment by Industry

Table 3.3-1 shows that government is the major employer on Guam; government jobs made up 26% Guam's payroll employment compared to 17% for the U.S. overall.

Table 3.3-1. Government's Share of Employment (September 2012)			
Country/Territory	Payroll Employment	Government Workers	Government Workers (% of Labor Force)
U.S.	131,975,000	21,875,000	17%
Guam	61,140	15,880	26%

Sources: U.S. Bureau of Labor Statistics 2012a, GDoL 2012.

Table 3.3-2 shows the composition of industry employment on Guam. As measured by the Guam Bureau of Labor Statistics, as of March 2013 there were 61,750 jobs on Guam. From 2000 to 2013, there was an increase in total jobs of 1,180 (or 2%).

Table 3.3-2. Guam Civilian Employment by Industry, 2000 and 2013						
Industry	2000 Number	% of 2000 Total	2013 Number	% of 2013 Total	Change 2000-2013 Number	% Change 2000-2013
Agriculture	290	0.5%	150	0.2%	-140	-48%
Construction	4,440	7%	6,630	11%	2,190	49%
Manufacturing	1,620	3%	1,610	3%	-10	-1%
Transportation & Public Utilities	4,980	8%	4,700	8%	-280	-6%
Trade	14,260	24%	13,860	22%	-400	-3%
Finance, Insurance & Real Estate	2,660	4%	2,480	4%	-180	-7%
Services	15,140	25%	16,660	27%	1,520	10%
Federal Government (excl. active-duty military)	4,440	7%	4,000	6%	-440	-10%
GovGuam	12,740	21%	11,660	19%	-1,080	-8%
Totals	60,570	100%	61,750	100%	1,180	2%

Note: 2000 data as of March 2000; 2013 data as of March 2013.

Source: GDoL 2013.

3.3.1.2 Occupational Profile

Table 3.3-3 shows employment by occupation for Guam during the years 2000 and 2012 and the percentage change in employment in each occupation over that time period. These data were developed

by the U.S. Bureau of Labor Statistics while data in Table 3.3-2 were developed by GDoL, so employment totals may be different.

As measured by the U.S. Bureau of Labor Statistics, Guam added 3,970 jobs (from 57,000 to 60,970) (an increase of 7%) during the time period from 2000 to 2012. More jobs were held in Office and Administrative Support occupations than any other occupation. Common jobs under this category include Executive Secretaries and Administrative Support, Customer Service Representatives, and various clerking positions. The number of jobs in many occupational categories increased by over 20% during this time period, including jobs in Construction and Extraction, Healthcare Practitioners and Technical fields, Architecture and Engineering, Community and Social Services, Computer and Mathematical fields, Life, Physical, and Social Sciences, and Legal occupations. Jobs in Sales, Transportation and Materials Moving, and Building and Grounds Cleaning and Maintenance each declined by over 10%.

Table 3.3-3. Guam Employment by Occupation, 2000 and 2012			
<i>Occupation</i>	<i>Employment</i>		
	<i>2000</i>	<i>2012</i>	<i>% Change</i>
Office and administrative support	10,090	10,890	8%
Food preparation and serving related	6,360	6,430	1%
Sales and related	5,530	4,270	-23%
Management	4,960	5,300	7%
Construction and extraction	3,380	5,370	59%
Education, training, and library	3,600	4,290	19%
Transportation and material moving	4,120	3,470	-16%
Building and grounds cleaning and maintenance	3,660	3,110	-15%
Installation, maintenance, and repair	3,000	3,430	14%
Personal care and service	1,720	1,660	-3%
Protective service	2,370	2,710	14%
Business and financial operations	2,090	2,400	15%
Production	1,810	1,720	-5%
Healthcare practitioners and technical	1,230	1,710	39%
Architecture and engineering	750	910	21%
Community and social services	360	620	72%
Healthcare support	690	720	4%
Arts, design, entertainment, sports, and media	590	630	7%
Computer and mathematical	260	630	142%
Life, physical, and social science	290	360	24%
Legal	140	320	129%
Total	57,000	60,970	7%

Source: U.S. Bureau of Labor Statistics 2012b.

3.3.1.3 Income Profile

Table 3.3-4 shows median annual salary by occupation for Guam during the years 2000 and 2012 and the percentage change in salary in each occupation over that time period. From 2000 to 2012, as measured by the U.S. Bureau of Labor Statistics, median salary for Guam jobs increased by \$2,440 (from \$22,890 to \$28,074), which was an increase of 23%.

The highest salaries were found in Management, Legal, and Architecture and Engineering occupations. Salaries in Architecture and Engineering, Transportation and Material Moving, Building and Grounds Cleaning and Maintenance, and Food Preparation and Serving increased by over 30%. Salaries in Legal occupations declined and salaries in Life, Physical, and Social Science occupations grew by about 1%.

Table 3.3-4. Guam Median Annual Salary by Occupation, 2000 and 2012			
<i>Occupation</i>	<i>Median Annual Salary</i>		
	<i>2000</i>	<i>2012</i>	<i>% Change</i>
Legal	\$61,460	\$45,310	-26%
Management	\$43,320	\$50,290	16%
Architecture and engineering	\$37,700	\$49,580	32%
Computer and mathematical	\$37,770	\$43,750	16%
Healthcare practitioners and technical	\$34,870	\$41,140	18%
Business and financial operations	\$36,660	\$44,250	21%
Life, physical, and social science	\$38,870	\$39,280	1%
Education, training, and library	\$27,960	\$31,733	13%
Community and social services	\$30,320	\$34,320	13%
Installation, maintenance, and repair	\$24,420	\$26,440	8%
Construction and extraction	\$24,710	\$27,710	12%
Arts, design, entertainment, sports, and media	\$19,920	\$24,920	25%
Protective service	\$23,820	\$29,140	22%
Office and administrative support	\$20,320	\$23,810	17%
Healthcare support	\$20,180	\$23,360	16%
Production	\$19,350	\$22,670	17%
Personal care and service	\$18,100	\$18,760	4%
Transportation and material moving	\$16,900	\$22,410	33%
Sales and related	\$15,330	\$18,880	23%
Building and grounds cleaning and maintenance	\$13,490	\$18,040	34%
Food preparation and serving related	\$13,670	\$17,790	30%
Employment Weighted Average	\$22,890	\$28,074	23%

Source: U.S. Bureau of Labor Statistics 2012b.

3.3.1.4 Price Adjusted Income

Changes in salary, over time, should be understood in terms of purchasing power. Purchasing power is how much an individual can buy with their income. Purchasing power will increase if incomes increase faster than prices but purchasing power will decrease if prices increase faster than incomes.

As shown in Table 3.3-4 above, salaries on Guam increased by 19% from 2000 to 2011; however, during that same period of time, as shown in Table 3.3-5, consumer prices on Guam increased by 65%, meaning that purchasing power on Guam has decreased substantially.

Table 3.3-5. Guam Consumer Price Index (CPI), All Items, Index, Year 2000 = 100													
	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>
Guam CPI	100	98.6	99.3	102.0	108.2	116.5	129.9	138.7	147.3	149.9	154.2	162.4	164.7
<i>% Change from previous year (Guam inflation rate)</i>		-1.4%	0.7%	2.7%	6.1%	7.7%	11.5%	6.8%	6.2%	1.8%	2.9%	5.3%	1.4%
U.S. CPI	100	102.8	104.5	106.9	109.7	113.4	117.1	120.4	125.0	124.6	126.6	130.6	133.3
<i>% Change from previous year (U.S. inflation rate)</i>		2.8%	1.6%	2.3%	2.6%	3.4%	3.3%	2.8%	3.8%	-0.3%	1.6%	3.2%	2.1%

Note: Guam 2012 CPI is from the third quarter of 2012.

Sources: GBSP 2012a, U.S. Bureau of Labor Statistics 2012c.

Using information from previous tables to illustrate the impacts that price changes have on income, Table 3.3-6 shows Price Adjusted Median Annual Salary, where salaries in Table 3.3-4 are divided by the Guam price index in Table 3.3-5. Since the price index begins in 2000 and the value is set at 100, year 2000 salaries are divided by 1 and are thus unchanged. The price index in 2012 reached a value of 164.7 so 2012 salaries are divided by 1.647 and are thus reduced by 64.7%.

The median salary on Guam, though it increased by 23% from 2000 to 2012 (Table 3.3-4), when adjusted for price change, decreased by 26% from 2000 to 2012. A 26% decline in price adjusted income means that the same person working the same job could purchase 26% fewer goods and services in 2012 than they could have in 2000.

Table 3.3-6. Guam, Price Adjusted Median Annual Salary by Occupation, 2000 and 2012

<i>Occupation</i>	<i>Median Annual Salary (Adjusted for Prices)</i>		
	<i>2000</i>	<i>2012</i>	<i>% Change</i>
Legal	\$61,460	\$27,511	-55%
Management analysts	\$43,320	\$30,534	-30%
Architecture and engineering	\$37,700	\$30,103	-20%
Computer and mathematical	\$37,770	\$26,563	-30%
Healthcare practitioners and technical	\$34,870	\$24,979	-28%
Business and financial operations	\$36,660	\$26,867	-27%
Life, physical, and social science	\$38,870	\$23,849	-39%
Education, training, and library	\$27,960	\$19,267	-31%
Community and social services	\$30,320	\$20,838	-31%
Installation, maintenance, and repair	\$24,420	\$16,053	-34%
Construction and extraction	\$24,710	\$16,825	-32%
Arts, design, entertainment, sports, and media	\$19,920	\$15,131	-24%
Protective service	\$23,820	\$17,693	-26%
Office and administrative support	\$20,320	\$14,457	-29%
Healthcare support	\$20,180	\$14,183	-30%
Production	\$19,350	\$13,764	-29%
Personal care and service	\$18,100	\$11,390	-37%
Transportation and material moving	\$16,900	\$13,607	-19%
Sales and related	\$15,330	\$11,463	-25%
Building and grounds cleaning and maintenance	\$13,490	\$10,953	-19%
Food preparation and serving related	\$13,670	\$10,801	-21%
Employment Weighted Average	\$22,890	\$17,045	-26%

Source: U.S. Bureau of Labor Statistics 2012b.

3.3.1.5 Unemployment

Table 3.3-7 shows Guam civilian employment and unemployment data between the years 2000 and 2012.

Between 2007 and 2011, Guam's labor force increased substantially to the point where, even with an increase in number of persons employed, the unemployment rate increased. However, the number of people in the labor force and the number of employed persons dropped substantially between 2011 and 2012, lowering Guam's unemployment rate to 11.8%. Guam's unemployment rate of 11.8% in March of 2012 was higher than the national rate of 8.2% at that time. Guam has no unemployment insurance program.

The 2010 Census data shows that 73% of those working on Guam were employed in three adjoining urban districts: Hagåtña, Dededo, and Tamuning. Also, nearly half were employed in three industries: accommodation and food service, retail, and construction (GDoL 2011).

As of March 2011, there were 1,842 H-1 and H-2 workers on Guam (GDoL 2011). Section 214.2(h) of Title 8 of the Code of Federal Regulations (CFR) grants certain conditions under which temporary employees may come to the U.S. for temporary work under the H-1 and H-2 programs, particularly if U.S. citizens cannot be found to capably perform the work.

Table 3.3-7. Guam Employment and Unemployment Trends 2000-2012				
<i>Year¹</i>	<i>Civilian Labor Force</i>	<i>Labor Force Participation Rate²</i>	<i>Employed</i>	<i>Unemployment Rate</i>
2000	70,800	67.8%	59,950	15.3%
2001	64,800	64.5%	56,040	13.5%
2002	62,050	62.4%	54,980	11.4%
2004	61,520	61.7%	56,810	7.7%
2005	64,130	61.1%	59,630	7.0%
2006	65,940	62.9%	61,390	6.9%
2007	63,600	57.8%	58,290	8.3%
2009	70,310	61.7%	63,800	9.3%
2011	74,950	62.6%	64,970	13.3%
2012	68,400	56.6%	60,340	11.8%

Notes: ¹ Data for 2008 and 2010 were not available.

² The labor force participation rate is the percentage of the adult population 16+ either employed or unemployed but actively seeking employment.

Source: GDoL 2012.

3.3.2 Housing Supply and Characteristics

As of the 2010 Census, there were approximately 50,560 housing units on Guam, of which almost 17% were vacant.

During the early portion of the 2000s, while Guam's economy was in recession, both real estate prices and the construction of new housing units fell. Decreased new home construction led to historically low values of new residential building permits from 2000-2002. Decline of housing prices continued into 2003, when home prices bottomed at a median price of around \$110,000 for a single-family home (First Hawaiian Bank 2007).

In 2004, real estate prices began to rise again in response to improving worldwide economic conditions and initial discussions of the proposed relocation. This in turn spurred new construction. From the time the market bottomed in 2003, home prices rose 41% and condo prices rose 74% (First Hawaiian Bank 2007).

In 2007, a peak in the value of residential and land sales occurred. Land and condominium prices seemed to bottom in 2009 and have been stable since, but, in 2012, single family home sales continued their decline from 2007 levels. Single family home sales in 2012 had a total dollar value of \$124.6 million, down 12% from 2011 levels. The median price of a single family home also dropped 12% from 2011 to 2012; the 2012 median home price on Guam was \$216,675 (Captain Real Estate 2013a). As of mid-2013, the median price declined by another 12% to \$190,000, the lowest level since 2007 (Captain Realty Advisors 2013b). Sales volume did increase from 2012 to 2013, at an annualized rate of 14% (Captain Real Estate 2013b).

Table 3.3-8 illustrates declining home prices during the early part of the 2000s and rising home prices more recently. The home purchase component of Guam's CPI more than doubled from 2000 to 2007; however, the peak of the housing market was around the year 2007, and the subsequent economic recession meaningfully impacted housing prices on Guam and in the U.S. Information on the home purchase component of the Guam CPI was not available after 2007; however, indications are that the home purchase component of the CPI would have declined since 2007, if it had been measured.

Table 3.3-8. Home Purchase Component of Guam Consumer Price Index, 2000-2007

	2000	2001	2002	2003	2004	2005	2006	2007
Home Purchase	100.0	98.6	86.5	94.5	124.7	155.9	187.3	210.6

Note: The Guam CPI shows prices bottoming in 2nd quarter 2002 while some market research shows prices continuing to fall into 2003; the true bottom to housing prices probably falls somewhere in between.

Source: GDoL 2006, GBSP 2012b.

Table 3.3-9 provides year 2010 housing characteristics information for Guam and each of Guam's villages.

Table 3.3-9. Housing Characteristics for Guam, 2010

		Total Housing Units	Vacant Units		Occupied Units		Median Rooms	Average Bedrooms	Median Value (Owner-Occupied)	Median Rent (Gross)
			Total	Vacancy Rate	Total	Renter Occupied				
Guam Totals		50,567	8,541	16.9%	42,026	49.7%	4.5	2.6	\$216,145	\$879
North	Dededo	12,829	1,801	14%	11,028	45.3%	4.6	2.8	\$189,091	\$812
	Yigo	5,887	927	15.7%	4,960	45.8%	4.7	2.7	\$192,933	\$861
Central	Tamuning	9,022	2,352	26.1%	6,670	72.4%	3.8	2.2	\$281,064	\$937
	Barrigada	2,650	397	15%	2,253	36.9%	5.1	2.8	\$263,971	\$917
	Mangilao	4,466	592	13.3%	3,874	51.2%	4.4	2.6	\$228,492	\$885
	Mongmong -Toto-Maite	2,297	359	15.6%	1,938	64.7%	4.3	2.5	\$236,983	\$815
	Hagåtña	396	110	27.8%	286	73.4%	3.7	1.9	\$246,429	\$752
	Sinajana	917	165	18%	752	46.3%	4.8	2.8	\$249,398	\$856
	Agana Heights	1,261	165	13.1%	1,096	47.6%	4.6	2.6	\$243,805	\$809
	Chalan Pago-Ordot	2,111	259	12.3%	1,852	34.5%	4.9	2.7	\$230,711	\$950
	Asan	751	112	14.9%	639	44.1%	4.9	2.8	\$274,057	\$954
	Piti	571	126	22.1%	445	45.8%	5.1	2.9	\$343,878	\$1,698
South	Yona	1,932	297	15.4%	1,635	34.2%	5.2	3	\$225,683	\$963
	Agat	1,508	249	16.5%	1,259	47.3%	4.5	2.6	\$191,346	\$690
	Santa Rita	1,808	360	19.9%	1,448	54.3%	5.2	3	\$212,590	\$1,343
	Talofofo	900	119	13.2%	781	28.6%	5.2	2.9	\$237,097	\$1,237
	Umatac	191	20	10.5%	171	42.1%	5	2.9	\$205,000	\$533
	Inarajan	607	73	12%	534	24.3%	4.7	2.7	\$199,138	\$857
	Merizo	463	58	12.5%	405	37.8%	4.9	2.8	\$188,000	\$858

Note: "Median Rent" is the value where half the rents are higher and half lower. "Contract rent" is the monthly rent regardless of any costs for furnishing, utilities, fees, meals, etc. "Gross rent" includes those additional things.

Source: Census 2010.

3.3.2.1 North

As of the year 2010, the Northern region had a total of 18,716 housing units (12,829 in Dededo and 5,887 in Yigo); this comprised 37% of the total number of housing units on Guam.

Overall, Guam had a high vacancy rate (17% in 2010, compared to the U.S. nationwide figure of 11.4%). The Northern region had a lower vacancy rate than Guam overall (17%), with an 11.1% rate in Dededo and a 10.8% rate in Yigo.

The Northern region, on average, had fewer renter occupied units as a percentage than Guam overall; both Dededo and Yigo had a rental occupancy rate around 45% compared to the Guam rate of 49.7%.

Housing units were slightly larger in the Northern region compared to Guam overall; both Dededo and Yigo had more rooms per unit and more bedrooms per unit than the Guam overall average.

Prices were lower in the northern region than Guam overall both in terms of median value and rents.

3.3.2.2 Central

As of 2010, the Central region had a total of 24,442 housing units, which comprised 48% of the total number of housing units on Guam.

The Central region had a higher vacancy rate than Guam's overall high rate of 17%. Tamuning, Hagåtña, Sinajana, and Piti all had vacancy rates over 20%; however, most of the vacant units were available for rent. The Central region had a higher rate of renter occupied units than Guam overall.

Housing units were smaller in the Central region compared to Guam overall. Hagåtña had the smallest sized units on Guam, with an average of 3.7 rooms and 1.9 bedrooms per housing unit.

Despite the smaller units in the Central region, prices were higher than overall Guam both in terms of median value and rents.

3.3.2.3 South

As of the year 2010, the Southern region had a total of 7,409 housing units, which comprised 15% of the total number of housing units on Guam.

The Southern region overall had a lower vacancy rate than Guam's overall rate of 17%, and a lower percentage were available to be rented. On average, the Southern region had a lower rate of renter occupied units than Guam overall.

Housing units were larger in the Southern region compared to Guam overall. Santa Rita and Yona had the largest units on Guam in terms of number of rooms per unit (5.2) and number of bedrooms per unit (3.0).

Despite the more rooms and bedrooms per unit in the Southern region, prices were generally lower than Guam overall, with five of the seven villages having lower median home values.

3.3.2.4 Temporary Workforce Housing

Based on information from Guam construction contractors and the Guam Department of Land Management (GDLM), there was capacity to house 3,700 temporary workers in 2009. Over half of this capacity (1,900) was owned and operated by one contractor at a single location in Harmon Industrial Park. The remainder of the capacity (1,800) was spread among 17 different locations, mostly in the North and Central regions (Joint Guam Program Office and NAVFAC Pacific 2009).

Since then, two major builders of temporary workforce housing began construction of developments that could ultimately house up to 26,500 residents, to accommodate the military buildup. However, based on the lower number required for the workforce, and the extended construction period as per the Roadmap adjustments, several housing units originally developed for temporary workforce housing have been converted to affordable housing for permanent residents. For example, the first phase of the Ukudu Workforce Village opened in 2011 and was designed to house 2,000 residents by the end of the year, but was unused as of June 2012 (Matthews 2012). If the Village is completely built out, it could accommodate up to 18,000 temporary residents (Torre 2011).

3.3.3 Government of Guam Finances

3.3.3.1 Government of Guam Revenue Sources

Table 3.3-10 shows the tax rates, sources, and budgetary destinations for the major internal revenue sources (plus Compact Impact funding – reimbursements to the local government agencies of Guam, CNMI, and Hawaii for costs incurred due to the in-migration of Micronesians, as per Section 104(e) of the Compact of Free Association).

The GovGuam bases most of its GRT and income taxes on the Internal Revenue Service code. Guam residents pay Guam personal income taxes, which are based on the federal tax code. U.S. military personnel stationed on Guam pay personal income taxes to the federal government but those funds are returned to GovGuam via Section 30. While real property taxes on Guam are relatively low, taxes on real estate transactions are 35%. Most sources of tax revenue go to the Guam General Fund, while some other tax revenues go into a variety of Other Governmental Funds.

Table 3.3-10. Revenue Sources for the Government of Guam			
<i>Tax/Fee</i>	<i>Tax Rate</i>	<i>Taxed Item</i>	<i>Budgetary</i>
GRT	4%	Gross income	General Fund
Hotel Occupancy Tax	11%	Daily room rate	Tourist Attractions Fund
Personal Income Tax ¹	10% - 35%	Income	General Fund
Corporate Income Tax (Guam Based)	15% - 35%	Net income	General Fund
Corporate Income Tax (Other Business on Guam)	15% - 35%	Guam source income	General Fund
Real Property Sales Tax	35% of the full cash value	Sale of land or buildings	Territorial Education Facility Fund
Annual Real Property Tax	7/80% for land (0.0875%)	Appraised value	General Fund
Annual Real Property Tax	7/20% for improvements (0.375%)	Appraised value	General Fund
Liquid Fuel Tax	\$0.10 per gallon	Diesel	Highway Fund
Liquid Fuel Tax	\$0.04 per gallon	Aviation fuel	Highway Fund
Liquid Fuel Tax	\$0.11 per gallon	All other fuel	Highway Fund
<i>Federal Grant</i>	<i>Total Federal Grant</i>	<i>Grant Base</i>	<i>Budgetary</i>
Compact Impact Payment	\$30,000,000	% of Insular FAS Population	Discretionary (Governor)
GG.501	Interior Department - Payments to the Territories	Various formulae for broad category of grants and programs ¹	Multiple

Note: ¹ The personal income tax rate (and associated GovGuam personal income tax revenue) is based on U.S. Federal tax code.

Sources: Guam Department of Revenue and Taxation 2008, DoI 2009, Guam Legislature 2012, Guam Economic Development Authority (GEDA) 2013.

3.3.3.2 Government of Guam Revenues

Table 3.3-11 provides breakdown of Fiscal Year (FY) 2011 government revenues. In FY 2011, GovGuam had revenues totaling \$1.1 billion. Tax revenues (\$553 million) accounted for most of the revenue and most of the remainder came from federal contributions (\$426 million). Of the \$1.1 billion in total revenue, \$552 million went to the General Fund, \$131 million went to Other Governmental Funds, \$281 million came from Federal Assistance Grants, and \$136 million came in the form of federal grants to the Guam Public School System. Section 30 federal income tax collections totaled more than \$46 million in 2011; these funds are generated for GovGuam through federal tax payments of military personnel stationed on Guam.

Table 3.3-11. FY 2011 Breakdown of Government of Guam Revenues					
	<i>General Fund Revenue</i>	<i>Other Governmental Funds</i>	<i>Federal Assistance Grants</i>	<i>Guam Public School System Federal Grants</i>	<i>Totals</i>
Taxes	\$485,006,669	\$68,339,690			\$553,346,359
Income Tax					
GRT					
Other taxes					
Licenses, fees and permits	\$5,735,762	\$54,214,874			\$59,950,636
Section 30 Federal income tax collections	\$46,357,373	\$3,730,516			\$46,357,373
Use of money and property	\$183,100	\$3,730,516			\$3,913,616
Federal contributions	\$6,461,145	\$2,389,011	\$281,203,371	\$135,584,057	\$425,637,584
Guam Public Schools System	\$1,429,568				\$1,429,568
Contributions from component units	\$2,199,058				\$2,199,058
Other	\$4,982,985	\$1,910,011		\$82,245	\$6,975,241
Totals	\$552,355,660	\$130,584,102	\$281,203,371	\$135,666,302	\$1,099,809,435

Source: GovGuam 2011.

3.3.3.3 Government of Guam Expenditures

Table 3.3-12 shows GovGuam expenditures for FY 2011. GovGuam spent more on public education than any other expenditure category; \$265 million was spent on public education not including payments made to UoG (\$33.1 million) and GCC (\$15.6 million) – in total, one-third of all GovGuam expenditures went to education. Public health (\$200 million), capital projects (\$135 million), and general government (\$118.9 million) were the three next highest expenditure categories. Over \$78.8 million was spent paying interest on GovGuam debt during FY 2011.

Table 3.3-12. FY 2011 Breakdown of Government of Guam Expenditures					
	<i>General Fund Revenue</i>	<i>Other Governmental Funds & Capital Projects</i>	<i>Federal Assistance Grants</i>	<i>Guam Public School System Federal Grants</i>	<i>Total</i>
Current Expenditures:					
General government	\$75,912,295	\$23,008,185	\$19,933,359		\$118,853,839
Protection of life and property	\$84,925,138	\$14,194,930	\$8,197,786		\$107,317,854
Public health	\$13,792,959	\$14,516,334	\$171,838,052		\$200,147,345
Community services	\$20,081,263	\$583,374	\$15,536,949		\$36,201,586
Recreation	\$2,763,566	\$1,035,566	\$344,516		\$4,143,648
Individual and collective rights	\$38,718,463	\$5,518,533	\$10,677,972		\$54,914,968
Transportation		\$4,036,479	\$13,248,156		\$17,284,635
Public education	\$209,562,604	\$234,506		\$55,431,259	\$265,228,369
Environmental protection		\$5,274,726	\$7,490,955		\$12,765,681
Economic development	\$3,592,927	\$150,027	\$6,736,380		\$10,479,334
Payments to:					
GovGuam Retirement Fund	\$1,643,757				\$1,643,757
A. B. Won Pat International Airport Authority			\$238,081		\$238,081
CLTC		\$579,049			\$579,049
GCC	\$13,131,969	\$1,857,297	\$563,376		\$15,552,642

Table 3.3-12. FY 2011 Breakdown of Government of Guam Expenditures

	<i>General Fund Revenue</i>	<i>Other Governmental Funds & Capital Projects</i>	<i>Federal Assistance Grants</i>	<i>Guam Public School System Federal Grants</i>	<i>Total</i>
Guam Educational Telecommunications Corporation	\$530,059				\$530,059
GHURA		\$378,711	\$2,129,098		\$2,507,809
GMHA	\$9,368,560	\$4,773,107	\$2,843,688		\$16,985,355
Guam Preservation Trust		\$698,934			\$698,934
GPA			\$611,753		\$611,753
Guam Regional Transit Authority		\$2,933,232	\$1,117,997		\$4,051,229
GVB	\$20,605	\$14,308,625			\$14,329,230
GWA			\$580,699		\$580,699
Port Authority of Guam			\$2,914,900		\$2,914,900
UoG	\$30,851,172	\$2,105,365	\$116,995		\$33,073,532
Miscellaneous appropriations	\$27,321,971	\$63,755	\$198,968		\$27,584,694
Interest and other charges	\$23,108,677				\$23,108,677
Capital projects	\$65,735,000	\$35,038,219	\$34,082,964		\$134,856,183
Cost of issuance		\$765,347			\$765,347
Debt Service	\$56,608,444	\$15,156,154		\$7,100,000	\$78,864,598
Total expenditures	\$677,669,429	\$147,210,455	\$299,402,644	\$62,531,259	\$1,186,813,787

Source: GovGuam 2011.

3.3.3.4 Overview of Government of Guam Capacity Issues

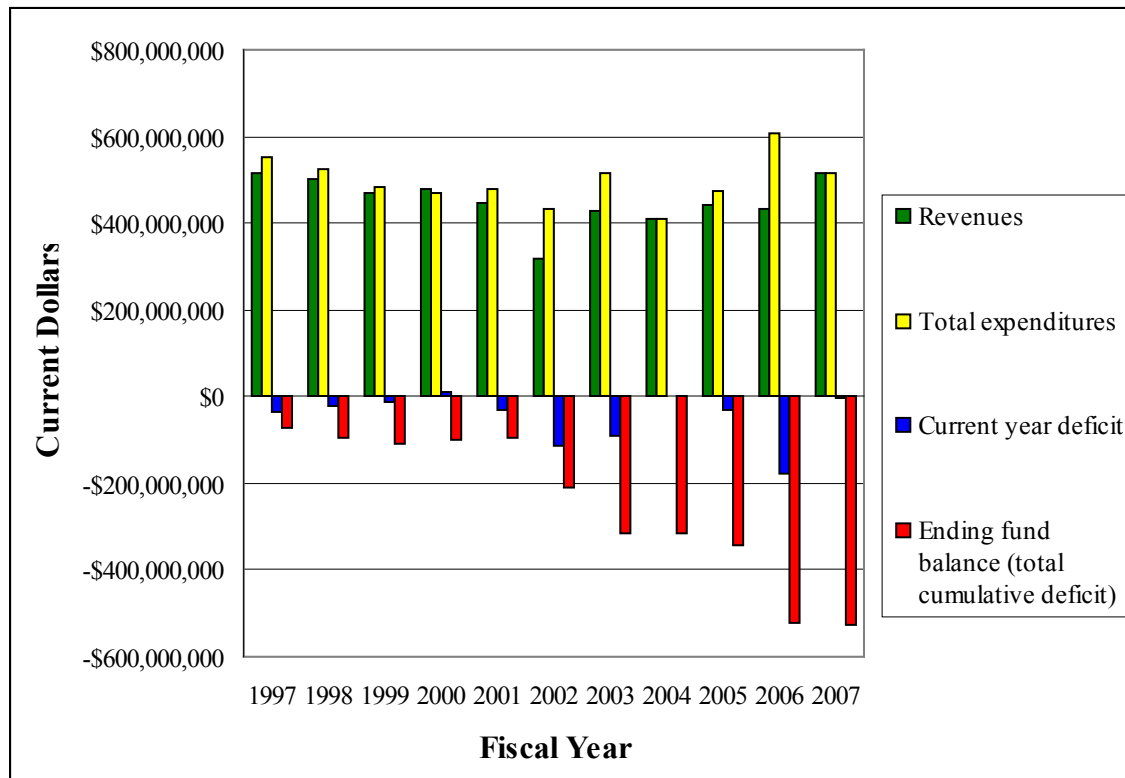
GovGuam faces two broad types of capacity challenges, both of which would affect its ability to cope with the impacts of the proposed action: (1) human resources, and (2) financial resources.

Human resources. Guam is geographically remote and its population base is small. Guam's population is smaller than any U.S. state and would rank only 147 among U.S. mainland cities (Census 2010). This small and remote population is a limiting factor to having a large pool of available skilled workers.

Financial resources. Guam's financial challenges involve both revenues for its normal operations and its ability to borrow money to provide infrastructure for either existing or potential population growth. Therefore, some detail is provided below to explain the status of Guam's government finances.

The General Fund is the primary operating fund of most American government units. It is used to account for all assets and liabilities of a government except those particularly assigned for other purposes in another more specialized fund. An example of a specialized fund, on the other hand, is the capital projects fund that accounts for financial resources used for acquisition, construction, or operation of major capital facilities.

Figure 3.3-1 shows annual General Fund revenues, expenditures, and deficits from FY 1997 to FY 2007. General Fund Expenditures grew by an annual average of about 1.8% over FY 1996 to FY 2006, primarily due to a jump in FY 2006. However, revenues fell substantially over that period, resulting in a total cumulative deficit of \$528 million by the end of FY 2007.



Sources: Banc of America LLC 2007, Guam Office of the Public Auditor 2008.

Figure 3.3-1. Historical Guam General Fund Revenues, Expenditures, and Deficits

The government started a deficit reduction plan in FY 2007, in part, because deficits were affecting the ability to sell bonds for existing costs and new infrastructure. This plan included tighter spending controls, more diligent revenue collection, more careful accounting systems, and more timely audits. In addition, Governor Calvo directed a fiscal stabilization plan in 2011 to prioritize financial stability and reduce the overall debt. One positive result of the fiscal stabilization efforts and from renewed interest in hotel construction (namely the Dusit Thani Hotel that was under construction as of mid-2013) has been that, compared to all other states and territories in 2012, Guam's bond values appreciated the most (Chappatta 2012). However, to achieve balanced budgets, Guam has cut staffing and services.

In April 2011, Governor Calvo approved the sale of Guam Hotel Occupancy Tax bonds. These bonds are backed by revenues generated by occupancy taxes charged to visitors staying at Guam hotels. The revenues generated by the bonds are being used for government construction projects including the building of the Guam Museum, the restoration and rehabilitation of the Plaza de Espana, the development of a crosswalk between Skinner Plaza and the Chamorro Village, and improvements to the Hagåtña Pool and Tennis Courts (Hotbond 2013).

In FY 2011, the General Fund received a total of \$552.4 million in total revenues, the highest in 14 years. However, due to overestimated potential revenues and unbudgeted expenses, the General Fund had a \$46.9 million operational deficit. The FY 2011 cumulative deficit (debt) was reduced by \$18.2 million primarily due to the budget contribution of unexpended American Recovery and Reinvestment Act funds (Guam Office of Public Accountability 2012a).

Guam's efforts to reduce its outstanding \$552 million debt are complicated by even larger unfunded obligations that are not included in its official cumulative debt estimates. Unfunded obligations refer to

future commitments that were not backed up by reliable provisions to pay for those commitments. Guam has historically incurred some unexpected expenses for its operation due to agreements that have led to later costs that were not planned for or budgeted. These unfunded obligations, in sum, are much higher than the official Guam debt. This means that Guam's capacity to borrow in order to correct its problems is very limited, creating extreme difficulty in maintaining current levels of service. Standard and Poor's cited unfunded pension and other retirement benefits as part of the substantial liabilities that led to GovGuam's "B+" credit rating in 2011 (Standard and Poor's 2012).

Additionally, the financial crisis of 2008-2009 greatly affected Guam's ability to market General Obligation bonds. General Obligation bonds are loans that are secured by the tax receipts of the issuing government body. Often, in the event the issuer does not repay on time, General Obligation bond creditors have first claim on the issuing governments' assets or tax receipts over other creditors. The government's B+ rating is still below investment grade. An "investment grade bond" is one that is assigned a rating in the top four categories by commercial credit rating companies. These ratings vary from rating company to rating company, but investment grade bonds are viewed as very safe. For example, Standard and Poor's defines "investment grade" as class BBB and above. Guam's B+ rating is below the BBB rating.

In 2011, Standard and Poor rated Guam's General Obligation Bonds at B+/Stable Outlook, due to "Guam's increased political willingness to establish a long-term plan to improve its financial position, including addressing its history of annual budget imbalances and its significant long-term liabilities" (Guam Office of the Governor 2011).

Standard and Poor's also noted major drawbacks on Guam's prospects for borrowing, including:

"The government's continued very large general fund deficit position and lack of general fund liquidity, with the general fund deficit increasing further in unaudited fiscal 2011 to a negative \$374 million after also growing in fiscal 2010;

The government's extremely high debt burden, which continues to grow, and resulting lack of financing flexibility given that it is within \$7.2 million of its \$1.139 billion debt ceiling;

The territory's mainly military- and tourism-based economy (with tourism primarily from Japan), which leaves it vulnerable to economic cycles and defense spending; and

The island's vulnerability to negative global economic and financial events, severe weather, and epidemic outbreaks, which have historically caused declines in tourism and major revenue streams (Standard and Poor's 2012)."

3.3.4 Gross Island Product

GIP is a measure of the total value of all final goods and services produced in a particular (island) economy. GIP is the most commonly used benchmark to gauge the overall size of an economy. The most recent measure of GIP on Guam was completed in 2010, when it was estimated that Guam's GIP was about \$4.58 billion. Table 3.3-13 details Guam's GIP from 1991 to 2002 as estimated by the GBSP and Table 3.3-14 shows Guam GIP from 2002 to 2010 as measured by the U.S. Bureau of Economic Analysis.

Table 3.3-13. Guam GIP 1991-2002 (Millions of Current \$'s)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
GIP	\$2,667	\$2,902	\$2,917	\$3,014	\$2,999	\$2,993	\$3,109	\$3,551	\$3,025	\$3,420	NA	\$3,428

Note: "Current dollars" reflect the dollar value for the years data were recorded; for example, in the table above, 1991 GIP is in 1991 dollars, 1992 GIP is in 1992 dollars and et cetera.

Source: GBSP 2006.

Table 3.3-14. Guam GIP 2002-2010 (Millions of Current \$'s)

	2002	2003	2004	2005	2006	2007	2008	2009	2010
GIP	\$3,349	\$3,494	\$3,774	\$4,056	\$4,077	\$4,207	\$4,335	\$4,542	\$4,577

Note: "Current dollars" reflect the dollar value for the years data were recorded; for example, in the table above, 1991 GIP is in 1991 dollars, 1992 GIP is in 1992 dollars and et cetera.

Source: Bureau of Economic Analysis 2012.

3.4 PUBLIC SERVICES

Public services are a key part of any relationship between citizens and their governments. In theory, as tax revenues change, the quality and quantity of public services will as well, with a positive correlation. As government tax revenues increase, the services provided by that government have the capacity to improve and, likewise, as government revenues decline then public services may suffer.

3.4.1 Education Services

3.4.1.1 Guam Department of Education

The Guam Department of Education (GDoE), formerly known as the Guam Public School System, services the entire school-age population of Guam under one unified school district. School-age children of active-duty military and some U.S. federal employees are educated in the DoD Domestic Dependent Elementary and Secondary Schools (DDESS) system. The DDESS is separate from the GDoE.

Staffing

In School Year (SY) 2011-2012, GDoE employed 3,377 FTE teachers and staff positions including (SIAS Appendix A, GDoE):

- 1,281 Elementary Teachers
- 590 Secondary Teachers
- 556 High School Teachers
- 455 Elementary School Support Staff
- 235 Secondary School Support Staff
- 260 High School Support Staff

Service Population

Total enrollment in SY 2011-12 was 31,824 (SIAS Appendix A, GDoE). Between SYs 2008-2012, GDoE experienced an increase of 930 students.

Ethnic demographics within the school system are changing. In SY 2011-2012, the largest ethnic groups represented in the GDoE student population were (GDoE 2012):

- Chamorro (41%)
- Filipino (25%)
- Pacific Islander (26%) (a category that includes students from the Freely Associated States of Micronesia [FAS] and Native Hawaiian)

In comparison, the largest ethnic groups represented 2 years earlier in SY 2009-10 were:

- Chamorro (52%)
- Filipino (23%)
- Pacific Islander (20%)

GDoE does not track the number of military dependents in the school system. However, less specific data show that of the total number of students GDoE served in 2012, 2,564 students lived with a parent who either lived or worked on federal property (SIAS Appendix B, GDoE).

Facilities

GDoE manages a total of 40 schools (26 elementary schools, 8 middle schools, 5 high schools and 1 alternative school) (GDoE 2012). The largest number of GDoE schools is located in Guam's Central region, followed by the Northern region, with the smallest number of schools in the Southern and Apra Harbor regions. The Northern region schools are crowded relative to other schools on Guam (SIAS Appendix A, GDoE). Redistricting has not occurred since 2008, but as the island population continues to increase in the north, students may be shifted to schools in the Southern region (SIAS Appendix A, GDoE).

GDoE has identified the need to construct no less than four additional schools (two elementary schools, one middle school, and one high school). The agency is renovating existing schools and plans to build three new schools, though funding has not been identified to do so.

3.4.1.2 Primary and Secondary Education

As of Fall of SY 2011-12, including GDoE, DDESS, and private schools – primary and secondary school enrollment on Guam was 40,262 students (GBSP 2012b).

Private Schools

Guam has 26 private schools: 15 are Catholic, 10 are other non-Catholic Christian denominations, and one is non-denominational. Overall, private schools on Guam have an enrollment of approximately 6,990 students (GBSP 2012b).

Department of Defense Domestic Dependent Elementary and Secondary Schools

Prior to SY 1997-98, military dependents attended Guam's public schools. Presently, military dependent education on Guam is available through DDESS. DDESS runs one elementary school, one middle school, one combined elementary/middle school, and one high school. Andersen Elementary and Middle Schools are located in the north, McCool Elementary/Middle School is located near Apra Harbor in the south, and Guam High School is located in central Guam. As of December 2012, DDESS employed approximately 267 people and had a student population of 2,549 (GBSP 2013a).

Those eligible to attend DDESS schools include dependents of active duty military, the U.S. Coast Guard, full-time deployed National Guard members, and a limited set of civilian DoD workers. DDESS teachers may send their dependents to DDESS schools on a space-available basis.

Table 3.4-1 shows total enrollment of DDESS eligible school-aged children between the SYs 1998-99 through 2012-2013. Enrollment was 2,549 for SY 2012-13.

Table 3.4-1. Enrollment for DDESS Eligible Students for School Years 1998-2013, by School System									
<i>School Year</i>	<i>Total Department of Defense Enrollment</i>	<i>Domestic Dependent Elementary and Secondary Schools</i>					<i>Public</i>	<i>Private</i>	<i>Home-School</i>
		<i>Total</i>	<i>Pre-K</i>	<i>K-5th</i>	<i>6th-8th</i>	<i>9th-12th</i>			
2012-13	3,006	2,549	178	1,330	521	520	246	179	32
2011-12	2,487	2,070	148	826	455	641	211	155	51
2010-11	2,177	1,770	90	662	415	603	197	176	34
2009-10	3,960	3,302	239	1,498	854	711	329	249	80
2008-09	3,697	3,201	297	1,631	619	654	261	188	47
2007-08	2,833	2,071	182	1,043	469	377	459	248	55
2006-07	2,715	2,092	221	1,032	478	361	429	154	40
2005-06	3,148	2,496	165	1,414	531	386	452	113	87
2004-05	2,688	2,270	----	1,340	525	405	222	131	65
2003-04	2,382	2,116	----	----	----	----	126	82	58
2002-03	2,109	1,763	----	1,023	453	287	114	146	86
2001-02	2,627	2,420	----	1,409	595	416	88	92	27
2000-01	2,860	2,587	----	1,632	635	320	133	94	46
1999-00	2,457	2,212	----	1,303	568	341	136	78	31
1998-99	2,948	2,611	----	1,795	462	354	156	76	105

Source: GBSP 2013b.

3.4.1.3 Higher Education

Public higher education services on Guam are offered by UoG and Guam Community College (GCC) and private higher education services are provided by Pacific Islands University (PIU). GCC, UoG, and PIU are all located in Mangilao, in the Central region of Guam. GCC and UoG are both fully accredited by the Western Association of Schools and Colleges. PIU is accredited by the Transnational Association of Christian Colleges and Schools.

Guam Community College

GCC was established in 1977 by Public Law (P.L.) 14-77, and is the only community college on Guam. GCC serves both secondary and post-secondary students and offers more than 50 fields of study for degrees and certificates including career and technical education, apprenticeship programs, and adult and continuing education.

Due to strong communication with local business groups, GCC is able to adapt its course offerings quickly to meet the needs of the economy. For example, it has begun offering classes for photovoltaics and renewable energy in anticipation of the need for energy efficient initiatives associated with new buildings and facilities supporting the proposed action.

Staffing

In academic year 2012-13, GCC had 238 staff, including 115 non-adjunct faculty positions, 89 support staff, and 34 administrators. There were also 94 adjunct (non-permanent) faculty positions (GCC 2013).

Service Population

GCC student enrollment has been increasing since 2008. In Fall 2008, GCC had a student population of 1,835, which grew to 2,576 by the Fall of 2012.

In Fall 2012, these ethnicities continued to be the largest ethnic groups in the GCC student population (GCC 2013):

- Chamorro (about 44%)
- Filipino (about 38%)
- Other Pacific Islander (about 11%)

GCC services can be accessed by military personnel; between academic years 2010-12, 16 students reported their residency status as military personnel and 78 students reported their residency status as military dependent.

Facilities

The GCC provides educational services offered on its Main Campus as well as at local high schools (Southern High School, Simon Sanchez High School, Okkodo High School, and John F. Kennedy High School). Adult Education programs are available on the Main Campus and at various satellite locations.

Since 2009, GCC has opened four new buildings: the Allied Health Building for nursing, a learning resources study center, the Foundation building for adult education, and a student center. Enrollment has been increasing, in part, due to new facilities. Since the opening of its new Allied Health Building, the number of students in the Pre-Nursing certificate program has increased by 25%.

University of Guam

The UoG is an open-admissions, semester-based, U.S. land-grant public institution that offers 15 master's degree programs, 35 bachelor's degree programs, and one associate's degree program. It is the only baccalaureate and master's degree institution in Micronesia.

UoG also operates a web-based learning system to provide online courses. During an average semester, 10% of undergraduate courses are offered online. UoG also offers a Master's of Education in Reading online.

Staffing

UoG employed a total of 819 people in academic year 2012-2013, including 397 faculty. Of the 397 faculty, 185 were employed on a full-time basis and 212 on a part-time basis (UoG 2012).

UoG faculty members typically have three roles in varying proportion: education, research, and public service. Faculty positions are supported by administrative personnel who manage contracts and grants and provide general support. Adjunct faculty positions are staffed through advertising in newspapers and military publications as well as word of mouth. Dependents of military personnel are occasionally qualified and willing to serve as adjunct faculty.

Service Population

As of Fall 2011, UoG had an enrollment of 3,721. Military personnel and dependents attend UoG for undergraduate and graduate degree programs and they receive resident tuition rates. H-2B workers on temporary work visas may enroll for incidental studies but cannot obtain a degree. There are no H-2B workers currently enrolled at UoG.

Facilities

UoG operates a main campus, located in Mangilao, which includes a Science Building Annex and a Health-Science Annex.

In September 2008, with assistance from the national Procurement Technical Assistance Program, UoG established a Procurement Technical Assistance Center, hosted by the University's School of Business and Public Administration. The Procurement Technical Assistance Center is intended to link the University's Small Business Development Center and Guam's businesses with federal contracting opportunities. UoG is creating an Engineering School to promote Science, Technology, Engineering and Math career paths.

Currently, UoG does not offer courses on DoD bases on Guam. The DoD Education Office System bundles Guam into a regional "foreign country" contract that requires any university offering courses on bases on Guam to also offer them on bases in Korea, Japan, and other places in the Pacific region. It is beyond the scope and ability of UoG to offer courses to all of these bases. UoG is seeking to reclassify its status with the DoD so that it may offer programs on base, including online courses to rotating troops and capstone classes for troops rotating to Guam who wish to finish a degree started at a different institution.

Pacific Islands University

PIU is a private, not-for-profit university that was founded as the Micronesian Institute of Bible Studies in 1976 and became PIU in July of 2009. In addition to its Guam campus, PIU has teaching facilities in Chuuk, Palau, and Yap. It offers four undergraduate programs of biblical study including: Certificate, Diploma, Associates of Arts Degree, and Bachelor of Arts Degree. PIU also offers a Master of Arts in Religion. Current student enrollment at all PIU sites includes 86 students, 67% of which are from Micronesia. Three PIU students are currently pursuing graduate degrees. PIU has 9 full-time faculty and 91 part-time/adjunct faculty (PIU 2012).

3.4.2 Health and Human Services

Health services involve the preservation of health and the prevention, treatment, and management of illness through the professions of medicine, dentistry, nursing and allied health. Human Services can incorporate a range of agencies and services including support of low-income, specially identified, or at-risk populations.

As of 2011, Guam had two hospitals, including 1 civilian and 1 naval hospital, 30 pharmacies, and 77 clinics (GBSP 2012b). A new, private, hospital known as Guam Regional Medical City (GRMC) is, as of February 2013, under construction. There are no non-profit groups providing health care and no academic medical centers.

3.4.2.1 Overarching Health Concerns and Access

A variety of health issues are concerns on Guam, including fertility rates, communicable and infectious diseases, heart disease, malignant neoplasm (cancer), cerebrovascular disease, obesity, diabetes mellitus, suicide, and motor vehicle accidents. Guam's tuberculosis (TB) incidence rate is 6 times more than Hawaii and 15 times more than the U.S. overall. The Guam Department of Public Health and Social Services (GDPHSS) Office of Vital Statistics indicated that Guam's infant mortality rate was 13.3 in 2011, more than two times that of the U.S. overall.

Guam's place as a hub in the Mariana Islands affects its overall health status. The island is susceptible to health concerns that are emergent in neighboring areas, whose populations often have high health needs and often do not have immunization or health records. Citizens from the Federated States of Micronesia (FSM) (Chuuk, Pohnpei, Yap, Kosrae), Palau, and the Marshall Islands are able to freely migrate to Guam, which in some cases, is a relatively attractive place. Because in-migrants often come from a

disadvantaged socioeconomic background, they are eligible to receive public health services from Guam agencies.

After arrival on Guam, disadvantaged in-migrants from other Pacific islands tend to live in overcrowded and otherwise substandard conditions that do not have adequate utilities services (such as water, power, and waste collection) (SIAS Appendix B, Guam Department of Youth Affairs [GDYA]). Lack of adequate utilities services and generally poor living conditions can lead to increased rates of Hepatitis B, TB, chlamydia, cholera, and Hansen's disease, among other public health concerns. Chlamydia is prevalent among the Micronesian population, with an incidence rate of 2,077 cases per 100,000 people in 2011 (SIAS Appendix A, Department of Public Health [DPH]). Also, of the 42 infant deaths in 2011, 13 (30.9%) were among Chuukese infants (SIAS Appendix A, DPH).

Since 1988, Guam has been considered a Medically Underserved Area (GDPHSS Maternal and Child Health Services 2007), demonstrating the island's difficulty in meeting its health care needs. Its remote location means access to specialized care is reduced. Patients requiring specialized services in the U.S. must take a 7-hour trip by commercial plane to Hawaii. Flight times from Guam to various countries for treatment are as follows:

- Manila, Philippines – 3.3 hours
- Tokyo, Japan – 3.4 hours
- Hong Kong, China – 4.4 hours
- Cairns, Australia – 4.9 hours

3.4.2.2 Health Care Professional Shortage

It has been difficult to recruit specialists from the U.S. mainland because of its remote location and lower pay scales. In 2012, Guam had a total of 172 physicians, including physicians at the Guam Memorial Hospital and military physicians working in the community on a part-time basis (GBSP 2012b). On average, in 2009, there were 25 patient care physicians per 10,000 in population in the U.S. (National Center for Health Statistics, Centers for Disease Control 2011). In comparison, Guam had a ratio of about 10 active physicians per 10,000 residents (GBSP 2012b).

Guam qualifies as a Health Professional Shortage Area; because of this, certain medical professionals (e.g., nurses, mid-level providers, chiropractors, health dentists, psychologists) can enter the National Health Service Corporation (NHSC), work at Guam medical facilities and receive a federal government salary, be compensated for relocation costs, and receive school loan repayment benefits. NHSC is a 4-year program and program participants typically stay for the length of that term but then leave Guam when the program is complete. While importing health professionals helps with shortages, systemic turnover created by the temporary nature of the NHSC program makes it difficult to provide a stable level of care over the long-term.

3.4.2.3 Uninsured and Underinsured Populations

One factor that affects Guam's ability to meet its population's health care needs is that a large percentage of the population does not have adequate health insurance. GDPHSS estimates that, as of 2010, about 21% of Guam's population was considered uninsured or underinsured (SIAS Appendix A, GDPHSS). Uninsured and underinsured individuals often must turn to government health agencies for services and health services agencies are mandated to serve everyone that comes through their doors regardless of whether or not that person has health insurance.

3.4.2.4 Health Care Funding

The funding of Medicaid and Medicare programs also presents unique challenges to the Guam healthcare system. By statute Guam's Medicaid funding is capped, and annual increases are based on the CPI. Federal matching funds for Medicaid (the Federal Medical Assistance Percentage) are set for 50%, the minimum rate. Once Guam has exhausted this capped Medicaid funding, all Medicaid costs must be assumed by GovGuam. Medicare funding on Guam is still paid under the system of the Tax Equity and Fiscal Responsibility Act of 1982, which limits Guam Memorial Hospital's reimbursement to \$6,000 per discharge. This is a lower payment than is provided to most other U.S. states and territories (U.S. Department of Health and Human Services 2008).

The U.S. Congress increased the levels of federal Medicaid funding in Guam through the Health Care and Education Reconciliation Act of 2010. The Patient Protection and Affordable Care Act of 2010, which increased the federal funding of Medicaid and Medicare for Guam, raised the cap, and allowed Guam the option to operate a Health Benefits Exchange. It also increased funding for community health centers (CHCs) and maternal, infant, and early childhood home visit programs (Congressional Research Service 2010). Guam also received a temporary 30% increase in its Medicaid spending caps under the American Recovery and Reinvestment Act of 2009 (Congressional Research Service 2010).

Medicaid and Medicare programs have also implemented incentives to increase the number of private providers who are willing to see Medicaid/Medicare patients, alleviating some of the pressure on the public providers. An Electronic Health Record incentive program provides incentive payments for eligible professionals who adopt, implement, upgrade, or meaningfully use certified electronic health record technology in their first year of participation in the program and successfully demonstrate meaningful use in subsequent years. To be eligible, a provider must meet set Medicaid/Medicare patient thresholds or practice in a Federally Qualified Health Center (U.S. Department of Health and Human Services 2012). Public and private health providers in Guam are adjusting their practices to be eligible for these incentives (SIAS Appendix B, GDPHSS DPH).

3.4.2.5 Guam Department of Public Health and Social Services

The GDPHSS provides various health services to the public including primary and acute health care.

Bureau of Primary Care Services

The GDPHSS Bureau of Primary Care Services (BPCS) was established in 1998 to administer two Community Health Centers (CHCs): the Northern Region Community Health Center (NRCHC) and the Southern Region Community Health Center (SRCHC). These centers are Federally Qualified Health Centers that provide primary, acute and preventative care on an outpatient basis. Prior to 1998, primary care services from GDPHSS did not exist, and services were limited to preventive services under the Maternal Child Health Program of the GDPHSS Bureau of Family Health and Nursing Services (BFHNS).

Staffing

In 2012, BPCS CHCs employed 70 FTE staff, including 8 physicians and 2 nurse practitioners.

The CHCs have high physician turnover; physicians who are under the NHSC scholarship or loan payment program often resign from the CHCs after they complete their NHSC financial obligation so that they can return to the U.S. mainland.

The CHCs also have experienced difficulty recruiting staff. Pharmacists are particularly difficult to recruit. Although the CHCs have advertised for the recruitment of this position every year for the past decade, there are few qualified applicants. With pharmacist positions still vacant, the chief pharmacist has to divide time working at both NRCHC and SRCHC.

An ongoing shortage of nurses is lessening; 29 students recently graduated from the UoG School of Nursing and are currently seeking employment, increasing the pool of nursing applicants interested in working at the CHCs (five of those applicants are being recruited as of January 2013).

Military spouses also provide workforce for the CHCs. In 2008, two physicians recruited were military spouses. The availability of these health professionals has positively impacted the CHCs staffing capabilities.

Service Population

While services are available to all, the CHCs focus on low income, uninsured, and medically underserved populations, regardless of ability to pay. BPCS uses a Sliding Fee Program that is based on the federal income poverty guidelines, which account for income and family size. Through this program, patients receive discounts for services up to 100%. Furthermore, Guam Memorial Hospital Authority (GMHA) will refer patients who have no primary care provider and/or health care to CHCs after they are discharged from the GMHA Emergency Room or after hospitalization.

In 2008, the CHCs received a total of 20,440 visits from patients for family practice, internal medicine, obstetrics and gynecology, pediatrics, nurse practitioner services and certified nurse midwife services. Military and military dependents are known to go to the CHCs for sexually transmitted diseases (STDs) screening, treatment, case management, and screening for blood pressure and glucose. H-2B construction workers without health insurance also utilize CHC services.

A growing challenge for the CHCs is to provide health care to FSM in-migrants, who tend to live in crowded and substandard living conditions. The living situation predisposes them to communicable/infectious diseases (e.g., hepatitis, gastroenteritis, parasitic diseases). FSM children are highly susceptible to childhood preventive diseases (e.g., measles, mumps, rubella, hepatitis, influenza, rotavirus) because they are not adequately immunized (SIAS Appendix A, GDPHSS DPH). In 2010, a major outbreak of mumps occurred resulting in 502 confirmed cases, which was the highest since a 1958 epidemic of 1,268 cases. Rates declined in 2011 subsequent to an intensive vaccination campaign involving 11 special vaccination clinics in schools, targeted neighborhoods, and remote areas where 1,523 doses of vaccines were administered. FSM children are in need of health services to combat parasitic and skin diseases as well as dental hygiene to prevent dental caries (SIAS Appendix A, GDPHSS DPH).

Table 3.4-2 shows the forms of insurance utilized by CHC clients, 2009-2011. Since 2009, Medicaid has been the most widely used form of insurance at CHCs. The rate of CHC costs being paid by uninsured clients has dropped from 24% in 2009 to 21% in 2011. Private insurance made up only 1 to 2% of the types of insurance used.

Table 3.4-2. Forms of Insurance Utilized by Community Health Clinic Clients, 2009-2011			
<i>Insurance</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>
Medicaid	48%	48%	49%
None/Uninsured	24%	23%	21%
Medically Indigent Program	24%	24%	26%
Private	2%	3%	2%
Medicare	1%	2%	1%

Source: SIAS Appendix A, GDPHSS DPH.

Facilities

Recently, both the NRCHC and the SRCHC have expanded. The NRCHC has expanded 9,100 square feet, including a new clinic addition and a new pharmacy wing. The existing generator room was expanded to house a new 230-kilowatt generator. The new clinic addition has eight exam rooms, a minor procedure room, a triage room, an audiological testing room, an isolation room, a decontamination room with six showers, a provider office, a social services office, a waiting room, a reception area large enough to fit 60 people, a classroom that can accommodate 50 individuals, soiled and clean utility rooms, a canopy entrance, and a reconfigured parking lot. The new pharmacy wing has space to drop off and pick up medications, a prescription dispensing area, and a patient counseling room.

With the expansion and renovation, the NRCHC now has the infrastructure capabilities to isolate and control infections, and decontaminate individuals during a chemical and/or bio-terrorism attack. Additionally, the expansion and renovation of NRCHC has positively impacted the center's ability to recruit additional providers and support staff, thus allowing the CHC to extend its hours of operation in the evenings and on Saturdays – this has resulted in an increased number of medical visits and CHC users.

The SRCHC has expanded by 19,638 square feet, including six additional exam rooms, three isolation rooms, an oxygen room, a treatment room, a decontamination room, and office space. The expansion and addition of the infrastructure for isolation, infection control, and decontamination, enhances SRCHC's services as an island-wide treatment facility during emergencies/disasters. An 839 square-foot building also has been added to house a 600-kilowatt generator to provide continuous operation during power outages. The renovations support the redesigning of patient flow to optimize provider productivity, resulting in additional patients served and more visits occurring because satisfied patients do return to the clinic and often refer others to use the center.

Bureau of Family Health and Nursing Services

The BFHNS provides women's health services, family planning services, child health services, services for children with special health needs, home care services, communicable disease services (e.g., immunization, TB clearance, health certificate, and skin tests), chronic screenings in the community, and information to the public through information booths. Two programs started in 2010: early childhood mental health and child home visitation. The abstinence education program is ending at the end of calendar year 2013.

Staffing

In 2012, the BFHNS had 36 staff members, 22 of which were nursing staff. Community Health Nurses at the BFHNS travel to different villages on Guam, making visits in order of priority. The BFHNS prioritizes its work in the following order: infectious diseases, child health, prenatal care, women, chronic needs, and family planning.

Service Population

The BFHNS provides health and social services mostly to individuals with no insurance and all who seek services related to TB or STDs. The medical clinic at Central Public Health has seen an increase in the number of pregnancies, and the number of women seeking prenatal care, postpartum care, and pregnancy testing services. There have been increases in the number of clients without health insurance, TB contacts, and children with special health care needs.

Facilities

The BFHNS is located at the central GDPHSS location, has one room at the NRCHC, and its staff makes visits to the SRCHC.

Bureau of Communicable Disease Control

The Bureau of Communicable Disease Control (BCDC) provides STD, human immunodeficiency virus (HIV), and TB related services, children and adult immunizations, and laboratory services.

The BCDC provides the laboratory services for all of GDPHSS's programs. A majority of the clinical laboratory work is in the form of testing for the Maternal Child Health program, and the STD and TB clinics.

Staffing

The BCDC had a total staff of 42 positions in 2012, of which 20 were communicable disease control health care professionals, and 6 of which were laboratory technicians.

Communicable disease investigators investigate reported cases by interviewing patient contacts and performing home visits. They also perform Direct Observed Therapy (DOT) for TB patients. DOT is the standard of care for all patients diagnosed and treated for active TB. Patients are visited daily to ensure they properly take their medication, to decrease the risk of the development of drug-resistant TB on Guam. TB staff members directly observe all patients while they ingest their TB medications and monitor them for any adverse drug reactions.

GDPHSS BCDC communicable disease prevention staffers are currently struggling to keep up with the dramatic increase in communicable diseases on Guam. BCDC staff is currently prioritizing the most urgent cases but cannot follow up on all reports because of capacity issues (SIAS Appendix B, GDPHSS).

Service Population

All individuals are eligible for STD, HIV, and TB services from the BCDC. The Bureau is responsible for surveillance and control of these diseases, as well as clearances for work and school.

There has been an increase in the number of patients seeking immunizations. The Vaccines for Children immunization program services eligible children from birth to 19 years of age. To be eligible for this program children must be Medicaid eligible, uninsured, American Indian or Alaskan Native, or considered underinsured. Those not eligible for the BCDC program can still access immunization services, but on a limited scale. The Immunization Program served 64,105 clients in FY 2012; 19,730 (31%) were FAS in-migrants.

About 30% of STD cases to GDPHSS are reported from the military. Partners identified are from the civilian community. About 20% of the clients served by the STD/HIV Program were active duty military and/or dependents, 35% were FAS in-migrants, and about 5% were H-2B workers.

The Ryan White HIV/AIDS Program served 27 clients in 2012; 8 out of 27 (30%) were FAS in-migrants. There were a total of 2,729 FAS Compact in-migrants seen by the TB Control Program for FY 2012.

Facilities

Services are provided at the central GDPHSS location, as well as at the NRCHC and SRCHC through Memoranda of Understanding (MOU). Services at the main location are completely free of charge while the CHCs charge a fee for service.

The STD/HIV Program has a satellite office located in NRCHC and is pursuing one in the SRCHC. The expansion allows for the Immunization Program to partner with NRCHC and the SRCHC to conduct a monthly Women, Infants, and Children Immunization Outreach Clinic for Women, Infants, and Children-enrolled children 0-5 years of age.

Division of Public Welfare

The Division of Public Welfare is responsible for providing a wide array of social services that are administered through a number of different bureaus. Below is a list of the bureaus and sections encompassed by the Division of Public Welfare, along with examples of the social services that they provide. Other programs provided by the Division of Public Welfare include Old Age Assistance, Aid for the Blind, Aid for the Permanently and Totally Disabled, and the Enhanced Allotment Plan.

Bureau of Social Services Administration

This bureau administers Title XX Guam Consolidated Grants programs, Child Protective Services, and Family Preservation and Support services, among other programs. It also administers foster care and adoption services, being the only adoption program available on the island.

Bureau of Health Care Financing Administration

This bureau administers Medicaid, State Children's Health Insurance Program, Medically Indigent Program, and locally-funded Catastrophic Illness Assistance Programs.

Bureau of Management Support

This bureau is responsible for investigations of alleged public assistance fraud, collection enforcement, quality control reviews, fair hearing coordination, management evaluation reviews, and small studies, among other activities.

Bureau of Economic Security

This bureau administers the Supplemental Nutrition Assistance Program (formerly the Food Stamp Program), Temporary Assistance for Needy Families, the locally-funded General Assistance program, and various adult programs. It also determines eligibility for Medicaid, Medically Indigent Program, and Catastrophic Illness Assistance Program.

Work Programs Section

This section administers the Jobs Opportunity and Basic Skills program, Guam Employment and Training Program, as well as eligibility for Child Care and Development Funds.

Division of Environmental Health

The Division of Environmental Health (DEH) provides regulatory services including the generation of sanitary permits and health certificates, and the issuance of health citations. The DEH performs pre-operation inspections of new permanent or temporary facilities (including temporary workforce housing),

issues permits for workforce housing operations, and conducts ongoing health inspections of these facilities. DEH also generates health permits for those working with food, at massage parlors, or cosmetologists, making sure that the employees have completed their TB skin test and any food safety workshops (offered at GCC) that are required. Revenue from these regulatory services makes up about 50% of the DEH budget.

Staffing and Services

In 2012, DEH had 22 filled positions of 33 approved positions. Also in 2012, DEH generated 489 sanitary permits for health regulated establishments, conducted 1,112 facility inspections, and generated about 31,000 health certificates.

3.4.2.6 Guam Department of Behavioral Health and Wellness Center

The Guam Behavioral Health and Wellness Center (GBHWC) is the primary agency on Guam that offers comprehensive behavioral health services to adults and children. The GBHWC is located near GHMA.

In 2010, the U.S. District Court issued the Permanent Injunction (PI), which turned over the operations of GBHWC to a Federal Management Team. The purpose of the PI is to change GBHWC operations from a medical/institutional approach to a recovery/community approach. The PI focuses on adult consumers of clinical care; under the Federal Management Team, GBHWC has increased staffing, added four new homes where treatments are provided, renovated one home for long-term care, and hired psychiatric professionals and other personnel to improve quality assurance and client care.

As of February 3, 2013, authority had been transferred from the Federal Management Team back to GBHWC. GBHWC currently holds responsibility to come into compliance with the PI.

Staffing

As of 2012, GBHWC had 197 staff positions, of which 69 are mental health professionals. Thirty-nine critical positions remain unfilled including psychiatrist, psychologist, and behavioral analyst positions. GBHWC indicated in public comments on the Draft SEIS that in 2014 GBHWC had 196 professional and support staff.

GBHWC currently has insufficient administrative staffing to manage all the contracts and provide all required services.

Some services are contracted out by GBHWC rather than provided by employees. Contracted programs include residential group homes, substance abuse treatment, children's homes, community habilitation program, respite and personal care, and Healing Hearts. GBHWC encourages other organizations to develop their respective expertise and contribute services that focus on the growing problems associated with mental health and substance abuse.

Service Population

All individuals are eligible for services at GBHWC, though the agency prioritizes providing services to the neediest clients. Prioritization of GBHWC's work is as follows: emergency services, inpatient acute care, medication dispensation, residential treatment services, outpatient services, and prevention and outreach activities.

Those with insurance will typically be seen in a private practice environment. However, insured individuals wishing to access free medication will sometimes go through GBHWC's diagnosis system. The proportion of FAS in-migrants in the service population increased each year from 2010 to 2012; in 2012, 660 FAS in-migrants received services from GBHWC (SIAS Appendix A, GBHWC).

Facilities

GBHWC operates 17 facilities throughout Guam that are generally in good condition. About half of these facilities operate at full capacity.

3.4.2.7 Guam Department of Integrated Services for Individuals with Disabilities

The Guam Department of Integrated Services for Individuals with Disabilities (GDISID) was created to be a single point of entry to services for Guam's disabled population. It is made up of two divisions: the Division of Vocational Rehabilitation and the Division of Support Services. There are also two special programs in operation including Evaluation Enforcement and Compliance and Aging and Disability Resource Center.

Division of Vocational Rehabilitation

The Division of Vocational Rehabilitation provides job training and placement services to individuals with disabilities. The Division of Vocational Rehabilitation reviews physical and mental health evidence to determine if an individual is eligible for vocational rehabilitation and works with eligible individuals to help them secure career development and employment opportunities.

Division of Support Services

The Division of Support Services provides eligible individuals with social work services, including case management, advocating for better access to services, and assistance in the development of individualized goals.

Evaluation Enforcement and Compliance

The Evaluation Enforcement and Compliance program was established to ensure that GovGuam meets the requirements of the Americans with Disabilities Act (ADA). The program accepts and processes ADA-related complaints and grievances. The program has provided training for ADA coordinators in 58 GovGuam agencies. It has also conducted outreach with various industries and organizations in Guam to promote non-governmental compliance with the ADA.

Aging and Disability Resource Center

Through the Aging and Disability Resource Center, GDISID works in conjunction with GBHWC to manage the Guam Get Care System, which is a web-based comprehensive directory of services. The Get Care System allows for access to forms and case management tools. As of January 2012, the website was receiving an average of 38,000 hits per month. The system is also utilized by the GDPHSS Division of Senior Citizens through an MOU.

Staffing

As of 2012, GDISID had a staff of 25, including 8 social workers. This number has decreased over the past 2 years from 33 staff.

Facilities

In November 2008, an executive order transferred three residential homes (Guma Mami, Catholic Social Services, and Latte Treatment Center) previously contracted with the GDISID to the GBHWC. A new center for GDISID is under construction that will house the One Call/One Click Dispatch Center. This is a national program that assists disabled citizens and veterans with transportation needs. The Center will streamline mobility planning by tracking client requests, program availability, and gaps in service.

3.4.2.8 Guam Memorial Hospital Authority

GMHA is Guam's only civilian general hospital servicing the entire island population's primary health care needs. In 1964, a public law was passed requiring GovGuam to administer and operate GMHA.

Staffing

In 2012, GMHA employed 1,077 medical staff, including 94 physicians and 506 nurses and allied health professionals. Medical staff, nursing staff, and allied health professionals have been, and continue to be, the most difficult positions to keep staffed. GMHA has had difficulty in competing for skilled professionals to fill these positions due to global and regional shortages. Some recruitment and retention strategies that GMHA has employed include increasing compensation and recruiting staff from off-island.

Service Population

On an average day, GMHA cares for approximately 263 patients, 165 in acute care and 98 in emergency. The hospital's annual activity volume includes 11,438 admissions, 6,150 outpatient visits, 28,333 emergency room patients, and 2,528 child deliveries. The hospital is often filled to capacity (SIAS Appendix B, GMHA).

GMHA is funded primarily through patient payment. Patients are mostly civilians. Military and their dependents do at times access GMHA services. The hospital can bill TRICARE (military health plan provider) for services rendered to military. GMHA has had recurring problems associated with non-payment for provision of care from those who do not have insurance.

Table 3.4-3 shows the percentage of GMHA services billed to various forms of insurance from 2009 to 2011. The majority of insurance used by patients at GMHA is third party/private insurance (29%). This is followed by Medicare and Medicaid (21% and 19%, respectively). Approximately 16% of patients self-pay for costs associated with care at GMHA.

Table 3.4-3. Insurance Used by Guam Memorial Hospital Association Patients Fiscal Years 2009-2011	
<i>Insurance Type</i>	<i>%</i>
Third Party/Private Insurance	29
Medicare	21
Medicaid	19
Self-pay	16
Medically Indigent Program	15

Source: Guam Office of Public Accountability 2012b.

Facilities

In 1978, the hospital moved to its current location in Tamuning, into a building originally built for the Catholic Diocese. In 1996 GMHA added a Skilled Nursing Unit facility in Barrigada Heights and began service there in 1999.

GMHA is a 220,000-square-foot facility with a total of 263 beds (including 158 acute care beds). The Skilled Nursing Unit has 40 beds. From 1989-2012, GMHA has completed approximately \$60 million in capital improvement projects, upgrading much of the facility to modern care standards. It is currently tripling the size of its Emergency Department and Cardiac Care Unit/Intensive Care Unit.

3.4.2.9 Naval Hospital Guam

The Naval Hospital Guam in Hagåtña Heights offers medical care to military personnel, military dependents, veterans, and, in case of emergency, civilians. The military also runs small outpatient clinics at AAFB and on the Naval Base, as well as a dental clinic.

The current Naval Hospital Guam facility was opened in 1954, is 306,000 square feet, and houses 38 active beds including 6 intensive care unit beds, plus an additional 64 contingency beds. Its branch clinics house 9 exam rooms and 8 dental rooms.

Construction of a new Naval Hospital is underway (as of August 2013) and the Veterans Affairs outpatient clinic is located in a separate building just outside the hospital property adjacent to Route 7. When construction is complete, the new hospital will be 282,000 square feet and have 42 beds, 4 operating rooms, 2 C-section rooms, and improved diagnostic and ancillary capabilities (U.S. Commander, Pacific Fleet 2011).

Veteran Health Care

The military provides mental health services to active duty members and their dependents, while the Veterans Administration services the mental health needs of veterans and their families. Health benefits for veterans are provided by the U.S. Veterans Health Administration.

The Guam Veterans Affairs Office (GVAO) refers veterans to the 2,700 square foot Community-Based Outpatient Clinic housed outside Naval Hospital Guam. Veterans needing medical attention are first seen at this Clinic and if further attention is needed they are referred to a private practice doctor or the Naval Hospital Guam for services. If still more specialized care is needed, they are referred to Tripler Medical Center in Honolulu. Urgent care for veterans can also be taken care of by GMHA, who must then apply for reimbursement from the Veterans Administration office in Honolulu.

Counseling for veterans that have seen combat is provided in the Veterans center that is currently staffed by two counselors, an office manager, and one outreach staff. The Veterans Health Administration also has a homeless veterans program with drug and alcohol treatment that is contracted to the Salvation Army, and provides Section-8 Rental Vouchers for veterans. This results in greater selection of affordable housing by allowing voucher holders to choose privately rented housing.

The Veterans Benefits Administration refers veterans to other agency or non-profit programs including: education and training, pensions, vocational rehabilitation and employment services, home loan service, life insurance, dependency and indemnity compensation, and burial services.

Military-Civilian Collaboration

Collaboration between the military and public health systems includes limited consultation and treatment services by specialized military medical officers, assistance when GMHA or the GDPHSS encounter supply or pharmaceutical shortages, as well as a source of back up during times of human or natural disaster.

3.4.2.10 Guam Veterans Affairs Office

This GVAO is a State office that assists Guam veterans with claims/applications and other benefits that are filed with the U.S. Department of Veterans Affairs. Most of the forms and claims filed by Guam veterans are sent to the U.S. Department of Veterans Affairs in Honolulu, where they are reviewed and processed. The office is also responsible for serving veterans from Micronesia - these services are typically burial services for those who are killed in action.

The office has purview over the veterans' cemetery. The GVAO has received a \$4 million grant from the National Cemetery Administration to renovate and expand the cemetery because it will be at capacity in the next 2 to 3 years. Expansion would require additional staff.

In 2012, the Office had five administrative staff and three staff at the cemetery, and experienced a volume of approximately 400 contacts per month.

3.4.2.11 Guam Regional Medical City

The GRMC is the largest healthcare network in the Philippines, and a Joint Commission-accredited Philippine healthcare organization. A private medical center that is currently under construction (as of August 2013), with a planned opening in 2014, will be operated by the GRMC. This hospital will have 130 beds and specialize in services based on the region's specific health profile, featuring wellness, cardiology, medical oncology, endocrinology, pulmonology, neurology, and specialties (Variety News Staff 2012).

3.4.2.12 Other Private Providers

There has been a recent increase in private mental health providers on Guam including psychiatrists, clinical psychologists, and individual, marriage, and family therapists. While only a limited number of private providers and clinics accept government insurance such as Medically Indigent Program and Medicaid, programs such as the federal Electronic Health Records Incentive program are increasing the number of providers accepting government insurance, as discussed above.

3.4.2.13 Non-Profit or Academic Centers/Providers

Currently, there are no non-profit groups on Guam providing health care and no academic medical centers.

Various non-profit providers on Guam serve both adults and youth, and provide human services, ancillary and support services, as well as emergency, homeless and youth shelter. Organizations such as these are important elements in supporting the health and human service system on Guam. Often, local and federal government agencies contract with these organizations for services. For instance, GBHWC maintains contracts with Sanctuary, Inc. for youth treatment services (2010 Final SIAS Appendix D, GBHWC).

The following are some examples of these non-profit providers including the Guam Salvation Army, Sanctuary, Inc., and Catholic Social Services.

The Guam Salvation Army provides numerous services and programs to people in need on Guam. It runs a Family Services Center that serves the needs of those who are facing financial crisis or eviction and homelessness through distribution of food, educational programs, and holiday events. The Lighthouse Recovery Center has 13 employees operating a residential facility with the capacity to assist 28 men transitioning from homelessness or substance abuse into independent drug-free lifestyles using a 6-month program. There are four beds for veterans supported by the GVAO. The Lighthouse Recovery Center also provides aftercare and outpatient treatment. The Family Services Center provides food, clothing, and rental utilities assistance to families with incomes at or below 30% of the annual median income. The program has three staff members and assists an estimated average of 100 households a year. The Salvation Army operates the largest food assistance program in Guam and conducts homeless outreach twice a month, including giving care packages and references to organizations. During disasters, it assists territorial and federal agencies with food distribution logistics to responders, volunteers, and victims (2010 Final SIAS Appendix D, Salvation Army).

Sanctuary, Inc. serves runaway, homeless, or troubled youth by providing an emergency shelter, a transitional living program, and weekly youth groups around issues of anger management, tobacco cessation, drugs and alcohol, and self-esteem. Sanctuary, Inc. also provides weekly adult groups in anger management, and parenting support and skills (2010 Final SIAS Appendix D, Sanctuary, Inc.).

Catholic Social Services provides programs for the elderly, homeless, and those with disabilities. It also provides supportive services such as an emergency food and shelter program and a housing counseling program (Catholic Social Services 2009).

3.4.3 Public Safety

Public safety services include protection from, and prevention of, events that could endanger the public, including crime and disasters both natural and man-made. Government agencies on Guam involved in law and traffic enforcement, fire prevention and suppression, emergency medical response, safety inspections, and civil and criminal litigation, justice, and corrections are all considered public safety agencies.

The next sections give brief overviews of the emergency response on Guam and key GovGuam agencies responsible for public safety on Guam.

3.4.3.1 Emergency Response

Guam's location makes it vulnerable on a number of levels. Guam is located in an area of high risk for natural disasters including typhoons, tropical storms, and tsunamis and its remoteness means that it cannot depend on expeditious aid from contiguous regions in the event of disaster (Suburban Emergency Management Project 2007). Guam's geographic location is also one that places it in close proximity to areas in the region such as North Korea and China, and the proposed action itself is meant to utilize this strategic positioning to, "fulfill U.S. government national security and alliance requirements in the Western Pacific Region" (Suburban Emergency Management Project 2007).

The Emergency Operations Center at the Office of Civil Defense (whose administrator is designated by the Governor of Guam) is the primary agency responsible for coordinating Guam's response to all emergencies and disasters through the National Incident Management System. The Office of Civil Defense is also responsible for all public information activities during emergencies, and the coordination of other response agencies. Response agencies on Guam include, but are not limited to: Guam Fire Department (GFD), Guam Police Department (GPD), GEPA, Guam Department of Public Works (GDPW), GDPHSS, GDoE, Guam Mayors Council, and the American Red Cross. Responses to acts of terrorism on the island are the responsibility of the Guam Homeland Security Office of Civil Defense.

The primary federal agency that works with the territory of Guam in times of emergency is the Federal Emergency Management Agency, and more specifically, the Federal Emergency Management Agency Region IX Pacific Area and Regional offices. MOUs are maintained with all DoD agencies on Guam that possess emergency management capabilities. However, these MOUs are utilized only in the event that GovGuam emergency response resources are exhausted.

3.4.3.2 Overlap of Federal and Local Public Safety

The Supremacy Clause applies when federal and local laws conflict, and federal policy or law would prevail. GovGuam can regulate conduct and activity on federal property to the extent that this inconsistency does not occur. In the event of an infraction by Active Duty personnel, on- or off-base, the military maintains jurisdiction, although concurrent jurisdiction means that GovGuam would also have jurisdiction in most cases. In cases involving civilians, jurisdiction is usually federal if the infraction

occurred on base, and local if not. In the case of a violent offense by Active Duty personnel, GovGuam has jurisdiction and can retain the individual on island (SIAS Appendix B, JoG).

Both in the past and currently, cases involving jurisdictional issues require that federal and local officials talk through the case and decide how the case is best prosecuted. This discussion includes issues such as what is best for all parties, what is best use of taxpayer resources, government assets and the best way to adjudicate and work through issues (SIAS Appendix B, JoG). GPD processes most infractions off base, including those involving Active Duty personnel (SIAS Appendix B, GPD).

Overall, collaboration between civilian and military safety agencies has been good, grounded in positive relationships and formal guidelines that continue to evolve. GPD reports having a good working relationship with military security services, and has been collaborating with them on specific issues. For example, GPD and Navy security officers share patrol duties in the tourist districts of Tumon and Tamuning, and the Chief of Police meets with military leaders regarding specific concerns such as illegal immigration. Another example of this collaboration is the Naval Criminal Investigative Service and Air Force Office of Special Investigations, which are part of a task force performing the mapping of massage parlors on the island of Guam to ensure that all massage establishments are operating legally (SIAS Appendix A, GPD; SIAS Appendix B, GPD). The GFD also have a MOU with military fire protection services. GFD reports that the military provides training and the collaboration is excellent (SIAS Appendix A, GFD).

3.4.3.3 Guam Police Department

GPD is the municipal law enforcement agency for all of Guam. Its Operations Bureau includes Special Operations, Neighborhood Patrol, and Highway Patrol Divisions. GPD's Investigations Bureau is made up of Criminal Investigations and Forensic Science Divisions.

The department is responsible for both preserving the peace and ensuring a safe environment for the territory of Guam. GPD's four operational precincts include: Hagåtña, Dededo, Agat, and Tumon/Tamuning. Handling of traffic accidents and reporting of motor vehicle and boating accidents also fall under the purview of the GPD.

The GPD provides administrative services as well, including background investigations for companies requiring this during the recruitment of potential employees, Highway Special Use Permits that are required for the significant use of the highway for hauling oversized equipment, and Firearms Permits and registration services that are required by law for anyone choosing to possess a firearm on Guam are also processed by the GPD.

GPD and DoD entities collaborate on several issues of mutual concern, including traffic training, vehicle inspections, "shore patrol" for sailors on leave, and criminal investigations involving military members or dependents.

Staffing

In 2012, GPD employed 303 sworn officers and 66 civilian personnel, these included part-time employees, those who only worked for a short period of time, and unpaid volunteers (of which there were over 100 in 2012); there were 146 FTE, paid, sworn officers as of 2012. However, GPD has noted that it has insufficient personnel to adequately service the community (SIAS Appendix B, GPD). Many personnel are volunteers for the National Guard or Army Reserve and are frequently deployed, taking them away from their policing duties and exacerbating staffing deficits. The personnel shortfall causes officers to work overtime, which often leads to fatigue.

GPD has created a Civilian Volunteer Police Reserve program that trains volunteers to perform under the authority of the GPD. There are currently about 100 volunteers. Volunteers do have other jobs or obligations that limit their availability to replace activated GPD officers. GPD sometimes pays volunteers, as well as retired police officers, on limited term appointments.

Service Population

GPD services all island populations. The 2012 precinct populations were as follows:

- Dededo - 65,862
- Hagåtña - 51,945
- Agat - 22,678
- Tamuning/Tumon - 19,799

Crime statistics and trends for Guam can be found in Section 3.5.6.

Facilities

Police stations servicing the four precincts are located in Hagåtña, Dededo, Agat, and the Tumon Bay resort area. The Dededo Precinct station is in good condition with room for expansion. The Hagåtña and Tumon/Tamuning stations are in good condition but have no available room to expand (SIAS Appendix A, GPD).

Construction of the Yigo and Talofofo Precincts are planned but have not begun.

There is a noted lack of police vehicles, which inhibits GPD from performing at optimal levels (SIAS Appendix B, GPD).

3.4.3.4 Guam Fire Department

The GFD is the primary agency responsible for fire prevention and suppression, search and rescue, and emergency medical response. GFD's fire stations and rescue bases are managed under its Fire Operations Division while its E911/Fire Dispatch work is managed under a separate division. The Emergency Medical Services/Rescue Bureau manages rescue operations including ambulance services.

Guam experiences weather conditions that make it vulnerable to wildland/urban interface brush fires. The GFD is usually the first responder in such incidents, and is responsible for establishing an Incident Command System. GFD cooperates with military fire response agencies through the National Incident Management System. For land-based search and rescue incidents that occur on federal or DoD lands, military responders take the lead on emergency coordination, and are supported by other GovGuam agencies. For sea-based incidents beyond the GFD's capacity, the U.S. Coast Guard takes operational lead (Guam Homeland Security Office of Civil Defense 2009).

Staffing

In 2012, GFD employed approximately 258 full-time sworn personnel, including emergency medical technicians. Approximately 34 of these personnel were qualified to perform open water rescues.

Facilities

GFD operates 12 fire stations (6 in the northern district and 6 in the southern district), 2 rescue bases, and the E911 Integrated Emergency Communications Center.

3.4.3.5 Guam Department of Corrections

The Guam Department of Corrections (GDoC) is responsible for the handling of persons after their conviction in a criminal offense. GDoC is organized into four divisions: Administration, Prison Security, Diagnostic Treatment Services, and Parole Services. Diagnostic Treatment Services provide prisoners with rehabilitation services through counseling, residential substance abuse treatment, educational opportunities, vocational rehabilitation, community release programs, and basic medical and dental services. Parole Services processes parole applications, determining eligibility, and conducts parolee surveillance and counseling.

Staffing

In 2012, GDoC employed a full-time staff of 214. Of these staff, 195 worked in custody and security, 5 in casework and counseling, 3 in behavioral health services/infirmarary, and 11 in administration.

There are two 12-hour shifts that each require a minimum of 35 officers on duty. This does not include the officers needed for court transport, medical transport, dental transport, supply, galley, visitation, maintenance, library, Internal Affairs, and Special Operations.

GDoC has 58 vacant positions, resulting in increased overtime work for existing personnel.

Service Population

In 2012, GDoC supported a daily prison population of 599 individuals including jail detainees (326), prison inmates (224), probationers (9), overnighers (17), and immigration violators (23). The average daily count of parolees was 254 individuals. GDoC and DoD have a MOU to house temporary detainees and an MOU with U.S. Immigration Services to house immigration violators. Annually, about six to ten active military personnel are confined in GDoC facilities.

Facilities

The Prison Security Division maintains four main facilities: the Hagåtña Detention Facility, the Adult Correctional Facility, the Women's Facility, and Community Corrections Center. The Hagåtña Detention Facility is meant to hold local pre-trial detainees, Federal Marshal detainees, and overnighers. The Adult Correctional Facility is made up of 14 housing units used to house individuals who have been convicted of a crime (minimum, medium, and maximum security), parolees being kept for a parole infraction, and immigration detainees. The Women's Facility is located outside the Adult Correctional Facility and is Guam's only holding facility for women. The Community Corrections Center houses inmates that are eligible for work credit, work release, and educational release (GDoC 2008).

The Adult Correctional Facility, Women's Facility, and Community Corrections Center are all located in Mangilao.

Space constraints currently exist for GDoC facilities; the agency has stated a need for an additional 1,000-bed facility (SIAS Appendix B, GDoC). Overcrowding at the Hagåtña Detention Facility necessitates that the Adult Correctional Facility be used to house some pre-trial individuals. GDoC has considered building a new facility to meet housing needs, but there are no firm plans to do so (SIAS Appendix B, GDoC).

3.4.3.6 Guam Department of Youth Affairs

The GDYA runs a variety of programs geared toward youth development, rehabilitation and involvement with the community. Its youth programs and facilities include the following:

Youth Correctional Facility and Cottage Homes

The Youth Correctional Facility and Cottage Homes facilities are used to house youth offenders. Non-status (criminal) offenders are placed in the secure Youth Correctional Facility. The Youth Correctional Facility has a capacity of 68 beds, usually broken down between male and female dorm rooms and 15 beds for the juvenile drug court or for overflow beds. Status offenders (non-criminal) are housed in the Cottage Homes, which is a non-secure correctional facility.

Counseling/Case Management

GDYA's Counseling and Case Management Unit provides individual, group, and youth counseling to GDYA clients and families at the agency's various sites. Social workers provide client assessment, case management, counseling and crisis intervention. Additional services such as various psychological evaluations, vocational testing, and behavior modification programs are also provided.

Community Social Development Resource Centers

The Community Social Development Resource Center programs are provided at resource centers at three locations: Dededo, Mongmong-Toto-Maite, and Agat. Programs at resource centers provide a broad range of services including aftercare for those released from GDYA correctional facilities, the Jumpstart Program (an inpatient treatment-oriented program geared toward early reintegration of clients into the community), and Chansa (a program that targets at-risk youth before they enter the juvenile justice system). The Social Development Unit also runs various programs and services such as mentoring, crisis intervention, and outreach counseling.

Vocational Rehabilitation and Support Services

The Vocational Rehabilitation and Support Services division is made up of three units: Administrative Services Unit, the Maintenance Section, and the Culinary Unit. The Administrative Services Unit oversees all budgetary and administrative duties, which include personnel, procurement, and accounting. The Maintenance Section is responsible for vehicle and building maintenance and custodial services. The Culinary Unit provides nutritional and balanced meals for all clients at the Youth Correctional Facility and the Cottage Homes Facility.

Prevention Unit

GDYA's Prevention Unit runs programs including Youth Crime Watch, School Children Outreach Empowerment, Youth Year leadership development program, and various sports and summer activities in the community.

Staffing

In 2012, GDYA had 87 FTE staff positions, 44 of which were youth service workers. Low pay levels and resources make it difficult for GDYA to hire and retain staff (SIAS Appendix B, GDYA). In public comments on the Draft SEIS, GDYA indicated that in 2014, it had 45 youth service worker positions filled.

Service Population

GDYA has handled cases for clients between the ages of 5 and 21, including criminal felons ages 17 to 21. In 2012, GDYA served 9,042 individuals – 8,616 in youth development and 426 in youth corrections.

Military families do not typically use GDYA services. FAS/FSM in-migrants comprise a disproportionate percentage of clients. In 2012, Chuukese residents made up 10% of Guam's population, but made 40% of

GDYA's service population (SIAS Appendix B, GDYA). Also, GDYA has had inquiries from the U.S. District Attorney about detaining active duty military dependents and illegal immigrants.

3.4.4 The Judicial Branch and Selected Agencies Affected by Population Growth

The Judicial branch of GovGuam and agencies discussed in this section were selected because they would likely be impacted by increases in service population or an increase in H-2B construction workers.

3.4.4.1 Judiciary of Guam

The JoG is a co-equal branch of GovGuam (holding equal status as the executive and legislative branches of the territorial government). As a co-equal branch, JoG administers its own activities distinct from executive branch agencies. It serves all residents of Guam and anyone who falls under the laws of Guam.

The JoG is comprised of the following divisions: Courts and Ministerial, Probation Services, Marshal's Services, Client Services and Family Counseling, and Procurement and Facilities Management.

Trial Courts are made up of Traffic Court, Small Claims Court, Child Support Court, Drug Courts, and Family Court.

Probation Services works to supervise, monitor, and reintegrate probationers back into the community. Parole officers manage adult and juvenile clients, playing roles in the Mental Health and Drug Courts, as well as performing drug tests and attending criminal hearings.

The U.S. Marshal's Service provides law enforcement services within the judicial system by preserving order and providing security and escort services in the courtrooms. Training for U.S. Marshal's includes initial basic law enforcement training and intermediate and advanced follow-up training.

Client Services and Family Counseling provides psychological counseling and evaluation to children and adults, individuals, families and groups in the judicial system.

Special therapeutic courts such as the Mental Health Court and other counseling programs in the Judiciary collaborate with other government agencies, nonprofits, and the business community to work with individuals in counseling programs. Currently, these therapeutic courts have a 95% adult success rate and an 80% juvenile success rate.

JoG is considering creating a Veterans Court in response to a request from the Guam Army National Guard. The Veterans Court would provide a mentor to veterans in the justice system; the mentor would preferably be a retired veteran with combat experience.

JoG processes background checks for DoD civilian contractors and employees, whom the DoD requires to have criminal, traffic, and civil clearances every 90 days. JoG maintains the database without any federal support, even though the bulk of the activity is from the military. Contractors pay \$10 for the clearance application, but that does not cover the cost.

Staffing

In 2012, JoG employed 9 judges and 361 FTE support staff. Due to lack of funding, some positions at JoG are left unfilled; an additional judge and associated support personnel were identified as needed to meet Guam's current growth (SIAS Appendix A, JoG). When funding for positions is available, JoG has little problem filling them (with the exception of those positions that have extensive certification requirements, e.g., certified counselors).

Service Population

In 2012, the Adult Drug Court held 1,226 client hearings. The Mental Health Court holds about 276 hearings per year and has served a total of 105 clients since opening in 2009. In 2011, there were 24,215 case filings at the Superior Court of Guam, the majority of which were traffic (14,921), small claims (2,125), civil (1,984), and criminal misdemeanor (1,300). Domestic divorce (878) and child support (482) were also common.

The DoD and JoG have concurrent jurisdiction on some crimes. Deployment can cause stress among dependents, which can involve the courts. Resulting cases have included juvenile, child custody, child abuse, family violence, and divorce. If a rotational troop gets into trouble, he or she may be held in Guam for trial. JoG coordinates with the DoD attorney to ensure rotational troops complete court-ordered requirements. Alcoholic treatment programs required by the court can last for 6 weeks and be received through Naval Hospital or AAFB. For violent offenders, rotational troops stay on Guam in custody and may not be released to commands.

As of January 2013, the Probation Services Division supervises approximately 70 active duty military personnel and had, in the year prior, provided services to at least 30 active duty military victims of crime by providing referral for services and victim assistance. The Mental Health Court currently has four individuals who are known veterans. JoG and the military cooperate to help these families; sometimes the Navy Family Services Center requests that the Court incorporate military dependents into court programs.

Facilities

JoG is primarily housed in a central Judicial center located in Hagåtña. There is a Northern Satellite Court located in the Dededo Mall. This Satellite Court has one court room that processes small claims, traffic, and other violations.

The Judicial Center needs at least two additional courtrooms as well as additional parking and the Northern Satellite Court requires expansion to accommodate current requirements and requirements associated with organic population growth (SIAS Appendix A, JoG).

3.4.4.2 Guam Department of Parks and Recreation

The Guam Department of Parks and Recreation (GDPR) administers approximately 76 public parks and recreational facilities on Guam including beach parks, community parks, skate parks, historic parks, baseball fields, a baseball stadium, a sports complex, tennis courts, and a public pool. All other community centers and parks fall under the 19 village mayors, who work closely with GDPR. GDPR also runs sports leagues and provides swimming and tennis lessons among others. A sports complex is in the process of being built in Dededo, and will include baseball fields and a swimming pool (2010 Final SIAS Appendix D, GDPR).

GDPR's State Historic Preservation Office (SHPO) conducts cultural resource review under federal law, engages a comprehensive historic preservation program on Guam, and conducts reviews for GDPW, Guam Power Authority (GPA), and Guam Waterworks Authority (GWA) permits for the potential for projects to impact cultural resources managed under Guam law, executive orders, and related policies.

GDPR's 2012 staffing was about 80 employees. Park ranger, teacher, and park maintenance positions are primarily outsourced. The SHPO office had a staff of nine people in 2012.

3.4.4.3 Guam Public Library System

The Guam Public Library System (GPLS) has been serving Guam residents since 1949. Its mission is to provide free and open access to information and ideas fundamental to a democracy. The library system aims to protect intellectual freedom, promote literacy, encourage lifelong learning, and maintain cultural materials (GPLS 2013).

Staffing

GPLS employed a staff of 24 in 2012. Library technicians handle a variety of tasks to maintain the continuing operations of the library system. In public comments on the Draft SEIS, GPLS indicated that in 2014 staffing levels had dropped to 21 FTEs due to reorganizational mandates and budgetary constraints.

Service Population

GPLS provides free and open access to information to anyone regardless of citizenship or residency status. All residents of Guam are eligible for a library card. Library resources are also available at all public and some private schools on Guam, institutions of higher education, and other institutions such as the Territorial Law Library.

Facilities

The main library is located in Hagåtña. A branch library is located in each of the villages of Agat, Barrigada, Dededo, Merizo, and Yona. GPLS also operates a bookmobile.

In 2011, GPLS became a division under the GDCA. Due to this reorganization, GPLS branch library facilities will be transferred to the mayors of Merizo, Agat, Barrigada, and Dededo. Also, library Special Collections (archived historical newspapers, genealogical books, and books by local authors) will be transferred from GPLS to the Guam Museum. GPLS will continue to make available digital versions of Special Collections documents.

3.4.4.4 Guam Department of Administration

The Guam Department of Administration is responsible for the effective administration of the internal business of GovGuam and for the management of financial and manpower resources by providing guidance, direction, and coordination of efforts relative to government operation; providing executive leadership and management to all divisions under the purview of the department; and supporting department-wide needs regarding budget, public relations, and safety. The Department of Administration also maintains a records management program for GovGuam. As of the first quarter of FY 2014, the Department of Administration had a total of 114 staff (Guam Department of Administration 2014).

3.4.4.5 Guam Customs and Quarantine

The Guam Customs and Quarantine Agency is responsible for enforcing local and federal laws and regulations that protect borders and ports of entry, and facilitate trade, commerce, and travel. The Guam Customs and Quarantine Agency operates at Guam's airport and seaport. In providing public comments on the Draft SEIS, the agency indicated that it employed 139 staff.

3.4.5 Agencies Affected by Development on Guam

The agencies discussed in this section were selected because they would likely be impacted by increases in development and construction on Guam that would occur as an indirect result of the proposed action.

They are GovGuam agencies responsible for issuing, monitoring, and enforcing development permits on Guam.

Because actions on federal land do not require local development permits, most of the impact on GovGuam development permitting functions would come from off-base growth generated by the proposed action (i.e., purchases from construction or operations and from indirect growth). In a few cases – such as the GEPA – federal agencies have delegated responsibility for oversight of direct project activities to local agencies, and so the direct project impacts also affect local permitting, monitoring, and enforcement to some extent.

3.4.5.1 Overview of Approval Process

For private-sector development, two primary agencies are involved: GDLM for land use/zoning approvals, and the GDPW for building permits. If a land use approval is required, developers apply with the GDLM for a decision by the Guam Land Use Commission (GLUC). If the GLUC approves the action, the applicant can proceed with obtaining the other permits and approvals. The alternative method for obtaining zoning change approval is to obtain legislative approval. *The Guidebook to Development Requirements on Guam* (GBSP 2005) provides an overview of the process and is summarized in this section.

The “one-stop permitting” center within GDPW assists applicants to identify the various approvals required and guides them through the approval processes. If no land use approval is needed, the GDPW one-stop permitting center is the primary point of contact for applicants. GDPW typically refers building permit applications for review by any or all of the agencies addressed in this section.

The administration of land use laws and regulations resides in the GDLM, and the GLUC is the decision-making authority that grants subdivision approvals, zone changes, conditional uses and variances, wetland permits, and flood hazard area permits.

When a proposed project is located within the Guam Seashore Reserve, the GLUC is referred to as the Guam Seashore Protection Commission. The GLUC technical review is conducted by the Application Review Committee (ARC), which includes representatives from the following agencies:

- GDLM,
- GEPA,
- GDPW,
- Guam Coastal Management Program (GCMP),
- Guam Department of Agriculture (GDA),
- GWA,
- GDPR,
- SHPO, and
- GPA

The GLUC considers the ARC recommendations in its decision. All GLUC and ARC meetings are public.

Subsequent to GLUC approval, additional permits and approvals that are identified by GDPW during the building permit application process are obtained by the applicant. In addition to the agencies represented on the ARC, the following agencies could also have permitting responsibility for new construction:

- GDPHSS, DEH
- GFD

3.4.5.2 Guam Department of Land Management

The GDLM has five operating divisions: Land Planning, Land Administration, Land Survey, Land Records, and Geographic Information System (GIS)/Land Information System. Pursuant to Reorganization Advisory 5 and 9, the CLTC and the Guam Ancestral Land Commission (GALC) are currently within GDLM (SIAS Appendix A, GDLM).

In addition to providing GLUC support for land use/zoning approvals, GDLM Land Planning Division has review responsibilities relating to building, occupancy, and clearing and grading permit, liquor and contractor licenses, workforce housing permitting, and childcare facilities. In 2012, GDLM had five FTEs assigned to these duties.

3.4.5.3 Guam Environmental Protection Agency

GEPA was initially established in 1973 as prescribed in Guam P.L. 11-191, signed into law on December 7, 1972. The Agency has five divisions: Administrative Services, Water Programs, Environmental Monitoring and Analytical Services, Air and Land Programs, and Energy, Sustainable Development and Outreach. This last division was recently established approved in GEPA's 2009-2013 work plan. GEPA's jurisdiction includes wastewater; clearing, grading, and excavation; drinking water and water quality certification; groundwater management and water quality monitoring; hazardous waste and clean-up of toxic waste sites; air quality; land use impacts; water pollution control; clearing/grading/stockpiling; and stormwater management (2010 Final SIAS Appendix D, GEPA).

GEPA has authority, delegated by the U.S. Environmental Protection Agency (USEPA), to carry out USEPA mandates including but not limited to program implementation, inspections, monitoring, reporting, and compliance oversight.

The types of permits GEPA issues are classified as follows:

- air, solid waste, hazardous waste, pesticide;
- residential/commercial buildings;
- grading, clearing and stockpiling;
- plan review: as requested by military, GDPW, GWA, and others; and
- Underground Injection Control, test-boring, and exploratory well-drilling.

A new permitting system was initiated in the beginning of 2012 that increased GEPA permitting efficiency. GEPA is also responsible for monitoring and enforcing the permits it issues. In 2012, GEPA had 48 FTEs assigned to these activities. In public comments on the Draft SEIS, GEPA recommended updating the number of GEPA permitting staff across all divisions and programs but did not provide updated information on staffing levels.

3.4.5.4 Guam Department of Public Works

The GDPW is a multi-purpose agency with responsibility for highway maintenance, bus operations, housing management, solid waste management, administration of capital improvement projects, and operation of the "one-stop permitting" center. Functions that are expected to be affected by development are those for which they provide permits – building (architectural and structural), electrical, plumbing, flood control/highway encroachment, and management of the one-stop permitting center (GDPW 2009).

The GDPW is a “one-stop” permitting center where those needing development permits can get referred to the full range of permits needed for their projects. GDPW not only reviews permits itself, but also routes applications to other agencies for their review. There was an electronic system for managing the one-stop but it was discontinued in 2002; however, a new database system is being developed for use in 2013 (SIAS Appendix B, GDPW). In 2012, GDPW had six FTE employees assigned to the permitting activities.

The types of permits reviewed by GDPW include the following:

- New construction,
- Additions,
- Demolition,
- Relocation,
- Grading,
- Signs, and
- Government.

Construction phase monitoring and enforcement actions include the following:

- Slab, wall, frame, roof inspections;
- Electrical, plumbing, and mechanical;
- Civil works;
- Flood inspections;
- Grading inspection; and
- Final construction inspection.

Operations phase monitoring and enforcement actions include the following:

- Response to complaints,
- Maintenance inspections,
- Business license inspections,
- House numbering, and
- Signage.

3.4.5.5 Guam Bureau of Statistics and Plans, Guam Coastal Management Program

The GBSP is responsible for collection and dissemination of economic and business statistics, coordinating information management throughout the government, producing mapping tools and products that facilitate the use of data by governmental agencies, and the administration of the GCMP.

The GCMP could potentially be impacted by increased construction on or off federal lands. The GCMP is not an enforcement agency but the staff do review federal coastal zone consistency determinations and participate in the ARC process by reviewing and commenting on development proposals. As a member of the ARC, GCMP reviews all Seashore Clearance permit applications that go before the Guam Seashore Protection Commission.

The GCMP staff responds to public complaints and reports suspected violations to the agency with enforcement responsibility. They often accompany other agencies during site inspections. In 2012, GCMP had six FTE employees assigned to permitting and monitoring activities. The GCMP indicated in its

comments on the Draft SEIS that in 2014, GCMP had two Planner III's, one Planner II, one Program Coordinator, one Administrative Assistant, and one Detailed Interim Administrator.

3.4.5.6 Guam Department of Agriculture

The GDA is organized into five divisions: Aquatic and Wildlife Resources, Forestry and Soil Resources, Agricultural Development Services, the Plant Inspection Facility, and Animal Control. It operates five marine reserves and has played an important role in the restoration of coral reefs and fishery resources. The Department must sign off on any construction permits that would impact the environment (GDA 2009). In 2012, GDA had two FTE employees assigned to permitting duties.

3.4.5.7 Guam Waterworks Authority

GWA is a public corporation that produces, treats, transmits, stores, distributes and sells potable water. GWA also collects treats and disposes of Guam's wastewater. As a participant in the ARC, GWA reviews development plans and proposals. In 2012, the planners were moved to a new section (New Area Development/Planning Section) with little impact on the day-to-day interaction of engineers and planners. The Planning Section coordinates ARC project review with the Engineering Division. Permit reviews are conducted for new water or sewer systems for all types of development (i.e., single family, multi-family, commercial). Monitoring and enforcement actions generally occur during the construction phase to ensure the work meets GWA standards. In 2012, GWA had five FTE employees assigned to these duties.

The majority of GWA staff time (estimated at 65% in 2012) is devoted to the design and construction of capital improvement projects to address the 2011 USEPA Court Order that mandated infrastructure improvements. This level of effort is expected to extend through 2015.

3.4.5.8 Guam Department of Parks and Recreation, State Historic Preservation Office

The SHPO is a member of the ARC and reviews development proposals to assess potential impacts to cultural resources. In accordance with the National Historic Preservation Act (16 United States Code 470a), as amended, the agency has a designated Guam Historic Preservation Officer. The Officer represents GovGuam in carrying out the responsibilities specified in the Act, and in the regulations and administrative requirements established for implementation of that Act.

The staff conducts field surveys and inventories. In addition, SHPO participates on the ARC and submits comments on development proposals. The staff reviews GDPW, GPA, and GWA permits for their potential to impact cultural resources. SHPO conducts National Historic Preservation Act Section 106 consultation reviews for federal projects. These permits and approvals entail inspections, monitoring, and enforcement during construction. The staff also reviews federal consistency determinations forwarded by GBSP-GCMP. In 2012, SHPO had six FTE employees assigned to performing these tasks.

3.4.5.9 Guam Power Authority

GPA generates and distributes power to Guam residents. As a member of the ARC, GPA reviews and comments on development proposals including GDPW permit applications. During construction, GPA performs inspections and material reviews to ensure compliance with relevant rules and regulations. Large projects require GPA review and evaluation of existing systems with respect to development alternatives. There are DoD joint use electrical facilities that are supported by GPA. GPA staff designs line or plant improvements to accommodate new customers or increased demand. GPA provides project management and engineering construction support for military projects on a time and materials contract basis. In 2011, GPA had approximately six FTE employees assigned to these activities (GPA 2012).

3.4.5.10 Department of Public Health and Social Services, Division of Environmental Health

An overview of the GDPHSS, DEH responsibilities were provided in Section 3.4.2. The DEH issues Sanitary Permits for health regulated establishments and occupancy permits. The occupancy permit inspections occur after construction and before operation. In 2012, DEH had 11 FTEs permit-related activities. The DEH does not participate on the ARC.

3.4.5.11 Guam Fire Department

An overview of the GFD was provided in Section 3.4.3.2. In addition to fire suppression services, the GFD is responsible for enforcing the fire code. They recently switched from using the Uniform Fire Code to the International Fire Code. Specific tasks include the following:

- Review permit application and design plans.
- Work with the applicants to resolve deficiencies.
- Inspection of work site during various phases of construction including a final inspection to enforce the fire code.
- Occupancy fire code inspections.

In 2012, the GFD had 14 FTE employees assigned to performing the above tasks.

3.4.5.12 Guam Department of Labor

The GDoL consists of numerous divisions, bureaus, and programs related to employment. The agency's organizational chart presents three main clusters: (1) statistics, including the Bureau of Labor Statistics and its Economic Research Center; (2) employment and Training, including various employment assistance and job training programs; and (3) regulatory and compliance, including divisions for occupational safety and health, and fair employment. The Workforce Investment Board is also attached to the Director's Office.

While all parts of the GDoL would be affected by the proposed action, the Agency for Human Resources Development and the Alien Labor Processing and Certification Division (ALPCD) are among those particularly likely to be affected. The Agency for Human Resources Development works to increase the pool of labor on Guam by identifying actual or potential discouraged workers – including those deficient in basic skills – and improving their skills through means ranging from classroom training to on-the-job training with private-sector partners. The ALPCD is responsible for processing applications to bring foreign workers into Guam and assuring compliance with federal Department of Homeland Security requirements (GDoL 2009).

ALPCD is the primary Guam entity reviewing and issuing permits under the H-2B work visa program of the U.S. Citizenship and Immigration Service, and would be the primary unit of GovGuam affected by the proposed project's use of H-2B workers. Indirect impacts related to permitting for H-2B workforce housing would also affect GDPW, GDLM, and DEH.

ALPCD manages the Guam components of the H-2B program (with oversight by the Governor and in cooperation with the U.S. State Department), and is involved in the H-2B process in six ways:

1. Prospective employers file applications for Temporary Labor Certification with ALPCD.
2. ALPCD adjudicates these applications, recommending approval or denial to the Governor of Guam (the Governor's recommendation, further interviewing, and visa issuance are handled by the U.S. State Department).

3. If ultimately approved by the U.S. Citizenship and Immigration Service, once the worker arrives on Guam, he/she must report to the ALPCD to file an Application for Registration and get a worker identification card issued by ALPCD.
4. ALPCD conducts labor law enforcement, compliance monitoring, job site, and temporary worker housing inspections.
5. ALPCD processes Exit Clearance forms two weeks before the worker is ready to depart the U.S.
6. Statistics, data gathering, and recordkeeping on ALPCD programs.

H-2B workers are issued 1-year permits, renewable up to 3 years. For the proposed action, it is likely that most workers hired before 2015 would stay for more than 1 year, meaning extensions would have to be granted by ALPCD.

In FY 2012, the ALPCD employed five FTE employees and one unfilled position was available. In comments on the Draft SEIS, ALPCD indicated that in 2014 there were three full-time employees and three temporary staff.

3.5 SOCIAL VALUES AND ISSUES

Public scoping was conducted by the Navy for the Guam and CNMI Military Relocation (2012 Roadmap Adjustments) SEIS. This is the second round of scoping for the SEIS. The first SEIS public scoping period occurred February 9, 2012 through April 6, 2012. The second public scoping period began with publication of the NOI in the *Federal Register* (77 *Federal Register* 61746) on October 11, 2012 Eastern Daylight Time (October 12, 2012 Chamorro Standard Time) and ended on December 10, 2012 Chamorro Standard Time. Of interest in this section are some categories of expressed concerns related to the socioeconomic impact of the proposed relocation above and beyond those covered in the preceding sections. The discussion below lists the categories most often mentioned in the recent public scoping meetings, as well as those held for the 2010 Final EIS process, and provides historical and current background to these issues.

3.5.1 Political Self-Determination

The political administration of Guam has undergone many changes and its political status as an unincorporated Territory of the U.S. continues to be a topic of public debate. While not a part of the proposed action and not technically “impacted” by the proposed action, some members of the Guam public expressed concern that increased military activity on the island weakens Guam’s ability to change or “improve” the Territory’s status. Similarly, although there has never been a recorded majority of voters on Guam in favor of full independence from the U.S., a political goal of some has been independence of the island, and they feel that any increase in military activity strengthens the sense of “colonization” on Guam and decreases the possibility of achieving independence.

At the time of Western contact, Guam was inhabited by a group of people that came to be known as the Chamorros. The Spanish Era (1521-1898) began with Magellan’s arrival in 1521 (permanent Spanish settlement began in 1668).

As a result of the outcome of the Spanish-American War, Guam was sold to the U.S. and placed under U.S. Naval administration and control through Executive Order 108-A on December 23, 1898. During the early period of the U.S. governance of Guam, the island was administered under the authority of the Navy. Naval policies included assimilation of the Chamorro population into American culture that

included a banning of the use of Chamorro language in schools (United Nations 1963). Prominent local Chamorro residents drafted a 1902 petition arguing that the non-representative form of government existing at that time went against the ideals of American democracy, and asked for further clarification of Guam's political status.

The Navy's administration of Guam was disrupted during WWII when in 1941, following the bombing of Pearl Harbor, and the invasion of Guam by Japanese military forces occurred. Japan occupied Guam between the years 1941-1944, during which time strict social standards were imposed including continuing restrictions on the use of the Chamorro language and the banning of English in local education. Guamanians were also used as forced-labor on a variety of Japanese military construction projects, and increasing hardships and harsh treatment under the Japanese contributed to building resistance against Japanese occupation. Chamorros fought Japanese occupation using community-based methods including prayer and the singing of songs; they were supported, covertly, by the U.S. Navy.

Eventual return of the island to the U.S. occurred on July 21, 1944. U.S. Marines invaded to recapture Guam from occupying Japanese forces. Over 1,800 U.S. Marines, sailors and soldiers died and over 6,000 were wounded in the battle to liberate Guam. Eventual return of the island to U.S. control occurred on August 10, 1944 when the battle was declared won. Over 18,000 Japanese forces were killed during the battle.

After WWII until 1961, the island was a restricted U.S. Navy zone. However, renewed and increasing U.S. military and political presence on Guam at the end of WWII included policies that put less emphasis on issues such as Chamorro reparations from the Japanese occupancy (see below "World War II Reparations") or land rights, causing some Chamorro opposition.

The passage of the Organic Act in 1950 ended more than 50 years of U.S. Navy administration on Guam (with the exception of the WWII Japanese occupation) and provides the basis for the current political, legal, and social relationship of Guam to the U.S. government. Through the Organic Act, Guam's political status is currently defined as an unincorporated Territory administered by the DoI. As an unincorporated Territory, the island is a possession of, although not a part of, the U.S. and not all provisions of the U.S. Constitution apply to the island.

The Organic Act extends U.S. citizenship to indigenous and non-indigenous citizens on Guam, and contains a bill of rights similar to that found in the amendments to the U.S. Constitution, excluding the right to trial by jury.

Although the Organic Act does not provide Guamanians with full political independence or equal rights compared to those extended to the 50 states, it does give local citizens stability through some opportunity to influence the island's governance. Universal suffrage for elections on Guam applies to Guamanians 18 years and older, and Guamanians are considered citizens of the U.S. However, local citizens are not eligible to vote in U.S. presidential elections.

Guam has a locally elected Guam government, and a Governor who serves a 4-year term. A 15-member Legislature has the power to override the Governor's veto. However, the Organic Act gives U.S. Congress the right to annul any law enacted by the Guam Legislature. In 1972, authorization of congressional representation for Guam was granted, and it has held one representative seat in the U.S. Congress since. This representative votes in committee and on floor amendments, but does not have the right to vote on national laws.

In an island-wide 1976 referendum, residents voted to "maintain close ties with the U.S., but to also begin negotiations to improve the Territory's status". A 1979 draft constitution was rejected by 79% of voters,

particularly because of the need for continued discussion on Guam's political status. However, a 1982 referendum elicited a 73% vote in favor of Commonwealth status. A Commission on Self Determination was established in 1984 and drafted a Commonwealth Act in 1986, which underwent an article-by-article vote in 1987. Core proposals were approved and other articles were approved in a second referendum. The Commission was not able to come to an agreement with the U.S. during discussions that were held between 1989 and 1997.

In 1997, Guam P.L. 23-147 established the Commission on Decolonization for the Implementation and Exercise of Chamorro Self-Determination. The purpose of the Commission was to register eligible voters (through the organization of a Guam Election Commission) to participate in a vote to establish their preference for political status. The choices to be presented were independence, integration, or free association, in accordance with international standards. Eligible voters were defined as Native inhabitants of Guam, or those persons who became U.S. citizens by virtue of the Organic Act of Guam, and descendants of those persons. The Guam Legislature provided the Guam Election Commission with the power to set the date for the decolonization plebiscite. Although the result of this plebiscite would not have been binding, it would have set precedence for future discussion of political status with the U.S. The vote was scheduled for November 2, 2004, but was postponed because eligible voters had not been fully identified and registered. Some Chamorro activists sought legal redress through the United Nations. They attended and spoke at numerous United Nations workshops on decolonization (United Nations 1963).

As of 2010, the U.S. publicly lent its support to the United Nations Declaration on the Rights of Indigenous Peoples, which is seen as an encouraging step toward support of the Chamorro people as an indigenous population of Guam (SIAS Appendix A, GDCA). The Commission on Decolonization was recently restarted, with the purpose of educating the people of Guam about the existing legal relationship between Guam and the U.S., to plan and implement a referendum on the legal status of Guam (open to qualified Chamorro voters and planned to be held in 2018), and to prepare a Constitution suitable to the chosen legal status resulting from that referendum. Current Commission activities include education and outreach to the public, including schools and the media, raising awareness around decolonization and the three political status choices: independence, free association, and U.S. proclaimed statehood (SIAS Appendix B, Commission on Decolonization).

3.5.2 Minoritization

There is concern about the growing "minoritization" of Chamorros. Past labor shortages and the Compact of Free Association have resulted in increases in Filipinos and non-Chamorro Micronesians within the population. The military was a driver of initial Filipino population increases and continues to drive Caucasian and other Mainlanders coming to Guam. Increasing numbers of other ethnic groups on Guam, as a percentage of population, decreases the percentage of population that is Chamorro, contributing to minoritization.

Prior to WWII, Chamorros made up more than 90% of Guam's population. This percentage dropped below 50% by 1980, was 42% in 2000, and 37.3% in 2010. Some fear that this increasing minoritization of the Chamorro people would result in reduced Chamorro political and cultural representation on the island.

The use of native language can also be considered an indicator of the strength of cultural representation in a society, and the loss of language skills is a common occurrence where a more dominant culture influences a minority culture. A survey of Chamorro residents (Santos and Salas 2005) found that 90% said the language was a source of pride, and students are learning to read and write the language with

more comprehension than most of their elders. However, younger people are much less able to speak and comprehend the spoken language than their elders. Younger people speak the language primarily just with older relatives, not among their peers. U.S. Census (2000) data verifies this observation: while 35% of all Guam residents 65 years old and over (regardless of ethnicity) spoke Chamorro, only 26% of those 18 to 64 years old spoke Chamorro, and just 11% aged 5 to 17 years old spoke Chamorro. Less than 2% of native speakers converse to children in Chamorro (SIAS Appendix B, GDCA).

However, there is indication of public re-engaging with the Chamorro language. A recently passed P.L. 31-45 amended Chapter 8, Title 17, Guam Code Annotated, expanding the Chamorro language and cultural curriculum in public schools. Testimony from UoG Micronesia Area Research Center staff in support of the amendment reported high interest and enrollment in university-level Chamorro language courses. In addition, various private schools on Guam have been implementing immersion and language programs for children and the community (SIAS Appendix B, GDCA)

3.5.3 Cultural Artifacts

The GDCA is charged with administering and expanding Guam's current relatively small museum for archaeological or other cultural artifacts, under Chapter 76, Article 1:76114 of the Guam Code enacted by P.L. 12-126. The newly reorganized GDCA manages a federally-funded "Division of Guam Museum and Archives" and with the opening of the Guam and Chamorro Education Facility in December 2014, the Guam Museum will have a permanent home. While Guam currently has a repository for artifacts, there is still the need for a repository where artifacts and human remains discovered in archaeological excavations during the SEIS investigations or subsequent military construction would be stored. Such a repository is to be built prior to the start of construction so that artifacts are stored in a culturally responsible way (SIAS Appendix B, GDCA). Refer to Chapter 5 of the SEIS, Cultural Resources, for discussion of the artifact curation.

3.5.4 World War II Reparations

Wartime reparations from the Japanese occupation remain a contentious issue, particularly because the elderly victims of that period are now reaching the end of their life spans. Guamanians suffered under the Japanese military administration from 1941 to 1944, and some believe that this occupation was the result of U.S. military presence on Guam. Although the U.S. guaranteed Japan immunity from reparations claims through Article 14 of the Treaty of Peace in 1946, Guamanians continue to request that the U.S. federal government pressure Japan to pay war reparations, or that the federal government pay them in Japan's stead. However, neither the U.S. Office of Insular Affairs nor the U.S. State Department has expressed a strong desire to pursue this request and Congress has refused to waive protections in Article 14 (DoI 2004). Most recently, the Guam WWII Loyalty Recognition Act (submitted by Guam delegate Madeleine Bordallo), included recommendations for reparations, but eventually was not included in the FY 2010 Defense Authorization Act (Punzalan n.d.).

3.5.5 Military-Civilian Social Issues on Okinawa that Affect Public Perception on Guam

This section provides a discussion of particular perceptions of the military presence on Okinawa. The discussion is included because such perceptions are widely publicized and thus have impacted public perception on Guam regarding the proposed action.

The Okinawa Prefecture in Japan consists of 49 inhabited and 110 uninhabited islands including the actual island of Okinawa (the largest island in the prefecture). U.S. military presence on Okinawa began in the closing weeks of WWII with the Battle of Okinawa. Although the U.S. occupation of the main

Japanese islands ended in 1952, the U.S. continued administration of the Ryukyu Islands, including Okinawa, until 1972. Over the years, the presence of the U.S. bases has incurred protests from anti-war organizations, labor and religious groups, women's organizations, and political factions.

Historically, the Okinawan public has voiced concerns regarding a host of issues including use of land, economic development, environmental damage, military-related accidents, crime and social order, and prostitution and crimes against women.

The concern related to use of land is that while Okinawa comprises only 0.6% of Japan's total land area, the prefecture houses approximately 75% of the total U.S. military forces facility areas in Japan. In addition, a majority of U.S. service members in Japan (an estimated 60%) are stationed here, 60% of whom belong to the Marine Corps (Okinawa Prefecture 2009).

Another existing perception is that the location and size of U.S. military bases impede planned urban redevelopment of Okinawa. Military bases occupy approximately 10.4% of prefectural land and 18.8% of the main island of Okinawa where most of the population and industries are concentrated (Okinawa Prefecture 2004).

Additionally, noise pollution on Okinawa has been perceived as having a range of physical and mental consequences to the Okinawan population (Asahikawa Medical College 2000), and environmental damage has been claimed due to training exercises using live ammunition. Military-related accidents and incidents, including helicopter and aircraft crashes, have also elicited public concern on Okinawa. (Okinawa Prefecture 2004).

Finally, crime and social order issues involving U.S. Status of Forces Agreement (SOFA) personnel on Okinawa have been a focus of concern. A critical event occurred in September 1995 with the abduction and rape of an Okinawan schoolgirl by three U.S. service members. Widespread public protests led to bilateral negotiations between the U.S. and Japan and led to the establishment of the Special Action Committee on Okinawa. In addition, prostitution occurs on Okinawa, and there exists the perception that it is fueled by military presence (Okinawa Women Act Against Military Violence 2009).

SOFA-related data rely on Okinawa prefecture records; these records categorize crime statistics into six major groups:

- Heinous crimes – murder, rape, robbery, arson;
- Violent crimes – assaults, blackmail, extortion;
- Thefts – burglaries, car thefts, muggings;
- Intellectual crimes – fraud, counterfeiting;
- Moral offenses – gambling, indecent assault, molestation; and
- Other – a category that includes vandalism and trespassing.

Data related to "Heinous Crime Arrests" on Okinawa are detailed in the table below (Table 3.5-1). Information on Moral Offenses is combined with Other Arrests, and is therefore, not listed in the table.

Table 3.5-1. U.S. Military (SOFA) Personnel - Arrests on Okinawa, 2003-2008				
<i>Year</i>	<i>Total Arrests</i>		<i>Heinous Crime Arrests¹</i>	
	<i># of Individuals</i>	<i>Cases</i>	<i># of Individuals</i>	<i>Cases</i>
2003	133	112	12	7
2004	72	59	1	1
2005	65	66	4	2
2006	63	57	5	3
2007	46	63	6	6
2008	63	70	13	7

Note: ¹ Heinous crimes include murder, rape, robbery, and arson.

Source: Allen 2009.

The number of SOFA-status individuals arrested in Okinawa for heinous crimes is low, although there is a widely accepted belief that sexual crimes are consistently underreported. However, analysts have stated that crimes by Americans on Okinawa are perceived as a major problem largely because of the attention they get in the local and international press and protests by anti-base groups on the island (Allen 2008).

Americans connected to the military commit far fewer crimes per capita than their Okinawan counterparts. In 2008, SOFA-status, individuals made up 3.28% of the island's population but accounted for 1.62% of all arrests. Previous years' statistics show similar low rates (Allen 2008, 2009; Allen and Sumida 2008; Republic of Korea Drop 2008; Weaver and Kusumoto 2008).

During 2008, the Marine Corps made several changes to help prevent misconduct among its service members in Okinawa. Some of the changes included an expansion of uniformed courtesy patrols, a new liberty card policy, checks of outgoing vehicles at Marine Corps installations, and additions to the orientation and education seminar that all newcomers must attend (Allen 2009).

Regardless, continued protests occur in response to crimes involving U.S. military suspects. In 2010, the alleged rape of a woman by two American military servicemen reignited the debate, sparking anger on Okinawa, and causing Japan's Defense Minister Satoshi Morimoto to suggest the U.S. take further steps to address such situations (Talmadge 2012).

In recent years, the Okinawa Prefectural Assembly have unanimously adopted several resolutions of protest related to military crime, the most recent being the November 16, 2012 Resolution of Protest Against the Actions Taken in Response to a Succession of Incidents Caused by U.S. Military service members (Okinawa Prefecture 2012). That resolution cites the number of criminal cases committed by U.S. military and/or other SOFA personnel since Okinawa's reversion to Japan as having reached 5,792 as of October 2012.

3.5.6 Crime, Vice, and Social Order

Tourism, the military, and periodic construction spikes have all been perceived to create markets for alcohol, illegal drugs, prostitution, and illegal gambling on Guam. Such issues emerged as concerns during public dialogue about the proposed action and its attendant construction phase.

Overall crimes as processed by GPD increased by about 9% between 2002 and 2006 and 8% between 2007 and 2011.

Recent figures from 2012 include 5,071 Part I Offenses (26.6 cases per 1,000 residents), and 6,280 Part II Offenses (33.05 cases per 1,000 residents). Island-wide arrests between 2010 and 2012 were as follows: 2,656 (2010), 2,134 (2011), and 2,309 (2012) (SIAS Appendix B, GPD). Tables 3.5-2 and 3.5-3 provide details.

Table 3.5-2. GPD Offenses Reported to Police 2007-2012						
<i>Offenses Reported to Police</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>
TOTAL PART I OFFENSES	4,511	3,312	3,002	3,028	4,364	5,071
Murder and Non-negligent Manslaughter	1	1	5	3	4	3
Negligent Manslaughter	0	3	0	0	2	0
Forcible Rape	208	154	29	40	151	175
Robbery	108	49	78	53	67	82
Aggravated Assault	117	330	191	260	331	292
Burglary	1,058	648	972	1,165	1,945	2,215
Larceny-theft	2,792	1,963	1,497	1,264	1,631	1,877
Motor Vehicle Theft	211	146	217	227	217	415
Arson	16	18	13	16	16	12
TOTAL PART II OFFENSES	6,023	4,835	7,219	5,218	4,552	6,280
Other Assaults, simple	597	1,283	789	867	1,333	1,464
Forgery and Counterfeiting	87	41	13	55	0	0
Fraud	369	258	346	274	319	369
Embezzlement	0	0	0	0	0	0
Stolen Property	19	1	11	1	1	11
Vandalism	1,144	1,229	1,940	1,118	886	1,168
Weapons Violation	59	9	142	62	5	10
Prostitution	5	4	2	5	0	5
Sex Offenses	6	3	172	74	70	95
Drug Abuse Violations	155	152	254	200	0	0
Gambling	0	1	0	0	0	0
Offenses Against the Family and Children	59	51	63	84	0	0
Driving Under the Influence	731	491	927	316	294	266
Liquor Laws	114	69	43	39	64	173
Drunkenness	336	159	1	0	0	0
Disturbance	1126	53	763	1076	0	0
Vagrancy	0	8	0	0	0	0
All Other Offenses	1,142	797	1,723	877	1,580	2,719
Suspicion	0	0	0	0	0	0
Curfew Violations	0	12	11	2	0	0
Runaways	74	214	19	168	0	0
TOTAL PART I AND II OFFENSES	10,538	8,147	10,221	8,246	8,916	11,350

Source: SIAS Appendix B, GPD

Table 3.5-3. GPD Arrested Persons Trends 2007-2012						
<i>Offenses Charged</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>
Murder	2	0	2	7	8	3
Negligent Manslaughter	1	2	0	0	0	0
Rape	130	85	71	74	43	66
Robbery	36	17	24	26	23	26
Aggravated Assault	223	207	207	145	130	154
Burglary	92	60	74	84	128	87
Larceny-Theft	182	181	223	175	170	169
Motor Vehicle Theft	31	20	16	13	14	32
Arson	3	2	0	2	0	1
Assaults, simple	597	833	750	646	453	589
Forgery and Counterfeiting	17	10	7	4	0	14
Fraud and Bad Checks	79	97	86	102	64	110

Table 3.5-3. GPD Arrested Persons Trends 2007-2012						
Offenses Charged	2007	2008	2009	2010	2011	2012
Embezzlement	0	0	0	0	0	0
Stolen Property, buying, receiving, possessing	19	12	12	17	8	16
Vandalism	84	93	104	86	56	71
Weapons Violations	21	4	11	6	5	9
Prostitution and Commercialized Vice	5	7	10	6	0	9
Sex Offenses	6	2	31	13	23	28
Drug Abuse Violations	155	118	157	117	115	93
Gambling	0	0	1	0	0	0
Offenses Against Family and Children	32	28	49	44	40	44
Driving Under the Influence	724	726	1066	624	422	396
Liquor Laws	114	108	98	61	47	69
Drunkenness	336	179	175	101	108	131
Disorderly Conduct	52	35	34	40	22	22
Vagrancy	1	0	0	0	0	3
All Other Offenses	299	327	309	263	255	167
Suspicion	0	0	0	0	0	0
TOTAL	3,241	3,153	3,517	2,656	2,134	2,309
% Change from Prior Year		-3%	12%	-24%	-20%	8%
% Change from 2007 to 2012	-29%					

Source: SIAS Appendix B, GPD

The territory had lower reported rates of both violent and property crimes rates when compared to U.S. averages. Table 3.5-4 compares recent Part I crime rates for Guam and the U.S. The violent crime rate on Guam had been trending down between 2002 and 2006; however, between 2007 and 2011 there was not a clear trend.

Table 3.5-4. Comparison of Violent and Property Crime Rates, Guam vs. U.S., 2007-2011				
Year	<i>Violent crime rate per 100,000 residents</i>		<i>Property crime rate per 100,000 residents</i>	
	<i>Guam</i>	<i>U.S.</i>	<i>Guam</i>	<i>U.S.</i>
2007	273	472	2,565	3,276
2008	337	459	1,743	3,215
2009	190	432	1,694	3,041
2010	223	405	1,677	2,946
2011	348	386	2,387	2,909

Source: SIAS Appendix B, GPD; U.S. Department of Justice 2012.

The property crime rate had a substantial decrease between 2008 and 2010, but in 2011 returned to prior levels. In 2011, GPD reported burglary (1,945 cases) and larceny-theft (1,631 cases) as the most common offenses of all crimes, not just property crimes. Aggravated assault was the most common violent crime (331 cases). Non-aggravated assaults (1,333) and vandalism (886 cases) were other common offenses. There is concern that, even though the rates of violent and property crimes are lower than the U.S. as a whole, the impact of violent and property crime in Guam could deter tourists from East Asia, in particular Japan.

Presently on Guam, clubs, strip clubs, and massage parlors are co-located, and prostitution is integral to this mix of commercialized vice. While on the surface prostitution may not be an obvious problem, the number of therapeutic massage parlors is rising. Although there is no direct linkage between therapeutic

massage parlors and prostitution, a relationship can be inferred from co-location of adult entertainment, massage parlors, and sex workers in cities throughout the world. Recently, cases of sexual slavery on Guam have been highlighted by the media and brought renewed attention to the discussion (SIAS Appendix B, GPD).

3.5.6.1 Military Population and Crime

Overall, there exists limited crime data and statistics on individual branches of the armed forces. GPD statistics from 2010 to 2012 for military crimes are displayed in Table 3.5-5, with prevalent offenses noted from most violated to least.

Table 3.5-5. GPD Crime Statistics for Military Population		
<i>Year</i>	<i>Military Populations (including dependents)</i>	
	<i>Arrests</i>	<i>Prevalent Offenses¹</i>
2010	76	Driving Under the Influence Simple Assault Drunkenness Disorderly Conduct Aggravated Assault
2011	54	Family Violence Simple Assault Aggravated Assault Rape Burglary
2012	57	Simple Assault Driving Under the Influence Drunkenness Robbery Aggravated Assault Other Sex Offenses Theft

Note: ¹ ranked from most violated to least.

Source: SIAS Appendix B, GPD.

Historically, prostitution has been associated with the presence of military bases. Prostitution is frequently cited as a problem around military bases in Korea, the Philippines, and more recently in Bosnia. However, local law enforcement policies are a major factor in determining whether prostitution is, first, considered an important issue, and, second, tolerated or not. Regardless of the approach or enforcement policies of local authorities, the U.S. military has declared a “zero tolerance” policy regarding prostitution. Guam Naval Base Security data indicates a total of five reported sexual assaults involving military in 2008 and six occurring in 2009.

Information on drug use /substance abuse in specific branches of the military was not available. However, there is nation-wide concern that military personnel returning from Iraq and Afghanistan are experiencing a range of difficulties and are using tobacco, alcohol, and illegal drugs as coping mechanisms. In response, the National Institute on Drug Abuse convened a conference in 2009 to address substance abuse and co-morbidities among military personnel, veterans, and their families, and in 2005 the DoD conducted a survey of 16,037 active-duty military personnel (Central Broadcasting Service News 2009) but published results did not compare rates among different military services or with civilians of comparable age and socioeconomic status.

On Guam, young Sailors on Navy shore leave have been observed to participate in the consumption of alcoholic beverages, resulting in drunken and disorderly conduct (SIAS Appendix B, GPD). Young

Sailors are often under the legal drinking age, and have a relative lack of drinking experience (Ames *et al.* 2009). During deployment, Navy policy does not allow any drinking of alcohol onboard ship while at sea, except under certain tightly regulated situations. The docking of ships at ports for periods of “liberty” or “shore leave” often leads to heavy and/or binge drinking activities (Federman *et al.* 2000), and anecdotal evidence indicates that this is the case currently when carriers dock at Guam’s port (2010 Final SIAS Appendix D, GDYA). In 2010, the drinking age on Guam was raised from 18 to 21, which may impact access to alcohol for younger military personnel.

First recorded in 1899, U.S. military-civilian conflicts on Guam centered on fights due to the sale of liquor to Sailors and Marines, and subsequent “drunkenness” (Rogers 1995). Occasional personal conflicts occur around all military bases throughout the world and regardless of country or nationality. Guam Naval Base Security information shows that out of 9 recorded off-base assaults involving military in 2008, and 12 in 2009, all involved civilians as well.

Particular concerns about the abuse of local women are heightened by reports of rapes by military personnel on Okinawa (see Section 3.5.5). Domestic violence and child abuse were concerns frequently expressed in scoping comments. Guam Naval Base Security information shows that out of the five reported sexual assaults involving military in 2008, all victims were female; out of the six reported sexual assaults involving military and occurring in 2009, five victims were female. The data also shows that out of the nine reported assaults involving military in 2008, two involved females; and out of the 12 off-base assaults involving military in 2009, one involved a female.

Military service members and dependents cited or arrested by GPD for off-base local law violations are processed through Guam’s legal system (SIAS Appendix A, GPD). For on-base crimes, Guam has concurrent jurisdiction that allows civilian law enforcement personnel access to the base and this arrangement typically is understood by all parties and followed (SIAS Appendix B, GPD). If military and civilian agencies work together on a case, information on the case can be public. However, if cases are handled by internal base procedures, no public disclosure is necessary (Guam Civilian Military Task Force Committee on Public Safety 2008). The JoG will coordinate with the Judge Advocate General’s Corps (the legal branch of the military) in the case of concurrent jurisdiction, especially in cases such as rotational troops that need to complete court-ordered requirements or are violent offenders (SIAS Appendix A, JoG).

3.5.6.2 H-2B Population and Crime

Arrest data on Guam does not indicate an offenders’ type of employment, so it is not possible to gather data on construction worker crime figures. Interviews with government and private stakeholders indicated that historically, H-2B workers have low impacts on crime and social disorder. Workers are subject to numerous employer regulations and, in general, they appear to follow these rules, be reliable employees, save money, and send it home. Any violations under legal jurisdiction could lead to their deportation (2010 Final SIAS Appendix D, JoG; Guam Chamber of Commerce; GVB; SIAS Appendix B, GCA, GDoL ALPCD).

3.5.6.3 Freely Associated States of Micronesia Populations and Crime

In-migrants from the FAS (including Palau, FSM, and the Republic of the Marshall Islands) are disproportionately represented in crime statistics. Of GPD offenses charged where race was noted, the FAS population represented 33% of the total; in addition, approximately 21% of inmates in the GDoC have FSM nationality and the GDYA indicates that 40% of their population are Chuukese (SIAS Appendix B, GPD, GDoC, GDYA).

GPD statistics from 2010 to 2012 for crimes involving FAS population are displayed in Table 3.5-6 below, with prevalent offenses noted from most violated to least.

Table 3.5-6. GPD Crime Statistics for Freely Associated States of Micronesia Populations		
<i>Year</i>	<i>Freely Associated States of Micronesia Population</i>	
	<i>Arrests</i>	<i>Prevalent Offenses¹</i>
2010	1,495	Driving Under the Influence Simple Assault Disorderly Conduct Aggravated Assault Vandalism
2011	931	Driving Under the Influence Simple Assault Drunkenness Disorderly Conduct Liquor Law Violation Drug Abuse Violation
2012	1,075	Driving Under the Influence Simple Assault Drunkenness Aggravated Assault Family Violence Burglary

Note: ¹ ranked from most violated to least.

Source: SIAS Appendix A, GPD.

The possibility of cultural difference with the host society and ethnic bias in arrest patterns must be acknowledged in reference to the above. In 2010, residents from the FSM accounted for 86.3% of the FAS residents on Guam (Census 2010). FSM in-migrants not only come from depressed economies, but also often live by different social and legal systems that may manifest in behavior that is acceptable in their culture but not on Guam (SIAS Appendix B, GDYA). For example, while educational requirements are minimal in FSM, not attending school is defined as truancy on Guam (2010 Final SIAS Appendix D, GPD). In addition, GPD noted that gang identification exists primarily so that members can identify with a group (SIAS Appendix B, GPD).

Alcohol offenses top the list of FAS offenses; in 2012, FAS arrests were disproportionately high for alcohol-related offenses, though not for drug violations (Table 3.5-7).

Table 3.5-7. Total Drug and Alcohol-Related Arrests and FAS Arrests, 2012		
<i>Offense</i>	<i>Total</i>	<i>% Freely Associated States of Micronesia</i>
Driving Under the Influence	396	44%
Liquor Laws	69	64%
Drunkenness	131	72%
Drug Abuse Violations	93	8.6%

Source: SIAS Appendix B, GPD.

Driving Under the Influence was the prevailing violation committed by FAS in-migrants. While the total number of Driving Under the Influence arrests is decreasing, of all Driving Under the Influence violations, the percentage of violations committed by the FAS population is increasing. There is a cultural component to this statistic as well: alcohol is not prevalent or affordable in the FSM, and transitioning to

the Guam, where inexpensive alcohol is readily available has led to increased substance abuse (SIAS Appendix B, GDYA).

3.5.7 Sociocultural Changes

The Chamorro concept of “inafa’maolek” holds that society is based on good relationships and mutual respect. Inafa’maolek is based on varying familial relationships, and reciprocal obligations between two people in any of these relationships. The relationships tend to be based on age, with the older person owing the younger person responsibility, and the younger owing the older deference.

Chamorros expect people to approach their relationships with the wider society conforming to the philosophy of “respetu” (in the Chamorro language it means respect, veneration). This philosophy involves respecting the environment and society where the individual lives. Chamorros are held to inafa’maolek and respetu by a strong sense of “mamahlao,” or shame. A proper Chamorro has a sense of mamahlao in social situations, and does not openly contradict a superior or act outside of social mores (Guam DCA 2003).

There is no clear evidence that the feeling of lack of respect for people and culture is any more or less pronounced on Guam than elsewhere. However, the most common suggestion for the military in conducting the proposed action was having better communication (KUAM.com 2008).

Community surveys capture the diversity of community sentiment toward the proposed action. A March 2007 survey by the Guam Chamber of Commerce found 71% of those polled support an increased military presence (Partido 2007). The Guam Chamber of Commerce then conducted a follow-up survey in early 2009 and again found about a 70% favorable response, with slightly higher support among less affluent households (Tamondong 2009).

A survey conducted by the UoG Public Affairs and Legal Studies Club in 2008 found that 52% of those surveyed think that the proposed action is a good thing for Guam and 88% expect the buildup to bring jobs and other economic benefits to Guam. In 2010, UoG Professor Amy Owen and students’ research project on public perceptions of the buildup included 403 participants and a 95% confidence level. The study results reported 71% of Guam residents perceiving the buildup as good for the economy, and 74% of Guam residents perceived the buildup as bad for the culture.

3.5.8 Quality of Life

The concept “quality of life” overlaps with virtually all topics covered by this study, and concerns in general the ability of the island to adequately support the proposed action, including how the island’s general tranquility, quality of family and community relations, infrastructure, social services, schools, and standards of living would be affected.

The 2007 Guam Chamber of Commerce survey found that 60% of polled Guam residents thought the proposed action would improve quality of life. However, there remain concerns that are heightened by the fact that military facilities are segregated from public facilities, and are ultimately seen as better quality than the latter. For instance, the DoD’s decision to establish its own school system in the late 1990s was interpreted as a “hostile” action by some elected officials (Underwood 1997), removing funding from a public school system to establish a separate, competing system. This feeling can be extended to health care infrastructure, housing costs and availability, access to recreational facilities, and competitive pricing (on-base versus off-base).

CHAPTER 4. ENVIRONMENTAL CONSEQUENCES

4.1 PRESENTATION OF ANALYSIS

Many impacts in this SIAS receive separate attention for construction versus operational components because construction impacts are temporary, while operational or permanent component impacts are long-term.

To capture the differences and overlaps between construction and operational components, each section provides the following information:

- *Construction Component Assumptions* defining variables that go into calculating construction-related impacts, including reasons and sources for these assumptions;
- *Operational Component Assumptions* defining variables that go into calculating impacts from the permanent military presence, including reasons and sources for these assumptions;
- *Estimation of Effects* showing year-by-year quantitative impact results, broken down by construction, operational, and total.

Certain sections differ in their structure because they are more explanatory; are limited by nature just to construction or operations; or deal with qualitative topics.

Estimates of population, economic conditions, and expenditures were based on information that was made available from DoD. Given that these anticipated actions occur into the future as far out as 2028 and projections rely on data that is projected into the short-term future, estimates of impacts in later years are likely to be less accurate than those forecast for the more immediate future.

4.2 POPULATION IMPACTS

4.2.1 Project-Related Population

Project-related population impacts show the increase in new populations on Guam that would be related to the proposed action. Some populations are directly related, indirectly related, and induced. The definition of each of these types of population growth is presented below.

The population growth estimate presented in the SIAS is a maximal-impact estimate; no constraints to population growth were imbedded in the estimation process. However, the estimates do assume that as construction activity declines, the jobs associated with that activity would be lost, and the population associated with those jobs would quickly leave Guam.

4.2.1.1 Summary of Population Impacts

The population impacts analysis indicates direct and indirect impacts – of mixed beneficial/adverse nature. Total population impacts are expected to increase steadily from 2015 to 2021, then stabilize between 2021 and 2023 (when maximum population impact would occur) and then decline to a stable, steady-state level by 2028. Table 4.2-1 shows the maximum population impact of 9,721 in the year 2023 and a steady-state population increase due to the proposed action of 7,412 beginning in the year 2028.

Table 4.2-1. Summary of Population Increase – Maximum and Steady-State		
	<i>Maximum 2023</i>	<i>Steady-State 2028</i>
Total Population	9,721	7,412

Construction Component Assumptions

Table 4.2-2 provides assumptions made in conducting population analysis for the construction phase, as well as the source of or rationale for those assumptions.

Table 4.2-2. Construction Component Assumptions for Project-Related Population Impacts		
<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
Quantitative Assumptions – Construction		
Average number of dependents for in-migrating direct, on-site, construction jobs	0.20 - 0.35	Estimate based on contractor interviews. Assumes few H-2B workers bring dependents.
Average number of dependents for in-migrating indirect/induced jobs	0.95 - 1.0	U.S Census national data on persons per jobs (Census 2010) and GDoL interviews.

Military Operational Component Assumptions

Table 4.2-3 provides assumptions made in conducting population analysis for the operations phase, as well as the source of or rationale for those assumptions.

Table 4.2-3. Operational Component Assumptions for Project-Related Population Impacts		
<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
Quantitative Assumptions – Operations		
Number of Marines by 2026.	5,000	NAVFAC Pacific 2012
Number of Marine dependents by 2023.	1,300	NAVFAC Pacific 2012
Number of transient Marines by 2026.	200	NAVFAC Pacific 2012
Number of in-migrating Civilian Military Workers by 2025.	338	NAVFAC Pacific 2012
Average number of dependents for in-migrating civilian military personnel.	0.95	U.S Census national data on persons per jobs (Census 2010).
Average number of dependents for in-migrating indirect/induced jobs	0.95 - 1.0	U.S Census national data on persons per jobs (Census 2010) and GDoL interviews.

Estimation of Effects – Construction and Operational Phases

Table 4.2-4 shows the growth and decline of population related to the proposed action over the period of 2015 to 2028. It indicates that a maximum total impact in population increase of 9,721 would occur in 2023 and that a steady-state population increase of 7,412 would be reached in 2028.

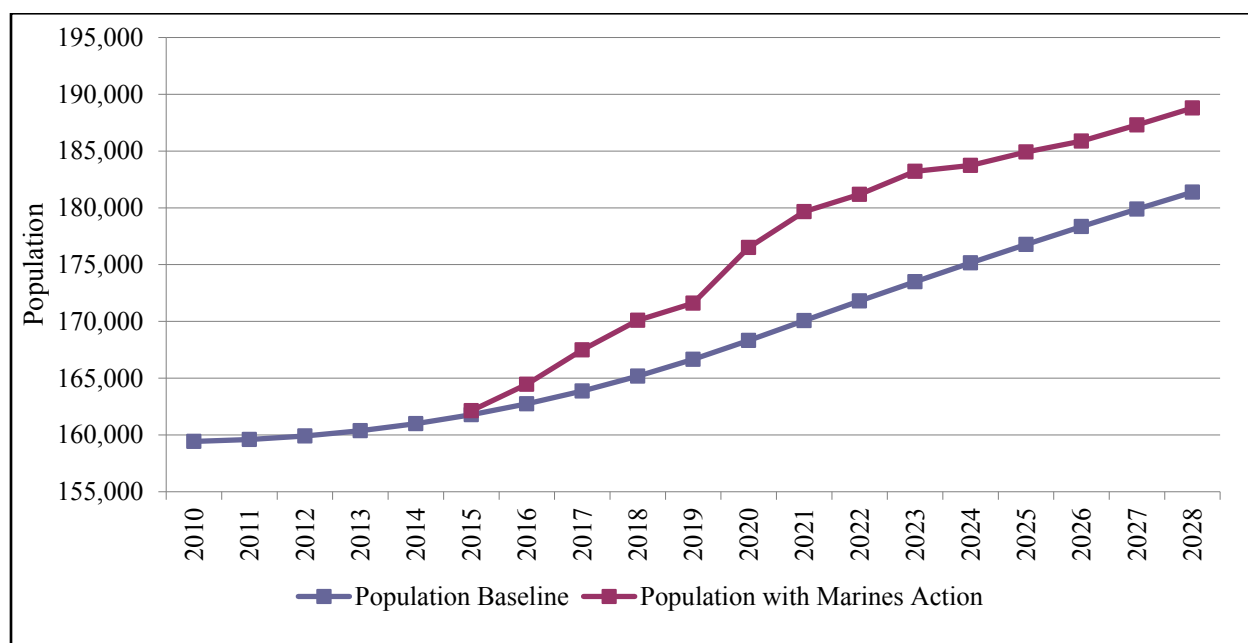
Table 4.2-4. Estimated Total Population Increase on Guam from Off-Island

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Direct DoD Population¹														
Active Duty Marine Corps	25	35	35	35	387	2,990	3,319	3,319	4,282	4,282	4,779	5,000	5,000	5,000
Marine Corps Dependents	8	11	11	11	118	908	1,008	1,008	1,300	1,300	1,300	1,300	1,300	1,300
Civilian Military Workers	4	5	38	75	113	150	188	225	263	300	338	338	338	338
Civilian Military Worker Dependents	4	5	35	71	107	143	179	214	249	285	320	320	320	320
Off-Island Construction Workers (DoD Projects) ²	161	1,071	2,301	3,227	2,871	2,587	3,175	2,978	2,205	1,350	618	46	0	0
Dependents of Off-Island Construction Workers (DoD Projects)	56	343	667	839	660	517	635	596	507	351	179	15	0	0
Direct DoD Subtotal	258	1,470	3,087	4,259	4,256	7,295	8,504	8,339	8,806	7,868	7,533	7,019	6,959	6,959
Indirect and Induced Population														
Off-Island Workers for Indirect/Induced Jobs ²	46	130	271	338	349	455	548	529	462	361	308	257	228	227
Dependents of Off-Island Workers for Indirect/Induced Jobs	43	124	260	325	337	441	533	517	453	355	304	255	227	227
Indirect/Induced Subtotal	89	254	531	663	686	897	1,082	1,046	915	716	612	513	455	453
Total Population	347	1,724	3,618	4,922	4,941	8,191	9,585	9,386	9,721	8,584	8,145	7,532	7,414	7,412

Notes: ¹ DoD population includes military personnel, DoD civilian workers and dependents from off-island.

² Population figures do not include Guam residents who obtain employment as a result of the proposed action.

Figure 4.2-1 compares total population on Guam with and without the proposed action. Between the years 2021 and 2023, population with the proposed action is 5.6% higher than it otherwise would have been without the proposed action. At a steady-state, which would begin in 2028, the difference would be 4.1%.

**Figure 4.2-1. Project-Related Population with and without the Proposed Action**

4.2.2 Demographic Characteristics

New population on Guam related to the proposed action would have a different demographic composition than what currently exists on Guam, and would thus affect the island's demographic composition.

Demographic impacts are presented in *employment component* and *military operational component* phases, as opposed to the construction and operational phase presentation of other impact analysis. Results from this analysis are compared to the demographic characteristics of Guam presented in the Affected Environment.

Employment Component Assumptions

Table 4.2-5 provides assumptions made about the demographic characteristics of population related to the employment component as well as the source for those assumptions.

Table 4.2-5. Employment Component Assumptions for Demographic Impacts		
<i>Assumption</i>	<i>Value</i>	<i>Source/Rationale</i>
Quantitative Assumptions – Employment		
Number of Cases Studied (Not born on Guam, moved to Guam for employment)	16,656	Census 2013a (Guam Cross tabulations)
Median Age when moved to Guam	35-44	Census 2013a (Guam Cross tabulations)
Gender		
Male	72.5%	Census 2013a (Guam Cross tabulations)
Female	27.5%	Census 2013a (Guam Cross tabulations)
Ethnicity		
Asian Alone	56.1%	Census 2013a (Guam Cross tabulations)
Native Hawaiian/Other pacific Islander	25.9%	Census 2013a (Guam Cross tabulations)
White Alone	11.9%	Census 2013a (Guam Cross tabulations)
Other	6.2%	Census 2013a (Guam Cross tabulations)

Military Operational Component Assumptions

Table 4.2-6 provides assumptions made about the demographic characteristics of population related to the military operational component as well as the source for those assumptions.

Table 4.2-6. Military Operational Component Assumptions for Demographic Characteristics Impacts

<i>Assumption</i>	<i>Value</i>	<i>Source/Rationale</i>
Quantitative Assumptions – Military		
Number of Cases Studied (Military and military dependents)	2,406 (5.8% of sample)	U.S. Census American Community Survey, PUMS 2009-2011 3-year estimates (Census 2012b).
Median Age	25	U.S. Census American Community Survey, PUMS 2009-2011 3-year estimates (Census 2012b).
Gender		
Male	56.7%	U.S. Census American Community Survey, PUMS 2009-2011 3-year estimates (Census 2012b).
Female	43.3%	U.S. Census American Community Survey, PUMS 2009-2011 3-year estimates (Census 2012b).
Ethnicity		
White alone	61.4%	U.S. Census American Community Survey, PUMS 2009-2011 3-year estimates (Census 2012b).
Asian alone	9.9%	U.S. Census American Community Survey, PUMS 2009-2011 3-year estimates (Census 2012b).
Black or African American alone	9.8%	U.S. Census American Community Survey, PUMS 2009-2011 3-year estimates (Census 2012b).
Some other race alone	6.4%	U.S. Census American Community Survey, PUMS 2009-2011 3-year estimates (Census 2012b).
Two or more major race groups	12.5%	U.S. Census American Community Survey, PUMS 2009-2011 3-year estimates (Census 2012b).
Prominent Places of Birth		
U.S.	87%	U.S. Census American Community Survey, PUMS 2009-2011 3-year estimates (Census 2012b).
Philippines	3%	U.S. Census American Community Survey, PUMS 2009-2011 3-year estimates (Census 2012b).
Japan	1.8%	U.S. Census American Community Survey, PUMS 2009-2011 3-year estimates (Census 2012b).
Germany	1%	U.S. Census American Community Survey, PUMS 2009-2011 3-year estimates (Census 2012b).
Puerto Rico	0.8%	U.S. Census American Community Survey, PUMS 2009-2011 3-year estimates (Census 2012b).
Korea	0.7%	U.S. Census American Community Survey, PUMS 2009-2011 3-year estimates (Census 2012b).
Guam	0.7%	U.S. Census American Community Survey, PUMS 2009-2011 3-year estimates (Census 2012b).
Educational Attainment (25 years and older)		
Number of Cases Studied Number of Cases Studied (Military and military dependents) 25 Years or Older	1,206	U.S. Census American Community Survey, PUMS 2009-2011 3-year estimates (Census 2012b).
Did Not Graduate High School	2%	U.S. Census American Community Survey, PUMS 2009-2011 3-year estimates (Census 2012b).
High School Graduate	47%	U.S. Census American Community Survey, PUMS 2009-2011 3-year estimates (Census 2012b).
Continued education After High School	51%	U.S. Census American Community Survey, PUMS 2009-2011 3-year estimates (Census 2012b).

Estimation of Effects

Employment Component

Populations who move to Guam for employment purposes are made up of more males than females (72.5% compared to 27.5%). Therefore, the proposed action would increase the percentage male population on Guam.

Populations who move to Guam have historically moved between the ages of age of 35 and 42. This is an older population than Guam's current population. Therefore, this component of the proposed action would slightly increase the average age of the Guam population.

Racial and ethnic populations that have moved to Guam for employment purposes in the past have primarily been Asian (56.1%), Hawaiian or other pacific islanders (25.9%), and White (11.9%). This component of the proposed action would thus result in the population of Guam being made up of a relatively smaller population of Chamorros and Guam-born individuals, and a relatively larger population of Asians, Other pacific islanders (not born on Guam), and Caucasians.

Military Component

The military component incoming population will have a higher ratio of males to females than currently reside on Guam. Therefore, the proposed action would increase the male proportion of the population on Guam.

The military component incoming population will generally be younger than Guam's population (median 25 years old compared to 29.5 on Guam). Therefore, this component of the proposed action would decrease the average age of the Guam population slightly.

The military component incoming population will be comprised of more Caucasian backgrounds than Guam's current population. This component of the proposed action would thus result in the population of Guam being made up of a relatively smaller population of Chamorros and Guam-born individuals, and a relatively higher population of Caucasians from the U.S. Mainland.

4.2.3 Comparative Analysis

Analysis of population change in the 2010 Final SIAS projected population impacts of a far greater magnitude than are presented above in Table 4.2-4. The population analysis in this SIAS projected population of lesser magnitude than those presented in the 2010 Final SIAS due to a number of factors, including:

1. Fewer Active Duty Marines – compared to the 2010 Final SIAS, the number of Active Duty Marines is 42% lower in this SIAS (from 8,552 to 5,000).
2. Fewer military dependents of Active Duty Marines – military dependents are lower by 86% (from 9,000 to 1,300). The large decline in the number of dependents (as compared to the decline in active duty marines) is due to a change in composition of Active Duty Marines. In the action being analyzed in this SIAS, two-thirds of Active Duty Marines would be rotational – spending 6 months per deployment to Guam – and therefore would not bring any dependents to Guam.
3. This SIAS does not assess impacts related to a potential U.S. Navy CVN berthing or a potential AAMDTF because these actions are no longer considered reasonably foreseeable. Impacts from utilities and roadways projects, that are not located at main cantonment or LFTRC project sites, are also not analyzed in this SIAS because they are independent actions, and the Roadmap

Adjustment does not change the decision made in the 2010 Record of Decision regarding these actions.

4. An extended construction period – Construction work resulting from implementation of the proposed action is expected to begin in 2015; construction activity would increase over the couple of years, with an extended period of construction activity occurring from 2017 through 2023, and then begin to taper off from 2024 until the final year of construction in 2027. Overall, this proposed action would have a 13-year construction period compared to the 7-year construction period that was projected for the proposed actions in the 2010 Final EIS.

The analysis in the 2010 Final SIAS assumed that a massive in-migration would occur due to labor shortages brought on by the relatively short construction period and the rapid military relocation schedule of Marines and their dependents to Guam. In addition, the analysis presented in the 2010 Final SIAS used the U.S. Census population projections that have since been substantially revised downward. This combination of factors contributed to the population peak identified in the 2010 Final SIAS. The proposed action analyzed in this SIAS would avoid such a population peak, and thus many of the social problems that can result from rapid population increases and subsequent sharp declines in population (referred to as a “Boomtown” economy in the 2010 Final SIAS) would not occur with this proposed action.

These, and other variations in population between this SIAS and the 2010 Final SIAS are summarized below in Table 4.2-7.

Table 4.2-7. Comparative Analysis						
	2010 Final SIAS		SEIS Proposed Action		Difference	
	Maximum Population Year (2014)	Steady-state Population (2020)	Maximum Population Year (2021)	Steady-state Population (2028)	Between Maximum Population Years	Between Steady-state Populations
Active Duty Marines	10,552	10,552	3,319	5,000	(7,233)	(5,552)
Dependents of Active Duty Marines	9,000	9,000	1,008	1,300	(7,992)	(7,700)
Civilian Military Workers and dependents (steady-state)	3,354	3,581	439	658	(2,915)	(2,923)
Active Duty Army and dependents (steady-state)	50	1,580	0	0	(50)	(1,580)
Direct construction workers and dependents (maximum)	23,095	0	3,574	0	(19,521)	0
Indirect and induced population (maximum)	33,126	8,895	1,046	453	(32,080)	(8,442)
Totals	79,178	33,608	9,386	7,412	(69,792)	(26,196)

4.3 ECONOMIC IMPACTS

4.3.1 Summary of Economic Impacts

Results of the economic impact analysis indicate there would be beneficial direct and indirect impacts from the proposed action. In general, economic impacts are expected to reach a maximum, for a short period of time in 2021, and then decline to a stable, steady-state level, by 2028. Table 4.3-1 shows maximum economic impacts and steady-state levels for topics in which numerical estimates are made.

Table 4.3-1. Summary of Economic Impacts – Maximum and Steady-State Totals		
	<i>Maximum 2021</i>	<i>Steady-State 2028</i>
Employment (FTE Jobs) ¹	7,031	1,438
Income (Millions of \$'s) ²	\$296	\$67
Housing Demand (Housing Units) ³	770	285
GovGuam Tax Revenue (Millions of \$'s) ⁴	\$86	\$40
GIP (Millions of \$'s) ⁵	\$635	\$75

Notes: ¹ Number of FTE civilian jobs generated by economic activity associated with the proposed action. FTE is equal to 40 hours per week; i.e., two 20-hour per week part-time jobs equals one FTE job.

² Wages and salaries earned that are associated with economic activity generated by the proposed action

³ The number of housing units in the private Guam housing market that would be needed to accommodate non-military population growth associated with the proposed action. Military personnel and their dependents would be housed on-base.

⁴ The amount of tax revenue that would be owed to GovGuam as a result of expenditures associated with economic activity that would be generated by the proposed action.

⁵ GIP measures the total value of all final goods and services produced in a particular (island) economy. GIP is the most commonly used benchmark to gauge the overall size of an economy.

4.3.2 Employment and Income

4.3.2.1 Civilian Labor Force Demand

Labor Force “Demand” refers to the jobs created by the proposed action and the workers needed to fill them.

This section focuses on civilian jobs only, including federal civilian workers and other jobs from spin-off economic growth. Calculations are in terms of FTEs. For example, two half-time jobs would be counted as one FTE. The number of FTE jobs is assumed to be equal to the number of required workers.

Construction Component Assumptions

Table 4.3-2 provides assumptions made in conducting the civilian labor force demand analysis for the construction phase as well as the source or rationale for those assumptions.

Table 4.3-2. Construction Component Assumptions for Civilian Labor Force Demand		
<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
Worker Requirement Factor	75 Workers Per \$10Mil Project Cost	GCA interviews. Factor incorporated into IMPLAN model prior to conducting analysis.
Current H-2B Construction Labor on Guam	1,088	SIAS Appendix A, GDoL ALPCD
Available Guam Construction Workforce (unemployed or out of labor force)	1,403	Guam Bureau of Labor Statistics. The Unemployment Situation on Guam: March 2012. Includes a portion of the unemployed. Includes those not in labor force because they are not looking for work (because they believe no job is available, they cannot find work, and for 25% of those not looking for work for “other reasons”). Total of unemployed and those not looking for work was multiplied by 14% - a factor tying the construction labor pool to the overall labor pool – to equal the assumed value.
Percentage of on-site Construction Workforce from H-2B	Up to 52%	Various interviews and estimates of available on-island labor. Range from 0% to 52%.

Military Operational Component Assumptions

Table 4.3-3 shows intermediate operations-related calculations for civilian military worker labor force demand. This data was used in subsequent estimates of the impact on total labor force demand from operations. Numbers in Table 4.3-4 represent the total number of civilian military jobs that would be necessary for operations associated with the proposed action. It would be expected that the majority of these jobs would be filled by transfers who would in-migrate to Guam.

Table 4.3-3. Intermediate Operations-Related Calculations for Civilian Military Worker Labor Force Demand														
	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>	<i>2024</i>	<i>2025</i>	<i>2026</i>	<i>2027</i>	<i>2028</i>
Civilian Military Employees	5	7	50	100	150	200	250	300	350	400	450	450	450	450

Source: NAVFAC Pacific 2012.

Estimation of Effects

As shown in Table 4.3-4, the proposed action would support a maximum of 7,031 FTE jobs, which would occur in 2021. After 2021, the number of jobs associated with the proposed action would begin to decline until the steady-state level of 1,438 jobs, which would be reached in 2028.

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Direct Construction Impact	419	1,457	2,895	4,102	3,941	3,782	4,391	4,205	3,249	2,174	1,217	466	85	0
Indirect Construction Impact	143	490	1,092	1,374	1,354	1,435	1,759	1,662	1,210	750	406	156	28	0
Total Construction Impact	562	1,947	3,988	5,477	5,295	5,217	6,150	5,867	4,459	2,924	1,623	621	113	0
Direct Operations Impact	42	56	102	149	226	449	535	587	707	761	863	878	878	893
Indirect Operations Impact	20	27	39	50	91	301	346	359	448	462	521	538	538	546
Total Operations Impact	62	83	141	200	317	750	881	946	1,154	1,223	1,384	1,416	1,416	1,438
Combined Direct Impact	461	1,513	2,997	4,251	4,167	4,231	4,926	4,792	3,956	2,935	2,080	1,344	963	893
Combined Indirect Impact	163	517	1,131	1,424	1,445	1,736	2,105	2,021	1,658	1,212	927	694	566	546
Combined Total Impact	624	2,030	4,129	5,677	5,612	5,967	7,031	6,813	5,613	4,147	3,007	2,037	1,529	1,438

Note: Portion assumed to be filled by Guam residents is not subtracted from these figures. Numbers may not add exactly due to rounding.

Figure 4.3-1 compares total labor force demand on Guam with and without the proposed action. In 2021, civilian labor force demand with the proposed action would be 11.9% higher than it otherwise would have been without the project. At 2028, the difference declines to 2.4%.

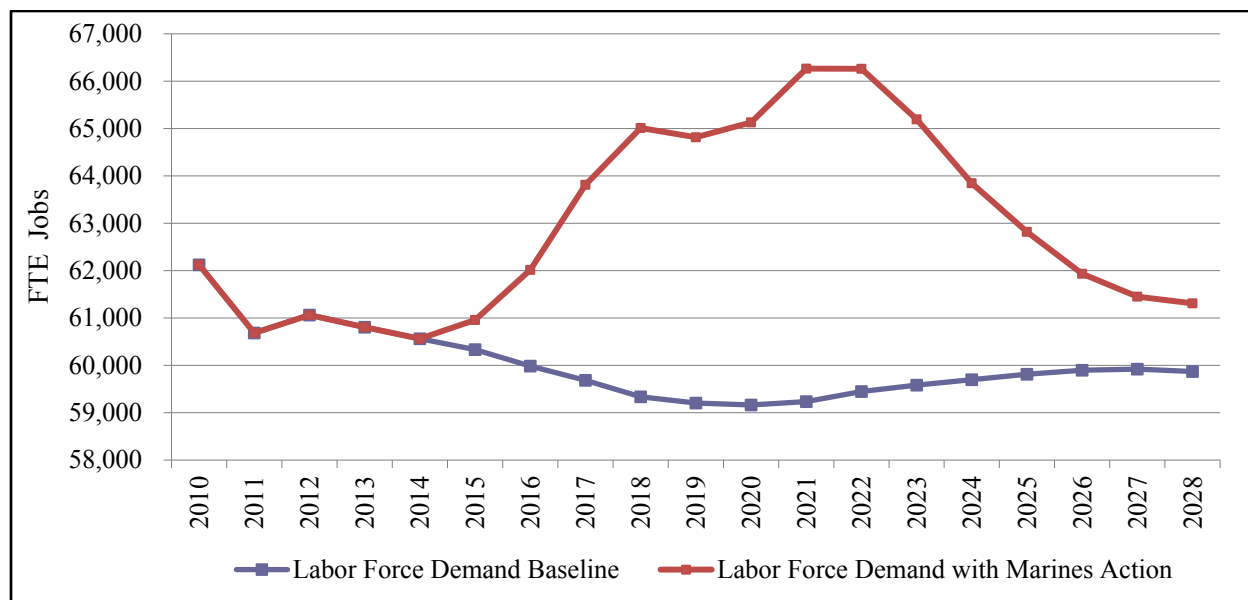


Figure 4.3-1. Labor Force Demand with and without the Proposed Action

4.3.2.2 Probable Labor Supply Sources

The 2010 Final SIAS included detailed discussion of probable sources of off-island labor. Qualitative analysis provided potential nearby locations for workers that may move to Guam to find employment in association with the proposed action analyzed in the 2010 Final EIS.

The proposed action being analyzed in this SIAS is much smaller in scale than the action analyzed in the 2010 Final EIS, therefore it is expected that in-migration of labor to Guam would not be of similar magnitude as was previously expected. However, research, supported by discussions with and public comments provided by the Guam DOL ALPCD, indicates that the qualitative determinations presented in the 2010 Final SIAS remain valid – the labor supply on Guam is not sufficient to meet the needs of the proposed action and some foreign H-2B workers would be used to meet labor demand and residents of other Pacific islands would likely migrate to Guam for employment opportunities. Because the determinations remain valid, they are not repeated here. Tables that quantify projected sources of off-island labor are presented below. For more information on qualitative aspects of this topic, see the 2010 Final SIAS, which is an appendix to the 2010 Final EIS (Volume 9, Appendix F –Final SIAS, Section 4.3.2.2).

On-site Military Construction: Assumptions

Table 4.3-5 presents assumptions about labor sources used in this analysis, and the source or rationale for these assumptions.

Table 4.3-5. Assumptions for Origins of Direct On-site Labor Force Construction Supply		
<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
Quantitative Assumptions – Labor Supply for Direct On-site Military Construction		
Construction employment	75 workers per \$10 million total construction cost	GCA interviews
Guam residents holding construction jobs	Up to 1,227 jobs in 2022	GDoL unemployment data
Continental U.S./Hawaii/Japan workers	Supervisory workers likely to come from U.S. or Japan	GCA interviews
Philippines/Other split of H-2B workforce	90% / 10%	GDoL interviews
Other U.S. Pacific Island % of workforce	Residuals of work force	GCA interviews
Qualitative Assumptions – Labor Supply for Direct On-site Military Construction		
Fees for H-2B workers	They do not become an impediment to recruiting affordable labor	Noted by GCA and GDoL as not expected to pose an impediment

Note: No assumption is made about the likely split of “Other Pacific Island” workforce among the CNMI, FSM, Republic of the Marshall Islands, Palau, and American Samoa. This reflects conflicting evidence in the foregoing table and the general difficulty of predictions for specific small areas.

Table 4.3-6 shows labor force information for the FAS and American Samoa.

Table 4.3-6. Overview of FAS and American Samoa Population and Labor Force				
	<i>Federated States of Micronesia</i>	<i>Republic of Marshall Islands</i>	<i>Palau</i>	<i>American Samoa</i>
Population (2012 est.)	107,665	68,480	21,032	64,827
Population Growth Rate (2012 est.) %	-0.19	+1.87	+0.361	+1.24
In- or (Out-) Migration/1,000 Pop. (2012 est.)	(21.04)	(5.1)	0.71	(7.17)
Gross Domestic Product Real Growth Rate (2005 est.) %	0.3	(0.3)	5.5	3.0
Unemployment (2005 est.) %	22	36	4.2	30
Labor Force (2005)	37,410 (2/3 are govt. workers)	14,680	9,777	17,630
Construction Industry Employees (various years, as per sources below)	1,400	1,365	849	563

Sources: Central Intelligence Agency 2012 (for all information except final row); FSM, Department of Economic Affairs, Division of Statistics 1998; Republic of Palau, Office of Planning and Statistics 2005.

Direct On-Site Military Construction: Estimation of Effects

Estimates in Table 4.3-7 are based on the various sources and assumptions noted in Table 4.3-5 and Table 4.3-6.

Table 4.3-7. Estimated Origin of Workers Constructing Military Facilities													
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
TOTAL	419	1,457	2,895	4,102	3,941	3,782	4,391	4,205	3,249	2,174	1,217	466	85
GUAM	259	386	594	875	1,069	1,196	1,216	1,227	1,044	824	599	419	85
OFF-ISLAND	161	1,071	2,301	3,227	2,871	2,587	3,175	2,978	2,205	1,350	618	46	0
H-2B Workers	114	761	1,634	2,291	2,039	1,837	2,255	2,114	1,566	959	438	33	0
Philippines	103	685	1,471	2,062	1,835	1,653	2,030	1,903	1,409	863	394	30	0
Other	11	76	163	229	204	184	226	211	157	96	44	3	0
Continental U.S./Hawaii/Japan	26	170	366	514	457	412	505	474	351	215	99	7	0
CNMI	4	29	62	87	78	70	86	80	60	36	17	1	0
Other U.S. Pacific Islands	17	111	239	335	298	268	329	309	229	140	64	5	0

Notes: ¹ The year 2028 is not included in this table because there is no construction activity associated with the proposed action in 2028.

² Numbers may not add exactly due to rounding.

Other Employment: Estimation of Effects

Table 4.3-8 indicates that current Guam residents (on-island workers) would be expected to capture a maximum of 1,842 non-direct-construction jobs related to the proposed action; this number of jobs for on-island workers would be expected in the year 2021 (a similar number of jobs would be expected in 2022 as well). After 2022, the number of jobs for on-island workers would be expected to steadily decline until a steady-state number of jobs for on-island workers (762) would be reached in 2028.

Table 4.3-9 shows the estimated numbers of FTE jobs for off-Island workers not including direct on-site construction jobs.

**Table 4.3-8. Estimated Numbers of Jobs (FTE) for On-Island Workers
Excluding Direct On-site Construction**

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Total Jobs, Excluding Direct Military Construction, for On-Island Workers	154	436	912	1,136	1,172	1,530	1,842	1,778	1,552	1,212	1,033	864	766	762

Note: Demand is in terms of FTE jobs, and assumes one worker per FTE job.

**Table 4.3-9. Estimated Numbers of Jobs (FTE) for Off-Island Workers
Excluding Direct On-site Construction**

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Total Jobs, Excluding Direct Military Construction, for Off-Island Workers	51	137	321	438	499	655	798	829	812	761	758	707	678	677

Note: Demand is in terms of FTE jobs, and assumes one worker per FTE job.

4.3.2.3 Civilian Labor Force Income

Civilian labor force income refers to the cumulative gross wages and salaries (before deductions for taxes) earned by the categories of workers noted in the preceding section.

This information is important for the subsequent GovGuam revenue calculations. Dollar amounts thus apply to the additional labor force as a whole, rather than to the situation of individual workers. Qualitative discussion of implications for individuals in regard to standard of living is provided in subsequent Section 4.3.2.4.

Construction Component Assumptions

Table 4.3-10 provides assumptions used for civilian labor force income analysis for the construction phase and the source or rationale for these assumptions.

Table 4.3-10. Construction Component Assumptions for Civilian Labor Force Income		
<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
Average salary for construction phase jobs	\$38,600	Generated by the IMPLAN Model

Military Operational Component Assumptions

Table 4.3-11 provides assumptions made in conducting the civilian labor force income analysis for the operations phase and the source or rationale for these assumptions.

Table 4.3-11. Operational Component Assumptions for Civilian Labor Force Income		
<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
Civilian Military Worker Average Total Income	\$52,287	Median value of General Schedule Summary Table

Note: General Schedule, pay scale for federal Employees and is developed by the U.S. Office of Personnel Management. The Office of Personnel Management produces a table with Grade level on the vertical axis and Time-in-Grade on the horizontal axis. The median value pinpoints the mid-point of the Grade axis and the mid-point of the Time-in-Grade.

Estimation of Effects

Table 4.3-12 shows that labor income on Guam associated with the proposed action would reach a maximum of \$296 million in 2021 and decline to a steady-state value of \$67 million by 2028.

Figure 4.3-2 compares total income on Guam with and without the proposed action. When impacts are at their maximum, civilian labor force income is 15.6% higher than it otherwise would have been without the proposed action. At 2028, the difference declines to 3.1%.

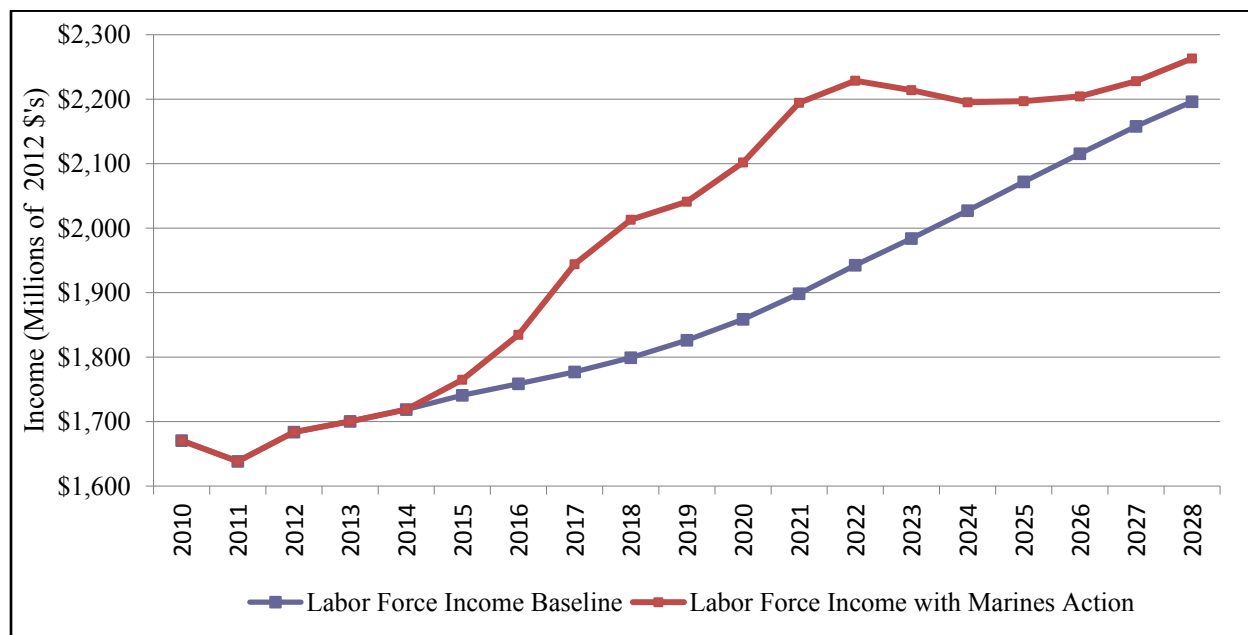


Figure 4.3-2. Civilian Labor Force Income with and without the Proposed Action

4.3.2.4 Potential Effects on Standard of Living

Standard of living is a measure of purchasing power. If the standard of living increases for a person, it means they can purchase more goods and services. If the standard of living declines for that person, he or she can purchase fewer goods and services.

Table 4.3-12. Impact on Civilian Labor Force Income (Millions of 2012 \$'s)														
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Direct Construction Impact	\$13	\$47	\$104	\$133	\$130	\$136	\$165	\$157	\$115	\$72	\$39	\$15	\$3	\$0
Indirect/Induced Construction Impact	\$7	\$25	\$56	\$72	\$70	\$74	\$90	\$85	\$62	\$39	\$21	\$8	\$1	\$0
Total Construction Impact	\$21	\$72	\$160	\$204	\$200	\$209	\$255	\$242	\$177	\$111	\$61	\$23	\$4	\$0
Direct Operations Impact	\$2	\$3	\$5	\$8	\$11	\$20	\$24	\$26	\$31	\$34	\$39	\$39	\$39	\$40
Indirect/Induced Operations Impact	\$1	\$1	\$2	\$2	\$4	\$14	\$17	\$17	\$21	\$22	\$25	\$26	\$26	\$26
Total Operations Impact	\$3	\$4	\$7	\$10	\$15	\$34	\$41	\$44	\$53	\$57	\$64	\$66	\$66	\$67
Combined Direct Impact	\$15	\$50	\$109	\$141	\$141	\$156	\$189	\$184	\$147	\$107	\$78	\$55	\$43	\$41
Combined Indirect Impact	\$8	\$26	\$58	\$74	\$74	\$88	\$107	\$102	\$83	\$61	\$46	\$34	\$27	\$26
Combined Total Impact	\$24	\$76	\$167	\$214	\$215	\$243	\$296	\$286	\$230	\$168	\$125	\$89	\$70	\$67

Note: Numbers may not add exactly due to rounding.

Changes in a person's standard of living are determined by their income and the prices of the goods and services they tend to purchase. A person's standard of living will increase if their income rises faster than the prices of goods and services they tend to purchase. A person's standard of living will decline if the prices of goods and services they tend to purchase rise faster than the person's income.

In both the construction and operational components, the average wage of workers would increase as a function of greater demand for labor. However, the price of goods and services purchased by individuals would rise as well.

It cannot be definitively predicted whether wages or the price of goods and services would increase at a faster pace. If wages earned by a particular household rise more quickly than the price of goods and services, then the standard of living would increase. If the price of goods and services rises more quickly than wages, the standard of living would decrease.

For households on fixed incomes, the result would be reduced purchasing power. Those with the ability to quickly renegotiate their wages will have a better chance at maintaining or increasing their standard of living.

Construction Component Wage Calculations

The average salary for jobs related to the construction phase (including indirect jobs) on Guam is estimated to average around \$38,600 per year. This estimate was derived from IMPLAN modeling results by dividing total labor income projections by projections of FTE jobs.

Military Operational Component Wage Calculations

The average FTE salary for jobs related to the military operational phase (including indirect jobs) in Guam is expected to be around \$46,000 per year. This estimate was derived from IMPLAN modeling results by dividing total labor income projections by projections of FTE jobs.

Estimation of Effects

Guam incomes would be expected to rise due to the proposed action as the estimated average FTE salary for jobs related to the construction phase (\$38,600) and operational phase (\$46,000) can be compared to the 2012 Guam average median FTE salary of \$25,330.

Construction component salaries are expected to be higher than average Guam salaries due to the creation of higher-paying jobs in the architecture and engineering, wholesale trade, and health services industries. With an increase in economic activity and a limited pool of on-island labor, there may be competition for labor and some upward pressure on wage rates.

Operational component salaries are expected to be higher than average Guam salaries, in part, due to additional higher-paying on base civilian military jobs. As noted in Section 4.3.2.1, most civilian military jobs would likely go to either spouses of new active duty personnel or to labor brought in from off-island; less than 25% of civilian military jobs are expected to be filled by current Guam residents.

Overall, the military relocation would bring more high skilled, high paying jobs that provide employees more flexibility to have their wages adjusted to meet price increases.

In terms of cost of living, from 2000 to 2012 Guam workers have seen their standard of living decline by 33% and there is little reason to expect that the military relocation would reverse that trend – Guam workers would likely continue to see the cost of goods and services rise faster than their incomes; this issue is not specific to Guam, it is a national and international condition stemming from continuing worldwide sluggish growth and rising prices. While the proposed action may not represent a reversal of

this trend, it would likely slow the rate of decline in the standard of living that has been prevalent since 2000.

4.3.2.5 Unemployment

The proposed action would bring new jobs to Guam but it would also bring new population from off-island. Analysis was done to determine how these two factors would affect the unemployment rate on Guam. The statements made below cannot truly account for the vagaries of measuring unemployment; for instance, during times of improving economic activity, the number of employed may increase while the unemployment rate also increases – the counter-intuitive increase in both would likely be due to an increase in number of people who begin to look for work and are thus officially included in the labor force and can be officially counted as unemployed. Therefore, the discussion below is somewhat cursory in nature and generally assumes that the more jobs that are available the less likely it is that any one particular individual or family would be without work when they seek it.

Construction Component Unemployment Assumptions

The influx of new jobs related to the construction phase would occur over a long period of time. Employment opportunities would be increased over that period of time. Therefore, the unemployment rate during the construction component would be lower than current levels. There may be times when full-employment is reached, but that state would not likely occur as a result of the proposed action alone. For full employment to be reached, the proposed action would need to occur in conjunction with other beneficial economic conditions such as a continuation of strong tourism activity and a rebound in Guam's housing and development industries.

Military Operational Component Unemployment Assumptions

The operational component would make more jobs available than exist on Guam at present. Most who immigrate to Guam would be doing so for work and would have jobs already lined up. However, others, such as individuals living in the Pacific region may come to Guam for work and not obtain jobs – these individuals would join the ranks of Guam's unemployed. Overall though, a higher number of jobs on Guam should positively affect the employment situation.

Estimation of Effects

During the construction phase, it is projected that employment associated with the proposed action would reduce the rate of unemployment on Guam from the March 2012 unemployment rate of 11.8% (GDoL 2012). Over the longer-term operations phase, while the level of employment would be higher due to the proposed action (see Section 4.3.2.1), the unemployment rate may not be greatly affected.

4.3.3 Housing

The housing analysis assesses the number of required housing units that would be required (demand) for the in-migrating Guam civilian population associated with the proposed action. It also provides an assessment of housing supply based on best available data.

4.3.3.1 Civilian Housing Demand

The housing unit demand in this section is an estimate of the number of *required* units (demand) for the in-migrating Guam civilian population associated with the proposed action. See Section 4.3.3.2 for discussion of the *supply* of housing in response to these requirements.

The Guam Housing and Urban Renewal Authority (GHURA) released a detailed housing needs assessment study in 2009 that is the basis of the housing supply estimates (GHURA 2009).

The primary focus of this analysis is demand and supply for the private-sector Guam housing market affected by in-migrating civilian populations.

General Exclusions to Analysis

The following additional factors are important to note in this introduction, but are *not* included in the rest of the analysis:

- “Stay-Behind” Worker Housing
- Housing for on base active-duty military and dependents
- Household formation for additional Guam residents

“Stay-Behind” Worker Housing

Currently, stay-behind workers are not included in housing analysis. If there are a large number of stay-behind workers who leave contractor roles and enter the private housing market, then the decline in civilian housing demand from 2022 to 2028 would not be as large as shown in Table 4.3-15.

Also if the stay-behind worker phenomenon leads to increased immigration over time, then civilian housing demand growth, in the years 2021 forward, would proceed at a faster rate than shown below.

Active-Duty Military Housing

Current plans are for on-base housing to be provided for all military personnel and thus this population is not included in the housing analysis.

New Household Formation by Guam Residents

Since workers hired from the existing Guam labor force would already have housing on Guam, no additional housing for them would be required.

Only minor exceptions might arise; Guam residents who might earn sufficiently more from their new employment to leave their housing units, previously shared with families or friends, and form new households.

It is impossible to reliably estimate the number of such new household formations that would occur attributable to construction, as even U.S. Census 2010 data do not provide a basis for such estimation. However, new project-induced household formations by Guam residents are likely to be small in number compared to the demand from new population originating from off the island.

Construction Component Assumptions

Construction phase impacts on private market housing would arise primarily from the in-migration of:

- non-H-2B workers who are directly employed at the various military construction sites.
- non-H-2B workers who take other direct or indirect construction-related jobs. Table 4.3-13 shows critical assumptions, as well as the source or rationale of those assumptions.

Table 4.3-13. Construction Component Assumptions for Civilian Housing Demand		
<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
Quantitative Assumptions		
Average Household Population for in-migrants.	3.7	U.S. Census Bureau Guam 2010 average household size
Qualitative Assumptions		
H-2B worker housing.	To be provided by employer and would involve predominantly new construction of quarters, with negligible conversion of existing housing stock to H-2B housing. Military contracts would require all construction contractors to provide housing for their H-2B employees.	Employers of H-2B workers are allowed to deduct only a limited amount from H-2B workers' paychecks for housing costs (currently, \$320 per month). This very low allowance means almost all H-2B workers are housed dormitory-style.
New household formation by Guam residents.	Negligible effect.	Guam residents directly or indirectly employed due to the proposed action would, on average, make somewhat more money than without the project. However, the number of residents previously living with family or friends to save money, who would move to their own housing units due to the increased pay, is likely to be minimal.

Military Operational Component Assumptions

Under the specifications of the proposed action, all Marines and their dependents would be housed on base and thus no off-base housing demand would stem directly from that population.

The housing demand during the operations phase is generated rather by:

- civilian military workers
- in-migrating direct and indirect workers

Table 4.3-14 provides assumptions made in conducting the housing analysis for the operations phase and the source or rationale for those assumptions.

Table 4.3-14. Operational Component Assumptions for Housing Demand		
<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
Quantitative		
Average Household Population for in-migrants.	3.7	Census 2010 Guam average household size
Qualitative		
Military personnel off base housing impact.	All Marine personnel and dependents would be housed on base.	Master Planning Assumption

Estimation of Effects

Table 4.3-15 indicates the combined total impact of the military relocation would result in a demand for 770 new units in year of 2021, falling to 285 units by 2028.

Table 4.3-15. Demand for New Civilian Housing Units from the Proposed Action														
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Direct Construction Impact	26	168	342	455	383	325	399	374	294	190	92	7	0	0
Indirect/Induced Construction Impact	16	56	126	159	157	166	204	193	141	88	48	18	3	0
Total Construction Impact	43	224	468	614	539	491	603	567	435	278	139	25	3	0
Direct Operations Impact	2	3	19	38	56	75	94	113	131	150	169	169	169	169
Indirect/Induced Operations Impact	7	9	10	11	19	64	73	75	94	96	109	113	113	116
Total Operations Impact	8	11	29	49	75	139	167	188	225	246	278	282	282	285
Combined Direct Impact	28	170	361	493	439	400	493	487	425	340	261	176	169	169
Combined Indirect Impact	23	65	136	170	176	230	277	268	235	184	157	131	117	116
Combined Total Impact	51	235	497	663	615	630	770	755	660	524	417	307	286	285

Figure 4.3-3 compares total housing demand on Guam with and without the proposed action. At the 2021 maximum, housing demand with the proposed action is 1.2% higher than it otherwise would have been, without the project. At 2028, the difference declines to 0.4%.

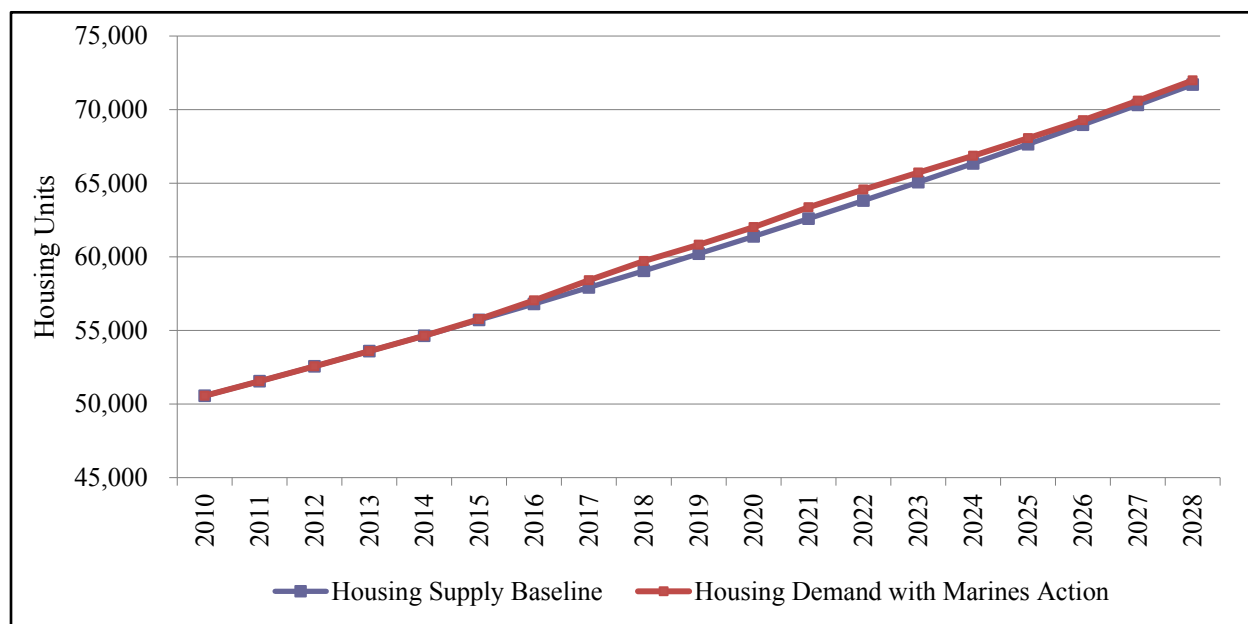


Figure 4.3-3. Housing Demand with and without the Proposed Action

4.3.3.2 Implications for Housing Supply, Deficits, and Prices

As described in the approach to housing, Section 2.2.5.2, if there is an on-island shortage of housing units to meet the projected demand associated with the proposed action, then additional housing units would be required. In the case of a housing shortfall, the island economy would either generate housing units for the heaviest construction years that may remain vacant thereafter, or the disincentives for such short-term housing production would result in a shortage of housing during the construction period. Unlike the 2010 Final SIAS that demonstrated a shortfall in housing supply, the updated loading and construction population suggests there is adequate inventory. The quantitative analysis described under the approach is not warranted. It would have addressed the following two housing supply scenarios:

- *Under-supply Future:* a scenario where little or no construction occurs to meet civilian market demand during the military construction period.
- *Over-supply Future:* a scenario where the demand is met, but results in a subsequent over-supply of housing, as population declines when construction ends. This scenario assumes that no alternative uses (such as conversion to commercial use) are found for this excess housing.

It should be noted that the estimates provided in these impact tables are theoretical, and based on best available information.

Table 4.3-16 provides assumptions made in conducting housing supply analysis for both the construction and military operational phases of the proposed action, and the source or rationale for these assumptions. The primary resource for existing conditions is the Guam Comprehensive Housing Study of 2009 by GHURA. The 2010 census also provides data on housing availability as presented in Table 3.3-9, but the numbers are higher than presented in the GHURA study. There is inherent variability in the both data

sets; however, the preference for the analysis was to use the lower housing inventory numbers, which were from the GHURA study.

Table 4.3-16. Assumptions for Civilian Housing Supply		
<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
Number of vacant ¹ housing units in <i>sound</i> or <i>deteriorated</i> condition in 2009.	2,474	GHURA 2009, Table 7 Vacancy Status by Condition of Unit, Guam 2009
Number of vacant ¹ housing units in <i>sound</i> condition	938	GHURA 2009, Table 7 Vacancy Status by Condition of Unit, Guam 2009
Planned housing units with building permits in 2008.	357	GHURA 2009, Table 8 building and Construction Permit Summary (2005-2008)
Recent planned housing units with building permits (average FY 2010-FY 2012)	268	Revised SIAS Appendix A, GDPW
Average vacant ² housing rate for units in sound or deteriorated condition in 2009.	6.5%	GHURA 2009, Table 7 Vacancy Status by Condition of Unit, Guam 2009
Vacant sound housing rate in 2009	3.1%	GHURA 2009, Table 7 Vacancy Status by Condition of Unit, Guam 2009

Notes: ¹ GHURA 2009 reported unit occupancy as occupied, vacant, unknown or not determined. The “vacant” occupancy is used in this table. Units are described as sound, deteriorated, dilapidated, or unable to determine. The values in this table reflect sound plus deteriorated units.

² Averaged the rate for sound and deteriorated.

“Deteriorated” condition refers to units that are in need of repair or refurbishment and general upkeep was lacking. “Dilapidated” units are not included in the supply inventory and were characterized as structurally unsound (GHURA 2009). The GDPW issues building permits and residential new construction permits were reported at 371 in FY 2010, 210 in FY 2011, and 224 in FY 2012 for an average of 268 new units over the most recent 3 years (SIAS Appendix A, GDPW).

The Guam Highlands Investment Group has submitted a plan to GDLM for a 5,000-home development near Leo Palace in Sigua (Pacific Daily News 2013). These additional housing units are planned over a 20-year timeframe. They are not included in the inventory because they are not approved.

Estimation of Effects

As shown in Table 4.3-16, the stock of likely available housing (vacant sound or deteriorated units plus permitted housing units) was estimated at 2,831 units (GHURA 2009). By limiting the inventory to those units in sound condition, the available housing drops to 1,295. In the absence of specific projections, the supply is assumed to remain at this level throughout construction.

Table 4.3-17 shows that the housing demand associated with the proposed action would not exceed existing vacant housing supply. The largest impact to housing unit demand is projected in 2021 with 770 units demanded, which is substantially less than the 2,831 units existing in supply. Also, as of February 2013, in addition to existing housing supply, there are 268 units in various stages of planning.

Table 4.3-17. Demand and Supply Needed for New Civilian Housing Units														
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Combined Action Total Impact	51	235	497	663	615	630	770	755	660	524	417	307	286	285
Annual Change in Demand	51	184	262	166	(48)	15	140	(15)	(115)	(136)	(107)	(110)	(21)	(1)
Available Housing Supply (sound or deteriorated vacant + planned units)	2,831	2,831	2,831	2,831	2,831	2,831	2,831	2,831	2,831	2,831	2,831	2,831	2,831	2,831
Available Housing Supply (sound + planned units)	1,295	1,295	1,295	1,295	1,295	1,295	1,295	1,295	1,295	1,295	1,295	1,295	1,295	1,295

4.3.3.3 Likely Actual Outcomes of Supply and Demand Issues

The maximum housing demand is 770 units compared to a supply of between 1,295 (sound) and 2,831 (sound and deteriorated) units. No additional housing is required to address the proposed action housing demand. The existing housing supply appears to be sufficient even if the inventory is limited to those in sound condition. There are likely to be new housing projects proposed on Guam unrelated to the proposed action.

There may be a market demand for a different style or type of unit than represented by the 2009 inventory of sound housing units. In addition, the location of the available housing may not be preferred for workers. This analysis does not address personal preferences, but serves to provide an indication of whether there would be a housing crisis associated with the proposed action. The data suggests there would not be a housing crisis and supply would meet demand.

There is always the potential for currently available vacancies to deteriorate to “dilapidated” condition through natural degradation or due to a natural disaster, such a typhoon. Some currently available housing units may be destroyed, creating higher demand for new housing units than shown in tables. The analysis does not address the impact of natural disasters on supply but it is likely the proposed action (demand) construction would be slowed by natural disasters as well. Further, the housing supply is more than double the demand even in the year with the highest demand; therefore, it is important to acknowledge the potential issue and recognize that there may continue to be a surplus of housing inventory even in a natural disaster.

Scarcities of Labor and Materials

Because there is no demonstrable shortage of housing supply, there are no anticipated shortages in labor and materials for the construction of new housing units.

Financial Viability of New Construction

An overriding issue regarding the response of housing supply to demand is the willingness of the housing construction industry, or even individual owners contemplating home additions, to invest for very short-run profit windows. However, based on the projections, new housing construction is not required to meet the proposed action housing demand.

Permitting Bottlenecks

The third factor that could impede a full response by the housing construction sector is the capability of Guam permitting agencies to review and issue housing construction permits sufficiently quickly to meet demand. Guam’s development permitting system, centered in its GDPW and GDLM, is understaffed. This system would need to be updated to fully account for the cost of processing building permit applications under the former Marine Corps Relocation proposal.

However, based on the projections, new construction, and hence the need for new building permits, is not required to meet the housing demand under the current SEIS proposed action.

Potential Outcomes

There would likely be sufficient housing units available without new construction projects. However, though perhaps not strictly necessary to meet demand, there will be construction of new housing units between 2015 and 2028. These additional units would serve to replace other units that fall into deteriorated conditions. Also, “sound” condition does not necessarily make a housing unit desirable for an in-migrating civilian military, or other relatively highly paid, worker; new construction will provide more

higher-end housing units for in-migrating workers and for those who may see their incomes rise as a result of the proposed action. The additional units may contribute to an oversupply of housing units, but if new units were to replace existing deteriorated units through demolition and infill, the complexion of Guam's housing inventory may be greatly improved.

4.3.3.4 Temporary Workforce Housing

Temporary workforce housing is not included in the above analyses because it is assumed that all H-2B worker housing would be provided by construction contractors and would not generate demand in the private-market. (Note: the analysis does assume in-migrating construction workers who are U.S. citizens or FAS residents etc. would affect private-market housing even though some of these workers may actually reside in temporary worker housing.) Immigration law requires that employers provide housing for each H-2B worker they bring in.

Around 2,000 H-2B workers are expected, annually, between 2018 and 2022, which is a substantially lower number than the 13,280 H-2B workers projected in the 2010 Final EIS. Table 2.3-3 presents the projected H-2B workers between 2015 and 2028.

There are a number of ways that this demand may be met, including:

- New worker housing
- Retrofit existing vacant construction workers housing (from past construction booms) or vacant residential apartments
- Reactivation of construction of planned (but not built) workforce housing units

The DoD would rely on construction contractors, who have expertise in the areas of workforce housing and logistics, to support temporary foreign worker housing requirements. While GovGuam and federal agencies would retain their authority to conduct inspections and enforce laws, DoD contract provisions would require aspects of quality control and oversight and contractors with proven track records. Well thought-out plans related to workforce housing, including quality of life requirements, would be given award preference.

Contract provisions would also include requirements to provide workforce medical, dining, transportation and safety/security. There would be health screening of all workers to reduce health risk to the Guam population and contractors would be required to provide health care either by supplementing local Guam staff and resources or building their own clinic.

Table 4.3-18 and Figure 4.3-4 provide further information on temporary workforce housing units that were planned prior to the 2010 Record of Decision to support the military relocation construction projects. In the absence of the military relocation construction that was planned prior to 2010, the workforce housing proposals were reduced, not constructed, or were converted into alternative uses.

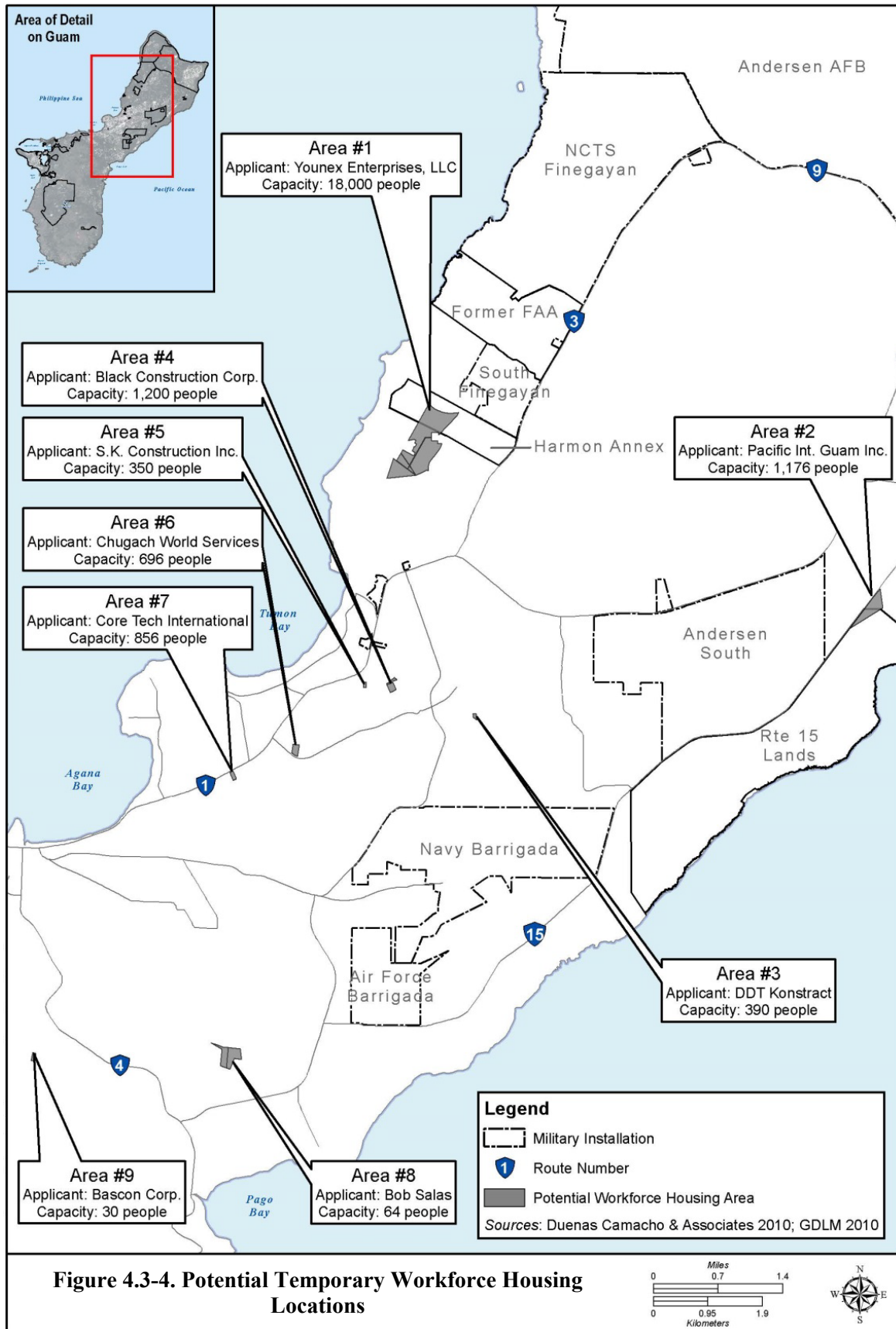
There has been no need for the workforce housing in the absence of the military relocation build-up. The first project listed in Table 4.3-18 is the only one that was constructed as worker housing. Phase 1 was constructed at a capacity of 600 and the developer is exploring opportunities for alternative use of these units. Subsequent phases of the Younex development are subject to permit conditions requiring off-site infrastructure improvements (SIAS Appendix B, GDLM).

Table 4.3-18. Temporary Workforce Housing Locations and Attributes

	<i>Guam Land Use Commission Case #</i>	<i>Applicant</i>	<i>Legal Lot Description</i>	<i>Municipal District</i>	<i>Location</i>	<i>Current Zone</i>	<i>Status</i>	<i>Capacity (people)</i>
1	2009-56	Younex Enterprises, LLC “Ukudo”	L10184 & L5039	Dededo / Tamuning	North	“M-1” (Light Industrial)	1,800 person capacity approved. Phase 1 (600) constructed.	1,800 (planned)
2	2010-22B	Pacific Int. Guam Inc.	L7024-R5	Yigo	North	“A” Rural	Constructed for alternative use.	N/A
3	2009-093B	DDT Konstruct	L5224-6-2	Barrigada	Central	“A” Rural	Constructed for alternative use.	N/A
4	2009-78	Black Construction Corp.	L5161-1-1 & -1-R15	Tamuning	Central	“M” (Light Industrial)	Constructed for alternative use.	N/A
5	2009-94	S.K. Construction Inc.	L5106-5-NEW	Tamuning	Central	“M” (Light Industrial)	No action	0
6	2010-18	Chugach World Services Inc.	L5148-REM-EAST-1	Tamuning	Central	“M” (Light Industrial)	No action	0
7	2010-19	Core Tech International	L2103-1A-1	Tamuning	Central	“M” (Light Industrial)	Constructed for alternative use.	N/A
8	2008-53	Bob Salas	L3462 & 3474	Mangilao	Central	“A” Rural	No action	0
9	2008-72	Bascon Corp.	L3278-2	Ordot	Central	“R-1” (Single-Family Dwelling)	No action	0
							Total Planned Units:	1,800

Note: N/A = not applicable.

Source: SIAS Appendix B, GDLM.



4.3.4 Estimated Local Government Revenues

This section is intended to provide “rough-order-of-magnitude” (approximate) revenues accruing to GovGuam from the primary sources previously identified in Section 3.3.3.1 (GovGuam Revenue Sources).

The following analysis does not attempt to specify all governmental costs, but does attempt to note likely differences in timing between costs and revenues. Government revenue sources that are analyzed include GRT, corporate income tax, and personal income tax. These taxes are collected quarterly or annually, therefore, there may be a time lag between when government revenues are needed and when they are actually available for use. The analysis assumes GovGuam collects all tax revenues that it would be owed. While GovGuam may not actually collect all revenues that it would be owed, the analysis provides a basis for projecting actual collections.

Results related to income tax revenue do include Section 30 funds; Section 30 provides that all federal income taxes derived from Guam, including “compensation paid to members of the Armed Forces and pensions paid to retired civilians and military employees of the U.S., or their survivors, who are residents of, or who are domiciled in, Guam shall be covered into the treasury of Guam and held in account for the Government of Guam and shall be expended for the benefit and Government of Guam in accordance with the annual budgets” (Government Printing Office 2013). The DoD and Internal Revenue Service signed an agreement in 2012 that ensures Section 30 payments are collected from Marines rotating onto Guam (Marianas Variety 2012). Since Section 30 revenues are collected at the U.S. federal level and remitted to Guam by the federal government, a very high collection rate can be assumed for these funds. Approximate Section 30 funds are presented in Table 4.3-23 as Direct Operations Impact.

Assumptions

Table 4.3-19 provides assumptions made when conducting local government revenue analysis for the construction and operational phases, as well as the source or rationale for these assumptions.

Table 4.3-19. Assumptions for Local Government Revenue		
<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
GRT	0.04	GovGuam GRT rate.
Profit	0.06	Assumed based on market conditions.
Corporate income tax rate	0.30	Based on GovGuam Corporate Income tax rate (same as U.S. rate).
Personal income tax rate (applies to military as well as to civilians)	0.15	Based on Internal Revenue Service Tax tables.

Estimation of Effects

Table 4.3-20 provides GovGuam tax revenue impact summary data. Year-by-year impacts can be found in the tables noted.

Table 4.3-20. Impact on GovGuam Tax Revenue Summary (Thousands of 2012 \$'s)			
<i>Tax</i>	<i>Maximum (2021)</i>	<i>Steady-State (2028)</i>	<i>Table with Year-by-Year Breakdown</i>
GRT	\$16,431	\$1,825	Table 4.3-21
Corporate Income	\$7,394	\$821	Table 4.3-22
Personal Income	\$62,601	\$37,444	Table 4.3-23
Total	\$86,426	\$40,090	

Table 4.3-21. Impact on Gross Receipts Tax Revenue (Thousands of 2012 \$'s)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Direct Construction Impact	\$917	\$3,098	\$6,650	\$8,634	\$8,466	\$8,781	\$10,616	\$10,043	\$7,410	\$4,671	\$2,543	\$975	\$180	\$0
Indirect Construction Impact	\$382	\$1,329	\$2,927	\$3,744	\$3,671	\$3,827	\$4,659	\$4,416	\$3,243	\$2,035	\$1,111	\$425	\$77	\$0
Total Construction Impact	\$1,299	\$4,427	\$9,577	\$12,378	\$12,137	\$12,608	\$15,275	\$14,459	\$10,653	\$6,706	\$3,654	\$1,400	\$257	\$0
Direct Operations Impact	\$66	\$89	\$94	\$89	\$119	\$300	\$350	\$353	\$431	\$439	\$509	\$525	\$525	\$554
Indirect Operations Impact	\$48	\$65	\$93	\$118	\$213	\$701	\$805	\$836	\$1,042	\$1,075	\$1,214	\$1,253	\$1,253	\$1,271
Total Operations Impact	\$114	\$154	\$187	\$207	\$332	\$1,002	\$1,156	\$1,189	\$1,473	\$1,514	\$1,723	\$1,779	\$1,779	\$1,825
Combined Direct Impact	\$983	\$3,186	\$6,744	\$8,723	\$8,585	\$9,081	\$10,966	\$10,396	\$7,841	\$5,110	\$3,053	\$1,500	\$705	\$554
Combined Indirect Impact	\$430	\$1,394	\$3,019	\$3,862	\$3,884	\$4,529	\$5,465	\$5,251	\$4,284	\$3,110	\$2,325	\$1,678	\$1,331	\$1,271
Combined Total Impact	\$1,413	\$4,581	\$9,764	\$12,585	\$12,469	\$13,610	\$16,431	\$15,648	\$12,126	\$8,220	\$5,377	\$3,179	\$2,036	\$1,825

Table 4.3-22. Impact on Corporate Income Tax Revenue (Thousands of 2012 \$'s)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Direct Construction Impact	\$413	\$1,394	\$2,993	\$3,885	\$3,810	\$3,951	\$4,777	\$4,519	\$3,334	\$2,102	\$1,144	\$439	\$81	\$0
Indirect Construction Impact	\$172	\$598	\$1,317	\$1,685	\$1,652	\$1,722	\$2,097	\$1,987	\$1,459	\$916	\$500	\$191	\$35	\$0
Total Construction Impact	\$585	\$1,992	\$4,310	\$5,570	\$5,462	\$5,674	\$6,874	\$6,507	\$4,794	\$3,018	\$1,644	\$630	\$116	\$0
Direct Operations Impact	\$30	\$40	\$42	\$40	\$54	\$135	\$158	\$159	\$194	\$198	\$229	\$236	\$236	\$249
Indirect Operations Impact	\$22	\$29	\$42	\$53	\$96	\$316	\$362	\$376	\$469	\$484	\$546	\$564	\$564	\$572
Total Operations Impact	\$51	\$69	\$84	\$93	\$149	\$451	\$520	\$535	\$663	\$681	\$776	\$800	\$800	\$821
Combined Direct Impact	\$442	\$1,434	\$3,035	\$3,925	\$3,863	\$4,087	\$4,935	\$4,678	\$3,528	\$2,300	\$1,374	\$675	\$317	\$249
Combined Indirect Impact	\$194	\$627	\$1,359	\$1,738	\$1,748	\$2,038	\$2,459	\$2,363	\$1,928	\$1,399	\$1,046	\$755	\$599	\$572
Combined Total Impact	\$636	\$2,061	\$4,394	\$5,663	\$5,611	\$6,124	\$7,394	\$7,041	\$5,457	\$3,699	\$2,420	\$1,430	\$916	\$821

Table 4.3-23. Impact on Personal Income Tax Revenue (Thousands of 2012 \$'s)														
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Direct Construction Impact	\$2,006	\$7,040	\$15,609	\$19,901	\$19,508	\$20,349	\$24,815	\$23,534	\$17,268	\$10,826	\$5,916	\$2,262	\$409	\$0
Indirect Construction Impact	\$1,106	\$3,819	\$8,442	\$10,729	\$10,543	\$11,066	\$13,508	\$12,785	\$9,356	\$5,839	\$3,177	\$1,216	\$222	\$0
Total Construction Impact	\$3,112	\$10,859	\$24,051	\$30,630	\$30,051	\$31,415	\$38,323	\$36,320	\$26,624	\$16,666	\$9,093	\$3,479	\$631	\$0
Direct Operations Impact ¹	\$465	\$635	\$999	\$1,374	\$3,842	\$19,370	\$21,798	\$22,205	\$28,249	\$28,679	\$32,120	\$33,407	\$33,407	\$33,530
Indirect Operations Impact	\$144	\$195	\$281	\$360	\$652	\$2,161	\$2,480	\$2,573	\$3,209	\$3,312	\$3,739	\$3,861	\$3,861	\$3,914
Total Operations Impact	\$609	\$830	\$1,281	\$1,734	\$4,493	\$21,531	\$24,278	\$24,778	\$31,458	\$31,991	\$35,859	\$37,267	\$37,267	\$37,444
Combined Direct Impact	\$2,471	\$7,676	\$16,608	\$21,275	\$23,350	\$39,719	\$46,613	\$45,739	\$45,518	\$39,505	\$38,036	\$35,669	\$33,816	\$33,530
Combined Indirect Impact	\$1,250	\$4,014	\$8,723	\$11,089	\$11,195	\$13,227	\$15,988	\$15,359	\$12,565	\$9,152	\$6,916	\$5,077	\$4,083	\$3,914
Combined Total Impact	\$3,721	\$11,690	\$25,331	\$32,364	\$34,544	\$52,946	\$62,601	\$61,098	\$58,082	\$48,657	\$44,952	\$40,746	\$37,898	\$37,444

Note: ¹ Direct operations impact is representative of Section 30 revenues.

Figure 4.3-5 compares total GovGuam tax revenue (associated with personal and corporate income, GRT, and Section 30 revenues) with and without the proposed action. It is projected that tax revenue impacts would be highest in 2021. Tax revenues with the proposed action are projected to be 10.6% higher than they otherwise would have been without the project. During the first year of steady-state operations (2028) the difference declines to 4.3%.

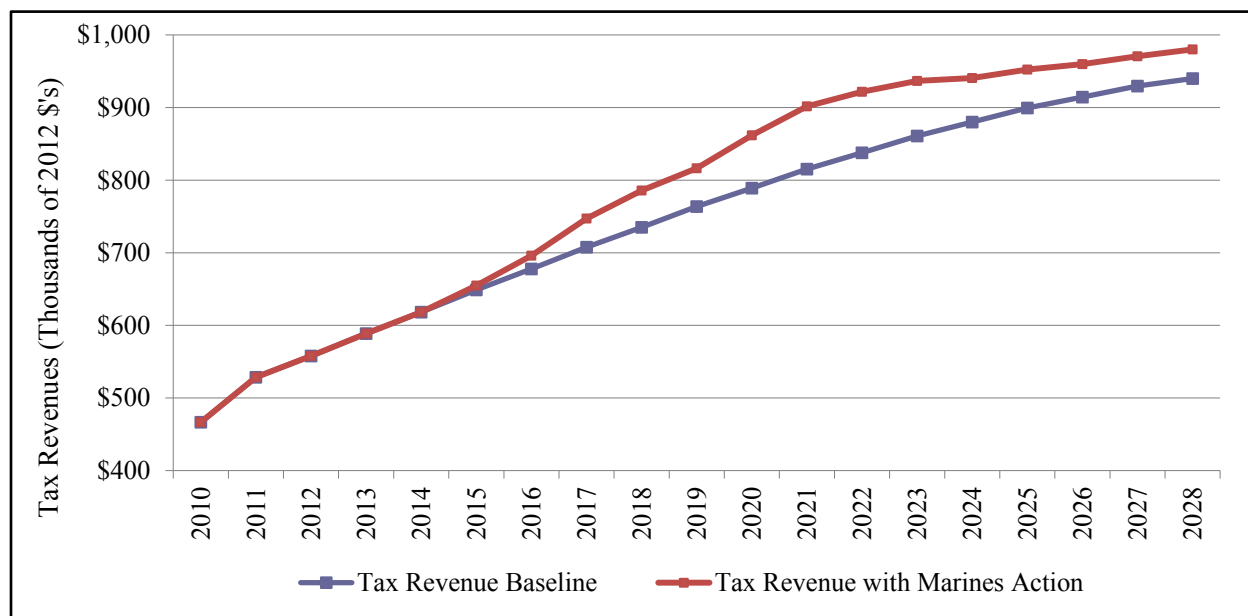


Figure 4.3-5. GovGuam Tax Revenues with and without the Proposed Action

4.3.5 Gross Island Product

GIP for Guam represents the total market value of all final goods and services produced in a given year. The concept is generally referred to as Gross Domestic Product and is the most commonly used benchmark to assess the overall strength of an economy; when the term economic growth is mentioned it usually refers to an increase in Gross Product from one time period to another.

Construction Component Assumptions

Table 4.3-24 provides assumptions made in conducting the GIP analysis for the construction phase. The assumed values below include Military Construction, as well as expenditures on installation of capital equipment into newly built facilities. Data are presented after adjustments were made, and represent the real value of construction on Guam (off-island expenditures are not included); these data may not be representative of other reported or programmed measures of construction expenditures.

Table 4.3-24. Construction Component Assumptions for GIP		
<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
Gross value of military contracts – 2015	\$64 million	NAVFAC Pacific 2012
Gross value of military contracts – 2016	\$222 million	NAVFAC Pacific 2012
Gross value of military contracts – 2017	\$451 million	NAVFAC Pacific 2012
Gross value of military contracts – 2018	\$624 million	NAVFAC Pacific 2012
Gross value of military contracts – 2019	\$603 million	NAVFAC Pacific 2012
Gross value of military contracts – 2020	\$590 million	NAVFAC Pacific 2012
Gross value of military contracts – 2021	\$693 million	NAVFAC Pacific 2012
Gross value of military contracts – 2022	\$662 million	NAVFAC Pacific 2012
Gross value of military contracts – 2023	\$505 million	NAVFAC Pacific 2012
Gross value of military contracts – 2024	\$333 million	NAVFAC Pacific 2012
Gross value of military contracts – 2025	\$185 million	NAVFAC Pacific 2012
Gross value of military contracts – 2026	\$71 million	NAVFAC Pacific 2012
Gross value of military contracts – 2027	\$13 million	NAVFAC Pacific 2012
2015 through 2027 total value	\$5 billion	NAVFAC Pacific 2012

Source: NAVFAC Pacific 2012.

Military Operational Component Assumptions

Table 4.3-25 provides assumptions made in conducting the GIP analysis (including intermediate calculations) for the operations phase.

Table 4.3-25. Operational Component Assumptions for GIP		
<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
Quantitative		
Gross value of military purchases – 2015	\$16 million	NAVFAC Pacific 2012
Gross value of military purchases – 2016	\$22 million	NAVFAC Pacific 2012
Gross value of military purchases – 2017	\$23 million	NAVFAC Pacific 2012
Gross value of military purchases – 2018	\$22 million	NAVFAC Pacific 2012
Gross value of military purchases – 2019	\$23 million	NAVFAC Pacific 2012
Gross value of military purchases – 2020	\$22 million	NAVFAC Pacific 2012
Gross value of military purchases – 2021	\$29 million	NAVFAC Pacific 2012
Gross value of military purchases – 2022	\$30 million	NAVFAC Pacific 2012
Gross value of military purchases – 2023	\$32 million	NAVFAC Pacific 2012
Gross value of military purchases – 2024	\$35 million	NAVFAC Pacific 2012
Gross value of military purchases – 2025	\$44 million	NAVFAC Pacific 2012
Gross value of military purchases – 2026	\$44 million	NAVFAC Pacific 2012
Gross value of military purchases – 2027	\$44 million	NAVFAC Pacific 2012
Gross value of military purchases – 2028	\$51 million	NAVFAC Pacific 2012
Average annual wages of enlisted personnel	\$36,590	NAVFAC Pacific 2012 (1/3 of total marine payroll included in analysis)
Average annual wages of military support personnel	\$52,287	Median value of General Schedule Summary Table

Source: NAVFAC Pacific 2012.

Estimation of Effects

Table 4.3-26 shows that the combined total impact on GIP would be \$635 million in 2021, declining to a stable figure of \$75 million beginning in 2028 as the steady-state operational phase begins.

Table 4.3-26. Impact on GIP (Millions of 2012 \$'s)														
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Direct Construction Impact	\$41	\$144	\$285	\$408	\$391	\$370	\$428	\$411	\$320	\$216	\$122	\$46	\$8	\$0
Indirect Construction Impact	\$13	\$45	\$100	\$127	\$125	\$131	\$160	\$151	\$111	\$69	\$38	\$14	\$3	\$0
Total Construction Impact	\$54	\$190	\$385	\$535	\$516	\$501	\$587	\$562	\$430	\$285	\$159	\$61	\$11	\$0
Direct Operations Impact	\$3	\$3	\$4	\$3	\$5	\$13	\$15	\$15	\$19	\$19	\$22	\$23	\$23	\$24
Indirect Operations Impact	\$2	\$2	\$4	\$5	\$8	\$28	\$32	\$33	\$42	\$43	\$49	\$50	\$50	\$51
Total Operations Impact	\$4	\$6	\$7	\$8	\$13	\$41	\$47	\$49	\$60	\$62	\$71	\$73	\$73	\$75
Combined Direct Impact	\$43	\$148	\$289	\$412	\$396	\$383	\$443	\$426	\$338	\$235	\$143	\$69	\$31	\$24
Combined Indirect Impact	\$15	\$48	\$103	\$131	\$133	\$159	\$192	\$184	\$152	\$112	\$86	\$65	\$53	\$51
Combined Total Impact	\$58	\$195	\$392	\$543	\$529	\$542	\$635	\$610	\$491	\$347	\$230	\$134	\$84	\$75

Figure 4.3-6 compares Guam's GIP with and without the proposed action. At maximum in 2021, GIP with the proposed action is 10.2% higher than they otherwise would have been, without the project. At 2028, the difference declines to 1%.

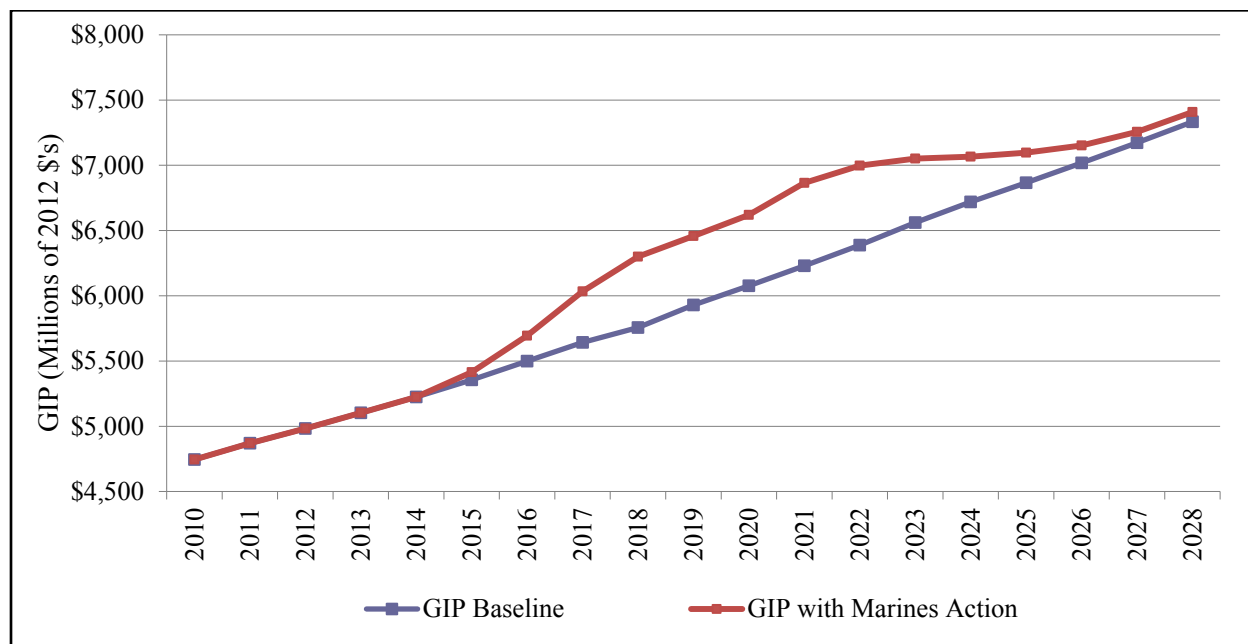


Figure 4.3-6. Guam Gross Island Product with and without the Proposed Action

4.3.6 Utility Rates

4.3.6.1 Estimation of Effects

For additional information on the power, water, and other utilities and related services on Guam, see SEIS Section 4.1.14.1.

Power

The revised estimated power demand increase, including all DoD current and future plans, induced civilian growth, construction workforce, and “organic” civilian growth (per U.S. Census Bureau 2010 forecasts) could be handled by current GPA generating capacity. DoD transmission and distribution system upgrades would likely be required. These upgrades would be paid for by the DoD. Since GPA would not have to fund major system upgrades, the potential effects on ratepayers should be minimal.

Water

Expanded DoD water facilities are proposed to be operated separately from the system operated by GWA and, therefore, no impacts to Guam rate payers are expected from use by DoD facilities. However, current water customers, civilian military workers, induced civilian growth, and other direct and indirect populations related to the proposed action would be impacted, as existing GWA requirements may involve some capital improvements. The water demand from these sources would not be substantial compared to the entire system. DoD supports the Guam Water Resources Development Group, whose goals include the management of the NGLA and the GWA and DoD water systems. The results of this cooperative effort should provide mitigation to operational problems with those systems and the water supply from the NGLA. In addition, the FY 2014 NDAA directed the Secretary of Defense to convene the EAC in part to develop an implementation plan that would address assistance to support public

infrastructure requirements necessary to support the preferred alternative. This plan will be coordinated by all pertinent federal agencies and will detail and describe work, cost, and a schedule for completion of construction, improvements, and repairs to the non-military utilities, facilities, and infrastructure, if any, on Guam that may be affected by the realignment of forces. This plan must be submitted to the congressional defense committees as part of a reporting requirement that is due no later than the date of issuance of the ROD for the SEIS. Additionally, the FY 2014 Consolidated Appropriations Act (Public Law No. 113-76) appropriated \$106,400,000 for civilian water and wastewater improvements on Guam. As appropriate, specific projects utilizing these funds will be coordinated with the EAC in their plan to support public infrastructure requirements. These initiatives should help eliminate the need for any rate increases from the direct and indirect impacts from the proposed relocation. It is possible that the identification of various funding sources (e.g., federal) could beneficially influence any potential rate increases that might otherwise be charged to rate paying customers on Guam.

Wastewater

Upgrades to secondary treatment at the Northern District and Agana WWTPs are required by the 2013 NPDES permits whether or not the Marines relocate. WWTP upgrades could have a significant impact to rate payers due to the higher costs of secondary treatment. The DoD would assist GWA in locating funding for necessary upgrades, as indicated in Section 4.1.14 of the SEIS, *Utilities*, and above in the *Water* section. It is possible that the identification of various funding sources (e.g., federal) could beneficially influence any potential rate increases that might otherwise be charged to rate paying customers on Guam. Further, the proposed action could alleviate these rate increases by the addition of Marines as new rate paying customers.

There could also be impacts to the GWA wastewater systems in southern Guam that are not used by the DoD but would have to service additional civilian populations from induced growth. These systems are currently in need of maintenance and upgrades, for which funding has been authorized by the Guam Legislature. The added civilian populations under the revised scenarios would be minimal for the southern parts of Guam and would have little impact on these wastewater systems.

Solid Waste

Population increases as a result of the proposed action would increase the level of solid waste service that would need to be provided and the total cost of providing solid waste services. The increased costs, though, would be spread over a larger group of ratepayers. It is possible that as the level of service increases, services would become more efficiently operated and rates for individuals would decline or experience a reduction in future increases expected without the proposed action. However, it is more likely that rates would be little changed as a result of the proposed action.

Information Technology/Communications

Commercial information technology/communications would be provided within the proposed new Marine Corps cantonment/family housing areas. Basic underground infrastructure would be installed during the construction of these facilities by DoD. The commercial providers would install the necessary cable infrastructure using the DoD installed conduit, manholes, handholes, and connection facilities. These commercially provided on-base IT/COMM services would be paid for directly by the individual users or potentially by the DoD. For instance, the DoD may opt to provide various housing facilities with internet Wi-Fi and television reception as a convenience to transient residents, similar to many hotels. Other areas, such as family housing, may be on a direct customer service arrangement with the commercial providers.

With these arrangements, there should be little to no impact to other commercial IT/COMM customers on Guam.

4.3.7 Local Business Contract Opportunities and Constraints

Guam businesses have historically expressed concern about losing out on opportunities to Alaskan contractors that have minority-owned small-business status. To address such concerns, information on relevant legalities, and possible opportunities and constraints was presented in Section 4.3.7 of the 2010 Final SIAS; information presented in that section remains relevant and consistent with current circumstances and procedures.

4.3.8 Tourism

Table 4.3-27 identifies potential impact topics for the construction and operations components, based on scoping inputs and interviews. Although more negative than positive consequences have been identified, industry leaders stressed that they are not opposed to the military relocation, but wish to work with the military on concerns and impacts.

Table 4.3-27. Topics for Tourism Impact Analysis	
<i>Construction</i>	<i>Operations</i>
More airline and hotel business from planning and construction supervisory travelers.	More airline and hotel business from military personnel (on rest and relaxation time), friends and family of military personnel, military business travelers.
Eventual island-wide infrastructure improvement.	Growth in businesses that support marine-based tourism and recreation.
Loss of workers to construction and/or pressure to increase wages (eroding competitive position).	Market loss due to conflict between military image and new branding of Guam as authentic Chamorro cultural experience.
Potential for blocked growth of new Chinese and Russian markets due to increased concern over Homeland Security.	Impacts on ocean-based tourism from greater competition between activities.
Loss of historic, cultural, or recreational attractions from land acquisition or encumbrances on land.	Potential for blocked growth of new Chinese and Russian markets due to increased concern over Homeland Security.
Market loss due to construction chaos, traffic, etc.	Because the rotational Marines coming to Guam have certain characteristics and spending patterns of visitors, the visitor base may expand to include the rotational Marines.

Construction Component

Increased Construction-Related Business Travel

Some increase in construction related business travel would be expected as a result of the proposed action. For more detailed information see Section 4.3.8 of the 2010 Final SIAS.

Infrastructure Improvement

Infrastructure improvement is an over-arching consideration that would result in positive impacts for all business on Guam.

Loss of Workforce and/or Wage Increases

The possibility of wage increases or loss of labor to higher-paying jobs during the construction component is a possible outcome, as wages in the construction sector are higher than those in the tourism sector. Impacts to Guam's tourism industry from loss of workforce and/or wage increases are not expected to be as drastic as those presented in Section 4.3.8 of the 2010 Final SIAS.

Potential for Blocked Growth of Chinese and Russian Markets

On November 23, 2011 the U.S. Department of Homeland Security granted visa parole authority for Russian citizens to visit Guam. The parole authority allows Russian tourists to enter Guam on a case-by-case basis, without the need for a visa. Russian visitors tend to stay longer and spend more money per visit than visitors from Guam's other tourism markets. While the increase in Russian visits has helped improve Guam's tourism industry, Russian visits represent only a small portion of total visits and thus do not provide a major contribution to the overall impact that the tourism industry has on Guam's economy (SIAS Appendix B, GVB); though there is strong potential for growth from the Russian market, which would provide diversification to Guam's visitor base. It is not anticipated that the implementation of the proposed action would bring an end to the eligibility of Russian citizens to visit Guam.

Prior to the implementation of the proposed action, Chinese visitors are not eligible to visit Guam. Some potentially strong growth in Guam's tourism market would be likely to occur if eligibility rules were changed to allow Chinese visitors. A continuation of ineligibility, for purposes specifically related to the proposed action, is not anticipated.

Tourism Market Loss Due to Construction

Although there was initial concern about this issue, industry leaders interviewed for this SIAS now consider it a minimal risk. Historical evidence also shows that the hotel construction boom during the 1980s and 1990s was centered in the Tumon Bay resort district itself, and the tourism market was able to grow nevertheless.

Military Operational Component*Loss of Possible Tourism Attractions from Department of Defense Use of Attractions*

There is some concern that DoD use of land would affect tourism attractions.

Chapter 5 provides additional detail regarding the recreational and tourism benefits of sites on potential land acquisition parcels. The GVB (2010 Final SIAS Appendix D, GVB) specified the Guam International Raceway as a focus of concern due both to its economic role in attracting racers from Asia and also because of its general social value as a place where military and civilians mingle and a venue for keeping young hot-rodders off the public roads.

Ritidian Point, which would have reduced access under some project alternatives, is also an attractive area for tourists to visit. Because Ritidian Point is an attraction, and tourist destinations compete with other destinations based, in part, on the quantity and quality of attractions, a reduction in tourist access to Ritidian Point may potentially lead to a slight reduction in tourism visits to Guam. The reduction could be quite small considering that the majority of current publicly accessible areas of Ritidian Point would be outside range surface danger zones and access would still be available via proposed new beach access consistent with established Refuge rules and regulations.

Increased Operations-Related Business and Leisure Travel

It is likely that an increase in military personnel would generate more visits from friends and family, as well as more business travel. With an average weighted 2012 hotel occupancy of 75% (GVB 2013), Guam hoteliers look forward to diversification of their markets and new sources of business. Additionally, off-duty military personnel and their families are likely to patronize retail locations and restaurants, island-wide, including the central entertainment district of Tumon Bay.

Growth in Support Businesses for Ocean-Related Tourism

Population increases are likely to provide expanded markets for support businesses. Officers of the Marianas Yacht Club (2010 Final SIAS Appendix D, Marianas Yacht Club) suggested the probability of a sufficient market base for a local retail outlet to sell smaller sailboats or parts on Guam and a private commercial small boat repair service haul-out facility that could encourage cruising yachts to stay longer and spend more money, and would also be used by smaller commercial businesses such as dive boats and commercial fishermen.

Market Loss Due to Conflict Between “Militarization” of Guam and Cultural Tourism

There is a concern that publicity of the proposed action on Guam and an increase in military activities and imagery on the island would affect visitors’ on-island experiences, replacing the desired tourism branding with a “military base brand” instead. For example, Western Guam’s main thoroughfare, Marine Drive, was recently renamed “Marine Corps Drive.”

In late January 2009, the GVB launched a rebranding of Guam tourism focused away from the traditional sun-and-sand marketing and focused instead on Chamorro cultural and historical assets that are unique to Guam. The “I Am Guam” campaign is focused not just on attracting higher-spending cultural tourists to Guam, but also on encouraging the residents of Guam to help promote tourism on a personal basis by more inclusion of visitors in events such as village fiestas, explaining local culture to English-speaking tourists, etc.

The supplanting of a cultural tourism branding for one that is more militarized appears to be a strong possibility, as Japan remains the source of 80% of Guam’s visitors, and there has been extensive publicity in Japan about the proposed action. However, a maximum potential adverse outcome is not inevitable. Among the factors that could determine what does actually happen includes:

- Military cooperation in exposing personnel to Chamorro culture and Guam history;
- Visible presence of police in tourist areas frequented by many off-duty Marines, to reassure Japanese visitors with negative perceptions from media accounts; and
- Overall military-civilian relations and communications efforts (see Section 4.5.3) that would create a sense of partnership with the visitor industry.

Impacts on Ocean-Based Tourism from More Population and Competition

Military personnel and their families, as well as additional population from spin-off economic growth, would generate both more business for ocean-based commercial activities and also more participants in non-commercial activities such as boating and diving.

Positive effects on ocean-based tourism are counteracted by both the prospect of more conflicts between various activities due to the limited number of calm-water sites and potential environmental damage that could arise from over-demand for tie-off buoys. In Hawaii, another island environment where population growth has generated these conflicts, state government has spent a considerable amount of time

attempting to mediate conflicts and work out informal or formal rules for assuring equitable access to sites equally attractive to commercial scuba dive groups, motorized boat tours, rental jet-ski users, paragliders, snorkelers, board surfers, body surfers, and swimmers (Hawaii State Department of Business, Economic Development, and Tourism 2004). Such regulatory efforts would eventually be needed on Guam over time as the population of visitors and military and civilian populations grow; however, even though the scale of the military relocation has been greatly reduced, such actions could be required sooner than they otherwise would be.

4.4 PUBLIC SERVICE IMPACTS

This section first gives a brief overview of agency responses to three topics impacting Guam public services: 1) existing conditions in regards to office or other facilities, 2) issues related to staff turnover and recruitment, and 3) issues attributed to the early effects of the announcement of the proposed action.

It then provides estimation of required additional key professional staff stemming from the proposed action, which is the primary focus of impact analysis, for the following categories:

- Public Education Service
- Public Health and Human Services
- Public Safety Services
- The JoG and Other Selected Service Agencies
- Growth Permitting and Regulatory Agencies

All noted impacts are independent of any needs that may result from non-project-related general population growth.

Table 4.4-1 provides an overview of agency responses to questionnaires (SIAS Appendix A) that focused on:

- Existing capacities of their agency facilities,
- Existing issues related to staff turnover and/or recruitment, and
- Any current staffing impacts attributable to the early effects of the announcement of the proposed action.

Agencies for which analysis is conducted but that are not identified in this table, did not complete questionnaires rather provided information via interviews or phone calls.

Table 4.4-1. Overview of Agency Responses to Questionnaires¹

<i>Agency / Governmental Branch</i>	<i>2012 Capacity of Agency Facilities to Handle Additional Growth</i>	<i>Staffing Challenges (Recruitment or Turnover)</i>	<i>Current Staffing Impacts Attributed to Announcement of Proposed Action</i>
Public Education			
GDoE	Schools serving the northern and central regions are currently at or over capacity and would be most impacted by increasing service populations. These capacities could be expanded through redistricting and moving student population into the southern district, or the expansion of teaching facilities. Central Office facilities are currently above their maximum capacity with no expansion possibilities.	There is a limited supply of fully certified, highly qualified teachers on Guam. There is a potential early retirement option available for current GovGuam employees which could impact GDoE ability to retain teachers. In addition, there can be competition for the limited supply of teachers on the island from DoD schools.	None at this time.
GCC	The GCC Main Campus, Southern High School, Simon Sanchez High School, and JFK High School facilities are at or above maximum capacity but could be expanded or renovated to service more students. The Okkodo High School facilities could accommodate additional students.	None at this time	None at this time.
UoG	No rating was provided for the UoG main campus. The Science Building and the Health Science Annexes are either at or above their maximum capacity and could not be expanded or renovated to provide additional capacity.	Recruitment is difficult primarily due to funding constraints and specific positions that are difficult to fill.	UoG has experienced some impact as faculty members that have technical expertise in areas pertaining to the buildup and have decreased their teaching duties to pursue opportunities outside job opportunities associated with the assessment of the proposed action.

Table 4.4-1. Overview of Agency Responses to Questionnaires¹

<i>Agency / Governmental Branch</i>	<i>2012 Capacity of Agency Facilities to Handle Additional Growth</i>	<i>Staffing Challenges (Recruitment or Turnover)</i>	<i>Current Staffing Impacts Attributed to Announcement of Proposed Action</i>
Public Health and Human Services			
GMHA	GMHA is at or over capacity, but has the capability of expanding to support additional service population. It has plans to expand its Emergency Department and the Critical Care Unit/Intensive Care Unit is currently developing its 2013 Strategic Plan, which will include analysis of its future expansion needs. The Skilled Nursing facility is able to handle an increase in service population.	GMHA experiences chronic staffing difficulties. In particular, it has difficulty recruiting for medical, nursing and allied health professionals, and for specialty care nursing units, due to global shortages. Nursing graduates from UoG have recently provided some staffing relief.	None at this time.
GDPHSS, BCDC	The Central Public Health Building is old, outdated, and is above maximum capacity with no expansion/renovation potential.	Recruitment difficulty due to hiring freeze, lower pay scale and lengthy processes. There is a hiring freeze for vacated, locally funded positions.	There has been an increase in the number of patients seeking immunizations.
GDPHSS, BFHNS	The Central Public Health Building is old, outdated, and is above maximum capacity with no expansion/renovation potential.	Nurse recruitment difficult due to lack of funding and low salaries.	Did not provide answer.
GDPHSS, BPCS	The NRCHC is at or above maximum capacity, even after its 2006 expansion. The SRCHC was expanded in 2011 and has additional capacity.	CHCs have high physician turnover due to transiency of those participating in the National Health Service Corporation scholarship or loan payment program. CHCs experience recruiting difficulty for a wide variety of professional positions. Nursing graduates from UoG have recently provided some staffing relief.	CHCs have seen positive impact through the recruitment of two physicians who are DoD spouses. H-2B construction workers who are uninsured or underinsured utilize the CHCs.

Table 4.4-1. Overview of Agency Responses to Questionnaires¹

<i>Agency / Governmental Branch</i>	<i>2012 Capacity of Agency Facilities to Handle Additional Growth</i>	<i>Staffing Challenges (Recruitment or Turnover)</i>	<i>Current Staffing Impacts Attributed to Announcement of Proposed Action</i>
GBHWC	The main GBHWC facility in Tamuning is at or above maximum capacity, but could be expanded to service additional service population. Of its other locations, each of which provide a different variety of services, nine have the capacity to support additional service population, 4 are at capacity but could expand, and two are over capacity with no ability to expand.	Agency staffing levels have increased, but GBHWC continues to experience difficulty recruiting psychiatrists, psychologists, and behavioral analysts. Currently there are 39 critical unfilled positions.	None at this time.
GDISID	Facilities have the capacity to handle a growth in service population.	GDISID has experienced a decrease in staff. Recruitment difficulties are caused by budget issues, the PI, and credentialing requirements.	Unable to provide accurate accounting of current impact.
Public Safety			
GPD	Facilities in Dededo and Talofofo Precincts have additional capacity, but facilities in Tumon/Tamuning and Hagåtña Precincts are at or over capacity and have no available room for expansion.	There have been long-standing staffing challenges due to a growing population, fiscal constraints, and personnel leaving for military service.	An increasing population has led to increased service needs including the processing of firearm applications/registrations and police clearances etc.
GDoC	Current facilities are at or over maximum capacity, with limited space for expansion.	Recruitment is difficult due to low pay scales and GDoC experiences turnover due to retirement and relocation of staff to the mainland U.S. There are currently 43 uniformed and 15 civilian vacancies.	None at this time.
GDYA	Facilities in Mangilao and Mongmong-Toto-Maite are at capacity, with the ability to expand, and some plans for expansion or relocation. Facilities at Talofofo, Dededo and Agat (Haya) can support additional service population.	Recruitment is difficult and turnover is high due to low pay scales.	None at this time.

Table 4.4-1. Overview of Agency Responses to Questionnaires¹			
<i>Agency / Governmental Branch</i>	<i>2012 Capacity of Agency Facilities to Handle Additional Growth</i>	<i>Staffing Challenges (Recruitment or Turnover)</i>	<i>Current Staffing Impacts Attributed to Announcement of Proposed Action</i>
Judiciary Branch of GovGuam (JoG)			
JoG	The Judicial Center is over capacity but there are plans for expansion. The Northern Court Satellite is over capacity, but expansion is possible.	Vacancies remain unfilled due to funding challenges and periodic staffing gaps occur due to staff serving in the Guard and Reserve. Turnover is low and any minimal recruitment difficulties affect certified positions.	None at this time.
Public Libraries (GPLS)			
GPLS	All library facilities could support additional service population if necessary, except for Hagåtña, which would require expansion/renovation to do so.	Recruitment has been historically difficult due to funding constraints.	None at this time.
Permitting Agencies²			
GCMP	Facilities not addressed in Questionnaire.	Recruitment impacted by a hiring freeze and budget limitations. Retirements and transfers effect on turnover.	Constraint on prioritizing grant tasks versus proposed buildup activities.
GDLM GALC	Facilities not addressed in Questionnaire.	This question not addressed in Questionnaire.	Although the buildup has impacted Guam Ancestral lots, no specific staffing impacts were identified.
GDLM CLTC	Facilities not addressed in Questionnaire.	NA	No significant effects have been identified.
GDPHSS, DEH	Facilities not addressed in Questionnaire.	Continued difficulty in filling Environmental Health and Safety and Engineer positions.	None at this time.
GWA	Facilities not addressed in Questionnaire.	No significant staffing problems.	None at this time.
GDPR, Historic Preservation Office	Facilities not addressed in Questionnaire.	Ongoing recruitment for Archeologist has not yet resulted in a hire, due to qualification limitations.	Staff workload has increased due to buildup-related military and civilian construction projects.
GFD, Fire Prevention Bureau	Facilities not addressed in Questionnaire.	This question not addressed in Questionnaire.	None at this time.
GPA	Facilities not addressed in Questionnaire.	No major staffing problems noted.	Staffs have left for work at private firms in anticipation of buildup-related projects.

Note: ¹ Agency questionnaires are reproduced in SIAS Appendix A. Agency interviews reproduced in SIAS Appendix B also address these issues.

² Permitting agency questionnaires did not address permitting agency facilities.

4.4.1 Public Education Service Impacts

This section analyzes impacts on public primary and secondary schools run by GDoE and on the higher education institutions GCC and UoG, including quantitative analysis of impacts on student population numbers, GDoE teacher requirements, and GCC and UoG non-adjunct faculty requirements.

The capacity of private and DoD schools on Guam is not analyzed, but analysis did take into account that portions of new school aged population would attend military and private schools. Impacts are independent of any needs that may result from non-project-related general population growth.

Construction Component Assumptions

Table 4.4-2 presents key *construction component* assumptions used in impact analysis and the source of or rationale behind these assumptions.

Table 4.4-2. Construction Component Assumptions for Public Education Agency Impacts		
<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
Elementary Teacher : Student Ratio	1 : 12	GDoE elementary teacher to student ratio for SY 2010 (SIAS Appendix A, GDoE).
Middle School Teacher : Student Ratio	1 : 13	GDoE middle school teacher to student ratio for SY 2010 (SIAS Appendix A, GDoE).
High School Teacher : Student Ratio	1 : 16	GDoE high school teacher to student ratio for SY 2010 (SIAS Appendix A, GDoE).
GCC Non-adjunct Faculty : Post-Secondary Student Ratio	1 : 50	GCC non-adjunct faculty to post-secondary student ratio for SY 2010 (SIAS Appendix A, GCC).
UoG Non-adjunct Faculty : Post-Secondary Student Ratio	1 : 18	UoG's non-adjunct faculty to student ratio for SY 2010 and the approximate ratio for SY 2010-2011 (SIAS Appendix A, UoG).
% U.S. population composed of primary, middle and high school age youth	Primary – 9% Middle – 4% High – 6%	Primary school age used: 5-11 years old Middle school age used: 12-14 years old High school age used: 15-18 years old (Census 2010)
% civilian school-age population attending public and private schools	Public – 81% Private – 16%	1991-2010 Guam public and private school enrollments (Guam Statistics 2010). Totals do not equal 100% because a percentage of civilian school-age population does not attend either public or private schools.
% adult (18 years and above) civilian population attending GCC or UoG	GCC – 2% UoG – 3%	2010 GCC and UoG enrollment (SIAS Appendix A, GCC; UoG) compared with 2010 adult civilian population (Census 2010).
Number of school-age dependents accompanying H-2B workers	0	GDoE does not collect data on this (SIAS Appendix A, GDoE). GDYA reported little to no H-2B children among its service population (SIAS Appendix A, GDYA). GDoL reported no awareness of H-2B workers bringing dependents (SIAS Appendix B, GDoL).
Number of H-2B workers attending GCC or UoG	0	H-2B workers are on Guam for specific reasons that generally do not involve higher education (SIAS Appendix B, UoG). GCC reported that H-2B workers are ineligible to attend its programs (SIAS Appendix A, GCC). UoG reported no H-2B workers among its student population (SIAS Appendix A, UoG).

Military Operational Component Assumptions

Table 4.4-3 presents key *operational component* assumptions used in impact analysis and the source of or rationale behind these assumptions.

Table 4.4-3. Operational Component Assumptions for Public Education Agency Impacts		
<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
All quantitative assumptions for construction component also apply for the operational component, unless negated by the assumptions listed below.		
% of civilian DoD workers whose dependents would be attending DoD's DDESS.	75%	Assumption is that 50% of civilian DoD workers would be from off-island. Additionally, 25% of civilian DoD workers would be the spouses of active duty military. The dependents of these individuals would be eligible for education through the DoD's DDESS system. See above labor section for rationale of DoD worker percentage assumptions.
% students eligible to attend DoD's DDESS that would go to GDoE schools instead.	0%	Assumption is that – of those dependents of active duty military and DoD civilian workers eligible to attend DoD's DDESS – none would attend GDoE schools, although some might choose to attend faith-based or other private schools. (2010 Final SIAS Appendix D, DDESS).
% of active duty military population enrolled in UoG classes.	0.2%	Number of 2005 UoG active duty military enrollments and total 2005 active duty military population numbers. (2010 Final SIAS Appendix C, UoG).
% of military dependent population enrolled in UoG.	0.3%	Analysis of 2005 UoG military dependent enrollment statistics and total military dependent population numbers.

Estimation of Effects*Effects on Guam Department of Education Student Populations*

Table 4.4-4 provides an overview of impacts on GDoE student populations during the action's maximum impact year and steady-state years. Year-by-year impacts are available in the tables noted.

Table 4.4-4. GDoE Student Population Impacts Summary							
<i>Agency</i>	<i>Current Service Population</i>	<i>Max Year</i>	<i>Max Year Additional Service Population</i>	<i>Max Year Percentage Increase</i>	<i>Steady Additional Service Population</i>	<i>Steady Requirements Percentage Increase</i>	<i>Table with Year-by-Year Breakdown</i>
GDoE Elementary	14,454	2021	275	2%	131	0.9%	Table 4.4-5
GDoE Middle	7,212	2021	119	1.6%	57	0.7%	Table 4.4-6
GDoE High	9,415	2021	168	1.7%	80	0.8%	Table 4.4-7

Table 4.4-5. Impact on GDoE Elementary Student Population

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in Service Population	Direct Construction	8	52	106	139	113	86	106	99	76	47	18	1	0	0
	Indirect Construction	6	19	41	54	57	74	89	86	68	47	31	11	2	0
	Total Construction Impact	14	71	147	192	170	160	196	185	144	94	50	11	2	0
	Direct Operations	0	0	2	4	7	16	20	25	37	50	65	72	76	77
	Indirect Operations	5	7	11	16	23	51	59	61	68	62	62	57	54	54
	Total Operations Impact	5	7	13	20	31	67	79	86	105	112	127	129	129	131
	Combined Direct Impact	9	52	107	142	120	103	126	124	113	97	83	73	76	77
	Combined Indirect Impact	11	25	53	70	81	124	149	147	136	110	93	68	55	54
	Combined Total Impact	20	78	160	212	201	227	275	271	249	206	177	141	131	131

Table 4.4-6. Impact on GDoE Middle School Student Population

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in Service Population	Direct Construction	4	23	46	60	49	37	46	43	33	20	8	0	0	0
	Indirect Construction	3	8	18	23	25	32	39	37	29	21	14	5	1	0
	Total Construction Impact	6	31	64	83	74	69	85	80	62	41	22	5	1	0
	Direct Operations	0	0	1	2	3	7	9	11	16	22	28	31	33	33
	Indirect Operations	2	3	5	7	10	22	26	26	29	27	27	25	23	24
	Total Operations Impact	2	3	6	8	13	29	34	37	45	48	55	56	56	57
	Combined Direct Impact	4	23	46	61	52	44	55	54	49	42	36	31	33	33
	Combined Indirect Impact	5	11	23	30	35	54	64	64	59	47	40	29	24	24
	Combined Total Impact	8	34	69	92	87	98	119	117	108	89	76	61	57	57

Table 4.4-7. Impact on GDoE High School Student Population															
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in Service Population	Direct Construction	5	32	64	84	69	53	65	60	46	29	11	0	0	0
	Indirect Construction	4	12	25	33	35	45	54	52	42	29	19	7	1	0
	Total Construction Impact	9	43	90	117	104	97	119	113	88	57	30	7	1	0
	Direct Operations	0	0	1	2	4	10	12	15	23	30	40	44	46	47
	Indirect Operations	3	4	7	10	14	31	36	37	41	38	38	35	33	33
	Total Operations Impact	3	4	8	12	19	41	48	53	64	68	77	79	79	80
	Combined Direct Impact	5	32	65	87	73	63	77	76	69	59	51	44	46	47
	Combined Indirect Impact	7	16	32	42	49	76	91	90	83	67	57	41	34	33
	Combined Total Impact	12	48	98	129	122	138	168	165	152	126	108	86	80	80

Effects on Guam Department of Education Teacher Requirements

Table 4.4-8 provides an overview of impacts on GDoE staffing during the action's maximum impact year and steady-state years. Year-by-year impacts are available in the tables noted.

Table 4.4-8. Primary and Secondary Education Teacher Requirements Impacts Summary							
<i>Agency</i>	<i>Current Teachers</i>	<i>Year</i>	<i>Max Year Teacher Requirements</i>	<i>Max Year Percentage Increase</i>	<i>Steady State Teacher Requirements</i>	<i>Steady Requirements Percentage Increase</i>	<i>Table with Year-by-Year Breakdown</i>
GDoE Elementary	1,245	2021	24	1.9%	11	0.8%	Table 4.4-9
GDoE Middle	557	2021	9	1.6%	4	0.7%	Table 4.4-10
GDoE High	572	2021	10	1.7%	5	0.8%	Table 4.4-11

Table 4.4-9. Additional GDoE Elementary Teachers Required

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in Service Population	Direct Construction	1	4	9	12	10	7	9	9	7	4	2	0	0	0
	Indirect Construction	1	2	4	5	5	6	8	7	6	4	3	1	0	0
	Total Construction Impact	1	6	13	17	15	14	17	16	12	8	4	1	0	0
	Direct Operations	0	0	0	0	1	1	2	2	3	4	6	6	7	7
	Indirect Operations	0	1	1	1	2	4	5	5	6	5	5	5	5	5
	Total Operations Impact	0	1	1	2	3	6	7	7	9	10	11	11	11	11
	Combined Direct Impact	1	5	9	12	10	9	11	11	10	8	7	6	7	7
	Combined Indirect Impact	1	2	5	6	7	11	13	13	12	9	8	6	5	5
	Combined Total Impact	2	7	14	18	17	20	24	23	21	18	15	12	11	11

Table 4.4-10. Additional GDoE Middle School Teachers Required

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in Service Population	Direct Construction	0	2	4	5	4	3	4	3	3	2	1	0	0	0
	Indirect Construction	0	1	1	2	2	2	3	3	2	2	1	0	0	0
	Total Construction Impact	0	2	5	6	6	5	7	6	5	3	2	0	0	0
	Direct Operations	0	0	0	0	0	1	1	1	1	2	2	2	3	3
	Indirect Operations	0	0	0	1	1	2	2	2	2	2	2	2	2	2
	Total Operations Impact	0	0	0	1	1	2	3	3	3	4	4	4	4	4
	Combined Direct Impact	0	2	4	5	4	3	4	4	4	3	3	2	3	3
	Combined Indirect Impact	0	1	2	2	3	4	5	5	5	4	3	2	2	2
	Combined Total Impact	1	3	5	7	7	8	9	9	8	7	6	5	4	4

Table 4.4-11. Additional GDoE High School Teachers Required															
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in Service Population	Direct Construction	0	2	4	5	4	3	4	4	3	2	1	0	0	0
	Indirect Construction	0	1	2	2	2	3	3	3	3	2	1	0	0	0
	Total Construction Impact	1	3	5	7	6	6	7	7	5	3	2	0	0	0
	Direct Operations	0	0	0	0	0	1	1	1	1	2	2	3	3	3
	Indirect Operations	0	0	0	1	1	2	2	2	3	2	2	2	2	2
	Total Operations Impact	0	0	0	1	1	2	3	3	4	4	5	5	5	5
	Combined Direct Impact	0	2	4	5	4	4	5	5	4	4	3	3	3	3
	Combined Indirect Impact	0	1	2	3	3	5	6	5	5	4	3	3	2	2
	Combined Total Impact	1	3	6	8	7	8	10	10	9	8	7	5	5	5

Effects on Guam Community College and University of Guam Student Populations and Non-Adjunct Faculty Requirements

Tables 4.4-12 and 4.4-13 provide overviews of impacts on GCC and UoG student populations and non-adjunct faculty requirements during the action's maximum impact year and steady-state years. Year-by-year impacts are available in the tables noted.

Table 4.4-12. Higher Education Student Population Impacts Summary							
<i>Agency</i>	<i>Current Service Population</i>	<i>Max Year</i>	<i>Max Year Additional Service Population</i>	<i>Max Year Percentage Increase</i>	<i>Steady Additional Service Population</i>	<i>Steady Requirements Percentage Increase</i>	<i>Table with Year-by-Year Breakdown</i>
GCC	3,445	2023	55	1.6%	39	1.1%	Table 4.4-14
UoG	3,639	2023	99	2.7%	70	1.9%	Table 4.4-15

Table 4.4-13. Higher Education Faculty Requirement Impacts Summary							
<i>Agency</i>	<i>Current Non-adjunct Faculty</i>	<i>Max Year</i>	<i>Max Year Non-adjunct Faculty Requirements</i>	<i>Max Year Percentage Increase</i>	<i>Steady Non-adjunct Faculty Requirements</i>	<i>Steady Requirements Percentage Increase</i>	<i>Table with Year-by-Year Breakdown</i>
GCC	69	2023	1.1	1.5%	0.8	1.1%	Table 4.4-14
UoG	198	2023	5	2.5%	4	2.0%	Table 4.4-15

Table 4.4-14. Impact on Post-Secondary Student Population at GCC and Additional Non-Adjunct GCC Faculty Required															
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Baseline Service Ratio		1:49													
Increase in Service Population	Direct Construction	1	7	15	20	16	12	15	14	11	7	3	0	0	0
	Indirect Construction	1	3	6	8	8	11	13	12	10	7	4	2	0	0
	Total Construction Impact	2	10	21	28	24	23	28	26	21	14	7	2	0	0
	Direct Operations	0	0	0	1	2	6	7	8	12	16	19	21	22	23
	Indirect Operations	1	1	2	3	5	17	20	19	22	20	18	17	16	16
	Total Operations Impact	1	1	2	4	7	23	26	27	34	35	38	38	38	39
	Combined Direct Impact	1	8	15	21	18	18	22	22	23	22	22	21	22	23
	Combined Indirect Impact	2	4	8	11	13	28	32	32	32	26	23	19	16	16
	Combined Total Impact	3	12	24	31	31	46	54	54	55	49	45	40	39	39
Additional Faculty Required	Direct Construction	0.0	0.1	0.3	0.4	0.3	0.2	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0
	Indirect Construction	0.0	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0
	Total Construction Impact	0.0	0.2	0.4	0.6	0.5	0.5	0.6	0.5	0.4	0.3	0.1	0.0	0.0	0.0
	Direct Operations	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.5
	Indirect Operations	0.0	0.0	0.0	0.1	0.1	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
	Total Operations Impact	0.0	0.0	0.0	0.1	0.1	0.5	0.5	0.5	0.7	0.7	0.8	0.8	0.8	0.8
	Combined Direct Impact	0.0	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.5	0.5
	Combined Indirect Impact	0.0	0.1	0.2	0.2	0.3	0.6	0.6	0.6	0.6	0.5	0.5	0.4	0.3	0.3
	Combined Total Impact	0.1	0.2	0.5	0.6	0.6	0.9	1.1	1.1	1.1	1.0	0.9	0.8	0.8	0.8

Table 4.4-15. Impact on UoG Student Population and Additional Non-Adjunct UoG Faculty Required															
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Baseline Service Ratio		1:18													
Increase in Service Population	Direct Construction	2	14	28	36	29	22	28	26	20	12	5	0	0	0
	Indirect Construction	2	5	11	14	15	19	23	22	18	12	8	3	0	0
	Total Construction Impact	4	19	38	50	44	42	51	48	38	25	13	3	0	0
	Direct Operations	0	0	1	1	3	10	12	14	22	29	35	39	41	41
	Indirect Operations	2	2	4	5	9	31	35	35	40	36	34	31	29	29
	Total Operations Impact	2	3	5	7	12	41	47	50	62	64	69	70	70	70
	Combined Direct Impact	2	14	28	37	32	33	40	40	42	41	40	39	41	41
	Combined Indirect Impact	3	7	15	19	24	50	59	57	58	48	42	34	29	29
	Combined Total Impact	6	21	43	57	57	83	98	98	99	89	82	73	70	70
Additional Faculty Required	Direct Construction	0	1	1	2	2	1	2	1	1	1	0	0	0	0
	Indirect Construction	0	0	1	1	1	1	1	1	1	1	0	0	0	0
	Total Construction Impact	0	1	2	3	2	2	3	3	2	1	1	0	0	0
	Direct Operations	0	0	0	0	0	1	1	1	1	2	2	2	2	2
	Indirect Operations	0	0	0	0	1	2	2	2	2	2	2	2	2	2
	Total Operations Impact	0	0	0	0	1	2	3	3	3	3	4	4	4	4
	Combined Direct Impact	0	1	2	2	2	2	2	2	2	2	2	2	2	2
	Combined Indirect Impact	0	0	1	1	1	3	3	3	3	3	2	2	2	2
	Combined Total Impact	0	1	2	3	3	5	5	5	5	5	4	4	4	4

Additional Public Education Services Discussion

While the above quantitative analysis focuses on the proposed action's impact on required teachers and non-adjunct faculty for GDoE, GCC and UoG, the discussion below focuses on other important factors regarding the impact of the proposed action on Guam's public education system including teacher recruitment and retention, facilities, GDoE teacher absenteeism, GDoE administrative staffing, additional GCC and UoG service populations, and GCC and UoG adjunct faculty and administrative staffing.

Teacher Recruitment and Retention

Challenges and opportunities around teacher recruitment will impact its ability to meet the demand for new teachers and are outlined in Table 4.4-1.

One potential positive impact of the proposed action would be a supply of incoming military spouses qualified to teach in the public school system. This positive impact meets an existing need; there is a limited supply of fully certified, highly qualified teachers on Guam. Also, as additional educational administrative positions open up, current GDoE teachers may choose to apply for those, leaving their teaching positions (SIAS Appendix A, GDoE). Finally, GDoE administrators believe that a potential early retirement option being offered to GovGuam employees could cause teacher retention issues (SIAS Appendix A, GDoE).

Facilities

The condition and capacity of public education facilities would affect their ability to meet increased student numbers (see Table 4.4-1).

There is an existing need for improvement of GDoE classrooms. Historically, parts of schools have had to be shut down, and schools are sometimes forced to open late due to health and safety concerns (Kelman 2008). Currently, overcrowding occurs in the north and central areas (for example, JFK and George Washington high schools). Schools in the southern region, on the other hand, often have vacant spaces (SIAS Appendix A, GDoE).

The proposed action's impact on primary and secondary public school student populations may contribute to the existing need for the construction of new schools or school redistricting, depending on the geographic distribution of the new student population. Redistricting has not occurred since 2008, but as the island population continues to increase in the north, students may be shifted to schools in the south. At present, without the proposed action, GDoE has identified the need to construct no less than four additional schools (two elementary schools, one middle school, and one high school). GDoE is renovating existing schools and plans to open three new schools, though it does not have a timeline yet for construction.

The GCC main campus is currently able to support the number of students being educated there; however, it is nearing capacity and certain buildings have been scheduled for major renovations (SIAS Appendix A, GCC). An increase in student population would require expansion and renovation of the existing facilities.

Most UoG facilities are currently not able to meet the needs of the student population. The Science Building Annex and Health-Science Annex do meet current needs but would not be able to meet the needs of an expanded student population (SIAS Appendix A, UoG). Both GCC and UoG are pursuing online education opportunities as ways to increase outreach, provide multiple section offerings, and offset building and operations costs (SIAS Appendix A, GCC; UoG).

Guam Department of Education Teacher Absenteeism

Existing GDoE teacher-to-student ratios are within the U.S. national average in public elementary and secondary schools for 2010 (1:16.4) (U.S. Department of Education 2012). However, these GDoE ratios do not capture challenges around teacher absenteeism. Since there is a high rate of teacher absenteeism, the teacher-to-student ratio on Guam is lower compared to the national average than the numbers alone illustrate.

In 2012, the rate of GDoE teacher absenteeism was higher than that of its students. On an average school day in 2011, 9% of GDoE employees were absent versus about 5% of GDoE students (SIAS Appendix A, GDoE; GBSP 2012b). Teacher absenteeism is calculated based upon days giving instruction in the classroom and classifies days on school campus doing other activities but not teaching in the classroom as absent; student absenteeism is calculated based on days present on campus, whether in the classroom or not.

Guam Department of Education Administrative Staffing

Other GDoE staff positions are not included in the analysis above, but would be impacted as well. For instance, in comments on the Draft SEIS, the GDoE noted that it expects additional human resources staff will be necessitated by the proposed action. Other examples of these positions include principals, administrators, health counselors, cafeteria workers, custodial/maintenance employees, assistants, and school aides. Questionnaire results indicate that there is an approximate 2:1 ratio between teachers and administrative staff in the GDoE school system (SIAS Appendix A, GDoE). Thus, the number of additional GDoE administrative staffing that would be required to support the proposed action would equal half of the number of required additional teachers indicated in the tables above.

Additional Guam Community College and University of Guam Service Populations

The above analysis does not include impacts to GCC's secondary school age population, or an increase in demand for new types of GCC and UoG courses that may be offered.

GCC's secondary school age population represents almost 50% of its student body. In 2010, GCC employed 39 faculty and 4 counselors in its secondary school program (SIAS Appendix A, GCC).

GCC and UoG have been responsive to the training needs of the proposed action. GCC can adjust classes within a period of months and a program/curriculum in 1-2 years. GCC has started to offer additional classes for photovoltaics and renewable energy in anticipation of new construction to support the proposed action (SIAS Appendix A, GCC). UoG has integrated a project management component into its management courses to support construction management skill sets and is pursuing the creation of an Engineering School (SIAS Appendix A, UoG; SIAS Appendix B, UoG). Both institutions are increasing their web-based course offerings as well. Any increase in student enrollment at GCC and UoG due to interest in these new opportunities is not included in the quantitative analysis above.

Guam Community College and University of Guam Adjunct Faculty and Administrative Staffing

Adjunct faculties are not included in GCC or UoG impact analysis above, and may be used to meet some of the staffing requirements. In 2010, GCC employed 74 adjunct faculty, making up 40% of the GCC faculty population (GCC 2012). For the same year, UoG employed 88 part-time faculty, making up about 44% of the UoG faculty population (UoG 2012). GCC and UoG actively seek and have some flexibility in hiring adjunct faculty to meet specific needs. GCC only hires new faculty if there is a need in upcoming adult education, apprenticeship, or continuing education courses (2010 Final SIAS Appendix D, GCC). UoG advertises for adjunct faculty in newspaper and military publications and seeks to recruit

spouses of military personnel stationed on island (SIAS Appendix B, UoG). There is potential that military spouses may contribute to the pool of available adjunct faculty.

The above analysis also does not include impacts on GCC and UoG administrative staffing requirements. In 2010, the GCC full-time employee pool of 238 was made up of 47% faculty, 43% staff, and 10% administrators (GCC 2012). In the same year, of UoG's 573 full-time employees, 198 were faculty, 100 performed clerical and secretarial functions, 31 were administrators, and the remaining performed a variety of professional, technical, or maintenance jobs (UoG 2012).

4.4.2 Public Health and Human Services Impact

This section analyzes impacts on the following GovGuam public health and human service agencies:

- GMHA
- GDPHSS
- GBHWC
- GDISID

Quantitative impact analysis is provided on:

- Service population numbers
- Key staffing requirements

The capacity of private or military health care facilities on Guam is not analyzed independently, although the availability of such resources and potential overflow of their service populations into the public sector were taken into account when analyzing impact on public services. Impacts discussed are independent of any needs that may result from non-project-related general population growth.

Construction Component Assumptions

Table 4.4-16 presents the key *construction component* assumptions used in analysis of impacts, and the source of or rationale for these assumptions.

Table 4.4-16. Construction Component Assumptions for Public Health Agency Impacts		
<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
% of Guam's civilian population supported by GMHA services	100%	All incoming population would be part of the service population of GMHA. Although some may choose to access services from private or GDPHSS clinics, they are still considered part of the public and, if in case of medical emergency, would be seen at GMHA (SIAS Appendix B, GMHA).
% total island population supported by GDPHSS and GBHWC	37.7%	This is the % total population on Guam that is uninsured or underinsured based on a GDPHSS estimate (GDPHSS 2011). These are the most likely populations to access services from GDPHSS and GBHWC and the results of this analysis was used as the estimated service population for all impact analyses for GDPHSS and GBHWC. Assumption derived from GDPHSS and GBHWC interviews (SIAS Appendix B, GDPHSS and GBHWC).
% of Guam's civilian population supported by GDISID services	100%	All incoming civilian populations would be part of the service population of GDISID, as the agency would provide services to anyone on the island that is or becomes disabled and meets agency criteria (SIAS Appendix B, GDISID).
GMHA Physician : Service Population Ratio	1:1,586	2010 GMHA physician to island civilian population ratio (SIAS Appendix A, GMHA).

Table 4.4-16. Construction Component Assumptions for Public Health Agency Impacts

<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
GMHA Nurse/Allied Health Staff : Service Population Ratio	1:178	2010 GMHA nurse and allied health staff to island civilian population ratio (SIAS Appendix A, GMHA).
GDPHSS BPCS Ratio of Providers and Nursing Staff : Service Population Ratio	1:6,000	2010 agency bureau provider and nursing staff numbers to service population estimates (SIAS Appendix A, GDPHSS).
GDPHSS BCDC Ratio of Communicable Disease Prevention Specialists : Service Population Ratio	1:2,400	2010 agency specialist numbers to service population estimates (SIAS Appendix A, GDPHSS).
GDPHSS BFHNS Ratio of Nursing Personnel: Service Population Ratio	1:3,529	2010 agency providers and nurse practitioners to service population estimates (SIAS Appendix A, GDPHSS).
GBHWC Ratio of Mental Health Professionals : Service Population Ratio	1:355	2010 GBHWC mental health professional numbers to service population estimate (SIAS Appendix A, GBHWC).
GDISID Ratio of Social Workers and Counselors : Service Population Ratio	1:19,119	2010 agency staffing data to service population ratio (SIAS Appendix A, GDISID).

Military Operational Component Assumptions

Table 4.4-17 presents key *operational component* assumptions used in impact analysis and the source of or rationale behind these assumptions.

Table 4.4-17. Operational Component Assumptions for Public Health Agency Impacts

<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
All quantitative assumptions for construction component also apply for the operational component, unless negated by the assumptions listed below		
% active duty military and military dependent population supported by GMHA	0%	Although there is anecdotal information mentioned in the text below that indicates active duty military and their dependents would sometimes access GMHA services, no quantitative data were available to support this analysis as in general GMHA does not record whether a patient is military or civilian. In certain circumstances, when GMHA does knowingly serve a military individual, they can bill TRICARE for the services.
% of civilian DoD workers supported by GMHA	25%	Assumption is that 50% of civilian DoD workers would be from off-island. Additionally, 25% of civilian DoD workers would be the spouses of active duty military. It is assumed that these populations would be eligible for medical services from the Naval Hospital. The other 25% would be serviced by GMHA. Assumption derived from labor force analysis in above sections.

Estimation of Effects*Service Population Impacts*

Table 4.4-18 provides an overview of impacts on GMHA, GDPHSS, GBHWC, and GDISID service populations during the action's maximum impact year and steady-state years. Year-by-year impacts are available in the tables noted.

Table 4.4-18. Impact on Public Health and Human Services, Service Population Summary							
<i>Agency</i>	<i>Current Service Population</i>	<i>Max Year</i>	<i>Max Year Additional Service Population</i>	<i>Max Year Percentage Increase</i>	<i>Steady Additional Service Population</i>	<i>Steady Requirements Percentage Increase</i>	<i>Table with Year-by-Year Breakdown</i>
GMHA	159,358	2021	5,137	3.2%	895	0.5%	Table 4.4-19
GDPHSS	60,000	2021	1,934	3.2%	337	0.6%	Table 4.4-20
GBHWC	60,000	2021	1,934	3.2%	337	0.6%	Table 4.4-20
GDISID	159,358	2021	5,137	3.2%	895	0.5%	Table 4.4-21

Public Health and Human Services Staffing Impacts

Table 4.4-22 provides an overview of impacts on various public health and human services agency staffing requirements during the action's maximum impact year and steady-state years. Year-by-year impacts are available in the tables noted.

Table 4.4-19. Impact on Guam Memorial Hospital Service Population

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in Service Population	Direct Construction	217	1,414	2,968	4,067	3,532	3,104	3,811	3,574	2,713	1,701	797	61	0	0
	Indirect Construction	78	241	513	640	643	741	904	861	668	443	268	115	23	0
	Total Construction Impact	295	1,655	3,481	4,706	4,174	3,845	4,715	4,434	3,381	2,144	1,065	176	23	0
	Direct Operations	5	7	49	98	147	196	245	294	343	392	441	441	441	441
	Indirect Operations	11	13	18	23	43	156	178	186	247	273	344	398	433	453
	Total Operations Impact	16	20	67	121	190	352	423	480	590	665	784	838	874	895
	Combined Direct Impact	222	1,421	3,017	4,165	3,678	3,300	4,056	3,868	3,055	2,093	1,237	502	441	441
	Combined Indirect Impact	89	254	531	663	686	897	1,082	1,046	915	716	612	513	455	453
	Combined Total Impact	311	1,675	3,548	4,828	4,364	4,197	5,137	4,914	3,970	2,809	1,849	1,015	897	895

Table 4.4-20. Impact on GDPHSS and GBHWC Service Population

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in Service Population	Direct Construction	82	532	1,118	1,531	1,330	1,169	1,435	1,346	1,021	640	300	23	0	0
	Indirect Construction	30	91	193	241	242	279	340	324	252	167	101	43	9	0
	Total Construction Impact	111	623	1,311	1,772	1,572	1,448	1,775	1,670	1,273	807	401	66	9	0
	Direct Operations	2	3	18	37	55	74	92	111	129	148	166	166	166	166
	Indirect Operations	4	5	7	9	16	59	67	70	93	103	129	150	163	171
	Total Operations Impact	6	8	25	46	71	132	159	181	222	250	295	316	329	337
	Combined Direct Impact	84	535	1,136	1,568	1,385	1,243	1,527	1,456	1,150	788	466	189	166	166
	Combined Indirect Impact	34	96	200	250	258	338	407	394	345	270	230	193	171	171
	Combined Total Impact	117	631	1,336	1,818	1,643	1,580	1,934	1,850	1,495	1,058	696	382	338	337

Table 4.4-21. Impact on GDISID Service Population

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in Service Population	Direct Construction	217	1,414	2,968	4,067	3,532	3,104	3,811	3,574	2,713	1,701	797	61	0	0
	Indirect Construction	78	241	513	640	643	741	904	861	668	443	268	115	23	0
	Total Construction Impact	295	1,655	3,481	4,706	4,174	3,845	4,715	4,434	3,381	2,144	1,065	176	23	0
	Direct Operations	5	7	49	98	147	196	245	294	343	392	441	441	441	441
	Indirect Operations	11	13	18	23	43	156	178	186	247	273	344	398	433	453
	Total Operations Impact	16	20	67	121	190	352	423	480	590	665	784	838	874	895
	Combined Direct Impact	222	1,421	3,017	4,165	3,678	3,300	4,056	3,868	3,055	2,093	1,237	502	441	441
	Combined Indirect Impact	89	254	531	663	686	897	1,082	1,046	915	716	612	513	455	453
	Combined Total Impact	311	1,675	3,548	4,828	4,364	4,197	5,137	4,914	3,970	2,809	1,849	1,015	897	895

Table 4.4-22. Public Health and Human Services Impact Summary

<i>Agency and Staffing Type</i>	<i>Current Staffing</i>	<i>Max Year</i>	<i>Max Year Staffing Requirements</i>	<i>Max Year Percentage Increase</i>	<i>Steady Staffing Requirements</i>	<i>Steady Staffing Requirements Percentage Increase</i>	<i>Table with Year-by-Year Breakdown</i>
GMHA Physicians	92	2021	3	3.2%	1	1%	Table 4.4-23
GMHA Nurses and Allied Health Professionals	819	2021	29	3.5%	5	0.6%	Table 4.4-24
GDPHSS - Primary Care Medical Providers and Nursing Staff	10	2021	0.3	3%	0.1	1%	Table 4.4-25
GDPHSS – BCDC Communicable Disease Prevention Professionals	25	2021	0.3	1.2%	0.1	0.4%	Table 4.4-26
GDPHSS – Bureau of Family Health and Nursing Services Nurses	17	2021	0.5	2.9%	0.1	0.5%	Table 4.4-27
GBHWC – Mental Health Professionals	169	2021	5	2.9%	1	0.5%	Table 4.4-28
GDISID Social Workers and Counselors	8	2021	0.3	3.8%	0	0%	Table 4.4-29

Note: There are a wide variety of medical providers captured in the GDPHSS estimate, reflecting the diverse services provided by GDPHSS. They include Obstetrician/Gynecologist (Obstetrics and Gynecology), family practitioners, internists, pediatricians, nurse practitioners and certified nurse midwives.

Table 4.4-23. Additional GMHA Physicians Required

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in Service Population	Direct Construction	0	1	2	3	2	2	2	2	2	1	1	0	0	0
	Indirect Construction	0	0	0	0	0	0	1	1	0	0	0	0	0	0
	Total Construction Impact	0	1	2	3	3	2	3	3	2	1	1	0	0	0
	Direct Operations	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Indirect Operations	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total Operations Impact	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	Combined Direct Impact	0	1	2	3	2	2	3	2	2	1	1	0	0	0
	Combined Indirect Impact	0	0	0	0	0	1	1	1	1	0	0	0	0	0
	Combined Total Impact	0	1	2	3	3	3	3	3	3	2	1	1	1	1

Table 4.4-24. Additional GMHA Nurses and Allied Health Professionals Required

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in Service Population	Direct Construction	1	8	17	23	20	17	21	20	15	10	4	0	0	0
	Indirect Construction	0	1	3	4	4	4	5	5	4	2	2	1	0	0
	Total Construction Impact	2	9	20	26	23	22	26	25	19	12	6	1	0	0
	Direct Operations	0	0	0	1	1	1	1	2	2	2	2	2	2	2
	Indirect Operations	0	0	0	0	0	1	1	1	1	2	2	2	2	3
	Total Operations Impact	0	0	0	1	1	2	2	3	3	4	4	5	5	5
	Combined Direct Impact	1	8	17	23	21	19	23	22	17	12	7	3	2	2
	Combined Indirect Impact	1	1	3	4	4	5	6	6	5	4	3	3	3	3
	Combined Total Impact	2	9	20	27	24	24	29	28	22	16	10	6	5	5

Table 4.4-25. Additional GDPHSS – Bureau of Primary Care Medical Providers and Nursing Staff Required

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in Service Population	Direct Construction	0.0	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0
	Indirect Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
	Total Construction Impact	0.0	0.1	0.2	0.3	0.3	0.2	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0
	Direct Operations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Indirect Operations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total Operations Impact	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
	Combined Direct Impact	0.0	0.1	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0
	Combined Indirect Impact	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
	Combined Total Impact	0.0	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1

Table 4.4-26. Additional GDPHSS BCDC Communicable Disease Prevention Specialists Required

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in Service Population	Direct Construction	0.0	0.2	0.5	0.6	0.6	0.5	0.6	0.6	0.4	0.3	0.1	0.0	0.0	0.0
	Indirect Construction	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
	Total Construction Impact	0.0	0.3	0.5	0.7	0.7	0.6	0.7	0.7	0.5	0.3	0.2	0.0	0.0	0.0
	Direct Operations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
	Indirect Operations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
	Total Operations Impact	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Combined Direct Impact	0.0	0.2	0.5	0.7	0.6	0.5	0.6	0.6	0.5	0.3	0.2	0.1	0.1	0.1
	Combined Indirect Impact	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
	Combined Total Impact	0.0	0.3	0.6	0.8	0.7	0.7	0.8	0.8	0.6	0.4	0.3	0.2	0.1	0.1

Table 4.4-27. Additional GDPHSS Bureau of Family Health and Nursing Services Nursing Personnel Required

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in Service Population	Direct Construction	0.0	0.2	0.3	0.4	0.4	0.3	0.4	0.4	0.3	0.2	0.1	0.0	0.0	0.0
	Indirect Construction	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
	Total Construction Impact	0.0	0.2	0.4	0.5	0.4	0.4	0.5	0.5	0.4	0.2	0.1	0.0	0.0	0.0
	Direct Operations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Indirect Operations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total Operations Impact	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Combined Direct Impact	0.0	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.1	0.1	0.0	0.0
	Combined Indirect Impact	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0
	Combined Total Impact	0.0	0.2	0.4	0.5	0.5	0.4	0.5	0.5	0.4	0.3	0.2	0.1	0.1	0.1

Table 4.4-28. Additional GBHWC Mental Health Professionals Required

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in Service Population	Direct Construction	0	1	3	4	4	3	4	4	3	2	1	0	0	0
	Indirect Construction	0	0	1	1	1	1	1	1	1	0	0	0	0	0
	Total Construction Impact	0	2	4	5	4	4	5	5	4	2	1	0	0	0
	Direct Operations	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Indirect Operations	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total Operations Impact	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	Combined Direct Impact	0	2	3	4	4	3	4	4	3	2	1	1	0	0
	Combined Indirect Impact	0	0	1	1	1	1	1	1	1	1	1	1	0	0
	Combined Total Impact	0	2	4	5	5	4	5	5	4	3	2	1	1	1

Table 4.4-29. Additional GDISID Social Workers and Counselors Required															
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in Service Population	Direct Construction	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0
	Indirect Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total Construction Impact	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0
	Direct Operations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Indirect Operations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total Operations Impact	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Combined Direct Impact	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0
	Combined Indirect Impact	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
	Combined Total Impact	0.0	0.1	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.0	0.0

Additional Public Health and Human Services Discussion

The above quantitative analysis focuses on the proposed action's impact on public health professional requirements. Other important impact factors affecting public health services including professional staffing deficits and challenges, additional staffing requirements, underinsured populations, military and civilian health care system overlap, and facility and supply requirements are qualitatively detailed below.

Professional Staffing Deficits and Challenges

Many of the professional staffing to service population ratios that were used in this public health agency analysis was not based on standards, but rather upon existing ratios in Guam public health agencies that include existing deficits. For this reason, the analysis preserves any professional shortages that currently exist. For example, the ratio of nurses to total population was estimated to be 5.6 nurses for every 1,000 residents (see Table 4.4-16) while the U.S. national average, as of 2011, was 8.7 nurses per 1,000 residents (Kaiser Family Foundation 2013). Further examples of existing deficits have been provided in the Existing Conditions section. Professional staff recruitment and retention challenges are outlined in Table 4.4-1.

A new, private hospital is under development, the GRMC hospital. This hospital could compete for local staff, though it could also attract more professionals from off-island.

Additional Staffing Requirements

For every one of the public health professional positions required in the analysis above, additional administrative staff would be required to support the work of that professional. For example, in a 2008 questionnaire response, the GDPHSS BPCS noted that for each health professional it employs, four additional support staff such as nurse aids and medical records clerks are required (2010 Final SIAS Appendix C, – GDPHSS BPCS).

There is also the possibility that the incoming populations associated with the proposed action might require additional staff time and agency resources. For example, GBHWC staff members have observed that workers from off-island, such as those that would arrive on Guam during the construction phase, often work in stressful and intense situations that increase the prevalence of substance abuse. Similarly, military individuals transferring to a new, remote island location sometimes experience difficulty adapting to a different culture. It has been observed that both these populations would sometimes be inclined to access the confidential and free services of GBHWC, despite having health insurance, because of the fear that their condition might affect their terms of employment (SIAS Appendix B, GBHWC).

Underinsured Populations

Guam's public health agencies target the most indigent populations for health care (see Affected Environment section) and the majority of individuals accessing services are uninsured or underinsured. Staff members note that while individuals accessing services may have health insurance, unaffordable co-payments for services or medications, or missing coverage for specific services and medications makes it necessary that these individuals access agency free services.

The population growth associated with the proposed action would contribute to these uninsured and underinsured populations, especially in the form of residents entering into Guam through the Compact of Free Association agreement, which does not require individuals to have health coverage before arriving on Guam (SIAS Appendix B, GDPHSS-DPH; GBHWC).

Military and Civilian Health Care System Overlap

In emergency situations, an individual (civilian or military) would be taken to the closest hospital emergency room (GMHA or Naval Hospital) until they are stable enough to be transported to the appropriate facility (SIAS Appendix B, GMHA). Because the Naval Hospital's capacity is low, military dependents do occasionally use GMHA services. GMHA can bill TRICARE, the military health insurance system, for these services (SIAS Appendix B, GMHA). As of writing, this billing data was unavailable.

Facility and Supply Requirements

The condition and capacity of public health facilities would affect their ability to meet increased service population numbers, and are outlined in Table 4.4-1.

In public comments on the Draft SEIS, GBHWC indicated that there is an existing need for a larger treatment center and for increased service levels for client residences.

4.4.3 Public Safety Service Impacts

This section analyzes impact on the following public safety agencies:

- GPD
- GFD
- GDoC
- GDYA

Quantitative impact analysis is provided on:

- Service population numbers
- Key staffing requirements

The capacity of military security services is not analyzed, although military security departments are discussed in view of their interaction with government agencies in maintaining public safety on the island. This analysis does not include staffing impacts due to GFD enforcement of fire codes and building standards for construction activity. These impacts are analyzed in the section entitled Growth Permitting and Regulatory Agency Impacts.

Impacts are independent of any needs that may result from non-project-related general population growth.

Construction Component Assumptions

Table 4.4-30 presents key *construction component* assumptions used in impact analysis and the source or rationale behind these assumptions.

Table 4.4-30. Construction Component Assumptions for Public Safety Agency Impacts		
<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
% island population under the protection of GPA	100%	GPA interview (SIAS Appendix B, GPA).
% increase in inmates in jail, prison, and federal holds at GDoC per year	2015 – 0.2% 2016 – 0.9% 2017 – 1.8% 2018 – 2.5% 2019 – 2.2% 2020 – 2% 2021 – 2.4% 2022 – 2.2% 2023 – 1.7% 2024 – 1.1% 2025 – 0.5% 2026 – 0.1% 2027/2028 – 0%	Percent of adult civilian population increase over baseline as a result of proposed action (construction phase). To produce increase in service population, these percentages were then multiplied by inmate population numbers provided by GDoC (SIAS Appendix A, GDoC).
GDYA service population	Ages 5-21	GDYA service population includes military dependents (SIAS Appendix B, GDYA)
GPD Sworn Police Officer: Service Population Ratio	1:519	2010 GPD staffing numbers to service population ratio (SIAS Appendix A, GPD).
GFD Firefighter: Service Population Ratio	1:565	2010 GFD staffing numbers to service population ratio (SIAS Appendix A, GFD).
GDoC Officer: Inmate Ratio	1:3	2010 GDoC staffing to inmate numbers SIAS Appendix A, GDoC).
GDYA Youth Service Worker: Service Population Ratio	1:471	2010 GDYA youth service worker numbers to service population estimates (SIAS Appendix A, GDYA).

Military Operational Component Assumptions

Table 4.4-31 presents key *operational component* assumptions used in impact analysis.

Table 4.4-31. Operational Component Assumptions for Public Safety Agency Impacts		
<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
All quantitative assumptions for construction component also apply for the operational component, unless negated by the assumptions listed below.		
% increase in inmates in jail, prison or federal holds at GDoC per year.	2015 – 0.1% 2016 – 0.1% 2017 – 0.1% 2018 – 0.2% 2019 – 0.5% 2020 – 2.7% 2021 – 3% 2022 – 3% 2023 – 3.7% 2024 – 3.8% 2025 – 4.1% 2026-2028 – 4.2%	Percent of adult population (including active duty) increase over baseline as a result of proposed action. To produce increase in service population, these percentages were then multiplied by inmate population numbers provided in the GDoC Questionnaire (SIAS Appendix A, GDoC).

Estimation of Effects*Service Population Impacts*

Table 4.4-32 provides an overview of impacts on GPD, GFD, GDoC, and GDYA service populations during the action's maximum impact year and steady-state years. Year-by-year impacts are available in the tables noted.

Table 4.4-32. Impact on Public Safety Service Population Summary							
<i>Agency</i>	<i>Current Service Population</i>	<i>Max Year</i>	<i>Max Year Additional Service Population</i>	<i>Max Year Percentage Increase</i>	<i>Steady Additional Service Population</i>	<i>Steady Requirements Percentage Increase</i>	<i>Table with Year-by-Year Breakdown</i>
GPD	159,358	2021	9,585	6%	7,412	4.6%	Table 4.4-33
GFD	145,890	2021	5,258	3.6%	1,112	0.7%	Table 4.4-34
GDoC	544	2023	30	5.5%	26	4.8%	Table 4.4-35
GDYA	10,470	2021	562	5.3%	268	2.5%	Table 4.4-36

Table 4.4-33. Impact on GPD Service Population

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in Service Population	Direct Construction	217	1,414	2,968	4,067	3,532	3,104	3,811	3,574	2,713	1,701	797	61	0	0
	Indirect Construction	78	241	513	640	643	741	904	861	668	443	268	115	23	0
	Total Construction Impact	295	1,655	3,481	4,706	4,174	3,845	4,715	4,434	3,381	2,144	1,065	176	23	0
	Direct Operations	38	59	117	187	661	3,870	4,321	4,400	5,744	5,903	6,549	6,855	6,937	6,959
	Indirect Operations	13	10	20	29	106	476	550	552	597	537	532	501	454	453
	Total Operations Impact	51	70	137	216	767	4,346	4,871	4,952	6,341	6,440	7,080	7,355	7,391	7,412
	Combined Direct Impact	255	1,473	3,085	4,253	4,192	6,974	8,132	7,973	8,456	7,604	7,346	6,916	6,937	6,959
	Combined Indirect Impact	92	251	533	669	749	1,217	1,454	1,413	1,265	980	799	616	477	453
	Combined Total Impact	347	1,724	3,618	4,922	4,941	8,191	9,585	9,386	9,721	8,584	8,145	7,532	7,414	7,412

Table 4.4-34. Impact on GFD Service Population

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in Service Population	Direct Construction	217	1,414	2,968	4,067	3,532	3,104	3,811	3,574	2,713	1,701	797	61	0	0
	Indirect Construction	78	241	513	640	643	741	904	861	668	443	268	115	23	0
	Total Construction Impact	295	1,655	3,481	4,706	4,174	3,845	4,715	4,434	3,381	2,144	1,065	176	23	0
	Direct Operations	8	11	73	146	219	293	366	439	512	585	658	658	659	659
	Indirect Operations	11	13	18	23	43	156	178	186	247	273	344	398	433	453
	Total Operations Impact	18	24	91	170	262	448	544	625	759	858	1,001	1,055	1,091	1,112
	Combined Direct Impact	225	1,424	3,041	4,213	3,751	3,397	4,177	4,012	3,224	2,286	1,454	719	659	659
	Combined Indirect Impact	89	254	531	663	686	897	1,082	1,046	915	716	612	513	455	453
	Combined Total Impact	314	1,678	3,572	4,876	4,436	4,293	5,258	5,059	4,139	3,002	2,066	1,232	1,114	1,112

Table 4.4-35. Impact on GDoC Inmate Population

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in Service Population	Direct Construction	1	4	9	12	10	9	11	10	7	5	2	0	0	0
	Indirect Construction	0	1	1	2	2	2	3	2	2	1	1	0	0	0
	Total Construction Impact	1	5	10	13	12	11	13	12	9	6	3	0	0	0
	Direct Operations	0	0	1	1	3	14	15	16	20	20	21	22	21	21
	Indirect Operations	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	Total Operations Impact	0	0	1	1	3	14	16	16	20	20	20	20	20	20
	Combined Direct Impact	1	4	9	12	13	23	26	25	27	24	24	24	24	24
	Combined Indirect Impact	0	1	2	2	2	3	3	3	3	2	2	2	2	2
	Combined Total Impact	1	5	11	14	15	25	29	28	30	26	26	26	26	26

Table 4.4-36. Impact on GDYA Service Population

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in Service Population	Direct Construction	17	107	216	283	230	176	217	202	156	96	38	1	0	0
	Indirect Construction	13	39	84	110	117	150	182	175	139	97	64	22	4	0
	Total Construction Impact	29	145	300	392	347	326	400	377	295	193	102	23	4	0
	Direct Operations	1	1	3	7	15	33	41	52	76	102	133	147	154	157
	Indirect Operations	10	14	23	33	48	104	121	125	138	127	126	117	110	111
	Total Operations Impact	10	14	27	40	63	137	162	176	214	229	259	264	264	268
	Combined Direct Impact	17	107	219	290	245	209	258	253	232	198	170	148	154	157
	Combined Indirect Impact	22	52	108	142	165	254	304	300	277	224	190	139	113	111
	Combined Total Impact	40	159	327	432	410	463	562	553	509	421	360	287	268	268

Public Safety Services Staffing Impacts

Table 4.4-37 provides an overview impacts on various public safety services agency staffing requirements during the action's maximum impact year and steady-state years. Year-by-year impacts are available in the tables noted.

Table 4.4-37. Public Safety Services Staffing Impacts Summary							
<i>Agency and Staffing Type</i>	<i>Current Staffing</i>	<i>Max Year</i>	<i>Max Year Staffing Requirements</i>	<i>Max Year Percentage Increase</i>	<i>Steady Staffing Requirements</i>	<i>Steady Staffing Requirements Percentage Increase</i>	<i>Table with Year-by-Year Breakdown</i>
GPD – Police Officers	307	2023	19	6.2%	14	4.6%	Table 4.4-38
GFD - Firefighters	258	2021	9	3.5%	2	0.8%	Table 4.4-39
GDoC – Custody and Security Personnel	207	2023	11	5.3%	10	4.8%	Table 4.4-40
GDYA – Youth Service Professionals	48	2021	1.2	2.5%	0.6	1.25%	Table 4.4-41

Table 4.4-38. Additional GPD Sworn Police Officers Required

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Additional Capacity Required	Direct Construction	0.4	3	6	8	7	6	7	7	5	3	2	0	0	0
	Indirect Construction	0.2	0	1	1	1	1	2	2	1	1	1	0	0	0
	Total Construction Impact	1	3	7	9	8	7	9	9	7	4	2	0	0	0
	Direct Operations	0.1	0	0	0	1	7	8	8	11	11	13	13	13	13
	Indirect Operations	0.0	0	0	0	0	1	1	1	1	1	1	1	1	1
	Total Operations Impact	0.1	0	0	0	1	8	9	10	12	12	14	14	14	14
	Combined Direct Impact	0.5	3	6	8	8	13	16	15	16	15	14	13	13	13
	Combined Indirect Impact	0.2	0	1	1	1	2	3	3	2	2	2	1	1	1
	Combined Total Impact	1	3	7	9	10	16	18	18	19	17	16	15	14	14

Table 4.4-39. Additional GFD Uniformed Fire Personnel Required

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Additional Capacity Required	Direct Construction	0	3	5	7	6	5	7	6	5	3	1	0	0	0
	Indirect Construction	0	0	1	1	1	1	2	2	1	1	0	0	0	0
	Total Construction Impact	1	3	6	8	7	7	8	8	6	4	2	0	0	0
	Direct Operations	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	Indirect Operations	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	Total Operations Impact	0	0	0	0	0	1	1	1	1	2	2	2	2	2
	Combined Direct Impact	0	3	5	7	7	6	7	7	6	4	3	1	1	1
	Combined Indirect Impact	0	0	1	1	1	2	2	2	2	1	1	1	1	1
	Combined Total Impact	1	3	6	9	8	8	9	9	7	5	4	2	2	2

Table 4.4-40. Additional Custody and Security Personnel Required

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Additional Capacity Required	Direct Construction	0	2	3	4	4	3	4	4	3	2	2	2	2	2
	Indirect Construction	0	0	1	1	1	1	1	1	1	0	0	0	0	0
	Total Construction Impact	0	2	4	5	5	4	5	5	3	2	2	2	2	2
	Direct Operations	0	0	0	0	1	5	6	6	7	7	7	7	7	7
	Indirect Operations	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total Operations Impact	0	0	0	0	1	6	6	6	8	8	8	8	8	8
	Combined Direct Impact	0	2	3	5	5	9	10	10	10	9	9	9	9	9
	Combined Indirect Impact	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	Combined Total Impact	0	2	4	5	6	10	11	11	11	10	10	10	10	10

Table 4.4-41. Additional Youth Service Professionals Required

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Additional Capacity Required	Direct Construction	0.0	0.2	0.5	0.6	0.5	0.4	0.5	0.4	0.3	0.2	0.1	0.0	0.0	0.0
	Indirect Construction	0.0	0.1	0.2	0.2	0.2	0.3	0.4	0.4	0.3	0.2	0.1	0.0	0.0	0.0
	Total Construction Impact	0.1	0.3	0.6	0.8	0.7	0.7	0.8	0.8	0.6	0.4	0.2	0.0	0.0	0.0
	Direct Operations	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3
	Indirect Operations	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
	Total Operations Impact	0.0	0.0	0.1	0.1	0.1	0.3	0.3	0.4	0.5	0.5	0.5	0.6	0.6	0.6
	Combined Direct Impact	0.0	0.2	0.5	0.6	0.5	0.4	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3
	Combined Indirect Impact	0.0	0.1	0.2	0.3	0.3	0.5	0.6	0.6	0.6	0.5	0.4	0.3	0.2	0.2
	Combined Total Impact	0.1	0.3	0.7	0.9	0.9	1.0	1.2	1.2	1.1	0.9	0.8	0.6	0.6	0.6

Additional Public Safety Services Discussion

The above quantitative analysis focuses on the proposed action's impact on public safety professional requirements. Other important impact factors affecting public safety services are qualitatively detailed below.

Other Staffing Factors

The GFD professional staffing to service population ratio used in this analysis was based upon existing ratio that does not allow the meeting of certain National Fire Protection Association fire protection standards on a consistent basis. While GFD is able to meet the response time requirements, the agency is currently unable to meet the recommended staffing ratio per engine company on a consistent basis, due to retirements, sick leave, vacations, and deployment of staff through the National Guard (SIAS Appendix A, GFD). For this reason, the analysis will preserve any professional shortages that existed at the time of data collection (late 2012). In public comment on the Draft SEIS, GFD noted that it seeks to recruit an additional 90 firefighters over the next 3 years (2014-2017) to meet NFPA and OSHA standards.

Table 4.4-1 outlines professional staff recruitment and retention challenges for all public safety agencies. Support staff would need to be hired for every professional staff member, and represent a large component of public safety agency staffing. For example, 2010 data show that for every five police officers approximately one civilian staff member was employed by GPD (SIAS Appendix A, GPD). In public comment on the Draft SEIS, GPD noted a need for over 100 sworn personnel and 30 unsworn civilian personnel to meet current and future staffing for the efficient delivery of public safety services.

Regional Issues

The analysis does not provide information on the regional distribution of service population and increased staffing. Regional aspects of the island affect both GFD and GPD's public safety responsibilities and would affect the distribution of required additional staff throughout the island. In high hazard areas, GFD must take into consideration and staff more heavily areas where hazardous materials are stored (including industrial regions), the Port Authority, regions with high rise buildings, and the remote and hilly southern regions of the island. Road and traffic congestion from construction associated with the proposed action and a general increase in population lack of water pressure would impact safety and rescue operations.

Precinct-specific police officer to population ratios are dependent on demographic traits and characteristics, and would be impacted by incoming population groups. Areas requiring more law enforcement presence include those with an urban center (businesses) or highly mobile/seasonal populations (GPD 2007). In 2010, the ratio of sworn police officers to 1,000 inhabitants (SIAS Appendix A, GPD) was as follows:

Tamuning/Tumon Precinct: 2.0

Agat Precinct: 1.0

Dededo (including Yigo) Precinct: 1.0

Hagåtña Precinct: 1.0

For Guam overall, the ratio is estimated to be about one police officer for every 1,000 residents (see Table 4.4-30; this compares to 2.3 police officers per 1,000 residents in the U.S. overall (as of 2007, but consistent over nearly three decades) (Project America 2013).

Jurisdiction

Because of the large military presence on Guam, issues of jurisdiction require close collaboration between local and federal public safety agencies, and such collaboration would require strengthening due to the proposed action. Details of this collaboration are provided in the Existing Conditions section.

Facilities and Equipment

Public safety agencies indicated that they deal with current issues of overcrowding and inadequate facilities. The condition and capacity of public safety facilities would affect their ability to meet increased service population numbers, and are outlined in Table 4.4-1.

Both GDoC and GDYA already have crowding issues. GDoC is unable to house all its inmates, overnights, and parolees that are being held on an infraction, and must shift individuals between its Adult Correctional Facility and Hagåtña Detention Facility (SIAS Appendix A, GDoC). All GDYA's facilities that house service population are either at or above capacity currently (SIAS Appendix A, GDYA).

GFD facility and equipment challenges include stations that were originally built for other purposes and do not house the equipment properly, exposing fire trucks and rescue boats to weather damage (2010 Final SIAS Appendix D, GFD) and equipment needs that would accompany the proposed action. In public comment on the Draft SEIS, GFD noted that it requires one additional Fire Station between Finegayan and Andersen AFB.

There are existing vehicle shortages (SIAS Appendix B, GPD) and an increase in agency staff combined with project-related safety incidents would require that public safety agencies acquire additional equipment and vehicles. For example, all firefighters and Emergency Medical Technicians are issued standard Medical Personal Protective Equipment (Guam Civilian Military Task Force 2007). Protective equipment can include:

- Structural incident gear includes helmets with face guards, fire retardant hoods, turnout coats, bunker pants with suspenders, fire boots, gloves, personal alarm security systems, and self-contained breathing apparatus.
- Forestry incident gear includes helmets, fire retardant long sleeves, pants, boots and gloves, canteens, head lamps, and goggles.
- Medical incident gear includes latex rubber gloves, N-95 face masks, contamination suits, and facial shields.

In public comment on the Draft SEIS, Guam Homeland Security Office of Civil Defense noted that it may require an increase in emergency capabilities through Mutual Aid Agreement.

4.4.4 Judiciary of Guam and Selected Other Service Agency Impacts

This section analyzes impacts to the Guam Judiciary (a branch of Government, not an executive agency), GDPR, and GPLS.

Quantitative impact analysis is provided on:

- Service population numbers
- Key staffing requirements

Impacts discussed are independent of any needs that may result from non-project-related general population growth.

Construction Component Assumptions

Table 4.4-42 presents key *construction component* assumptions used in impacts analysis.

Table 4.4-42. Construction Component Assumptions for Other Selected Agency Impacts		
<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
% of island population assumed to be in GDPR service population	100%	The entire island population is allowed access to the parks and recreation areas managed by GDPR (SIAS Appendix B, GDPR).
% of island population assumed to be in GPLS service population	100%	All island residents and visitors are allowed access to the GPLS libraries, and all individuals with a valid form of identification are allowed to obtain a library card (SIAS Appendix B, GPLS).
% of island population assumed to be on Guam Judiciary's service population	100%	All civil and criminal activity processed and litigated on Guam would go through the Judiciary system (SIAS Appendix B, Guam Judiciary).
GDPS Staff: Service Population Ratio	1:5,312	2010 agency staff to service population estimates (SIAS Appendix B, GDPS).
GPLS Staff : Service Population Ratio	1:5,312	2010 GPLS staff to service population ratio (SIAS Appendix A, GPLS).
Guam Judiciary Judge : Service Population Ratio	1:17,706	2010 Judiciary judges to service population ratio (SIAS Appendix A, Guam Judiciary)

Military Operational Component Assumptions

Assumptions for the *operational component* are the same as for the construction component.

Estimation of Effects*Service Population Impacts*

Table 4.4-43 shows the combined total impact for each of these agencies' service populations would reach a maximum in 2023 at 9,721, and drop to a steady 7,412 by 2028. This results in a maximum 6.1% increase in service population and a sustained increase of 4.7%.

Table 4.4-43. Impact on GDPR, GPLS, and Guam Judiciary's Service Population															
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in Service Population	Direct Construction	217	1,414	2,968	4,067	3,532	3,104	3,811	3,574	2,713	1,701	797	61	0	0
	Indirect Construction	78	241	513	640	643	741	904	861	668	443	268	115	23	0
	Total Construction Impact	295	1,655	3,481	4,706	4,174	3,845	4,715	4,434	3,381	2,144	1,065	176	23	0
	Direct Operations	38	59	117	187	661	3,870	4,321	4,400	5,744	5,903	6,549	6,855	6,937	6,959
	Indirect Operations	13	10	20	29	106	476	550	552	597	537	532	501	454	453
	Total Operations Impact	51	70	137	216	767	4,346	4,871	4,952	6,341	6,440	7,080	7,355	7,391	7,412
	Combined Direct Impact	255	1,473	3,085	4,253	4,192	6,974	8,132	7,973	8,456	7,604	7,346	6,916	6,937	6,959
	Combined Indirect Impact	92	251	533	669	749	1,217	1,454	1,413	1,265	980	799	616	477	453
	Combined Total Impact	347	1,724	3,618	4,922	4,941	8,191	9,585	9,386	9,721	8,584	8,145	7,532	7,414	7,412

Other General Service Agency Staffing Impacts

Table 4.4-44 provides an overview of the proposed action's impacts on GDPR, GPLS, and Guam Judiciary key staffing requirements for the action's maximum year and steady-state. Year-by-year breakdowns of impacts are available in the tables noted.

Table 4.4-44. Other Selected General Service Agency Impacts Summary

<i>Agency and Staffing Type</i>	<i>Current Key Staffing</i>	<i>Max Year</i>	<i>Max Year Key Staffing Requirements</i>	<i>Max Year Percentage Increase</i>	<i>Steady Key Staffing Requirements</i>	<i>Steady Requirements Percentage Increase</i>	<i>Table with Year-by-Year Breakdown</i>
GDPR – General Staff	30	2023	1.8	6%	1.4	4.7%	Table 4.4-45
GPLS – General Staff	30	2023	1.8	6%	1.4	4.7%	Table 4.4-46
Judiciary – Judges	9	2023	0.5	5.6%	0.4	4.4%	Table 4.4-47
Department of Administration	114	-	16	14%	-	-	Analysis not conducted (see the following section: <i>Additional Discussion of Judiciary of Guam and Selected Other Public Service Agencies</i>)
Customs and Quarantine	139	-	9	6.5%	-	-	Analysis not conducted (see the following section: <i>Additional Discussion of Judiciary of Guam and Selected Other Public Service Agencies</i>)

Table 4.4-45. Additional GDPR Staffing Required

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Additional Capacity Required	Direct Construction	0.0	0.3	0.6	0.8	0.7	0.6	0.7	0.7	0.5	0.3	0.1	0.0	0.0	0.0
	Indirect Construction	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0
	Total Construction Impact	0.1	0.3	0.7	0.9	0.8	0.7	0.9	0.8	0.6	0.4	0.2	0.0	0.0	0.0
	Direct Operations	0.0	0.0	0.0	0.0	0.1	0.7	0.8	0.8	1.1	1.1	1.2	1.3	1.3	1.3
	Indirect Operations	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Total Operations Impact	0.0	0.0	0.0	0.0	0.1	0.8	0.9	0.9	1.2	1.2	1.3	1.4	1.4	1.4
	Combined Direct Impact	0.0	0.3	0.6	0.8	0.8	1.3	1.5	1.5	1.6	1.4	1.4	1.3	1.3	1.3
	Combined Indirect Impact	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1
	Combined Total Impact	0.1	0.3	0.7	0.9	0.9	1.5	1.8	1.8	1.8	1.6	1.5	1.4	1.4	1.4

Table 4.4-46. Additional GPLS Staffing Required

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Additional Capacity Required	Direct Construction	0.0	0.3	0.6	0.8	0.7	0.6	0.7	0.7	0.5	0.3	0.1	0.0	0.0	0.0
	Indirect Construction	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0
	Total Construction Impact	0.1	0.3	0.7	0.9	0.8	0.7	0.9	0.8	0.6	0.4	0.2	0.0	0.0	0.0
	Direct Operations	0.0	0.0	0.0	0.0	0.1	0.7	0.8	0.8	1.1	1.1	1.2	1.3	1.3	1.3
	Indirect Operations	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Total Operations Impact	0.0	0.0	0.0	0.0	0.1	0.8	0.9	0.9	1.2	1.2	1.3	1.4	1.4	1.4
	Combined Direct Impact	0.0	0.3	0.6	0.8	0.8	1.3	1.5	1.5	1.6	1.4	1.4	1.3	1.3	1.3
	Combined Indirect Impact	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1
	Combined Total Impact	0.1	0.3	0.7	0.9	0.9	1.5	1.8	1.8	1.8	1.6	1.5	1.4	1.4	1.4

Table 4.4-47. Additional Judiciary Judges Required

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Additional Capacity Required	Direct Construction	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0
	Indirect Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total Construction Impact	0.0	0.1	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0
	Direct Operations	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4
	Indirect Operations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total Operations Impact	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
	Combined Direct Impact	0.0	0.1	0.2	0.2	0.2	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4
	Combined Indirect Impact	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
	Combined Total Impact	0.0	0.1	0.2	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4

Additional Discussion of Judiciary of Guam and Selected Other Publics Service Agencies

The above quantitative analysis focuses on the proposed action's impact on JoG, GDPR, and GPLS professional staff requirements. Other important impact factors are qualitatively detailed below.

Department of Administration

Analysis of staffing impacts for the Department of Administration was not conducted; however, in public comment on the Draft SEIS, the Department of Administration provided information on additional expected staff that would be required due to the proposed action. It was indicated that 16 additional staff would be required with the following breakdown:

- (2) Computer System Analyst II
- (1) Messenger Clerk
- (1) General Accounting Supervisor
- (1) Management Analyst II
- (2) Accountant I
- (2) Accounting Technician II
- (3) Treasury Cashiers
- (2) Buyer II
- (2) Personnel Specialist II

It was further indicated that these new employees' salaries would cost \$688,371 per year (inclusive of benefits) and a one-time capital outlay of \$55,856 to purchase 16 new computers for the proposed employees would be required.

Guam Customs and Quarantine

Analysis of staffing impacts for the Guam Customs and Quarantine Agency was not conducted; however, in public comment on the Draft SEIS, the Customs and Quarantine Agency provided information on additional expected staff at Guam's air and sea ports that would be required due to the proposed action. It was indicated that an additional nine staff would be required to meet demands generated by the proposed action.

In addition to an increased number of staff, the Guam Customs and Quarantine Agency noted that necessary upgrades to operations and capabilities would include automated document review and clearance capabilities, heightening intelligence networks, and acquiring modernized inspection tools.

Judiciary of Guam

The JoG is a co-equal branch of GovGuam, distinct from and holding equal status as the executive and legislative branches of the territorial government, and therefore is discussed separately from Executive Branch agencies here.

Professional staff recruitment and retention and facilities challenges for JoG are outlined in Table 4.4-1.

The JoG professional staffing to service population ratio used in this analysis was based upon an existing ratio that is insufficient to meet judicial mandates and Guam's present population (SIAS Appendix A, JoG). For this reason, the analysis will preserve any professional shortages that currently exist.

A National Center State Courts study conducted in 2010 estimated that the JoG would require four additional judicial officers in 2014 to adequately service the population.

The following ratios of support staff necessary to support each judge is as follows (2010 Final SIAS Appendix D, JoG): one Chamber Clerk, one Bailiff, one Law Clerk, one Deputy Clerk Supervisor, one Deputy Clerk Assistant, two Deputy Clerk I, and two Deputy Clerk II. These numbers are not indicative of total support staff that is needed by the Judiciary, rather those administrative staff directly supporting each judge.

Current Agency Staffing Deficits

The professional staffing to service population ratios for the other agencies in this section were also based on existing ratios that are insufficient in meeting current service needs and analysis will thus preserve these deficiencies. Overall staff recruitment and retention challenges for agencies that responded to questionnaires are outlined in Table 4.4-1.

GDPR has experienced a precipitous decrease in staffing in the space of 12 years and, despite population increases, staffing numbers continue to decrease (SIAS Appendix B, GDPR). According to criteria for determining adequacy of Public Library Services set down by the GPLS Board, Guam lacks sufficient professional librarians for its population size (SIAS Appendix A, GPLS).

Facilities and Equipment

Challenges relating to facilities for agencies that responded to questionnaires are outlined in Table 4.4-1.

The GPLS Five-Year Plan (2008-2012) indicates inadequate library equipment and furniture, and ineffective electronic archiving and catalog systems (SIAS Appendix A, GPLS). In response to a 2008 questionnaire, GDPR noted that all facilities including beach parks, historical parks, and recreational facilities are in poor condition due to budget cuts (2010 Final SIAS Appendix C, GDPR).

4.4.5 Growth Permitting and Regulatory Agency Impacts

Analysis was performed on impact on the following GovGuam agencies responsible for issuing, monitoring, and enforcing development permits on Guam:

- GDPW Building Permits and Inspection
- GDLM
- GEPA
- GCMP, within GBSP
- GPA
- GWA
- GFD
- SHPO, within the GDPR
- DEH, within the GPDHSS
- ALPCD within the GDoL

Unlike the previously described services, the permitting work of these agencies would be driven by increases in permit applications before and during the process of growth on Guam (rather than population increases). While not all permit applications are of similar scope (permits for larger projects require more labor than permits for smaller projects), the mix of large and small permits for each forecast year is not accounted for due to lack of information. The mix of large and small permit applications for the year 2012 (when data was collected) is incorporated into the impact analysis.

Note that impacts to GFD, GDPR, and GDPHSS were also addressed in prior impact sections. This section analyzes only the impact on their permitting functions, which is only a small percentage of their overall functions.

Assumptions

There are no distinctions between *construction component* and *operational component* assumptions for the agencies analyzed in this section. This is because impacts are driven by the number of development permits estimated to be required, regardless of the project phase. Therefore, the assumptions listed in Table 4.4-48 apply to both components.

Table 4.4-48. Assumptions for Growth Permitting Agency Impacts		
<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
Quantitative Assumptions		
Permits other than building permits	Proportional to population growth	Environmental permits generally grow with population.
Monitoring/enforcement	Proportional to population growth except as noted below	Environmental monitoring and enforcement generally grow with population.
GDPW		
Number of permits issued	1,088	FY 2012 (SIAS Appendix A, GDPW)
Number of FTEs	7	FY 2012. Three FTE vacancies identified (SIAS Appendix A, GDPW)
% FTEs in permitting.	40%	FY 2012. Three FTE vacancies identified (SIAS Appendix A, GDPW)
% FTEs in monitoring/enforcement	40%	FY 2012. Three FTE vacancies identified (SIAS Appendix A, GDPW)
% FTEs in administrative/support	15%	FY 2012. Three FTE vacancies identified (SIAS Appendix A, GDPW)
Number permits processed per permitting FTE	389	Calculated based on data presented. (2010 Final SIAS Appendix D, GEPA)
GDLM Assumptions		
Number of permits/licenses (including GLUC Notice of Action) processed	2,435	FY 2012 (SIAS Appendix A, GDPW)
Number of FTE (Land Planning Division)	11	FY 2012. Based on GDLM organizational chart filled positions and questionnaire response. Twelve vacancies were identified on organizational chart. Assume Land Planning Division not supported by other Divisions (SIAS Appendix A and B, GDLM)
% FTEs in permitting	33%	As described in 2010 SIAS
% FTEs in monitoring/enforcement	11%	As described in 2010 SIAS
% FTEs in administrative/support	11%	As described in 2010 SIAS
Number permits processed per permitting FTE	671	Calculated based on data presented. (GDLM Survey Response 2009)
Permitting/enforcement/monitoring	Increase according to permit increase	Enforcement assumed to be tied to population growth.
GEPA Assumptions		
Number of permits	1,232	FY 2012 (SIAS Appendix A, GEPA)
Number of FTE	53	FY 2012. Fifteen FTE vacancies were identified (SIAS Appendix A, GEPA)

Table 4.4-48. Assumptions for Growth Permitting Agency Impacts		
<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
% FTEs in permitting	80%	FY 2012 (SIAS Appendix A, GEPA)
% FTEs in monitoring/enforcement	10%	FY 2012 (SIAS Appendix A, GEPA)
% FTEs in administrative/support	2.5%	FY 2012 (SIAS Appendix A, GEPA)
Number permits processed per permitting FTE	29	Calculated based on data presented (SIAS Appendix A, GEPA)
On-site activities (direct project impact)	Equivalent of nine permits on-site in 2015, increasing along with population impacts.	Some set-up would be required early in project.
Monitoring/enforcement	Proportional to population growth except nine permit-equivalents needed in 2015.	Environmental monitoring and enforcement generally grow with population but typically require effort closer to beginning of projects.
GCMP		
Number of permits reviewed (Federal consistency and ARC)	134	FY 2012(SIAS Appendix A, GBSP-Cultural Resources Management)
Number of FTEs	11	FY 2012. Two FTE vacancies were identified (SIAS Appendix A, GBSP-Cultural Resources Management)
% FTEs in permitting.	35%	FY 2012. Two FTE vacancies were identified (SIAS Appendix A, GBSP-Cultural Resources Management)
% FTEs in monitoring/enforcement/fire investigations.	20%	FY 2012. Two FTE vacancies were identified (SIAS Appendix A, GBSP-Cultural Resources Management)
% FTEs in administrative/support	10%	FY 2012. Two FTE vacancies were identified (SIAS Appendix A, GBSP-Cultural Resources Management)
Number permits processed per permitting FTE	35	Calculated based on data presented (SIAS Appendix A, GBSP-Cultural Resources Management).
GFD Assumptions		
Number of permits reviewed (construction and operation)	808	FY 2012. Construction = 238; operation = 570 (SIAS Appendix A, GFD)
Number of FTEs	15	SIAS Appendix A, GFD
% FTEs in permitting.	40%	SIAS Appendix A, GFD
% FTEs in monitoring/enforcement/fire investigations.	53%	SIAS AS Appendix A, GFD
% FTEs in administrative/support	7%	SIAS Appendix A, GFD
Number permits processed per permitting FTE	135	Calculated based on data presented (SIAS Appendix A, GFD).
GDPHSS, DEH Assumptions		
Number of permits (Sanitary and Occupancy) reviewed.	535	FY 2012 Sanitary = 489; Occupancy = 46 (SIAS Appendix A, DEH)
Number of FTEs	22	FY 2012. Thirty-three FTE unfilled (SIAS Appendix A, DEH)
% FTEs in permitting.	9.1%	SIAS Appendix A, DEH
% FTEs in monitoring/enforcement.	40.9%	SIAS Appendix A, DEH
% FTEs in administrative/support	31.8%	SIAS Appendix A, DEH

Table 4.4-48. Assumptions for Growth Permitting Agency Impacts		
<i>Assumption</i>	<i>Assumed Value</i>	<i>Source/Rationale</i>
Number permits processed per permitting FTE	267	Calculated based on data presented (SIAS Appendix A, DEH).
GDPR, Historic Preservation Office Assumptions		
Number of GDPR permits.	1,089	FY 2012 (SIAS Appendix A, GDPR, Historic Preservation Office)
Number of FTEs	9	FY 2012. There are unfilled FTEs (SIAS Appendix A, GDPR, Historic Preservation Office)
% FTEs in permitting.	45%	As described in 2010 SIAS
% FTEs in monitoring/enforcement.	25%	As described in 2010 SIAS
Number permits processed per permitting FTE	272	Calculated based on data presented.
Permits required for direct project activities	Three in 2015, increasing through 2022	As new lands are to be disturbed, program preparation is required.
GDoL ALPCD Assumptions		
No H-2B workers would be associated with operation of the proposed project. H-2B workers would only be employed for direct construction, and not for any indirect or induced activities.	0%	H-2B workers are mostly used for construction on Guam. Local workforce training programs are focusing on a variety of skill area training, and non-H-2B workers, for example from FAS, would provide the skills match for all non- site construction jobs.
Number of FTEs	5	FY 2012. One vacant FTE identified (SIAS Appendix A, GDoL ALPCD)
Average number of H-2B workers	1,088	FY 2012 (SIAS Appendix A, GDoL ALPCD)
Ratio of H-2B workers to ALPCD staff.	218:1	
GWA		
Number of GWA permits.	285	FY 2012 (SIAS Appendix A, GWA)
Number of FTEs	21	FY 2012. Five FTE vacancies identified (SIAS Appendix A, GWA)
% FTEs in permitting.	15%	FY 2012 (SIAS Appendix A, GWA)
% FTEs in monitoring/enforcement.	10%	FY 2012 (SIAS Appendix A, GWA)
% FTEs in administrative support	5%	FY 2012 (SIAS Appendix A, GWA)
Number permits processed per permitting FTE	91	Calculated based on data presented. (SIAS Appendix A, GWA)
GPA		
Number of GPA permits	412	FY 2012 (SIAS Appendix A, GPA)
Number of FTEs	6	FY 2011. Six FTE employees in work in "Planning and Regulatory" (GPA 2012)
% FTEs in permitting.	30%	FY 2012 (SIAS Appendix A, GPA)
% FTEs in monitoring/enforcement.	25%	FY 2012 (SIAS Appendix A, GPA)
% FTEs in administrative support	10%	FY 2012 (SIAS Appendix A, GPA)
Number permits processed per permitting FTE	69	Calculated based on data presented (SIAS Appendix A, GPA).

Estimation of Effects

Guam Department of Public Works

The proposed action's impact would be largest in 2019 at 152 additional GDPW permit applications, requiring an additional 0.8 FTE in 2020. By 2028, the impact drops to an additional 14 permit applications, requiring 0.1 additional FTE (Table 4.4-49).

Guam Department of Land Management

Impact on permits would be largest at 113 in 2019 and decline to 14 by 2028 (Table 4.4-50). The number of new staff required would be the greatest in 2019 at 1.7 FTEs and drops to 1.4 FTEs at 2028. New staff for GDLM would be primarily related to increased demands from land use commission hearings.

Guam Environmental Protection Agency

The proposed action's impact would be largest in 2019 with 271 additional GEPA permit applications, requiring an additional 9.7 FTEs. At 2028, the impact drops to an additional 14 permit applications, requiring an additional 0.7 FTEs (Table 4.4-51).

Guam Coastal Management Program

Table 4.4-52 shows that impacts on GCMP permits would be largest in 2021 at 16 and decline to 5 at 2028. New staff required for monitoring and enforcement makes up a large portion of the combined total employment impact, and would be the greatest in 2021 at 0.9 FTEs and drop to 0.6 FTEs by 2028.

Table 4.4-49. Estimated GDPW Permits and Required Permitting Staff															
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in No. of Permits	From Direct On-site Project	2	13	29	41	39	38	47	46	34	22	13	5	1	0
	From Off-Site Project and Indirect	3	8	70	30	113	108	33	32	28	21	18	15	14	14
	Total New Permits from Proposed Action	5	21	98	70	152	146	79	77	62	44	32	20	14	14
New Staff Required	From Direct On-site Project	0.01	0.03	0.07	0.11	0.10	0.10	0.12	0.12	0.09	0.06	0.03	0.01	0.00	0.00
	From Off-Site Project and Indirect	0.01	0.02	0.18	0.08	0.29	0.28	0.08	0.08	0.07	0.06	0.05	0.04	0.03	0.03
	Monitoring/ Enforcement	0.01	0.01	0.10	0.13	0.18	0.28	0.18	0.08	0.08	0.06	0.05	0.04	0.04	0.03
	Administration/ Support	0.00	0.01	0.05	0.05	0.09	0.10	0.06	0.04	0.04	0.03	0.02	0.01	0.01	0.01
	Combined Total New Staff Needs	0.0	0.1	0.4	0.4	0.7	0.8	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1

Note: Columns may not add exactly to totals due to rounding.

Table 4.4-50. Estimated GDLM Permits and Required Permitting Staff															
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in No. of Permits	From Direct On-site Project	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	From Off-Site Project and Indirect	3	8	70	30	113	108	33	32	28	21	18	15	14	14
	Total New Permits from Proposed Action	3	8	70	30	113	108	33	32	28	21	18	15	14	14
New Staff Required	From Direct On-site Project	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	From Off-Site Project and Indirect	0.0	0.0	0.1	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Monitoring/ Enforcement	1.0	1.1	1.1	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
	Hearings	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Administration/ Support	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Combined Total New Staff Needs	1.2	1.3	1.4	1.5	1.7	1.7	1.6	1.5	1.4	1.4	1.4	1.4	1.4	1.4

Note: Columns may not add exactly to totals due to rounding.

Table 4.4-51. Estimated GEPA Permits and Required Permitting Staff															
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in No. of Permits	From Direct On-site Project	9	52	116	166	158	154	189	186	139	91	53	20	3	0
	From Off-Site Project and Indirect	3	8	70	30	113	108	33	32	28	21	18	15	14	14
	Total New Permits from Proposed Action	12	60	186	195	271	262	221	217	167	112	72	35	16	14
New Staff Required	From Direct On-site Project	0.3	1.8	4.0	5.7	5.4	5.3	6.5	6.4	4.8	3.1	1.8	0.7	0.1	0.0
	From Off-Site Project and Indirect	0.1	0.3	2.4	1.0	3.9	3.7	1.1	1.1	0.9	0.7	0.6	0.5	0.5	0.5
	Monitoring/ Enforcement	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
	Administration/ Support	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0
	Combined Total New Staff Needs	0.4	2.2	6.7	7.1	9.7	9.5	8.1	8.0	6.2	4.2	2.8	1.5	0.8	0.7

Note: Columns may not add exactly to totals due to rounding.

Table 4.4-52. Estimated GCMP Permits and Required Permitting Staff															
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in No. of Permits	From Direct On-site Project	0	2	5	7	7	7	8	8	6	4	2	1	0	0
	From Off-Site Project and Indirect	0	1	3	4	4	6	7	7	7	6	6	5	5	5
	Total New Permits from Proposed Action	1	4	8	11	11	13	16	15	13	10	8	6	5	5
New Staff Required	From Direct On-site Project	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0
	From Off-Site Project and Indirect	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	Monitoring/Enforcement	0.0	0.0	0.1	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	Administration/Support	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Combined Total New Staff Needs	0.0	0.1	0.3	0.6	0.8	0.8	0.9	0.9	0.9	0.8	0.7	0.6	0.6	0.6

Note: Columns may not add exactly to totals due to rounding.

Guam Power Authority

The impact from the proposed action would be the greatest in 2019 at 108 additional GPA permit applications, which would require an additional 1.1 FTE employees. At 2027, the impact drops to an additional 8 permits, requiring 0.1 additional FTE worker (Table 4.4-53).

In comments on the Draft SEIS, GPA noted that it had cost requirements to resolve relating to its Program Management Office, Environmental Studies, and Archaeological Services. It was also indicated that placement of a Combined Cycle Generation Plant on the north end of Guam and a pipeline were existing requirements that needed resolution.

Guam Water Authority

The impact from the proposed action would be the greatest in 2019 and 2020 at 55 additional GWA permit applications, which would require an additional 0.9 FTEs. At 2027 and 2028, the impact drops to an additional 6 permits, requiring 0.1 new FTE (Table 4.4-54).

Guam Fire Department

The impact from the proposed action would be the greatest in 2019 at an additional 69 GFD permit applications, which would require an additional 0.7 FTE employees (Table 4.4-55). At 2027 and 2028, the impact drops to 8 additional permits, requiring 0.3 FTE.

Guam Department of Public Health and Social Services, Division of Environmental Health

Table 4.4-56 shows that impacts on DEH permits would be greatest at 45 in 2019 and decline to 5 by 2027. The combined total employment impact, which consist of new staff required for monitoring and enforcement, would be largest in 2020 at 0.8 FTEs and dropping to 0.5 FTEs by 2026.

Guam Department of Parks and Recreation, Historic Preservation Office

The impact from the proposed action would be the greatest in 2019 at 140 additional SHPO permit applications, which would require an additional 0.6 FTEs (Table 4.4-57). By 2028, the impact drops to an additional 11 permits, which would require 0.1 FTE.

Guam Department of Labor, Alien Labor Processing and Certification Division

The impact from the proposed action would be the greatest in 2018 at 2,291 additional ALPCD applications, which would require an additional 11 FTEs. This impact drops to 0 FTE beginning in 2026 (Table 4.4-58).

Table 4.4-53. Estimated GPA Permits and Required Permitting Staff															
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in No. of Permits	From Direct On-site Project	4	22	49	70	66	65	79	78	58	38	22	8	1	0
	From Off-Site Project and Indirect	2	5	26	15	41	42	20	19	17	13	11	9	8	8
	Total New Permits from Proposed Action	6	27	75	85	108	106	99	98	75	51	34	18	10	8
New Staff Required	From Direct On – site Project	0.0	0.2	0.4	0.5	0.5	0.5	0.6	0.6	0.4	0.3	0.2	0.1	0.0	0.0
	From Off-Site Project and Indirect	0.0	0.0	0.2	0.1	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Monitoring/ Enforcement	0.0	0.0	0.2	0.1	0.3	0.3	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
	Administration/ Support	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Combined Total New Staff Needs	0.1	0.2	0.7	0.7	1.1	1.0	0.9	0.8	0.7	0.5	0.3	0.2	0.1	0.1

Note: Columns may not add exactly to totals due to rounding.

Table 4.4-54. Estimated GWA Permits and Required Permitting Staff															
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in No. of Permits	From Direct On-site Project	2	9	20	28	27	26	32	31	24	15	9	3	0	0
	From Off-Site Project and Indirect	1	3	18	11	29	29	14	13	12	9	8	7	6	6
	Total New Permits from Proposed Action	3	12	38	39	55	55	46	45	35	25	17	10	6	6
New Staff Required	From Direct On-site Project	0.0	0.1	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.2	0.1	0.0	0.0	0.0
	From Off-Site Project and Indirect	0.0	0.0	0.2	0.1	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Monitoring/ Enforcement	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
	Administration/ Support	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
	Combined Total New Staff Needs	0.0	0.2	0.6	0.6	0.9	0.9	0.7	0.7	0.5	0.4	0.3	0.2	0.1	0.1

Note: Columns may not add exactly to totals due to rounding.

Table 4.4-55. Estimated GFD Permits and Required Permitting Staff															
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in No. of Permits	From Direct On-site Project	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	From Off-Site Project and Indirect	2	5	42	18	69	65	20	19	17	13	11	9	8	8
	Total New Permits from Proposed Action	2	5	42	18	69	65	20	19	17	13	11	9	8	8
New Staff Required	From Direct On-site Project	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	From Off-Site Project and Indirect	0.0	0.0	0.3	0.1	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Monitoring/ Enforcement	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
	Administration/ Support	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Combined Total New Staff Needs	0.0	0.1	0.5	0.3	0.7	0.8	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3

Note: Columns may not add exactly to totals due to rounding.

Table 4.4-56. Estimated DEH Permits and Required Permitting Staff															
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in No. of Permits	From Direct On-site Project	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	From Off-Site Project and Indirect	1	3	28	12	45	43	13	13	11	9	7	6	5	5
	Total New Permits from Proposed Action	1	3	28	12	45	43	13	13	11	9	7	6	5	5
New Staff Required	From Direct On-site Project	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	From Off-Site Project and Indirect	0.0	0.0	0.1	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Monitoring/ Enforcement	0.0	0.1	0.2	0.3	0.3	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4
	Administration/ Support	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
	Combined Total New Staff Needs	0.0	0.1	0.4	0.4	0.6	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5

Note: Columns may not add exactly to totals due to rounding.

Table 4.4-57. Estimated GDPR-Historic Preservation Office Permits and Required Permitting Staff															
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Increase in No. of Permits	From Direct On-site Project	3	16	35	50	47	46	56	56	42	27	16	6	1	0
	From Off-Site Project and Indirect	2	6	57	24	92	88	27	26	22	18	15	12	11	11
	Total New Permits from Proposed Action	5	22	92	74	140	134	83	81	64	45	31	18	12	11
New Staff Required	From Direct On-site Project	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0
	From Off-Site Project and Indirect	0.0	0.0	0.2	0.1	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
	Monitoring/ Enforcement	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Administration/ Support	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Combined Total New Staff Needs	0.0	0.1	0.4	0.3	0.6	0.6	0.4	0.4	0.4	0.3	0.2	0.2	0.1	0.1

Note: Columns may not add exactly to totals due to rounding.

Table 4.4-58. Projected Number of H-2B Workers On Guam and Basis for ALPCD Workload														
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
New H-2B Workers from Proposed Action	114	761	1,634	2,291	2,039	1,837	2,255	2,114	1,566	959	438	33	0	0
New Staff Required	1	3	8	11	9	8	10	10	7	4	2	0	0	0

4.5 SOCIOCULTURAL IMPACTS

When reviewing sociocultural impacts in this section, it is important to remember that while social issues are not direct impacts that occur at the same time and place as the proposed action, they are indirect impacts of the proposed action that can occur later in time or further in distance. Brief overviews of these topics are included in Section 3.5, including:

- Claims for WWII reparations.
- Land issues including the military's return of lands formerly acquired from Guam and restrictions on access due to post-9/11 increased security.
- Military-Civilian social issues on Okinawa.

Sociocultural impacts are primarily driven by population; thus the larger population increases would be the greater sociocultural impacts would be. As compared to the proposed action assessed in the 2010 Final EIS, the proposed action assessed in the SEIS and in this SIAS would have much smaller increases in population, and these increases would take place over a longer period of time. Similarly, as compared to the proposed action assessed in the 2010 Final EIS, any sociocultural impacts identified in this SIAS would be less intense and have a longer period of time, which would allow for a smoother period of adjustment.

4.5.1 Impacts on Crime and Social Disorder

Most sociocultural impacts are due to the overall population increase due to the proposed action, not the unique characteristics of any particular population. Scoping comments and interviews were used to identify probable impacts. Analysis is qualitative and based largely on questionnaires and interviews conducted in 2008-2009 and 2012-2013. This analysis addresses potential increases in overall crime, noting specific potential impacts on levels of prostitution, drug use/substance abuse, sexual assaults, and military-civilian fights, where applicable.

Construction Component

During the construction phase, crime and social disorder impacts are possible, and would be due to the increase in population, which would be greatly reduced in comparison to population projected for the 2010 Final EIS.

Population increases in general can cause a variety of social disruptions. Residents who observe social change and may note an increase in crime as a result of the population growth, regard newcomers as largely responsible for the crime, and become more likely to report crime (Covey and Menard 1984).

It is expected that an increase in the number of offenses and arrests would accompany the population increase during construction, especially considering that the overall population and social change at this time would occur over the same time period as the relocation of Marine Corps personnel (the Operational Component).

Interviews with industry professionals that experienced Guam's hotel construction boom in the late 1980s and early 1990s indicated that Guam did not experience major increases in crime or social disorder during these time periods. As noted in Section 3.5, H-2B workers typically have minimal impacts on crime and social disorder. Any violations under legal jurisdiction could lead to their deportation (2010 Final SIAS Appendix D, JoG, Guam Chamber of Commerce, GVB; SIAS Appendix B, GCA, GDoL ALPCD).

The volume of prostitution, as well as the number of arrests for drug and alcohol-related offenses would tend to grow with the increase in population during the construction period. Also, the flow of construction supplies into Guam during the construction phase could present increased opportunities for drug smuggling. The drug methamphetamine was involved in 54% of the drug arrests in 2006 (2010 Final SIAS Appendix D, GPD). The 2003 Drug Threat Assessment reported that methamphetamine is the most available, most abused illegal drug on Guam (U.S. Department of Justice 2003). It is readily available on Guam due to local production, and a steady supply from the Philippines, Hong Kong, China, Taiwan, and South Korea.

Military Operational Component

During the operational phase, crime and social disorder impacts are possible, but like the construction phase, increases would be due to the increase in population in general; crime rates are not expected to increase as a result of the proposed action.

The volume of prostitution would likely grow with the increase in population. Some military personnel, like some civilians, frequent houses of prostitution and engage in other types of commercialized vices. Given that there is already a fairly large military population on Guam, the few arrests on Guam for prostitution and commercialized vice indicate that the problem is not a large one. Similarly, the Naval Base Security data provided in Chapter 3: Affected Environment, Sections 3.5.5 and 3.5.6, indicate that the impact of sexual assaults by the military would not be substantial.

While Guam's existing military population is not considered to be a major issue in terms of military/civilian conflicts at present, interviews with various Guam civic leaders found concern based, in part, on a perception of the Marine Corps' "warrior culture" and, in part, on widespread memories of encounters when there was a larger military presence on Guam during the Vietnam War period (Guam Civilian Military Task Force Committee on the Environment 2008, Guam Civilian Military Task Force Committee on Health and Social Services 2008, Guam Civilian Military Task Force Committee on Public Safety 2008). Ultimate fighting and mixed martial arts training have been gaining popularity worldwide, and this is also the case among the young civilian population on Guam. Initial interviews with Guam public safety and youth agencies indicated that there had been reports that youth interested in the sport and undergoing training may test themselves against Marines who have the reputation of possessing fighting skills (2010 Final SIAS Appendix D, GPD). However, follow-up interviews inquiring into the growth of mixed martial arts did not identify a substantial increase in the interest (SIAS Appendix B, GDYA). If such conflicts occur, they would likely represent a major transitional "period of adjustment," but the length of this period is not predictable.

4.5.2 Political and Chamorro Issues

The biggest impact drivers on political and Chamorro issues for both the construction and operational phases may be the introduction of military and DoD civilian workers into the population. Acquisition or leasing of lands for development would also drive impacts to a lesser extent, and are covered in Chapter 5.

Based on scoping input and interviews, Table 4.5-1 identifies potential impact topics for the construction and operations components.

Table 4.5-1. Topics for Chamorro Issues Impact Analysis	
Construction	Operations
Further minoritization of Chamorros and existing local population by temporary workers and related in-migration	Political minoritization of Chamorros and existing local population by permanent military population and related in-migration
Unearthing of Chamorro artifacts	Related impact: perceptions of mutual respect from the U.S. military

At 37.3% of the population (Census 2010) Chamorros are already a minority on Guam (although they are still a plurality – i.e., the largest single group). Therefore, incoming temporary H-2B construction workers and other workers associated with construction could increase Chamorro feelings of marginalization. However, the portion of these workers from the FAS or on H-2B visas would lack voting rights, and most of these workers would leave Guam after 2025. Therefore, the construction component should not have ongoing minoritization impacts for indigenous Chamorros or the existing local population.

There is a concern that military development could unearth Chamorro artifacts. The Guam Museum will have a permanent home by December 2014; there remains a need for a repository for artifacts unearthed prior to that time. Refer to Cultural Resources section of the SEIS for a discussion of the curation of artifacts Military Operational Component.

Analysis indicates a sustained increase of approximately 7,412 people on Guam. Most of these people would have political rights as U.S. citizens. While Marines and adult dependents would only be on Guam for 2 to 3 years and would likely not become deeply engaged in local politics, their sustained presence could affect Chamorro political strength. A reduction in Chamorro and local voting power may also be felt on the policy level, when cultural tradition is involved. For example, it is commonly agreed among Chamorro politicians that public funds should be spent to support funeral and wake activities. However, non-Chamorro elected officials may not agree with this cultural tradition, risking the elimination of these and related policies or practices (2010 Final SIAS Appendix D, DCA).

Nuanced aspects of the way the military deals with the Chamorro population on Guam would determine the perception of whether they respect the local population and culture. A survey by the Public Affairs and Legal Studies club at the UoG found over 80% of respondents wanted to tell the military that communication would be the surest sign of respect and path to smooth interaction on Guam (KUAM.com 2008).

4.5.3 Community Cohesion

The negative interactions related to incoming new population discussed here do not rise to the level of major issues previously discussed under “Crime and Social Disorder,” but are more likely to be irritants that may undermine a sense of mutual respect between social groups.

In addition, this discussion identifies that the arrival of new populations can bring positive benefits that infuse communities with opportunities for more meaningful interactions.

Table 4.5-2 summarizes the potential impacts for construction and operations components.

Table 4.5-2. Topics for Community Cohesion Impact Analysis	
Construction	Operations
<ul style="list-style-type: none"> • Increase in Cultural Conflicts 	<ul style="list-style-type: none"> • Increase in Cultural Conflicts • Increase in Military Outreach/Community Programs

Construction Component

Large-scale in-migration of culturally different populations can lead to tension with the host community's longtime residents (United Kingdom Department for Communities and Local Government 2007). The main populations relevant to this proposed action are H-2B construction workers. Cultural discontinuities could emerge during the construction component, producing conflict. Such discontinuity and conflict could increase as greater numbers of in-migrants arrive.

As previously discussed in Section 4.3.8, Guam's temporary foreign workers (H-2Bs) are generally regarded as law-abiding, causing few disruptions to the community. However, there has been some historical experience with foreign construction workers who, due to unfamiliarity with local conditions and prohibition, have overstayed their visa terms (SIAS Appendix B, ALPCD), or disturbed local customs or environments. For example, temporary foreign workers have upset residents by harvesting marine animals normally not consumed on Guam (species considered too small), and by taking shells and corals to the point where reefs have been damaged (SIAS Appendix B, GBSP). In-migrants from FSM are viewed by some as not adopting sustainable fishing practices (SIAS Appendix B, Fisherman's Coop).

Conflicts between local and in-migrant customs related to housing and living conditions is also an issue on Guam. For example, up to 15 or 20 individuals from these groups have been reported to reside in a single housing unit, and there are stories of subdivided lots without sewer connections or other infrastructure being sold by unscrupulous developers to Micronesians, who find it natural to live in the "traditional" rural style found on their home islands (2010 Final SIAS Appendix D, GCA and GHURA; SIAS Appendix A, GDPHSS). These problems can occur because public health standards are not the same from island of origin to host island. In comments on the Draft SEIS, GHURA indicated that potential impacts on GHURA-assisted populations of low and moderate income individuals, if any, would be minimal.

Military Operational Component

A newcomers' orientation program offered by the Navy and the Air Force is in place that informs newly assigned service members and their families about the culture and uniqueness of Guam (Office of the Governor of Guam 2009). The Department of Chamorro Affairs indicated that the current Navy and Air Force provide excellent briefing programs on Chamorro culture that include video and immersion aspects to engage participants (SIAS Appendix B, GDCA).

In addition, a long-standing variety of community service programs have encouraged positive interaction and cultural exchange between the military and civilian populations on Guam. Many of these programs were instituted by the Naval and Air Force commands on the island (Office of the Governor of Guam 2009). These programs have the potential to bring a beneficial impact to Guam to the point that positive interactions could strengthen military ties to local communities. For example, the larger military contingent would add greater numbers of volunteers to community service programs that would bring together both military and civilian groups working toward shared goals.

Some examples of programs are:

- Sister Village Program - Military units are paired with villages to foster mutual sharing and understanding between the people of Guam and the military personnel and their family members stationed on Guam. School partnerships with military units were established in 1987.

- In 1997, volunteer efforts were formally expanded in five project categories to help strengthen education and the quality of life on Guam through joint military and community effort. Those project categories include:
 - Partnership in Education
 - Guest Teacher Program
 - Health, Safety, and Fitness
 - Environmental Stewardship
 - Anti-Drug Campaigns
 - Project Good Neighbor (Pacific Daily News 2008)
 - Naval Hospital Guam Community Services
- Staff contribute thousands of community service hours on projects such as school clean-up, work with Guam Animals in Need, and countless other organizations.
- Naval Hospital received top honors in the 2008 Navy Environmental Stewardship Flagship Award for large, shore-based commands.
- Most notable is the nursing mentorship that is provided for seniors of the UoG nursing program (Naval Hospital Guam 2009).
- AAFB Programs:
 - Big Brothers Big Sisters
 - Donations to schools through the DoD Computers for Learning Program (Lessard 2008)
 - Air shows open to the community
 - Participation in youth sports

4.6 SUMMARY OF IMPACTS

Population Change: The population change associated with the proposed Military Relocation would reach a maximum of 9,721 in 2023 and thereafter decline to a steady-state population increase of 7,412 by 2028. Population change associated with this proposed action is of a far lesser magnitude than was projected in association with the 2010 FEIS, which showed a peak population increase 79,178 and a steady-state population increase of 33,608.

Economic Activity: The economic impacts from the Military Relocation would be beneficial, leading to increased employment and standards of living as compared to baseline conditions. Impacts to Guam's housing stock and availability would likely not bring about additional development.

Public Services: Guam's public services and permitting agencies would require additional staff to meet additional demand associated with the proposed action. Estimated increases in GovGuam tax revenues would likely compensate for any increased demand on these public services that would occur.

Sociocultural Issues: There is a potential for sociocultural impacts to occur, but the magnitude of the impacts are difficult to predict and could vary substantially based on policy and program choices yet to be made as how to address them; any sociocultural impacts would be substantially lower than assessed in the 2010 Final EIS because population increases associated with this action would be much smaller.

More detailed impact summaries for four of the five socioeconomic categories analyzed in this SIAS are presented below. The impacts of land acquisition are discussed in Chapter 5.

4.6.1 Population Impacts

Direct and indirect impacts of both beneficial and adverse nature would occur on population. Total population impacts are expected to increase steadily from 2015 to 2021, and then stabilize between 2021 and 2023 (when maximum population impacts would occur) and then decline to a stable, steady-state level by 2028. As indicated in Table 4.6-1, the maximum population impact (of 9,721) would occur in the year 2023. Population would decline to 7,412 in 2028 and become a steady-state population.

Table 4.6-1. Estimated Total Population Increase on Guam from Off-Island

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Direct DoD Subtotal	258	1,470	3,087	4,259	4,256	7,295	8,504	8,339	8,806	7,868	7,533	7,019	6,959	6,959
Indirect/Induced Subtotal	89	254	531	663	686	897	1,082	1,046	915	716	612	513	455	453
Total Population	347	1,724	3,618	4,922	4,941	8,191	9,585	9,386	9,721	8,584	8,145	7,532	7,414	7,412

Notes: ¹ DoD population includes military personnel, DoD civilian workers and dependents from off-island.

² Population figures do not include Guam residents who obtain employment as a result of the proposed action.

As shown in Table 4.6-2, results of population analysis in this SIAS are of a substantially lesser magnitude than those presented in the 2010 Final SIAS due to a number of factors including:

1. Fewer Active Duty Marines – compared to the 2010 Final SIAS, the number of Active Duty Marines is 42% lower in this SIAS (from 8,552 to 5,000).
2. Fewer military dependents of Active Duty Marines – military dependents are lower by 86% (from 9,000 to 1,300). The large decline in the number of dependents (as compared to the decline in active duty marines) is due to a change in composition of Active Duty Marines. In the action being analyzed in this SIAS, two-thirds of Active Duty Marines would be rotational – spending 6 months per deployment to Guam – and therefore would not bring any dependents to Guam.
3. This SIAS does not assess impacts related to a potential U.S. Navy CVN berthing or a potential AAMDTF because these actions are no longer considered reasonably foreseeable. Impacts from utilities and roadways projects, that are not located at main cantonment or LFTRC project sites, are also not analyzed in this SIAS because they are independent actions, and the Roadmap Adjustment does not change the decision made in the 2010 Record of Decision regarding these actions.
4. An extended construction period – Construction work resulting from implementation of the proposed action is expected to begin in 2015; construction activity would increase over the next couple of years, with an extended period of construction activity occurring from 2017 through 2023, and then begin to taper off from 2024 until the final year of construction in 2027. Overall, this proposed action would have a 13-year construction period compared to the 7-year construction period that was projected for the proposed actions in the 2010 Final EIS.

Table 4.6-2. Comparative Analysis						
	2010 Final SIAS		SEIS Proposed Action		Variance	
	Maximum Population Year (2014)	Steady-state Population (2020)	Maximum Population Year (2021)	Steady-state Population (2028)	Between Maximum Population Years	Between Steady-state Populations
Active Duty Marines	10,552	10,552	3,319	5,000	7,233	5,552
Dependents of Active Duty Marines	9,000	9,000	1,008	1,300	7,992	7,700
Civilian Military Workers and dependents (steady-state)	3,354	3,581	439	658	2,915	2,923
Active Duty Army and dependents (steady-state)	50	1,580	0	0	50	1,580
Direct construction workers and dependents (maximum)	23,095	0	3,574	0	19,521	0
Indirect and induced population (maximum)	33,126	8,895	1,046	453	32,080	8,442
Totals	79,178	33,608	9,386	7,412	69,792	26,196

4.6.2 Economic Impacts

Table 4.6-3 summarizes the primary economic impacts of the proposed action during 2021 (the year that economic impacts would be largest) and 2018 (the first year of steady-state operations). Table 4.6-3 shows Total Combined Impacts (i.e., direct and indirect/induced) for combined construction and operations for the following subject areas: GIP, Civilian Housing Demand, GovGuam Tax Revenues, Civilian Labor Force Income, and Civilian Labor Force Demand. Impacts to each subject area are summarized below.

Civilian Labor Force Demand

Civilian labor force demand is expected to increase by a maximum of 7,031 full-time jobs in 2021 (6,150 related to construction and 881 related to operations). Of the 7,031 jobs, 3,058 are estimated to be taken by Guam residents. At steady-state, by 2028, labor force demand is expected to increase by 1,438 full-time jobs (all related to operations); 762 of the jobs are estimated to be taken by Guam residents.

Civilian Labor Force Income

Civilian labor force income is expected to increase by a maximum of \$296 million in 2021 and reach a steady-state level of \$67 million in 2028. The estimated average salary for jobs related to the construction phase (\$38,600) and the military operational phase (\$46,000) would be considerably higher than the 2011 Guam average salary of \$27,387.

Government of Guam Tax Revenues

GovGuam tax revenues are expected to increase by a maximum of \$86.4 million in 2021 and reach a steady-state level of \$40 million in 2028. Personal income tax revenue is estimated to be the primary driver of GovGuam tax revenue impacts associated with the proposed action (72% of total tax revenue impacts in 2021 and over 90% of tax revenue impacts during the steady-state).

Civilian Housing Demand

Housing demand associated with the proposed action is estimated to reach a maximum of 770 units in 2021 and decline to a steady state demand of 285 units in 2028. No new housing units are expected to be required to meet demand generated by the proposed action.

Gross Island Product

GIP is expected to increase by a maximum of \$635 million in 2021 and reach a steady-state level of \$75 million by 2028. The primary driver of GIP impacts in 2021 would be DoD construction activity while during the steady-state period GIP impacts would be primarily driven by Marine Corps operational expenditures.

Table 4.6-3. Summary of Economic and Housing Impacts		
	<i>Impact</i>	
	<i>Maximum⁴</i>	<i>Steady-State⁵</i>
Civilian Labor Force Demand ¹	7,031	1,438
– Expected for Guam Residents	3,058	762
Civilian Labor Force Income ²	\$296	\$67
GRT ²	\$16.4	\$1.8
Corporate Income Tax ²	\$7.4	\$0.8
Personal Income Tax ²	\$62.6	\$37.4
Total Tax Revenue ²	\$86.4	\$40.0
Civilian Housing Demand ³	770	285
GIP ²	\$635	\$75

Notes: ¹ FTE jobs.

² Dollar figures in millions of 2012 dollars.

³ Units of housing required by civilian in-migrants, disregarding housing supply.

⁴ Maximum impacts estimated to occur in 2021.

⁵ Steady-state impacts projected to begin in 2028.

4.6.3 Public Services Impacts

Analysis identified what portion of project-related population would access services from each agency. This number was deemed the agency's "service population." From the service population, the number of additional staff members each agency would require as a result of this growth in service populations in order to maintain current ratios of staff to service population was determined.

Table 4.6-4 provides a summary of the increase in service population projected for each public service agency. Service population numbers are expected to be at maximum in either 2021 or 2023 (as a rule of thumb – 2021 if an agency would not be affected by direct DoD population, and 2023 if it would be); a long-term steady-state would be reached for all agencies in 2028.

Table 4.6-4. Summary of Public Agency Service Population		
	<i>Impact¹</i>	
	<i>Maximum</i>	<i>Steady-State</i>
GDoE	562	268
GCC	55	39
UoG	99	70
GMHA	5,137	895
GDPHSS	5,137	895
GBHWC	1,934	337
GDISID	1,934	337
GPD	9,585	7,412
GFD	5,285	1,112
GDoC	30	26
GDYA	562	268
GDPR	9,585	7,412
GPLS	9,585	7,412
JoG	9,585	7,412

Note: ¹ Numbers represent projected increase in service population for each public services agency that would be generated by the proposed action.

Table 4.6-5 shows a summary of the increase in number of staff that would be required by GovGuam public service agencies to meet the needs of projected increases in demand for services. Although the percent of increase in additional staffing varies, the highest percentage among agency categories affected by population growth would be 9% during the maximum time period and 3.3% for steady-state. For agencies affected by development, a 25% increase in total staffing is anticipated at maximum, largely due to the requirements of ALPCD.

Table 4.6-5. Summary of Public Service Agency Key Staffing Requirements					
Agency Category	Baseline Staffing	Impact ¹			
		Max	Max %	Steady-State	Steady-State %
Agencies Affected by Population Growth					
Public Education Agencies	2,641	49	1.9%	25	0.9%
Public Health and Human Services	1,140	38	3.3%	7	0.6%
Public Safety	820	40	4.9%	27	3.3%
Judiciary of Guam ² and Selected Agencies Driven by Population Growth	322	29	9.0%	3	0.9%
Agencies Affected by Development					
Growth Permitting and Regulatory	112	28	25%	4	3.6%

Notes: ¹ Numbers represent projected increase in key staff for each public services agency that would be required to maintain current levels of service.

² The JoG is a branch of GovGuam, co-equal with the executive and legislative branches.

4.6.4 Sociocultural Impacts

There is a potential for sociocultural impacts to occur, but the magnitude of the impacts are difficult to predict and could vary substantially based on policy and program choices yet to be made as how to address them. Any sociocultural impacts would be substantially lower than assessed in the 2010 Final EIS because population increases associated with this action would be much smaller. Impacts that were identified include the following:

- In proportion to the increase in on-island population, there would likely be impacts on the number of crimes and social order.
- There is potential for social friction to occur due both to more military personnel and more off-island civilian in-migrants, especially in the initial stages of construction and military personnel coming to Guam.
- Guam's indigenous Chamorro population has concerns about whether incoming military populations would recognize them as both American by nationality, and also as a unique ethnic culture worthy of respect and preservation. Potential military-civilian and cultural conflict can be alleviated through concerted efforts to orient new arrivals to the local culture and encourage continued exchange.
- Political and Chamorro concerns involving political minoritization are impacted by the potential increase in non-Chamorro populations due to the relocation, notably during the operational phase. More non-Chamorro and local voters could potentially affect ongoing and future issues undergoing votes.

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CHAPTER 5. LAND ACQUISITION

5.1 HISTORY AND BACKGROUND

This Affected Environment section provides: 1) historical and current information on the administration and socioeconomic value of land on Guam, 2) an overview of the federal land acquisition process, and 3) information on the general land and real estate characteristics of each of the parcels under consideration for acquisition. This approach is slightly different from the 2010 SIAS where the parcel characteristics were provided as a stand-alone report entitled, “Land Acquisition Baseline Report” that was included as an appendix to the 2010 Final SIAS.

5.1.1 Historical Land Tenure and Administration on Guam

Guam has a history of occupation by various countries and their administrators that have implemented assorted forms of land administration. This history affects the manner in which changes in land administration (such as those proposed by this project) occurs, and is received by inhabitants. For information on land administration prior to U.S. administration after WWII, see the 2010 Final SIAS (Appendix F of the 2010 Final EIS).

5.1.1.1 U.S. Administration of Guam Land After World War II

Note: All information from this section, unless otherwise noted, was obtained from the book “Destiny’s Landfall” (Rogers 1995).

Following the repossession of Guam from Japan, the U.S. Navy administration began the process of rebuilding parts of Guam that were destroyed during fighting. While efforts in education and public health had more positive results for Guam’s population, the processes involving land re-distribution were fraught with discontent that remains to the present day.

The 79th Congress passed several laws in 1945-1946 involving land issues (below), and a Land and Claims Commission began operation in April 1945 to administer those and other laws.

- P.L. 224 (15 November 1945), the Guam Meritorious Claims Act, authorized payment for war-connected claims, including property loss. There was a ceiling of \$5,000 placed on each property loss claim. Principal claims that emerged involved the largest landowners (Catholic Church, Atkins Kroll, Torres, Butler, Martinez, and Bordallo families).
- P.L. 225 (November 1945), the Land Transfer Act, made federal land available to Guam residents who had been relocated due to the bombardment or through land acquisition. These residents had been moved to refugee camps to be later compensated with either payment or replacement lands.
- P.L. 594 (2 August 1946), the Land Acquisition Act, authorized the Navy Department to acquire private land. Following the end of the war, it was identified that a total of 75,700 acres (30,634.8 hectares) or 55% of Guam would be needed for defense and security reasons in the present and into the future. The U.S. already owned 28,345 acres (11,470.9 hectares), and 29,460 acres (11,922.1 hectares) needed to be acquired, with a remaining 17,895 acres (7,241.9 hectares) to be leased.

Confusion over land ownership documentation was intense during this period. During the Japanese occupation, there had been widespread destruction of land-related documents. Later, during the U.S. bombardment, many homes and landmarks delineating property boundaries were demolished and

rebuilding efforts often disregarded old property boundaries, especially if the physical characteristics that identified those boundaries no longer existed. Thus, the rebuilding process resulted in new lots that contained portions of tracts owned by different people. Adding to the disorder was the fact that much of the land that was acquired by the Navy had not been surveyed.

As a result of confusion over redistribution, and with a continuing desire to own more land on Guam, the Navy was able to obtain large parcels at reduced rates rather than negotiating for individual lots. The average price paid for an acre of land was \$54, while acreage was leased at an average of \$0.60 an acre. Although the land acquisition occurred in 1947, the acquisition prices were based upon 1941 appraisals, which likely presented a lower valuation than if appraisals had been more current.

Some landowners were willing to sell their land, but others protested and took their cases to court (still others did not address their concerns in court, leading to a continued feeling of unresolved grievances in the present day). A Superior Court of Guam was enacted by Executive Order number 24-47 in October 1947 in order to hear civil actions and land condemnation cases. By the end of 1949, the court had cleared almost 3,000 cases. There was discomfort with the court's decisions, as no Guamanians were included in the court.

The presiding judge, John C. Fischer, was hired from the U.S. mainland, and was also the presiding judge of the Court of Appeals that listened to any appeals that emerged from the Superior Court's processes. Bullying tactics such as "threats, coercion, appeals to patriotism, and fear of military reprisal" were also reported and later emerged in court claims and investigations (Rogers 1995). In 1948 and 1949, the Ninth Guam Congress passed resolutions and bills asking to have Guamanian representation in land decisions, the end to the condemnation of Tumon Bay, and the abolishment of the Superior Court. These bills and resolutions were rejected, although only half of Tumon Bay was restricted from public access, instead of the entire bay as previously planned.

The civil administration of Guam was transferred from the U.S. Navy to the DoI in August 1950, as part of the Guam Organic Act. Per Section 22 of the Organic Act, U.S. federal lands used by the Navy government for civil affairs were to be transferred to GovGuam within 90 days of August 1, 1950. The Navy retained lands that were required for military purposes. However, Section 33 gave rights to the president to designate any part of Guam as a military reservation, and a total of 42,380 acres (17,150.7 hectares) that were used for civil affairs, including a large part of sewer, water, power, and telephone systems were kept under Navy ownership per Section 33.

In all, after the enactment of the Organic Act, the Navy and Air Force controlled 36% of the island, GovGuam took control of over 22% of the island, leaving 42% of the island under private ownership.

Since the Organic Act, land continues to undergo ownership change and come under claim. The 1977 Omnibus Territories Act contained an amendment to the Organic Act, allowing the U.S. District Court to hear compensation claims for land that the Navy had condemned after WWII. By 1980, 600 claims had reached the courts. Following a positive determination for one case, claim filings increased to a total of 1,377 claims for 3,525 condemned parcels of land. In addition, in 1984, GovGuam unsuccessfully sued the federal government in an attempt to acquire excess land held by the Navy.

The federal government has released some excess lands, albeit with timelines fraught with "red tape" (Rogers 1995). For example, the Guam Excess Land Act released DoD property that was declared to be in excess to military requirements, to GovGuam. DoD land control has decreased over the past three decades as a result of the Guam Excess Land Act of 1994 and BRAC recommendations. The former Naval Air Station Agana was closed in 1995, and the Navy transferred ownership to GovGuam and other

government agencies. In 1997, BRAC realigned Naval Base Guam, which included the release of surplus/excess Navy DoD lands determined to be excessive in the Guam Land Use Plan. The previous Naval Facility, at Ritidian Point, was transferred to the U.S. Fish and Wildlife Service. In addition, the Navy out-leased the Former Navy Ship Repair Facility located within the Apra Harbor Naval Base to GovGuam for utilization as a commercial shipyard facility.

5.1.2 Current Land Tenure and Administration on Guam

Information in Table 5.1-1 that was provided by GBSP shows the number and proportion of acres on Guam that are owned by the U.S. federal government, GovGuam, and private parties. Privately-owned lands make up 54% of Guam land, federally owned lands make up 27% of Guam land and GovGuam owned land makes up 19% of Guam land. The recorded distribution of land has shifted since reported in the 2010 Final SIAS – data shows that GovGuam land has declined while private land has increased – this is due to updated data that now reflects GALC distributions of land to private owners.

Table 5.1-1. Summary of Guam Land Ownership		
	<i>Acres</i>	<i>% of Acreage</i>
Total	134,447	100%
Private	72,957	54%
GovGuam	25,581	19%
Federal	35,939	27%
<i>DoD Custody and Control</i>	<i>34,839</i>	<i>25.9%</i>
<i>Non-DoD Custody and Control</i>	<i>1,100</i>	<i>0.8%</i>

Source: SIAS Appendix A, GBSP.

5.1.2.1 Private Land Ownership

Non-federal and non-GovGuam lands are assumed to be privately held. As shown in Table 5.1-1, the approximate acreage of privately-owned land on Guam is 72,957 acres (29,524.8 hectares) (approximately 54% of total land on Guam). Private land ownership on Guam is not restricted on the basis of nationality or residency and title can be held in fee simple, which means the owner has the right to control, use, and transfer the property in accordance with the law.

5.1.2.2 Federal Land Ownership

Information presented in Table 5.1-1 shows that the U.S. federal government owns 35,939 acres (14,544.1 hectares) of land on Guam, which is approximately 27% of total land on Guam. The DoD manages most of the federal lands, but there are approximately 1,100 acres (445.2 hectares) of federal land managed by other agencies, including the National Park Service, U.S. Postal Service, and the National Weather Service. Federal acreage numbers are based on DoD GIS. The federal lands are excluded from Guam land use planning and local zoning regulations and permitting are not applicable to development on federal lands.

5.1.2.3 Government of Guam Land Ownership

Information presented in Table 5.1-1 shows that the approximate acreage of GovGuam owned land is 25,581 acres (10,351.3 hectares), which is approximately 19% of total land on Guam. GovGuam lands include land used for government operations, as well as public lands that are subject to either ancestral or indigenous land rights claims.

GovGuam lands are currently managed by the GDLM. Under the GDLM Director's Office are the:

Land Planning Division – administrators of past, current, and future land use projects on Guam.

Land Administration Division – works to promote effective development of current GovGuam land, as well as manage land acquisitions and sales. This division is divided into a Land Disposition Section, Land Acquisition Section, and Land Registration Section.

Land Survey Division – registers and surveys GovGuam land, maintaining files for GovGuam and private use.

Land Records Division – administers land title registration and provides services to public and private companies relating to the location of property lines and certification of ownership.

GIS/Land Information System Division – aims to capture all data elements (maps and land records) for the island of Guam and to automate various GDLM services.

- Pursuant to Governor Calvo's (Guam's current Governor, as of the year 2013) Reorganization Advisories 5 and 9 effective October 1, 2011 GDLM houses both the GALC and the CLTC, the commissions with primary responsibility for managing lands under ancestral or indigenous claim. The reorganization serves to increase efficiency and cost effectiveness while improving customer service (SIAS Appendix A and B, GDLM).

Other agencies work with GALC and CLTC, as described further below. Comprehensive land use planning is the responsibility of the GBSP. Guam Economic Development Authority (GEDA) manages land leases and attempts to generate revenue for GALC. Other entities, including the GDA and GDPR, have land management functions specific to a land classification. The GDPW administers roads and highways.

Guam Ancestral Lands Commission

Ancestral lands are lands where qualified ancestral property rights can be accrued. This is property that was owned by a Guam resident on or after 1 January, 1930, and was subsequently condemned for public purposes by either the U.S. federal government or GovGuam. These lands were released as excess public lands in accordance with local and federal authorities. GALC was established by Guam P.L. 25-45 to administer Guam's ancestral lands and to assist original landowners or their heirs and descendants in exercising their ancestral property rights. It is responsible for investigating, recording, filing and reporting claims for ancestral lands, and responding to requests for redistribution of lands taken by the U.S. or by GovGuam taken on or after January 1, 1930 (Guam Office of Public Accountability 2006).

At inception, GALC began with 3,200 acres (1,295 hectares) of ancestral lands identified in P.L. 22-145 and an additional 6,500 acres (2,630.5 hectares) of ancestral lands identified in P.L. 23-141. Not all of this land was immediately releasable (due to easements and other government functions), but 448 lots that constituted 5,929 acres (2,399.4 hectares) were releasable. As of July 2006, GALC had released 234 of these lots to applicants (Guam Office of Public Accountability 2006). As of January 2013, GALC manages 5,373 acres (2,174.4 hectares) of land including 50 acres (20.2 hectares) that are leased (SIAS Appendix B, GDLM).

The seven-member GALC is appointed by the Governor. Commissioners must be residents of Guam and descendants or heirs of ancestral land owners.

The commission has several duties including:

- Maintenance of five registries for the settlement of ancestral claims.

- Managing the extinguishment of ancestral claims through granting what is deemed “just compensation.” Such compensation is arranged through satisfactory negotiations between the claimant and GALC. In exchange for just compensation, the claimant surrenders all interest in the ancestral land claim.
- Administration of Landowner’s Recovery Fund, created to grant loans, loan guarantees or grants-in-aid to landowners, or to defer costs or fees for professional services required by those who have ancestral land claims.
- Administration of Land Bank lands. Land Bank lands include Spanish Crown Lands and other non-ancestral lands. The GALC is tasked with developing these lands to the highest and best use. It administers these lands through an MOU with the GEDA. Revenues generated from this land development are used to provide just compensation in ancestral claim extinguishment; however, as of 2005, no funds had been disbursed because a compensation schedule had not been determined (Guam Office of Public Accountability 2006).
- Administration of a private account, into which revenues from an inherited license agreement are deposited. This license agreement was inherited from GEDA, and allows a private company to occupy approximately 10 acres (4 hectares).
- Participation in zoning of ancestral lands, through participation in a Provisional Commission, and subject to approval by the Legislature.

The five registries maintained by the GALC include:

- Original Landowners Registry, - listing of recorded owner names of properties confiscated or condemned by the U.S. or GovGuam after 1930. This list confirms applicant’s property claims for future extinguishment upon receipt of just compensation.
- Excess Lands Registry – listing all lands already declared excess by the U.S. or GovGuam, and lands that may be declared excess in the future. This list identifies specific lots that GALC may use as just compensation for extinguishment claims.
- Claims Registry - lists all claims to ancestral title.
- Conditional Awards Registry – lists all conditional compensational awards made to claimants.
- Ancestral Title Registry – lists applicants granted land titles in return for the surrender of property claims.

GALC staff includes one land agent and one administrative assistant (SIAS Appendix A, GALC).

Chamorro Land Trust Commission

The CLTC was formed to advance the well-being of the Chamorro population through the distribution of land. The 12th Guam Legislature passed P.L. 12-266 in 1974, the Chamorro Land Trust Act, which was modeled after the Hawaiian Homes Commission Act. However, the law was not implemented for 18 years due to difficulties in defining the legal definition of a native Chamorro (Rogers 1995). The CLTC was codified by 21 Guam Code Annotated, Title 21, Chapter 75.

Administered within the GDLM, the CLTC controls GovGuam land designated as Chamorro homelands. Chamorro homelands are defined as all GovGuam lands, with the exception of lands reserved for public purposes or ancestral lands (managed by the GALC). The native Chamorro designation is not based on ethnicity but on residency in Guam prior to August 1, 1950 by virtue of the authority and enactment of the Organic Act of Guam (SIAS Appendix B, GDLM).

The CLTC makes Chamorro homelands available to qualified applicants (native Chamorros or decedents thereof) through residential, agricultural and commercial leases. The annual lease rates are \$1 for residential and agricultural leases, but vary for commercial use based on intended use and appraisals (SIAS Appendix B, GDLM). Of the estimated 10,000 acres (4,046.9 hectares) managed by CLTC, approximately 647 are leased for residential use, 2,274 for agricultural use, and 705 for commercial or other uses. Priority use for the land is to address homelessness and encourage agricultural production. CLTC does not actively seek development proposals. There are approximately 10,740 Chamorro leases. “Public utility companies or corporations also may be granted licenses for telephone and electric power lines, gas mains etc., and to churches, hospitals, public schools, post offices, and for other public improvements” (Guam Office of Public Accountability 2009).

The Guam Racing Federation has a lease through 2018 to operate the Guam International Raceway. They have actively sought to retain the use of the land that was within the 2010 Final EIS LFTRC alternatives (SIAS Appendix B, GDLM).

The five-member CLTC is appointed by the Governor and confirmed by the legislature. The CLTC Chairman is one of the five members and also appointed by the Governor. Full-time staff includes a Director, Deputy Director, and seven other staff. In addition, GDLM staff provided support (SIAS Appendix B, GDLM).

Leases to qualified Chamorro applicants are limited in the following manner:

- Acreage for subsistence agriculture or aquiculture limited to .25 acre (0.1 hectare).
- Acreage for commercial agriculture, aquiculture, or grazing limited to 20 acres (8.1 hectares).
- Acreage for residential lots limited to 1 acre (0.4 hectare).
- Leases are for 99 years.
- Lessees are required to occupy the land and make minimum improvements.
- Cottage industry activity (industry such as manufacturing items occurring from the home) is authorized.
- Licensing authority for community support facilities such as churches and markets can be obtained for up to 21 years.

When CLTC lands are not earmarked for Chamorro leases, general leases can be made available for these lands. In such a case, CLTC returns the lands to the GDLM for general leasing, with the following stipulations:

- Lease terms are 25 years or less.
- Leases are subject to termination.
- Generated revenues are put into the Chamorro Home Loan Fund. These funds can be loaned to CLTC lessees for land improvements. 10% of the fund is used for educational purposes through the Chamorro Education Assistance Fund.

CLTC has four divisions:

- Administrative Services
- Logistical Support
- Residential and Agricultural Leasing
- Commercial Licensing

The GEDA provides commercial licensing support through an MOU (SIAS Appendix B, GDLM). In June 2009, the Legislature passed a bill imposing a moratorium on commercial leases until the CLTC develops regulations and a land use plan that designates specific lands as available for commercial lease (Hart 2009). As of January 2013, the moratorium continued to be in effect and it has resulted in a backlog of commercial leases (SIAS Appendix B, GDLM). The moratorium was the culmination of a critical report by the Office of the Public Auditor on, and subsequent legislative attention to, a variety of questions about CLTC management and staffing capacity to deliver all its services to Chamorro clients rather than to commercial clients as well (Gesick 2009).

5.1.3 Federal Land Acquisition Process

Federal guidelines would be followed in executing project-related land acquisitions.

Federally funded projects including the proposed action can require the acquisition of private and public lands for project implementation, and the government has developed various regulations to guide such processes. In general, these federal guidelines ensure the fair, equitable, and consistent treatment of affected property owners.

There are various types of real estate acquisition as follows:

- Fee Simple – allows full ownership of title.
- Leasehold – allows right of exclusive possession for a specified period and use.
- Easement – allows non-possessory right of use for a specific purpose (restrictive easements allow for the right to restrict use of others for specific purposes, if required).
- Purchase Option – allows the right to acquire a specific interest for a specific price, within a specified period of time.

The DON is required to comply with federal land acquisition law and regulations, which includes the requirement to offer just compensation to the owner, to provide relocation assistance services and benefits to eligible displaced persons, to treat all owners in a fair and consistent manner, and to attempt first, in all instances, acquisition through negotiated purchase.

5.1.3.1 The Uniform Relocation Assistance and Real Property Acquisition Policies Act

The Uniform Relocation Assistance and Real Property Acquisition Policies for Federal and Federally Assisted Programs Act of 1970 (hereinafter the “Uniform Act”), as amended and as enacted through P.L. 91-646, controls federally-funded projects that require the acquisition of real property, including the relocation of persons displaced by such acquisition. Information contained in this section is based on the National Highway Institute’s online training FHWA-NHI-141045 (National Highway Institute 2010) and a review of the Uniform Act July 6, 2012 amendments.

There is a history of federally funded programs requiring the acquisition, rehabilitation or demolition of private real property. The Constitution’s Fifth Amendment provides protection for property owners, as it states that they are entitled to just compensation for their property, if it is to be acquired for public use, and that property cannot be acquired without due process of law. Thus, past programs requiring land acquisition would sometimes include relocation benefits such as moving expense reimbursement or housing assistance. However, especially during the decades between 1930 and 1960, as public works projects and urbanization resulted in increasing numbers of people being displaced by federally funded programs, affected property owners were experiencing inconsistent treatment.

Efforts to reduce inconsistency and create minimum standards resulted in the passing of the Uniform Act and its implementing regulation 49 CFR Part 24. Since 1970, it has been revised several times, with the most recent updates in January 2012. The Act requires that the displacing agency provide both advisory assistance and financial benefits.

The Uniform Act consists of three sections, including:

Title I – provides definitions and limitations.

Title II – details applicable provisions (payments and services for property owners and tenants).

Title III – details real property acquisition policies.

Property Appraisal and Fair Market Value

By law, the federal government is required to offer property owners just compensation for their property, which is based on fair market value of the property. Fair market value is determined through a federal real property valuation appraisal. The estimated fair market value is used as the basis for acquiring estimates of just compensation. An estimate of just compensation must be established before any property negotiations begin.

Any acquiring agency wishing to begin the process of property appraisal is required to first inform the public. Property owners must be notified that their property is under consideration for acquisition, advised of their legal protections during the process, and invited to accompany the property inspection by an appraiser. This is the initial opportunity for property owners to begin a dialogue with the acquiring agency whereby the owner can confirm ownership and other interests in the property, point out unique amenities, and identify improvements.

Land appraisals can be completed either by staff of the acquiring agency, or by a technically qualified consultant. The Uniform Act defines an appraisal in its Section 101(13), as:

“a written statement independently and impartially prepared by a qualified appraiser setting forth an opinion of defined value of an adequately described property as of a specific date, supported by the presentation and analysis of relevant market information.”

An appraisal should include the following, as of a specific date (usually the date of appraiser visit):

- Opinion of defined value.
- Adequate description of the property (location, zoning, highest and best use analysis, physical and legal characteristics of the real estate, improvements and physical characteristics of improvements, etc.).
- Supporting relevant market information (comparable sales, analysis of properties sold, rental rates, construction costs, market demand information etc.).

Complex appraisals must be completed by an appraiser certified in accordance with Title XI of the Financial Institutions Reform, Recovery, and Enforcement Act of 1980. The appraiser should be qualified in the following approaches to property appraisal:

- Market Approach (Sales Comparison Approach) – uses comparable data available, verifies this data with a knowledgeable entity, and adjusts the value according to similarities and dissimilarities between the area of interest and the comparable properties.
- Cost Approach – includes estimates from the Market Approach, in addition to the reproduction or replacement of physical improvements on the land (noting depreciation or deterioration).

- Income Approach – uses verified market data to estimate the gross income a property is capable of producing, and include allowance for vacancy losses and remaining economic life, etc.

These approaches can be combined and reconciled to produce a single market value for property.

Section 302(a) of the Uniform Act requires purchase at minimum of an equal interest in tenant-owned improvements such as buildings, structures and improvements. Additional requirements are outlined in 49 CFR 24.105.

Furthermore, during the valuation process, the appraiser should also determine what is considered real property to be acquired versus personal property that can be moved.

It is required that the valuation process *not* take into account any increase or decrease in property value due to the proposed action. Federal regulations code 49 CFR 24.103 provides additional appraisal standards and requirements. Federal and state laws, including eminent domain codes, provide additional guidance for appraisers. Also, the Uniform Appraisal Standards for Federal Land Acquisitions should be consulted.

All acquiring agencies should have an appraisal review process to ensure appraisals are accurate, technically correct, and meet standards and requirements.

Appraisals are *not* required if an informed owner wishes to donate the land, or the property value is uncomplicated and estimated to be worth \$10,000 or less. A higher limit may be requested if it is determined this will not reduce assistance protection provided under the Uniform Act. Uncomplicated appraisals for properties with an estimated value of over \$10,000 but less than \$25,000 may receive a waiver valuation rather than an appraisal to estimate fair market value, but if an owner elects to have an appraisal performed, one will be obtained (Federal Highway Administration 2010).

Records for each land appraisal process should be maintained, and are required to include:

- Appraisal Report or waiver valuation document.
- Appraisal analysis and conclusion or evidence for waiver valuation.
- Agency estimate of just compensation.
- Other items (such as contracts, project plans, scope of work, and comparable sales and data books).

Once the property appraisal has been completed and reviewed, the approved appraisal amount is used to determine the amount of just compensation to be offered for the property. Just compensation will never be less than the fair market value established by the approved appraisal (Federal Highway Administration 2010).

Written Offer and Negotiations

All property appraisal processes must be complete before negotiations begin. Once an estimate of just compensation has been established, the Uniform Act requires the acquiring agencies to provide a written offer to the property owner for the full amount.

This written offer should be provided promptly and should include a summary statement, including the following information:

- Amount offered as just compensation (as established through the valuation process, and based on current data).

- The basis for the amount offered.
- Description of the property to be acquired.
- Property interest to be acquired.
- Identification of buildings, structures or improvements.

It is at the point of this written offer that relocation eligibility for property owners and tenants is established.

A qualified agency staff member or qualified contractor may be used as a negotiator. Typically the appraiser involved in the first valuation phase must not conduct negotiations. However, negotiations for properties valued at \$10,000 or less can be negotiated by the appraiser. The negotiator and property owner engage in negotiations, which should be done in the following manner:

- All policies and procedures should be explained.
- The property owner is given adequate time to consider the offer and present information regarding the value of the property.
- All information presented by the property owner should be considered by the acquiring agency.
- All concerns of the owner should be considered.
- All negotiations should be handled in an amicable manner, and not include threatening or coercive behavior.

Negotiations sometimes result in additions to the estimate of just compensation for a property. A property owner can provide additional information and make reasonable counter offers and proposals for consideration. This information can be used as a basis for additions to offer amounts, which is called an administrative settlement. Administrative settlements may be approved if they are reasonable, prudent, and in the public interest.

Partial Acquisitions

Sometimes acquiring agencies do not require the acquisition of entire properties. This is referred to as a partial acquisition. If a partial acquisition creates an “uneconomic remnant,” the agency is required to offer to purchase those remnants. In addition, if partial acquisitions cause damages to remaining properties, amounts offered as compensation should include, as a separate line item, compensation for the damages to the remaining property.

Payment

Once negotiations have been completed, a property owner is not required to surrender the property until the agreed purchase price is paid by the acquiring agency. Only exceptional cases warrant right-of-entry for the agency prior to making payment, and only upon approval of the owner.

Once the necessary paperwork is completed, the acquiring agency should pay any liens against the property and pay the property owner. Incidental expenses should be paid (preferable) or reimbursed, and include:

- Recording fees and transfer taxes
- Documentary stamps
- Evidence of title
- Surveys and legal descriptions

- Penalty costs to the owner
- Other similar expenses

Throughout the process of offering, negotiations and payment, records for each parcel should be maintained, and are required to include:

- Activity records (negotiator's log)
- Initial and revised offers
- Property owner concerns, counter offers, and their disposition
- Title information
- Executed documents and agreements
- Records of payments

Relocation

In addition to paying fair market value, the Uniform Act prescribes certain benefits for eligible occupants impacted by federal property acquisitions, including: assistance in finding acceptable replacement housing or business location; the payment of moving and other incidental and miscellaneous expenses and, as needed, certain supplemental payments for increased housing or rental costs at a replacement location.

Displaced persons must be provided information regarding the relocation process and their rights through a series of notices, including:

- General Information Notice
- Notice of Relocation Eligibility
- 90-day Notice

The General Information Notice is provided to all people that *may* be displaced by the proposed action (includes general information about the project and relocation process in the appropriate language). It informs the recipient of the following rights and processes, among others:

- Types of relocation payments that are available.
- How to access relocation payments.
- The appeals process.
- Other relevant services (transportation, housing and business sites, assistance in claims filing, etc.).
- Affected parties must be given at least 90 days of notice in writing prior to relocation.
- Affected parties must be provided with assistance from the agency in moving, locating replacement dwelling or business site (moving without this assistance can jeopardize relocation assistance).
- Relocation should happen only if affected parties are provided with comparable, decent, safe, and sanitary housing.

The Notice of Relocation Eligibility is provided to particular affected parties that would be displaced, and are thus eligible for relocation assistance. This Notice should be issued on or soon after the date that the offer to acquire property is made.

To determine affected parties, a relocation agent consults secondary sources such as government offices and census data, as well as conducts personal interviews. Once the appropriate information has been documented for each affected person or business, the relocation agent maintains contact and dialogue with the affected parties.

Finally, the 90-day Notice requirement means that all lawful occupants shall receive a written notice of the earliest date that a move might be required. This notice must be provided at minimum 90 days in advance of the move date. This notice cannot be provided until after the occupant or owner has been fully informed of their relocation rights.

Overall displaced people must be paid by the displacing agency:

- Actual and reasonable expenses in moving family, personal property, or business.
- Actual direct losses of personal property resulting from the move or from closure of a business (up to the cost of relocating the property).
- Actual and reasonable costs in searching for a replacement business.
- Actual reasonable expenses to reestablish a displaced farm, nonprofit organization or small business at its new site.

In 2012, the Uniform Relocation Assistance and Real Property Acquisition Policies Act, as amended, Fixed Residential Moving Cost Schedule for Guam was as follows shown in Table 5.1-2.

Table 5.1-2. Uniform Act Fixed Residential Moving Cost Schedule 2012										
<i>Occupant Owns Furniture</i>									<i>Occupant Does Not Own Furniture</i>	
<i>Number of Rooms of Furniture</i>									<i>Number of Rooms No Furniture</i>	
<i>1 room</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>Additional rooms</i>	<i>1</i>	<i>Additional rooms</i>
\$450	\$800	\$1,150	\$1,450	\$1,750	\$2,000	\$2,250	\$2,500	\$100	\$200	\$0

Note: Payment is limited to \$100 if a person has minimal possessions and occupies a dormitory-style room, or the person's residential move is performed by an agency at no cost to the person.

Source: Federal Highway Administration 2012

Displaced people are also eligible for assistance in finding and relocating to comparable housing or comparable locations for their business, farms or nonprofit organizations. Replacement housing must be decent, safe and sanitary. Relocation surveys pertaining to housing include comparisons of available housing, noting the following characteristics, among others:

- Price range
- Size (number of bedrooms)
- Occupancy status (owner or renter)

Surveys pertaining to business operations include, among other information:

- Price Range
- Lot Size
- Building Size
- Zoning

The Uniform Act, as amended in July 2012, provides for those that are displaced from dwellings they have owned at least 90 days before initiation of negotiations for the acquisition.

- The amount needed, in addition to compensation for the acquired property, to buy a comparable home.
- The cost of higher interest rates, if the home is mortgaged.
- Reasonable closing costs for acquiring the replacement home, including the title search and recording fee.
- Relocation records for each parcel should be maintained, and are required to include:
 - Activity records (relocation agent log).
 - Offers of service, payment and comparable relocation properties.
 - Concerns of the affected party and their disposition.
 - Housing resource and records of computation, documenting the method used to determine replacement property payments.
 - Copies of all required notices.
 - Replacement property rental, purchase, mortgage and inspection documents.
 - Recorded bids for business moves and payments made in conjunction with moving costs.

Records are required to be maintained for at least 3 years following project completion.

Condemnation

While the government is authorized to acquire property through its powers of eminent domain (condemnation), it has been the consistent peacetime policy of the DON to acquire real estate through negotiation with owners. Use of the condemnation process may be necessary even with willing sellers to clear problems with title.

Costs for condemnation proceedings are not reimbursed to the landowner, except under the following circumstances:

- It is determined the acquiring agency is not allowed to condemn the land.
- Condemnation proceedings are abandoned by the acquiring agency.
- The landowner initiates an inverse condemnation action that is agreed with by the court, or the acquiring agency agrees to an out-of-court settlement.
- Local law requires that the acquiring agency reimburse condemnation costs.

5.1.3.2 Secretary of the Navy Instruction 11011.47B

Secretary of the Navy Instruction 11011.47B, *Acquisition, Management and Disposal of Real Property and Real Property interests by the Department of the Navy* (2009) replaced a 2006 version. The key policies are summarized as follows:

- Land is acquired only if there is no other federal property available that meets the mission requirements.
- To ensure maximum use of federal property, prior approval is required from Commander, Navy Installations Command for land acquisition or use of non-DoD land.
- Additional approval is required from the Under Secretary of Defense for major land acquisitions which are defined as more than 1,000 acres (404.7 hectares) or land having greater than \$1 million purchase or annual lease price. The public notice includes a notice of intent to perform environmental analysis request for legislation or budget, and a press release.
- Every effort would be made to acquire land through negotiations.

- Minor land acquisitions are limited to one land parcel, unless the other parcels are non-contiguous. There are also cost limitations.
- Transfers within the DoD are allowed with mutual approval of both parties.

The P-73 Real Estate Procedural Manual provides procedural guidance for Navy personnel and others involved in acquiring, managing, and disposing of real property. Basically, it provides instructions for complying with Secretary of the Navy Instruction 11011.47B and other regulations.

5.1.4 Economic Value of Land on Guam

During the pre-contact era, although land was highly valued on Guam, it was typically never sold. Thus there was no exchange or monetary value attached to land (Souder 1987). The value of land rested in its support of subsistence living. Fertile land had more relative value than infertile land, and land with access to water had more relative value than land that did not have water access.

This subsistence valuation of land changed with European contact. Firstly, monetary values for land parcels were established as a basis upon which taxes could be levied (Souder 1987). Secondly, as crops suitable for export increased dramatically in price, the value of a piece of land depended on the type of crop that it would support.

5.1.4.1 Monetary Value of Land

The monetary value of land on Guam has generally increased over time. Table 5.1-3 shows the typical 1973 price per square meter of land on Guam by village. Table 5.1-4 shows prices for unimproved land on Guam by village, as of November 2009. Although some village boundaries have undergone shifts, a comparison of the two data sets shows that prices have increased between 1973 and the present.

Table 5.1-3. Price Range for Guam Land by Village, 1973		
<i>Village</i>	<i>Price/Sq. Meter</i>	<i>Notes</i>
Agat	\$2-\$12	Includes present day Santa Rita
Asan	\$1-\$4	
Barrigada	\$3-\$52	
Dededo	\$4-\$75	
Inarajan	\$1-\$21	
Piti	\$1-\$47	
Sinajana	\$1-\$191	
Talofofo	\$1-\$4	
Umatac	\$10	
Yona	\$1-\$4	
Machanao	\$4-\$6	Included northwest corner of Guam, part of Dededo and part of Yigo
Agana	\$61-\$405	Includes present day Agana Heights, Chalan-Pago-Ordot, Hagåtña, Mangilao, Merizo, Mongmong-Toto-Maite and Tamuning

Source: Souder 1987.

Table 5.1-4. Estimated Price Range and Median Price for Guam Land, by Village, 2012				
Village	Price/Sq. Meter			Price/Acre
	Low	Median	High	Median
Agana Heights	\$42	\$42	\$42	\$169,968
Agat	\$22	\$45	\$134	\$182,109
Asan	\$32	\$94	\$157	\$380,405
Barrigada	\$8	\$100	\$443	\$404,686
Chalan-Pago-Ordot	\$5	\$27	\$339	\$109,265
Dededo	\$2	\$100	\$251	\$404,686
Hagåtña	\$203	\$405	\$726	\$1,638,978
Inarajan	\$15	\$56	\$113	\$226,624
Mangilao	\$20	\$64	\$178	\$258,999
Merizo	\$4	\$109	\$113	\$441,108
Mongmong-Toto-Maite	\$39	\$53	\$207	\$214,484
Piti	\$48	\$96	\$192	\$388,499
Santa Rita	\$15	\$51	\$98	\$206,390
Sinajana	\$10	\$136	\$176	\$550,373
Talofofo	\$3	\$45	\$73	\$182,109
Tamuning	\$29	\$216	\$1,023	\$874,122
Umatac	\$40	\$45	\$49	\$182,109
Yigo	\$17	\$30	\$70	\$121,406
Yona	\$12	\$175	\$507	\$708,201

Notes: Estimate based on data from Public Multiple Listing Service Search. Sample includes 353 unimproved Properties (Multiple Listing Service 2012). Values for Agana Heights, Hagåtña, and Umatac are carried over from 2009 estimates due to lack of 2012 data.

Evidence shows that land value has been increasing: a 1987 report showed the average value of a tract of land on Guam increasing from \$115 in 1941 to \$51,132 in 1987 (Souder 1987). Increases in Guam land prices may be due to any number of factors including population increase, inflation, and improvements in infrastructure.

Table 5.1-5 shows the estimated total equity value for Guam land, not including improvements. While government owners of land are not likely to mortgage property, private owners may leverage the value of their land to increase the stock of money on Guam, which could facilitate overall economic expansion.

Table 5.1-5. Estimated Total Value of Guam Land, 2012			
Village	Total Acres	Land Value	Value Per Acre (mean)
Agana Heights	637	\$108,976,049	\$171,077
Agat	6,641	\$1,205,166,591	\$181,474
Asan	3,534	\$1,346,703,973	\$381,071
Barrigada	5,274	\$2,134,315,372	\$404,686
Chalan-Pago-Ordot	3,633	\$397,509,598	\$109,416
Dededo	19,003	\$7,683,521,368	\$404,332
Hagåtña	541	\$887,313,576	\$1,640,136
Inarajan	11,919	\$2,682,844,110	\$225,090
Mangilao	6,765	\$1,757,471,280	\$259,789
Merizo	4,906	\$2,168,748,668	\$442,060
Mongmong-Toto-Maite	1,150	\$246,573,975	\$214,412
Piti	4,660	\$1,814,976,883	\$389,480
Santa Rita	10,295	\$2,130,151,281	\$206,911
Sinajana	548	\$300,970,958	\$549,217
Talofofo	11,129	\$2,048,650,594	\$184,082
Tamuning	3,487	\$3,048,064,588	\$874,122
Umatac	4,327	\$787,985,643	\$182,109

Table 5.1-5. Estimated Total Value of Guam Land, 2012

<i>Village</i>	<i>Total Acres</i>	<i>Land Value</i>	<i>Value Per Acre (mean)</i>
Yigo	23,422	\$2,844,403,255	\$121,442
Yona	12,673	\$8,977,086,257	\$708,363
Guam Total	134,543	\$42,571,434,020	\$316,415

Note: Estimate of total land value by Village made by multiplying median prices by total number of square meters of land for each Village. Estimate does not include land improvement values, for example houses.

Land use classification also affects the monetary value of a land parcel. Certain land use activities create more monetary value than others. Lands that are classified to allow more profitable uses are generally considered more valuable.

The GBSP land classification maps identify the following classes of land usage:

- Agricultural – This area allows agricultural uses, single-family dwellings, duplexes, and uses considered accessory to these.
- One-Family Dwelling – Primarily for single-family dwellings, this zone allows schools, churches, parks, and health services as conditional uses.
- Multiple Dwelling – This land use allows duplexes and multi-family residential uses, as well as single-family dwellings and hotels.
- Commercial – In addition to typical commercial uses, this zone also allows single and multiple-family dwelling units.
- Limited Industrial – This land use allows light manufacturing (drugs, cosmetics, food products), as well as auto repair facilities, warehouses and other similar uses. Packaging of fish or meat products, including fat rendering, is not allowed.
- Industrial Zone – The Heavy Industrial classification allows all uses not specifically prohibited by law.
- Hotel-Resort Zone – The Hotel-Resort classification is geared toward tourism-related activities, and all associated uses are conditional in nature.
- Planned Unit Development – Emphasizes unified development of an area based on an integrated plan meeting six general criteria. These criteria consider such things as area size being suitable for the proposed development, compatibility with surrounding uses, lot coverage, “appropriate evolution of the Master Plan” for that area, etc.
- Conservation/Preservation – Unique environmentally sensitive lands that should be protected from development pressure. These areas possess valuable, fragile natural resources and geologic constraints that render the land unsuitable for development.
- Military – Military installation and includes all federal lands.

Table 5.1-6 shows estimated current market prices for unimproved land, for sale at a point in time (December 2012) by type of land use. Table 5.1-6 does not include all land classifications because at the point in time, land in every land category was not available for sale. Lands that are classified as Hotel-Resort, Limited Industrial, and planned unit development have the highest value. Although these uses require large initial investments to develop, they have long-term potential for high profitability.

Table 5.1-6. Estimated Median Prices for Land on Guam by Land Classification Type		
<i>Type of Land Use</i>	<i>Price per Square Meter</i>	<i>Price per Acre</i>
Hotel-Resort	\$431	\$1,744,197
Limited Industrial	\$140	\$566,560
Planned Unit Development	\$136	\$550,373
Commercial	\$108	\$437,061
Multiple Dwelling	\$103	\$416,827
Industrial	\$83	\$335,889
One-Family Dwelling	\$65	\$263,046
Rural	\$35	\$141,640

Note: Estimate based on data from Public Multiple Listing Service Search. Includes a sample of 353 unimproved properties; accessed on December 7, 2012 (Multiple Listing Service 2012).

5.2 APPROACH TO LAND ACQUISITION IMPACT ANALYSIS

The analysis of land acquisition impacts focuses on the potential economic and sociocultural effects of federal land acquisition. This land acquisition analysis differs from the analysis of previous chapters because the potential impacts are specific to each action alternative. The SEIS NOI (October 2012) described five action alternatives for main cantonment/housing and seven for LFTRC. Since the publication of the SEIS NOI, one main cantonment alternative has been removed from consideration and two LFTRC alternatives have been removed from consideration, leaving four cantonment alternatives and five LFTRC alternatives that are analyzed in the SEIS. No land acquisition is proposed for the main cantonment alternatives and one of the LFTRC alternatives (NWF) would not require federal land acquisition, rather a transfer of custody and control of land that is already federally owned, so land acquisition impact analysis is primarily focused on the remaining four LFTRC alternatives – the Route 15 alternative and the three NAVMAG alternatives (East/West, North/South, and L-Shaped).

Impact analysis for each alternative is divided into three sections, which focus on the following stakeholders:

- *Individual Owner/Occupants*: defined as directly affected land owners, claimants, and tenants (including lessees and licensees) whose lots would be potentially acquired due to the proposed action.
- *Community*: defined as members of the Guam island-wide community, who might be impacted by the proposed land acquisition.
- *GovGuam*: defined as a large land owner who leases property and maintains properties in trust or for the benefit of the larger community. The potential impacts of land acquisition could be discussed under construction or operations phase of the proposed action. In this analysis, they are considered operational long-term impacts.

5.2.1 Economic Impacts of Land Acquisition

5.2.1.1 Economic Impacts to Individual Owner/Occupants

The economic impact assessment on Individual Owner/Occupants compares the difference between the economic condition of landowners and occupants prior to land acquisition versus their economic condition after land acquisition. It is noted that cultural and/or family values are important and may even exceed the importance of the economic value placed on land; however, the importance of cultural and/or family values are addressed in the sociocultural impact section, and not in the economic impact assessment.

The method used in the economic analysis assumes that the Uniform Act, the primary federal law guiding all federally funded land acquisition projects, applies. The Uniform Act provides for just compensation under either negotiated purchase (as there is an agreed upon price) or eminent domain (as the payment for land is determined by a federal court). Furthermore, the Uniform Act prescribes full compensation for improvements to land and relocation costs for occupants of land. The 5th amendment of the U.S. Constitution guarantees the provision of “just compensation” to landowners and occupants of land when the government takes land from private hands for public use.

Although in the past there have been concerns expressed over historical nonpayment or perceived inadequate payment for land acquired for military bases, the Uniform Act ensures that the landowner or occupant is left in the same economic circumstance before and after the land acquisition process.

Residential tenants of CLTC land lease parcels of land at a rate of \$1 per year. This below-market lease rate serves as a subsidy for tenants who, if they had to pay a market lease rate, would incur a higher cost. The economic impact of this scenario is measured as the aggregate of the difference between what affected CLTC tenants are paying currently for their lease and what they would pay for a comparable lease at the market rate.

5.2.1.2 Economic Impacts to Community

Economic impacts on the community are addressed through two measures of potential for economic growth: recreational value of land and agricultural production of land.

Recreation Value

A reduction in the number and variety of recreational areas because of federal land acquisition on Guam would constitute an economic impact. Community members find value in time spent recreationally and in the quality and quantity of recreational choices they have. Furthermore, recreational areas induce more tourists to visit Guam which tends to improve economic conditions for the community.

Impact analysis for recreation value consists of an inventory of recreational sites that would be affected by land acquisition and a brief discussion that explains how recreational sites are relevant to community recreation and/or tourism.

Agricultural Production

There is the potential that land acquisition could impact agricultural production through the taking of currently productive agricultural land. In addition to those lands actively being used for agriculture, there are lands that may not be actively farmed but are valued for their agricultural potential. Local agricultural production is a benefit to the community at large as it reduces Guam’s dependence on imported food and increases the sustainability of the local economy. Impacts on agricultural production are assessed by quantifying the land available for, or potentially valued as, agriculture production that would be lost due to land acquisition.

5.2.1.3 Economic Impacts to Government of Guam

GovGuam receives various economic benefits from Guam land. In particular, GovGuam:

- Levies a direct annual tax based on real property value;
- Uses the value of taxable land as a base on which to put a ceiling on its debt issuance;
- Receives revenues for leasing and licensing the use of land; and
- Receives fees from the use of public recreation areas.

Economic impacts on GovGuam are addressed through four measures: property tax revenue, adjustment to the debt ceiling, GALC and CLTC revenue, and recreational fees that would be received by GDPR.

Property Tax Revenue

GovGuam collects taxes from owners of real property (land and improvements on land). GovGuam charges a tax of 0.0875% on the appraised value of land and 0.35% on the value of improvements. Therefore, for every \$100 of appraised land value, GovGuam is owed approximately \$0.0875 in property tax and for every \$100 of appraised improvement value GovGuam is owed \$0.35. Real property tax revenue is held in GovGuam's General Fund and is used to pay for public services.

In an evaluation report of Guam's tax collection activities, the DoI Inspector General estimated property tax collections of \$18.9 million in FY 2006. This represented about 5% of total GovGuam tax collections. In FY 2011, property tax collections were \$20.1 million. The report recommended that Guam become compliant with local tax code, which requires updates to tax assessments to reflect current values (DoI 2008). This is important as the most recent appraisal of real property for tax purposes on Guam was done in 1993. In March 2013, the GovGuam Department of Revenue and Taxation sent out a request for proposals for appraisal and revaluation services.

Because the federal government does not make property tax payments to GovGuam, federal land acquisition has the potential to reduce the amount of real property subject to GovGuam property tax. This in turn would reduce the property tax revenue received by GovGuam. Areas that are currently owned by GovGuam are not subject to property tax and federal acquisition of these lands would not affect the amount of taxable land or potential tax revenues.

The value of property tax revenues that would be lost due to land acquisition is calculated using the method used by the Guam Department of Revenue and Taxation's Real Property Tax Division to estimate the amount of property taxes that it is owed. Specifically (Guam Legislature 2012):

- The total value (appraised value) of a property is subject to taxation
- Separate tax rates are applied to land and improvements
- Land is taxed at 0.0875% of total value
- Improvements are taxed at 0.35%

As an example, tax calculations for a parcel of land that is appraised at \$500,000 with additional improvements appraised at \$500,000 (for a total property appraisal of \$1,000,000) would be as follows:

- Total value of land: \$500,000
- Total value of improvements: \$500,000
- Total tax for the property: \$2,187.5 (\$437.50 + \$1,750)
- Tax on land: \$437.5 (\$500,000 x 0.0875%)
- Tax on improvements: \$1,750 (\$500,000 x 0.35%)

Property tax assessment data was not gathered for the SIAS. Values from Table 5.1-5 are used to proxy for appraised value.

Table 5.2-1 shows GovGuam property tax revenues collected for FY2011. These revenues accrue to the GovGuam general fund. In FY2011, GovGuam collected a total of \$20.1 million in property tax revenues.

Table 5.2-1. GovGuam Property Tax Revenues, FY 2011	
	<i>FY 2011</i>
Property Tax Revenues	\$20,147,143

Adjustment to Debt Ceiling

Debt (or bond) issuance is the act of a government, such as GovGuam, borrowing money with the agreement to repay the money (principal), plus interest, in the future. One of the major uses of debt issuance is to fund expensive infrastructure improvements such as roads or utilities. The major benefit of debt issuance is that a government may proceed with a project that it cannot pay for with cash on-hand. The major disadvantage of debt issuance is that the cost of the project becomes much higher in the long-term, because interest is owed on the debt.

A government's debt issuance ceiling is the maximum amount of debt that it is legally allowed to incur. In March 2007, the U.S. Supreme Court upheld the spirit of the rule in the Organic Act, that public indebtedness (GovGuam's debt issuance ceiling) be calculated as 10% of the assessed valuation of property on Guam.

Although Title 11 of the Guam Code Annotated § 24102 defined the assessed value of property on Guam as 35% of the appraised value of property, Guam P.L. 29-19 amended this definition. Under this amendment, assessed value of property is to be calculated as 70% of the appraised value of property. Guam P.L. 30-7 amended the calculation again, to be calculated as 90% of the appraised value of property.

Data from a June, 2012 report explains that GovGuam has nearly reached its debt ceiling limit of \$1.139 billion, leaving only \$7.2 million available for future debt given the current ceiling (Standard and Poor's 2012).

A government's debt issuance ceiling is the maximum amount of debt that it may incur. In March 2007, the U.S. Supreme Court, confirming what was written in Guam's Organic Act, ruled that public indebtedness (GovGuam's debt issuance ceiling) was to be limited to 10% of the assessed valuation of taxable property on Guam. Again, assessed value is determined as 90% of appraised value. Thus if GovGuam's property tax base is reduced, then GovGuam's debt ceiling would be reduced as well. This impact was measured as a percentage (10%) of the reduction in assessed property value. It should be noted that, as assessments change, so would the impact to Guam's debt ceiling; impact results in this report are based on recently gathered assessment data, but results would change as any of the affected parcels are reassessed.

A higher debt ceiling is not necessarily economically beneficial to a government. In general, the more debt that is issued to a government, the higher that government's debt payments would be. GovGuam's debt payments are paid out from the GovGuam budget, which is variable. A decline in budget coupled with debt payments remaining at a stable level would require budgetary cuts for other GovGuam expenditures such as public health and education.

License and Lease Revenue

Both GALC and CLTC receive appropriations from the GovGuam legislature. GALC provides commercial licenses and leases allowing other entities (public and private) to conduct business on GALC land; the fees GALC receives for licenses and leases are deposited into the Land Bank Account. According to GALC's Report to the Citizens of Guam for FY 2011, Land Bank Account balances included (GALC 2012):

- FHB Land Bank Trust Account - \$1,930,730
- Coast 360 Land Bank Trust Account - \$84,061
- Bank of Hawaii Trust Account - \$77,668
- Bank of Hawaii Landowners Recovery Fund - \$11,779

CLTC provides agricultural and residential leases as well as commercial leases; revenues from residential and agricultural leases are deposited into the Chamorro Commercial Loan Fund and revenues from commercial leases are deposited into a separate checking account opened by the Commission (Guam Office of Public Accountability 2009). CLTC's Report to Citizens of Guam for FY 2011 identified revenues for the years 2010 and 2011:

Table 5.2-2. Chamorro Land Trust Commission Revenues for 2010 and 2011		
	2010	2011
Land Trust Application Fees	\$4,450	\$2,800
Interest Income	\$0	\$4
Commercial Lease/License	\$747,398	\$765,616
Agriculture/Residential Trust Lease	\$3,000	-\$1,091
Payment in Lieu of Real Property Tax	\$4,400	\$0
Adjustment from Prior Year	\$17,642	\$0
Total	\$776,890	\$767,329

Source: CLTC 2012.

In addition, GovGuam land is sometimes leased to public and private entities, usually through the GEDA, these leases generate revenue for GEDA operations which are meant to encourage increased economic activity on Guam.

The acquisition of GALC, CLTC, or GovGuam lands to support the proposed action through leasing or licensing may have either positive or negative revenue impacts depending whether or not those lands are currently under license or lease. The impact could be negative if land acquisition results in a loss of revenue for the leasing agency. Alternatively, if land for the proposed action is acquired in the form of long-term leases, GALC, CLTC, and GovGuam (likely through GEDA) would generate increased revenue – a positive economic impact from the proposed action.

For purposes of this analysis, the value of the potential impact was measured as the license and lease fees received by GALC and CLTC before land acquisition versus after land acquisition. Typical current lease rates for GALC, CLTC, and GEDA properties were used in conjunction with the expected acreages to be acquired to estimate the possible decrease or increase in land lease revenue that could be expected as a result of the proposed land acquisition.

Since lease rates for the particular parcels of interest are not known or assessed in this analysis, results are qualitative. The purpose of this analysis is to illustrate that there would be appreciable revenues to GovGuam and GovGuam agencies from long-term leases, if the long-term lease option is pursued and agreed upon.

Recreational Fees

GovGuam collects fees for the use of the facilities maintained by the GDPR, including recreational facilities such as pools and tennis courts, as well as parklands, through the collection of use permit fees. While these fees generally do not meet the entire costs to operate facilities and maintain park land, they

support the continuation of the public service provided by GDPR. Table 5.2-3 shows the revenue due to park permits and recreation programs increased between 2009 and 2010.

Table 5.2-3. GDPR Revenue Collection FY 2009 and 2010		
<i>Program</i>	<i>Revenue Fiscal Year 2009</i>	<i>Revenue Fiscal Year 2010</i>
Park Permits	\$86,948	\$95,768
Recreational Programs	\$96,228	\$154,654

Source: GDPR 2010.

The overall economic value of recreation in a region is notionally based on the number and variety of available recreational resources. Since community members have various preferences for recreation, the more recreational choices available to the community, the higher the overall recreation value a region offers. Generally, as the number of recreational sites in a region increases, the recreation value of the region increases. As the number of recreation sites in a region decreases, the recreation value of the region decreases. The number of revenue generating recreational uses will be identified for each parcel based on the SEIS.

In addition there is a sociocultural value associated with recreational resources. GovGuam, via GDPR, operates or maintains numerous recreational resources and facilities such as Paseo Stadium, Matapang Beach Park, and youth centers; fees for those services create revenue. If land acquisition restricts or prohibits access to revenue-generating recreational resources, recreational revenue for GovGuam would be reduced. The potential economic impact of this access issue would be the amount of recreational fees received by GovGuam before land acquisition versus after land acquisition.

5.2.2 Approach to Sociocultural Impacts

Assessment of potential sociocultural impacts to individual owner/occupants and the community, including specific culturally-based impacts, is a qualitative assessment based on readily available lot and land use information, and published research. No individual owners or occupants were contacted or interviewed during this impact assessment as the decision to proceed with land acquisition has not been finalized and such contact would represent a premature action. Land Acquisition would be in compliance with the Uniform Act, the primary Federal law guiding all federally funded land acquisition projects.

5.2.2.1 Impacts to Individual Owner/Occupants

The following were identified as potential sociocultural issues of concern for individual land owners and occupants of land that would be acquired:

- Land ownership and occupancy
- Social disarticulation and cultural marginalization
- Social and psychological marginalization and stress and anxiety

Land Ownership and Occupancy

There are landowners that are interested in selling their property that would perceive the sale as a positive event. However, in the absence of interview data with land owners, a prevailing assumption is made that, from a sociocultural perspective, land acquisition, if in the unlikely event that it were to occur through the condemnation process, would be perceived as a negative impact by individual land owners/occupants.

Although individuals are compensated for the economic value of acquired land (and related expenses), the loss of land is a long-term unplanned event that is disruptive to the owners and occupants of an acquired property who may value that property as something that cannot be replaced with money.

Social Disarticulation and Cultural Marginalization

Social structures, networks, and belief systems act as centralizing forces that mobilize individuals to act with common interest. Social disarticulation and cultural marginalization occur as these forces deteriorate or are broken; effects are long-term because these structures, networks, and belief systems are difficult to re-form (Ragsdale 2001). It has been acknowledged that the costs associated with the relocation of a population go much beyond financial costs and that among some of the heaviest costs are associated with what happens to those who are being relocated (Sowell 1996).

Overall, social disarticulation means that a person's social capital or social resources are no longer available. Losing social capital or social resources amplifies the impacts of losing other (natural, physical, human) resources. The *Impoverishment Risks and Reconstruction model for resettling displaced populations* (IRR model), developed through the World Bank, is a model used to measure the social impacts of compulsory displacements that occur for development reasons. The model recognizes that relocation can cause social disarticulation. Relocation does so by severing the existing social fabric of a community: relocation "disperses and fragments communities, dismantles patterns of social organization and interpersonal ties; (and) kinship groups become scattered..."

Results of the severing of social and cultural ties have been shown in other geographical contexts to result in decreased group activity participation, ultimate discontinuation of such activities, and lowered maintenance of areas of cultural importance (Behura and Nayak 1993). Relocated individuals also often find it difficult to integrate into new locations (Baboo 1992). Therefore, in projects that require the relocation of people, the risks of social disarticulation are increased if the relocation is done in a manner that severs kinship and social ties, compared with group and social-based relocation (Ragsdale 2001).

In the Chamorro context, social disarticulation can also lead to cultural marginalization. A loss of land and its resources by a Chamorro property owner can cause cultural marginalization through his or her need to receive *ayuda* or help from others in coping or relocating (Topping and Ogo 1980:348), and a loss of historical land-based ties. It is important to note that the cultural marginalization of an individual due to loss of land has consequences that impact the larger community as well (refer to the Community Impacts section below).

Social and Psychological Marginalization and Stress and Anxiety

Social and psychological marginalization can be an impact of population displacement and relocation. Such impacts occur due to a person's loss of confidence in society and themselves, feelings of injustice and reduced social status associated with economic marginalization (loss of economic power).

A Chamorro property owner's access to land and/or shoreline areas can provide them with the resources to raise animals such as chickens, occasionally grow seasonal produce, or fish for food and recreation and to give away to family and community. In addition, ownership of land allows occasional invitations to relatives and families to visit for a day of social activities (family reunions, for instance). The strong sense of cultural and familial pride associated with the ability to contribute such products of the land and sea or such recreational areas to support an individual's close community is valuable to the property owner's sense of identity and the person's reputation in the community and among extended family.

There are a number of additional potential risks to individuals being relocated that are identified through the IRR model. While risk intensity for each of these impacts is relatively low in the context of the proposed action (see discussion below), land owners or occupants that are uninformed of land acquisition procedures, and subject to provocative discussion in local newspapers or public debate, may experience high levels of stress and/or anxiety due to the perception that these potential problems may actually occur.

The IRR model identifies additional potential impacts of relocation: landlessness, joblessness, homelessness, food insecurity, increased morbidity and mortality, and loss of access to common property and services. Overall, the application of the Uniform Act lowers the risk intensity for both landlessness and homelessness impacts for property owners and tenants, as they are legally entitled to just compensation for their expenses as well as assistance (including financial) in finding replacement lands and facilities for their homes and businesses. Joblessness can occur during resettlement projects when individuals are relocated far away from their current jobs, or when places of employment are located on parcels that may be acquired. This is unlikely in the proposed action's context of a small island community where travel time to most places is not considered long. Food insecurity as a result of resettlement usually occurs in instances involving large groups of people that rely on cultivating the land they live on for a primary source of nutrition.

The physical health impacts that have been documented in the international arena have also involved large groups of people relocating in environments lacking proper drinking water and waste disposal systems. These issues do not apply in the context of the proposed action as the numbers of people that would potentially be relocated are relatively small; the areas under consideration are not overwhelmingly used for farming activities and, with some exceptions, Guam possesses the infrastructure to provide safe drinking water and sewage systems for those numbers potentially to be relocated.

5.2.2.2 Impacts to the Community

Possible and perceived impacts of land acquisition to the Guam community include issues of:

- Federal land ownership or control
- Recreational and cultural site and activity access
- Cultural marginalization

Federal Land Ownership or Control

The public is concerned by proposed increases in federal land ownership on the island of Guam (although there may be individual landowners interested in selling their land). No land acquisition is proposed for the Main Cantonment, but most of the LFTRC alternatives require land acquisition, as well as restrictions on use of submerged lands. An important change from the 2010 Final EIS is that lands proposed for acquisition are not the lands that have been or are in the process of being released by the federal government. The federal submerged lands are adjacent to current federal land holdings. However, because of the DON's commitment to the concept of "net negative," by the end of the Marine Corps relocation there would be no net increase in federal land under the custody and control of the DoD.

Where the proposed LFTRC involves acquisition of coastal lands, there would be an associated increase in federal control of submerged lands.

Recreational and Cultural Site Access

Recreational and cultural activities include on-land activities such as hunting, "boonie stomping" (hiking), visits to cultural sites, and the gathering of medicinal herbs. The public is concerned about access to

recreational and cultural sites. Submerged land uses such as boating, scuba diving, and fishing (commercial and recreational) are restricted within existing federal submerged lands and additional submerged lands would be restricted to public access, depending on the LFTRC alternative.

Cultural Marginalization

A loss of land and its resources by a Chamorro property owner has community consequences. Loss of land could impact the individual's close family and friend network if, for instance, the landowner is unable to provide occasional gifts of the product of farming and fishing associated with the use of their land. Impacts to the community could also occur through an owner's inability to provide *chenchule'* or monetary gifts expected during special occasions (Topping *et al.* 1975:263), or through a loss of venerated residents who contribute to a feeling of *inafa'maolek* or getting along together (Salas 1998).

Apart from community ties to specific landowners, overall cultural marginalization of the Guam community could occur. The economic value of land on Guam may be quantifiable; but the value of the land, from the cultural perspective of inhabitants of Guam, is less tangible.

Categories of functions that land can provide for different cultures have been compiled by the International Union for Conservation of Nature – World Commission on Protected Areas, an organization that has identified the cultural impacts on local communities that result from the loss of access to land due to conservation activities. Similar to the proposed action, the process of creating protected areas can cause change in land ownership and loss of access to recreational and cultural sites. In particular, the organization has identified the following typical sociocultural values that could be impacted by land acquisition: importance to human health, cultural heritage, spiritual attachment, existence, knowledge, sense of place, and identity.

Contemporary land issues on Guam with most relevance to the proposed action are issues of forced federal land acquisition, and restrictions to land access, with the cultural value of land underpinning both these issues.

The history of forced or uncompensated land taking by various outside administering forces impacts public perception of any present-day land acquisition on Guam. Forced or uncompensated land acquisition approaches were not past policy and are not the current policy of the DoD and are regulated by federal law. However there is a concern in the public that past land acquisition injustices may be repeated.

Between the late 1970s and early 1990s, various parcels of federally owned lands were determined to be excess and through various BRAC, or other special legislative actions, were identified to be returned to GovGuam and original landowners. Although large parcels of land were released, there remain identified land parcels that have not yet been released, a fact that causes public dissatisfaction. Some Guam residents argue these past actions should be “made right” by the military and/or the federal government in the course of the planned buildup.

Public comment has indicated dissatisfaction not only with the large quantity of existing and proposed federally owned land but proposed limitation of public access to these lands. Access to recreational land and ocean areas (including historical and cultural sites) for hiking, fishing, beach-going, diving, and sight-seeing among other activities, is also an issue. The public perception is that existing military land regulations currently block access to some of the prime recreational areas on Guam. It is believed that further land acquisition would expand such restrictions on land and ocean-based recreational activities. Many members of the native Chamorro population of Guam and their elected or self-appointed

representatives feel that their culture is bearing an unfair burden of impact from the proposed action, especially in the continued loss of public and private land ownership and access to these lands.

Both land and submerged lands, and the resources that are available on or in those areas have been identified as a source of health and sustenance for the Chamorro people. Cultural Resources sections of the SEIS contain an overview of archaeological evidence of early settlement reliance on ocean resources “with emphasis on exploitation of the shallow water, fringing reef, and lagoon areas” accompanied by foraging activities, which gradually developed during the Latte period to include cultivation of plots of land and increased consumption of rice, and tubers such as taro or yams. Various products of the land are also identified as being used by the Chamorro people in order to access these sources of sustenance, such as the yoga (*Elaeocarpus yoga*), ifit (*Intsia bijug*), and dukduk tree (*Artocarpus mariannensis*) used for timber (such as canoe building, food, and cordage).

Subsequent to European contact, the products of fishing and land cultivation were traded for other goods from passing vessels. Cultural Resources sections of the SEIS also identifies various plants traditionally used for medicinal purposes by the *suruhanu*, which are “spirit counselors” or “medicine men” of the native Chamorro culture, whose knowledge was passed down from previous generations (usually orally) (McMakin 1975). Possessing the ability to communicate with *taotaomo’na* (ancestral spirits) as well as holding traditional knowledge of *tinanom* (plants) and *amot* (medicine), the *suruhanu* was a central cultural curing figure (Bevacqua 2009, McMakin 1975). *Suruhanu* exist in the present day, and continue to practice the gathering of medicinal plants and administration of *amot* to the Chamorro community, with their practices being documented in written and video formats (McMakin 1975, 1976). Thus, not only does land provide the resources for the preservation of health, but of a traditional Chamorro knowledge based upon the ecosystem.

Land on Guam provides the value of cultural heritage and existence to the native Chamorro community. The inheritance of family properties is a continuing aspect of Chamorro culture that remains evident in the current land tenure system on the island.

As stated in the Historical Land Tenure section above, ancient Chamorro society was a matrilineal society and control of land was passed down through the women. Although alternate practices of dividing land were administered under Spanish and American control, these were not always followed by Chamorro residents. These practices were “not fully utilized (by all Chamorro families) as family members continued to keep the family land intact in accordance with the ancient Chamorro system of land inheritance” (De Oro 2009). Evidence of this heritage can be seen in current land ownership records showing collections of inherited lands remaining grouped by family. These groupings of land ownership can provide Chamorro families a sense of existence of family lineage and heritage through the possibility of intergenerational bequest.

Regardless of actual legal ownership designations, land on Guam also represents to native Chamorro a sense of place. The island of Guam is often referred to by them as *Tano y Chamorru* or the land of the Chamorro, a reference not to land ownership in the Western sense, but to spiritual ties that a people feel for their cultural birthplace – in other words, where they belong.

Ancient Chamorro beliefs do not place the dead in a higher or lower plane of existence. Instead, they believe that their ancestor’s spirits remained in the world, that “a person’s soul was *taifinakpo’* (without end) and that the *ante* (spirit) would return to the world its family still lived in ... with new powers and obligations” (Bevacqua 2009). Importantly, the ancient Chamorro practice of animism, or the belief that everything in nature contains a spirit or soul, means that these spirits (ancestors) and thus people in general are interconnected and inextricable from nature (Mendiola n.d.). In addition, specific ancestral

spirits are place-based, causing the need for the living, unfamiliar to certain spirits, to ask permission before entering certain areas (Bevacqua 2009).

5.2.2.3 Impacts to Government of Guam

Land Ownership and Occupancy

As described under individual and community impacts, the taking of land by the federal government is considered an impact on the entities that are losing ownership or control of their property, including GovGuam. In essence, the possible acquisition of GALC and CLTC land not yet distributed to qualified Chamorro individuals/qualified ancestral landowner claimants is less of a sociocultural impact on the entities themselves, but can be considered an indirect impact on the Chamorro community. Qualified Chamorros view the CLTC and GALC inventory as a future possibility for ownership or lease, and as such, community members may experience an indirect loss of future land ownership due to land acquisition. Based on the SEIS LFTRC alternatives however, an important change from the 2010 Final EIS is that there are no proposals to acquire lands that are released or in the process of being released to GovGuam.

5.2.3 Land Acquisition Data Collection Methods

5.2.3.1 Definitions and Limitations

The term “parcel” refers to an area of non-DoD land that is within the SEIS action alternatives. If an alternative includes multiple non-contiguous areas of non-DoD lands the alternative would have multiple parcels proposed for land acquisition. The term “parcel” is not used to describe a legal unit of real property, but is merely a polygon of land area. Parcels are composed of “lots.” Lots are real property owned by one entity (e.g., a group, a government agency or an individual).

Existing land and real estate conditions of the parcels of interest were collected from readily available sources. The data collection and analysis did not include field verification or interviews.

5.2.3.2 Boundaries, Acreage, Lots, and Ownership

Recognizing the action alternatives would evolve throughout the NEPA process, a NAVFAC Pacific GIS version control system was established for the project. GIS Version Control 4 is the source of parcel and lot boundaries, acreages, and land ownership (i.e., Private, GovGuam, Federal) for the March 2013 SIAS iteration. NAVFAC Pacific Real Estate issues the official versions at periodic milestones of the SEIS development.

The GIS maps represent the minimum land area required to support each action alternative. Throughout the project, development of these land acquisition areas will be refined. The final land area to be acquired would also be subject to negotiations with landowners. Assumptions regarding the GIS data are as follows:

- Acreages do not include submerged lands.
- Acreages do not include encroachment/noise buffers, utility and access easements that may be required.

Lots would be subdivided to minimize land acquisition. Note: Land acquisition negotiation may require DoD to acquire additional land if the landowner would be left with an uneconomical remnant to the parcel that is not useful to the landowner or cannot be reasonably subdivided.

Other limitations are as follows:

- The final land acquisition proposal would be subject to individual land owner negotiation that would occur subsequent to the publication of the Final SEIS Record of Decision.
- The parcels and lot boundaries are based on best available information which was researched by the Government using good faith and diligent efforts. However, the boundaries may not be used for legally enforceable rights or property boundaries and shall not provide any rights to seek legal claim against the Government.
- Some GovGuam lands are managed by the CLTC and the GALC.

The NAVFAC Pacific Real Estate office provided ownership data for the GIS Version Control 4 land areas. Recorded ownerships were categorized as follows:

- GovGuam, including lands managed by the CLTC and GALC. Note: Some GovGuam lands are managed by the CLTC and the GALC. These organizations do not officially subdivide their land into lots.
- Private Land, including individual and corporate ownership. Note: individual landowners are not named in the SIAS (this would protect their identity and privacy).
- Federal Land.
- Unknown, indicating a data gap.

If land acquisition were to occur, these owner stakeholders would be the primary parties in negotiation.

5.2.3.3 Land Use and Utilities

There is no readily available and government-approved data on current land use for Guam. For this SIAS, existing land use on each parcel was surmised based on 2011 aerial photos, and information presented in the 2010 Final SIAS and 2010 Final EIS. Land uses were not verified by a site visit.

NAVFAC Pacific Real Estate provided utility maps that were used as the basis for identifying access to utilities at the parcel.

5.2.3.4 Land Use Classification and Prime Farmlands

Zoning designations regulate the use, type, intensity, and coverage for individual parcels or development project areas. These designations are designed to be consistent with overarching land use plans. However, Guam zoning regulations and land use permitting regulations are not applicable to federal lands development. The Guam Zoning Map was first adopted in 1966 and has since been amended by laws passed by the Guam Legislature and signed by the Governor. Current zoning maps were not available.

Instead of zoning maps, the 2010 Final EIS relied upon electronic versions of the land use characterization map that were generated and by the GBSP in 2009. The map did not reflect official zoning but was deemed to be the best available data to guide regional land use planning. GBSP provided an update to the land classification map and it is the basis for the land classification analysis.

Agricultural lands have been reduced by encroachment of competing land uses. Prime farmlands and important farmlands maps are designated by USDA in conjunction with the local governments to identify lands that are considered to have the combination of physical and chemical characteristics for producing food, feed, forage or crops. The data used in the 2010 Final EIS was relied upon to assess potential impacts to agricultural use. The data did not include determination of lands actively in agricultural production.

5.3 LAND ACQUISITION BASELINE DATA

The SEIS land areas proposed for potential acquisition differ from those in the 2010 Final EIS. In the 2010 Final EIS, there were three non-federally-owned parcels proposed for potential acquisition as follows:

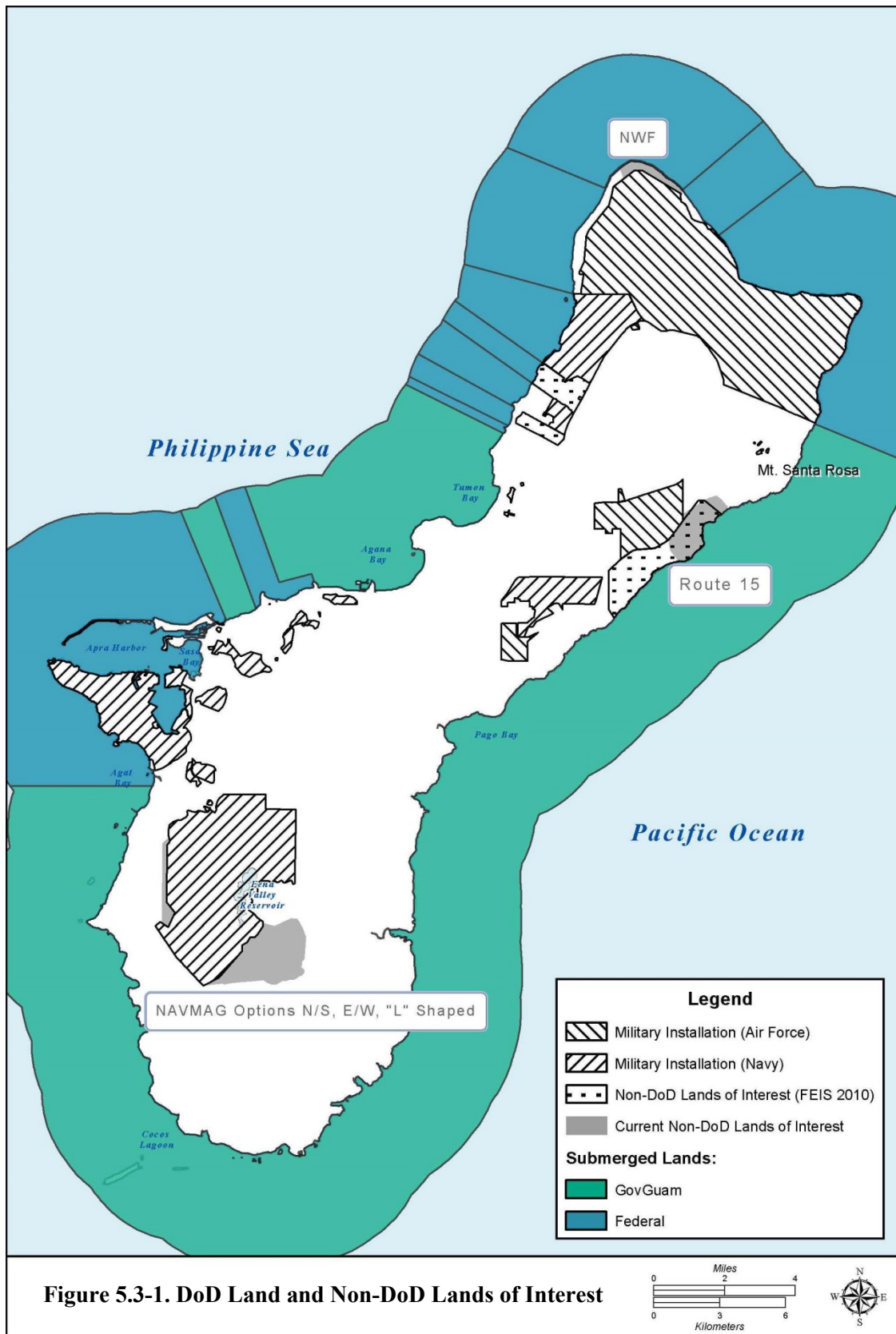
- Route 15 (with two options - A and B)
- Former Federal Aviation Administration parcel
- Harmon Annex parcel

In the SEIS, only (a modified version of) the Route 15 parcel is retained that contain non-DoD land of interest. In addition to these, there are other non-DoD parcels being considered for use in LFTRC alternatives. Non-DoD parcels of interest are contained in the following alternatives:

- Route 15
- NAVMAG, three alternatives: North/South, East/West, and L-Shaped
- NWF

This section provides general characteristics for each parcel of interest. This general description is typically followed by figures and tables that provide visual and more detailed information on those characteristics.

Figure 5.3-1 provides a visual overview of Guam and all of the potential acquisition alternatives.



5.3.1 Route 15 Alternative

The Route 15 alternative would require approximately 654 acres (264.7 hectares) of land acquisition (shown on Figure 5.3-2).

5.3.1.1 Current Land Use

Route 15 land is primarily undeveloped – 73.2% of acreage is classified as undeveloped sites in their natural state. The raceway park constitutes 126 acres (51 hectares); it constitutes the second most intensive land use for the Route 15 parcel. GovGuam submerged lands border the eastern edge of the Route 15 parcel and the coast is characterized by a steep undeveloped cliff-side and surface access is difficult due to topography. Table 5.3-1 provides both total and percentage based acreage information on the various land uses in the Route 15 parcel. Figure 5.3-3 illustrates land use in the parcel.

Table 5.3-1. Land Use: Route 15		
Type of Land Use	Route 15	
	Acreage	% Total Acreage
Undeveloped Site in Natural State	654	73.2%
Developed Site Raceway Park	126	14%
Pre-Development Site Clearing	30	3.4%
Quarrying Resource Extraction Use	68	7.6%
Road Corridor	13	1.5%
Subsistence Family Agriculture	3	0.3%

Note: Acreage figures are rounded and may not add up to the overall acreages identified in the text.

5.3.1.2 Lots

The Route 15 Parcel Option impacts six lots (Figure 5.3-4).

5.3.1.3 Land Classification and Prime Farm Lands

The current GBSP land classification of lands in Route 15 parcel is identified as Agriculture, as illustrated in Figure 5.3-5. There are no Prime Farmlands within the Route 15 parcel options.

5.3.1.4 Utility Availability

Utility availability on the Route 15 parcel and its surrounding potential impact area are depicted in Figure 5.3-6. As seen in the figures, utility availability to the Route 15 parcel is minimal. A primary overhead power line and a water transmission line borders the parcel.

5.3.1.5 Assessed Property Valuation

Assessed Property Valuation for the Route 15 parcel options are as follows:

- Route 15 options (all land assessments, no buildings) – \$233,810/acre

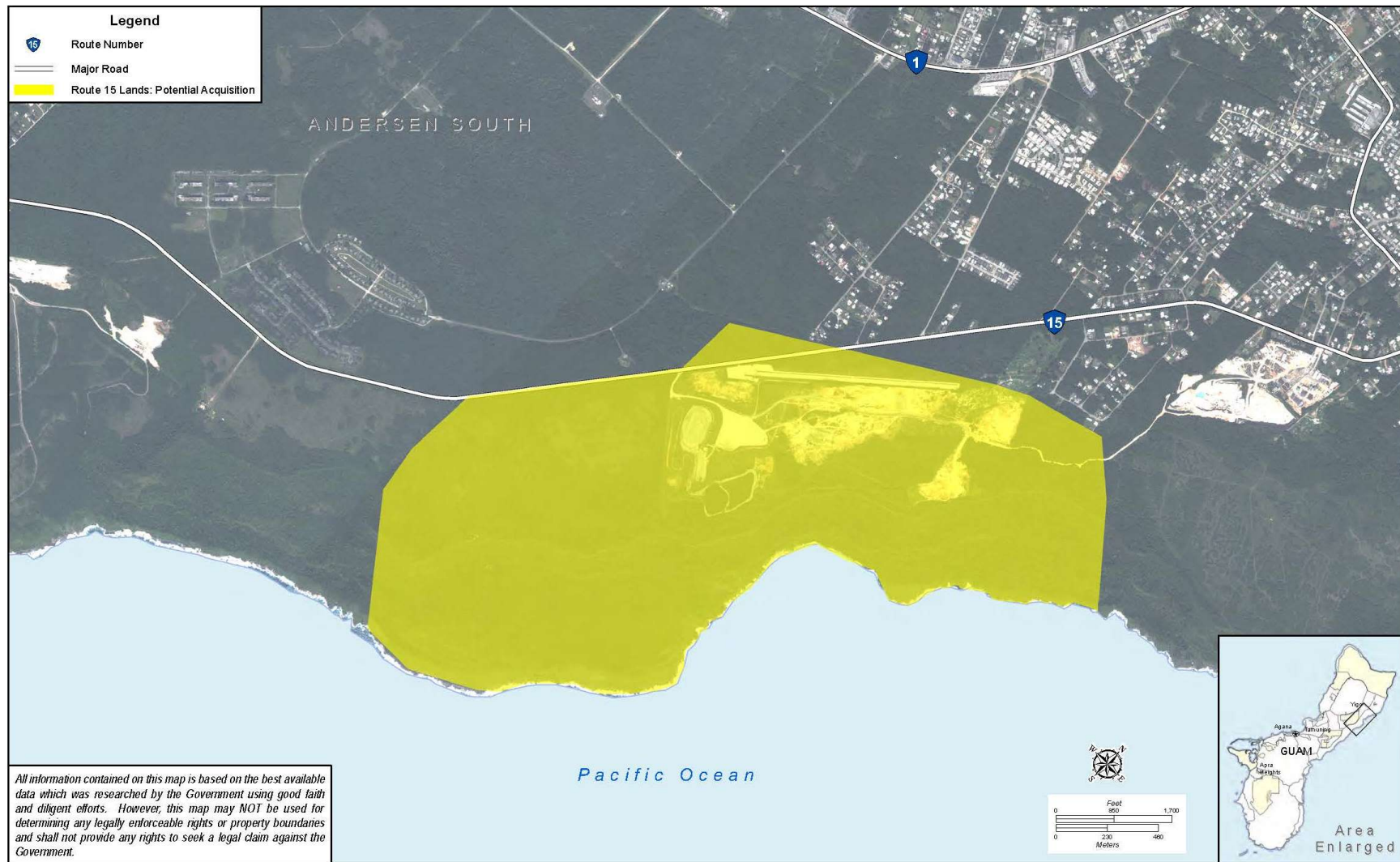


Figure 5.3-2. Aerial Map: Route 15

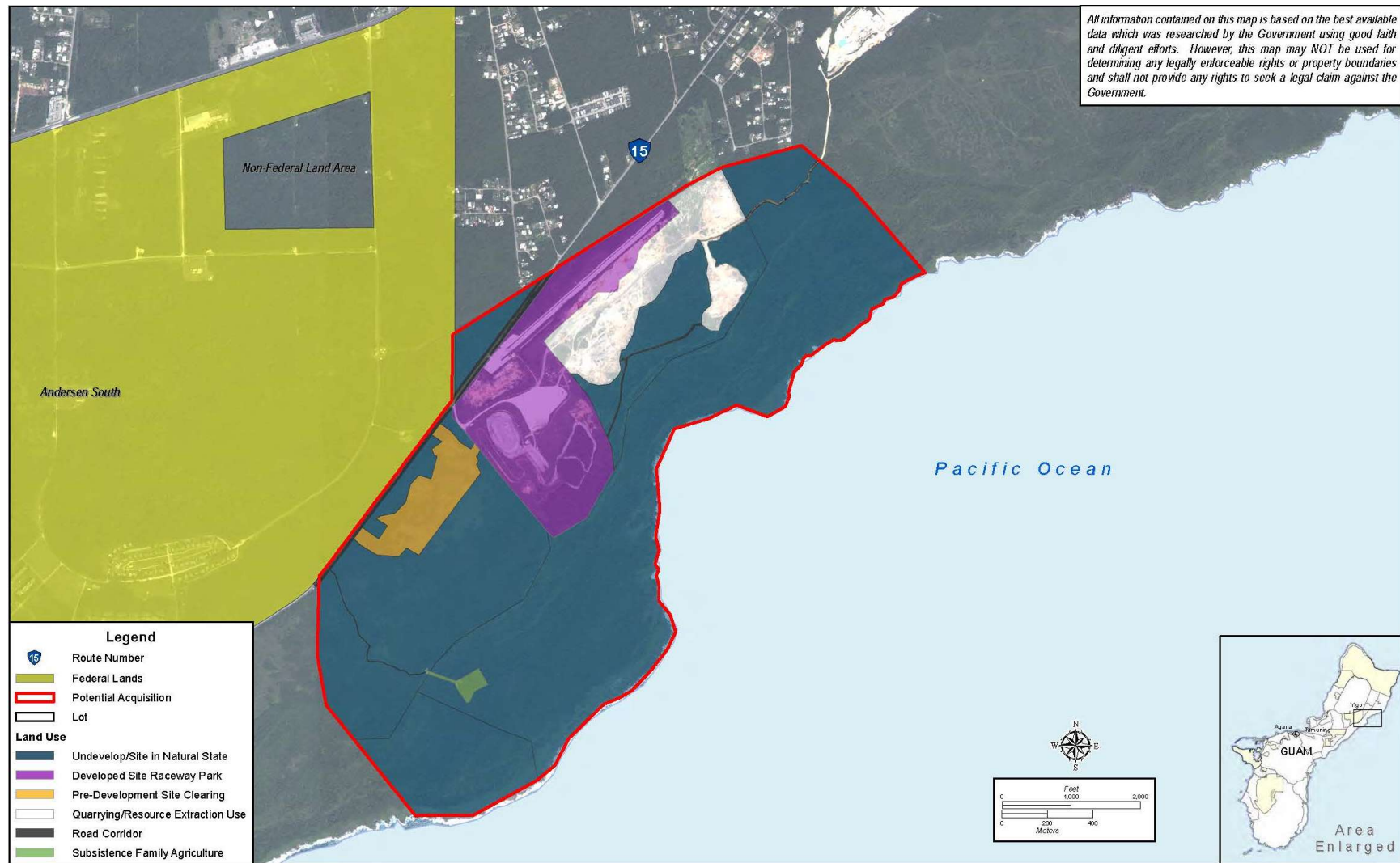


Figure 5.3-3. Land Use: Route 15

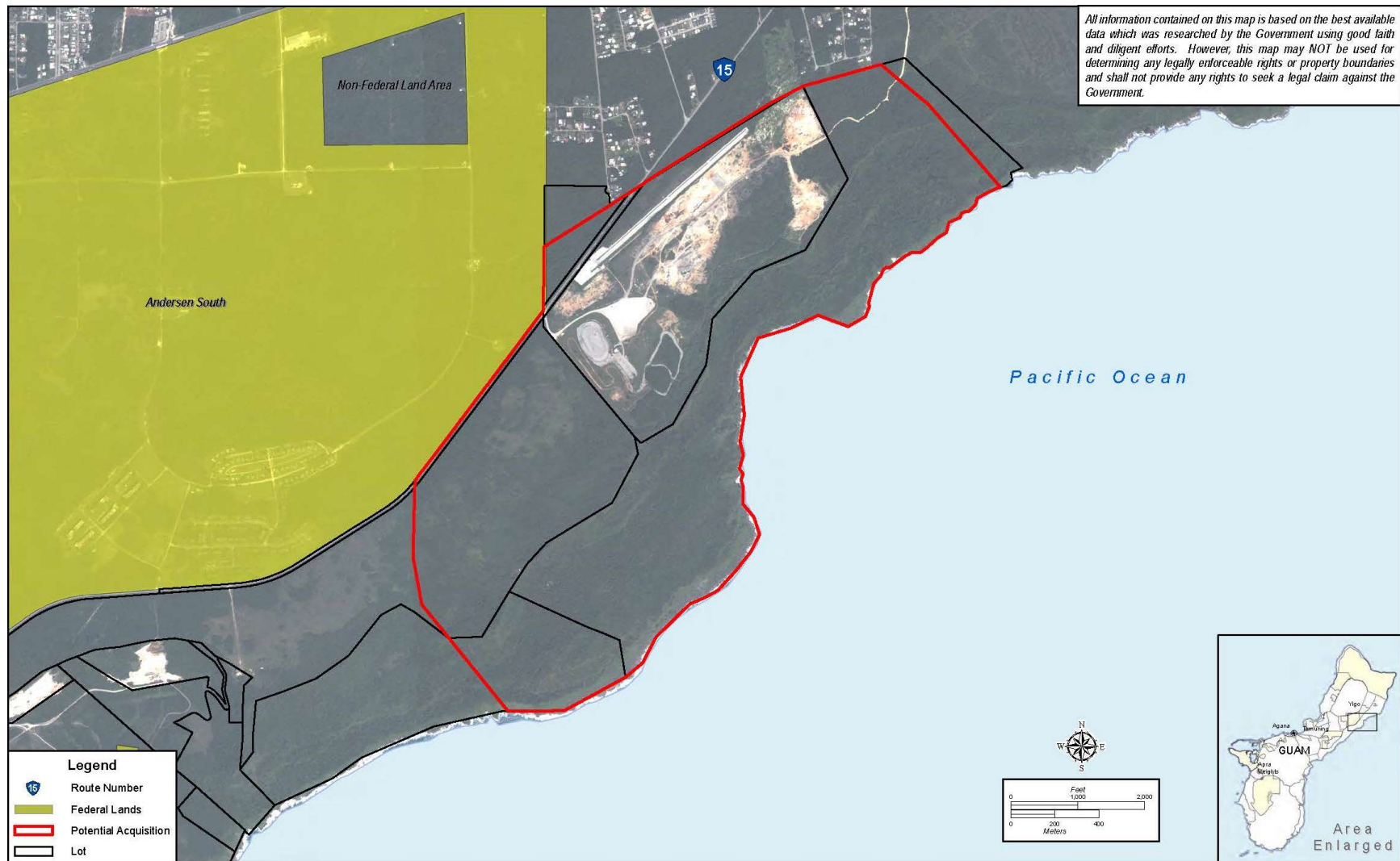


Figure 5.3-4. Lot Outlines: Route 15

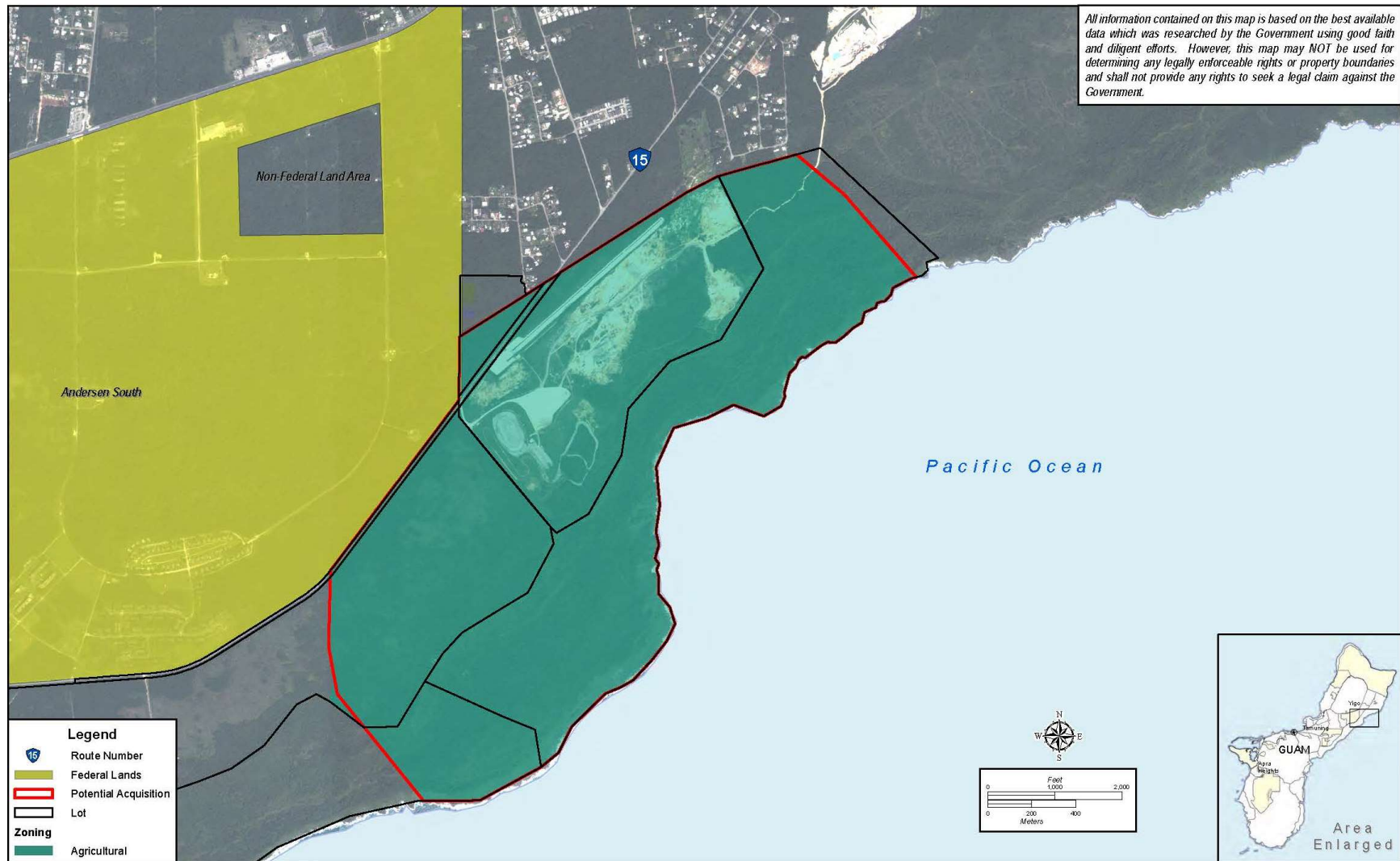


Figure 5.3-5. Land Classification: Route 15

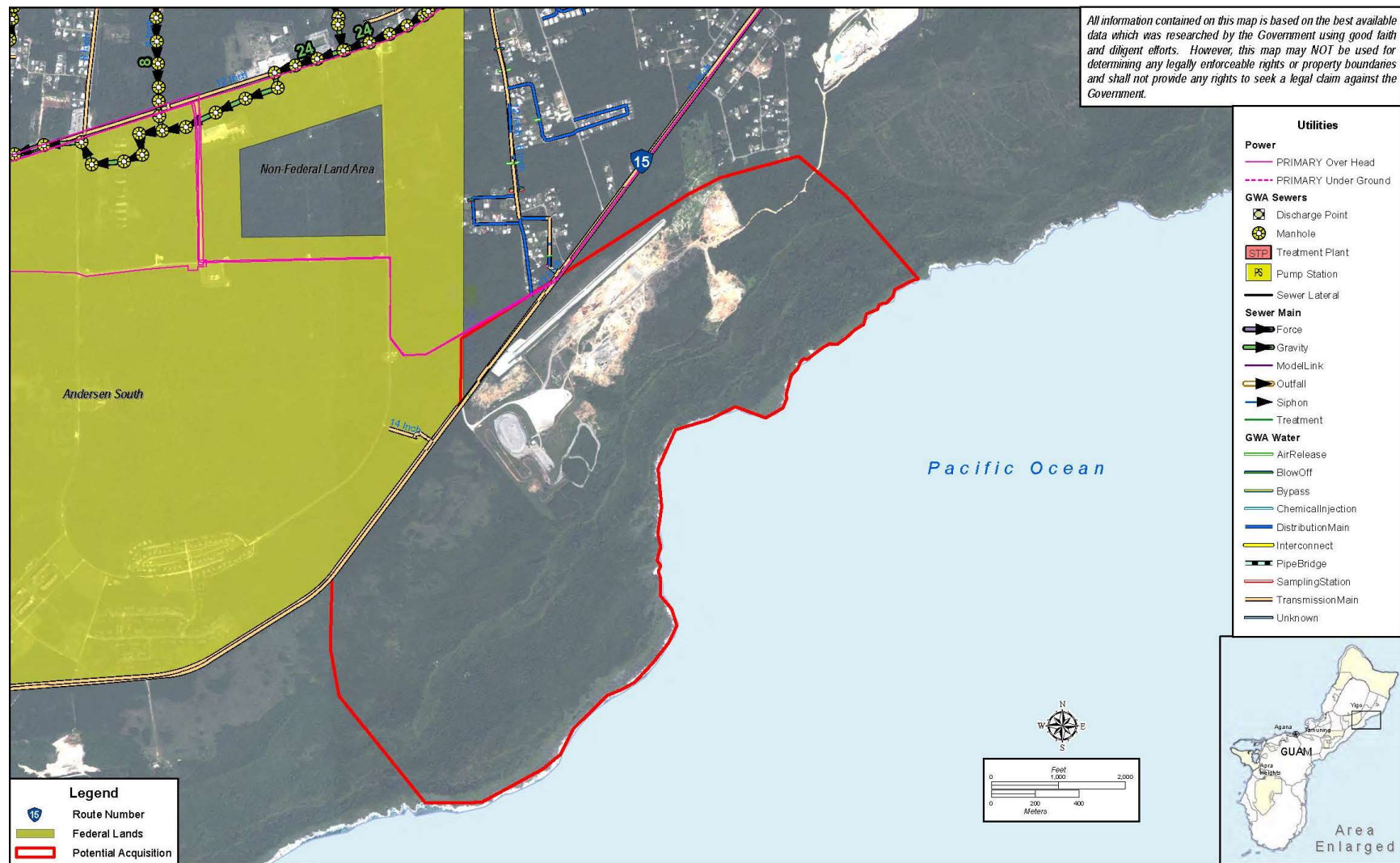


Figure 5.3-6. Utilities: Route 15

5.3.1.6 Recorded Ownership

Recorded ownership of lots in the Route 15 parcel is listed in Table 5.3-2 and illustrated in Figure 5.3-7. The proposed land acquisition is estimated at 896 acres (362.6 hectares). There are no federal lands in the Route 15 parcel. The CLTC owns three of the seven lots in the Route 15 parcel; these three lots constitute 75% of total acreage on the parcel. GovGuam also owns three lots, comprising 3% of the parcel's acreage. GALC owns one large lot (197 acres [79.7 hectares]) that would be acquired.

Table 5.3-2. Ownership: Route 15			
<i>Lot Owner</i>	<i># Lots</i>	<i>Total Acreage</i>	<i>% Acreage</i>
CLTC ¹	3	676	75%
GALC	1	197	22%
GovGuam ²	3	23	3%
Total	7	896	100%

Notes: ¹ Includes the lot occupied by the Guam International Racing Federation.

² Non-CLTC and GALC lands.

³ The numbers have been rounded and totals may not equal actual total.

5.3.2 Naval Magazine Alternatives

The NAVMAG - North/South alternative would require approximately 252 acres (102 hectares) of land acquisition. The NAVMAG - East/West alternative would require approximately 1,498 acres (606.2 hectares) of land acquisition. The NAVMAG - L-Shaped alternative would require approximately 792 acres (320.5 hectares) (Figure 5.3-8).

5.3.2.1 Current Land Use

The current land use of NAVMAG - North/South, East/West, L-Shaped options are depicted in Table 5.3-3 and Figures 5.3-9, 5.3-10, and 5.3-11. In all three alternatives the land is primarily undeveloped in a natural state. The North/South Alternative is entirely undeveloped. Conservation land represents 21% and 19%, respectively, of the East/West and L-Shaped alternatives.

Table 5.3-3. Land Use: NAVMAG-North/South, East/West, L-Shaped						
<i>Type of Land Use</i>	<i>NAVMAG-North/South</i>		<i>NAVMAG-East/West</i>		<i>NAVMAG-L-Shaped</i>	
	<i>Acres</i>	<i>% Total Acreage</i>	<i>Acres</i>	<i>% Total Acreage</i>	<i>Acres</i>	<i>% Total Acreage</i>
Undeveloped Site in Natural State	252	100%	1,498	79%	792	81%
Conservation	0	0%	396	21%	182	19%

Note: Acreages are rounded and may not add up to the overall acreages identified in the text.

5.3.2.2 Lots

The NAVMAG - North/South parcel affects 23 lots (Figure 5.3-12). The NAVMAG - East/West parcel affects 19 lots (Figure 5.3-13). The NAVMAG - L-Shaped parcel affects 30 lots (Figure 5.3-14).

5.3.2.3 Land Classification and Prime Farm Lands

The current land classification of NAVMAG - North/South, East/West, and L-Shaped parcels are depicted in Figures 5.3-15, 5.3-16, and 5.3-17. The current BSP land classification for all three alternatives is Agricultural.

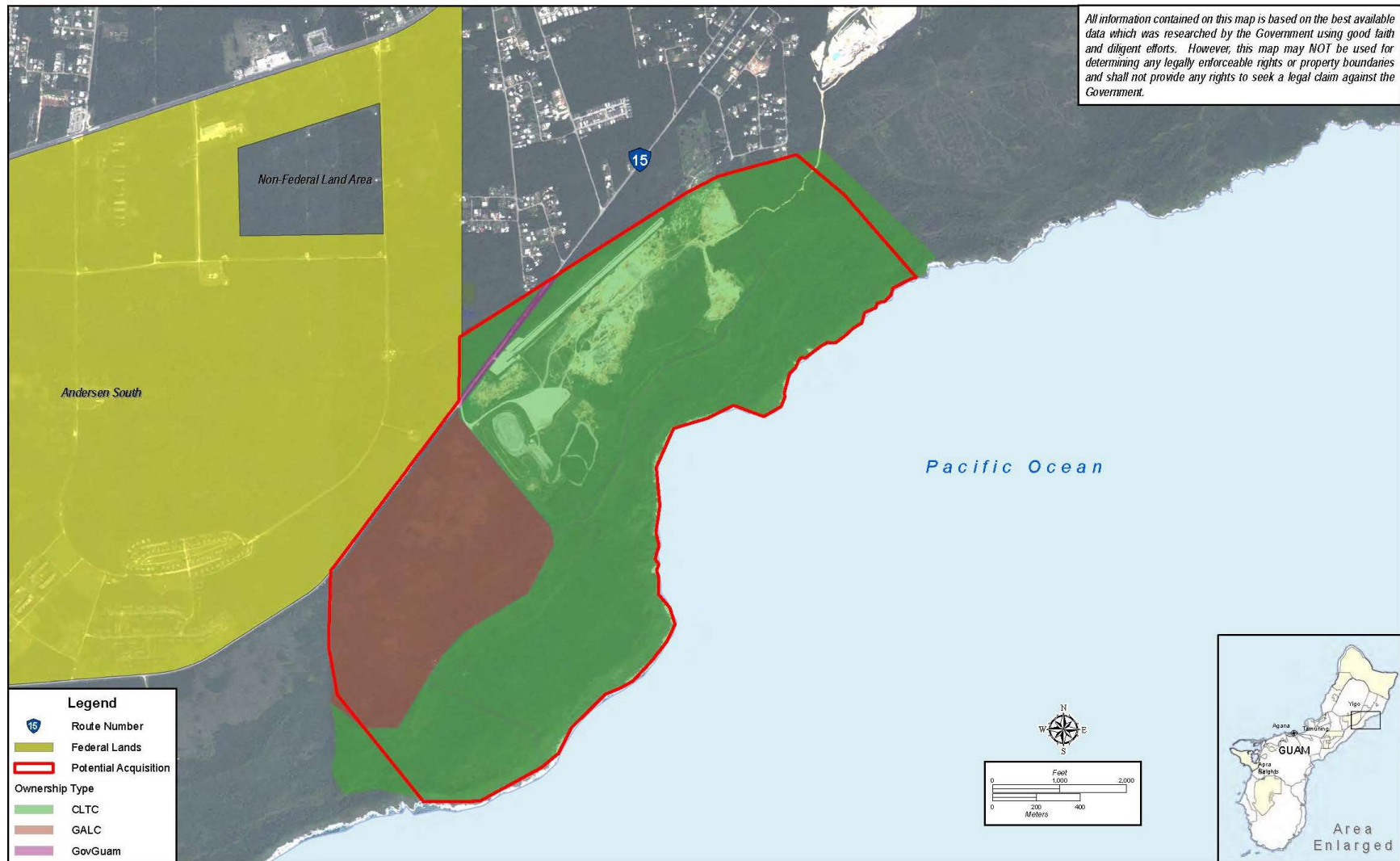


Figure 5.3-7. Ownership: Route 15

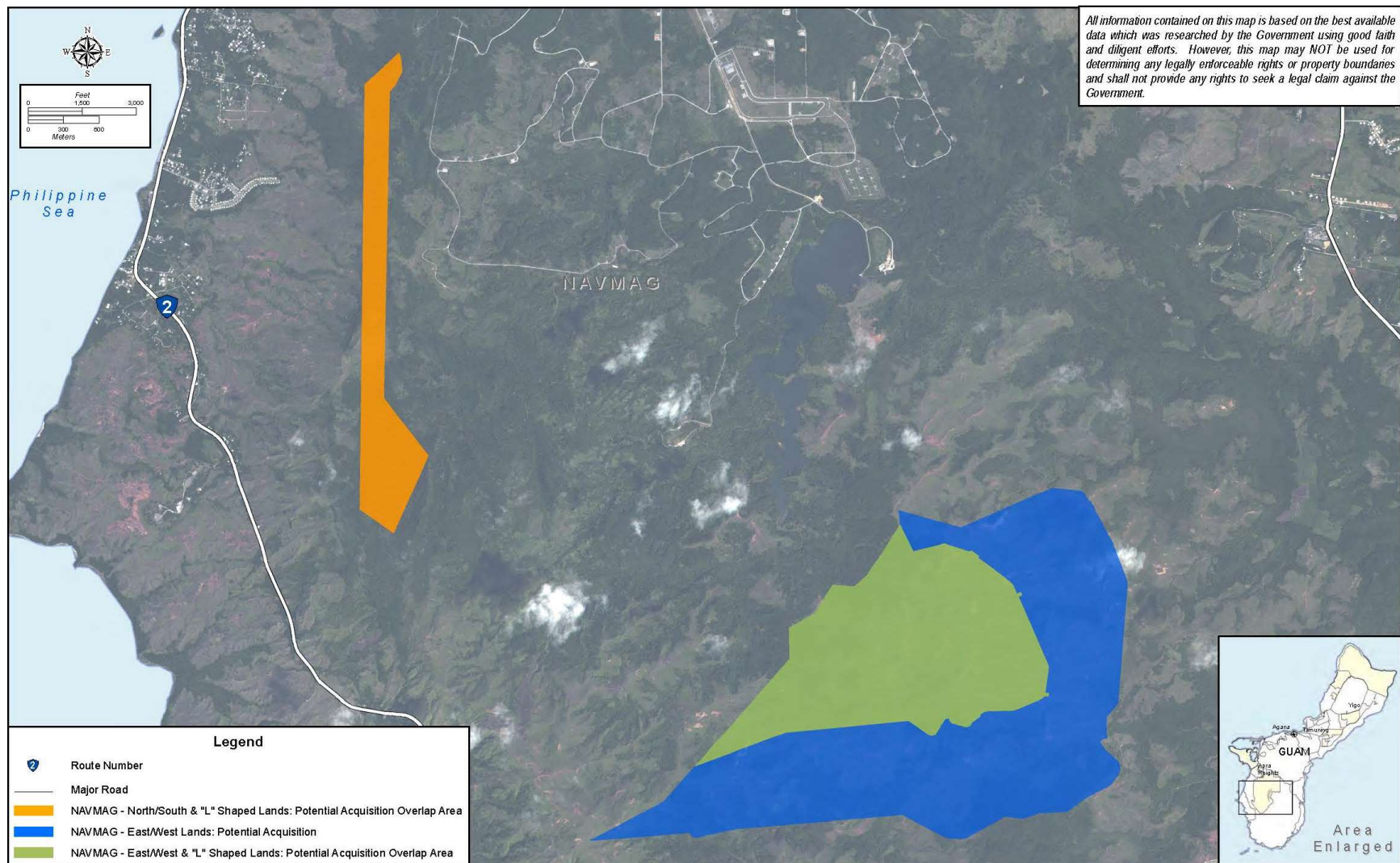


Figure 5.3-8. Aerial Map: NAVMAG - North/South, East/West, and L-Shaped

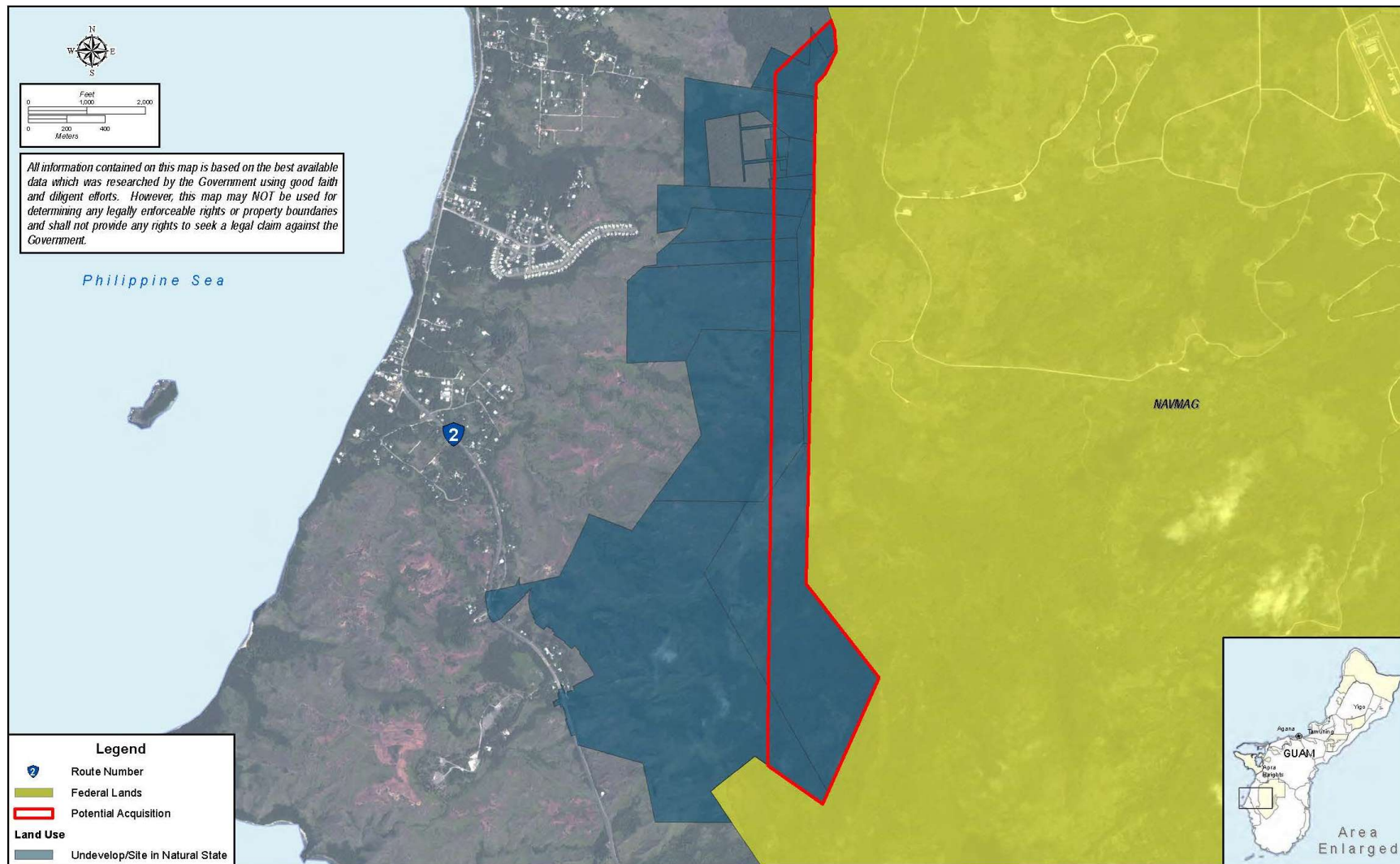


Figure 5.3-9. Land Use: NAVMAG - North/South

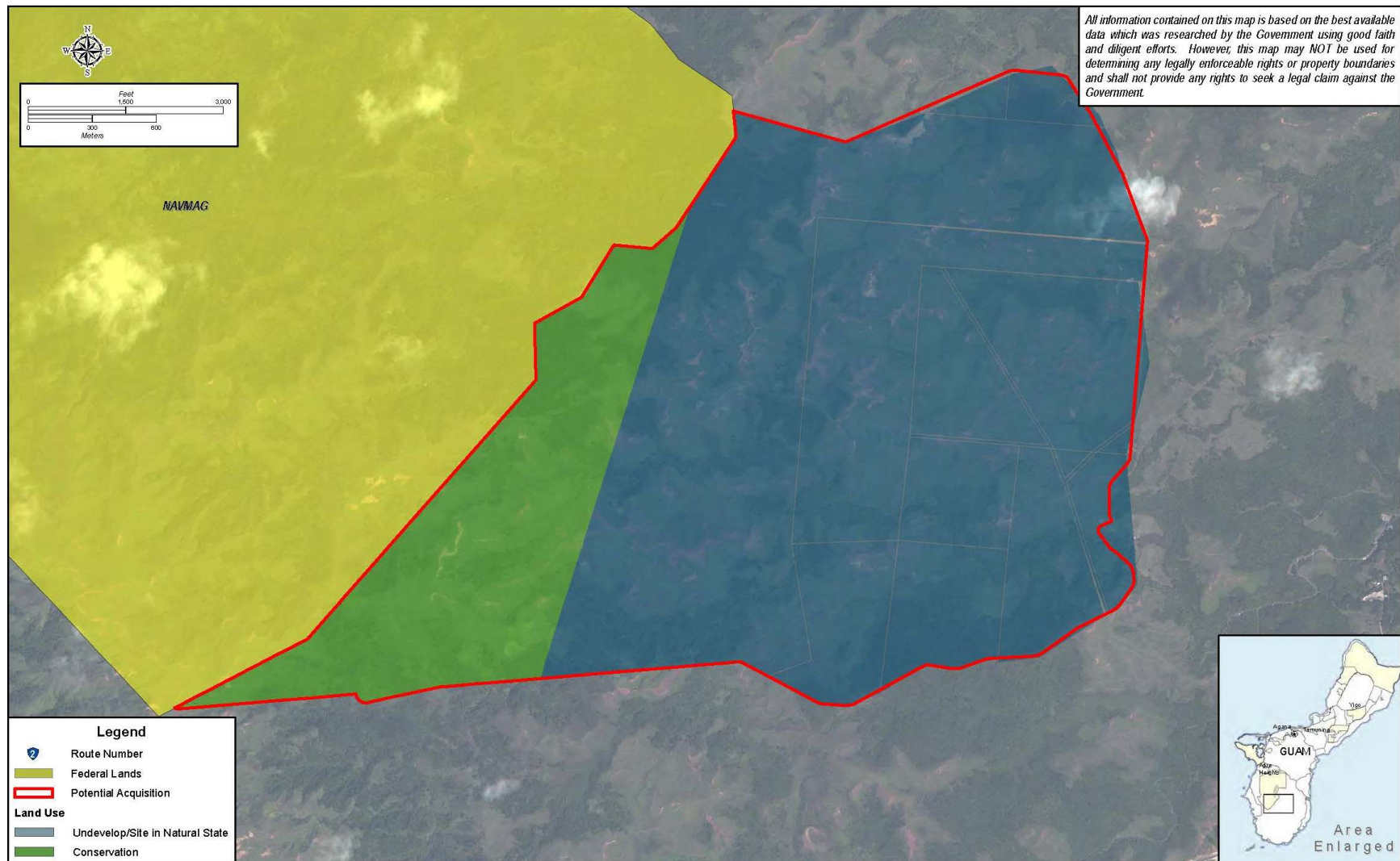


Figure 5.3-10. Land Use: NAVMAG - East/West

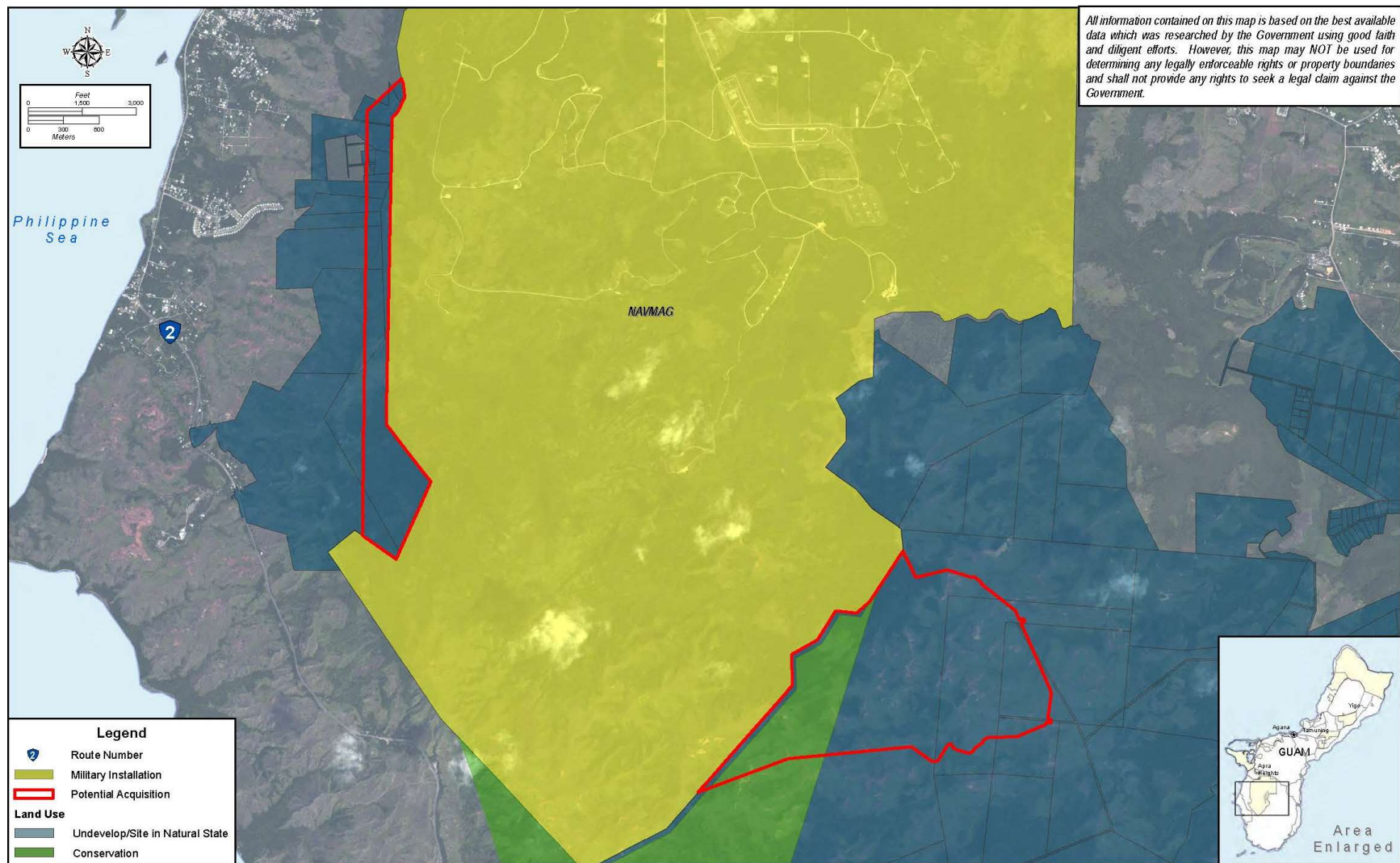


Figure 5.3-11. Land Use: NAVMAG – L-Shaped

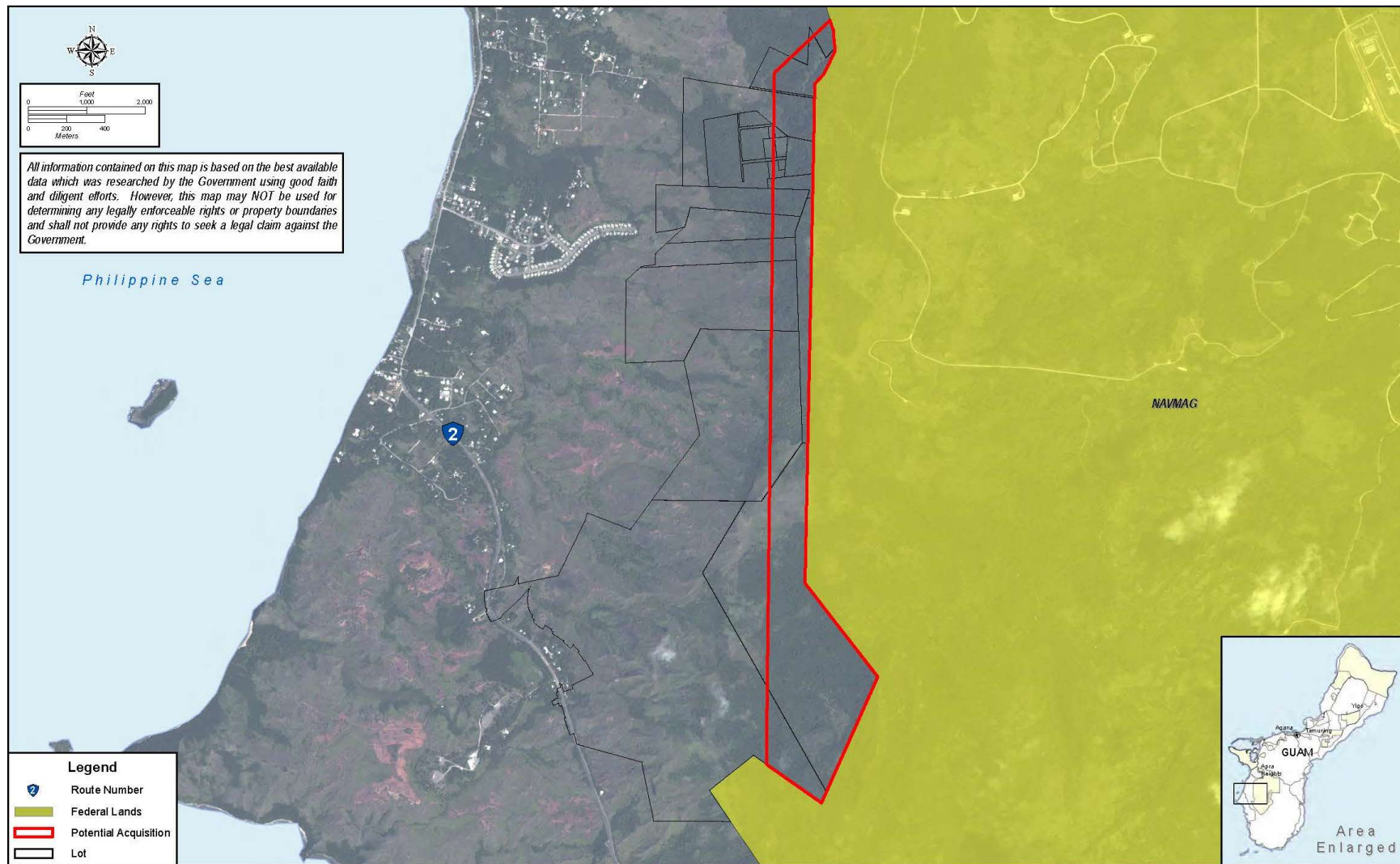


Figure 5.3-12. Lot Outlines: NAVMAG - North/South

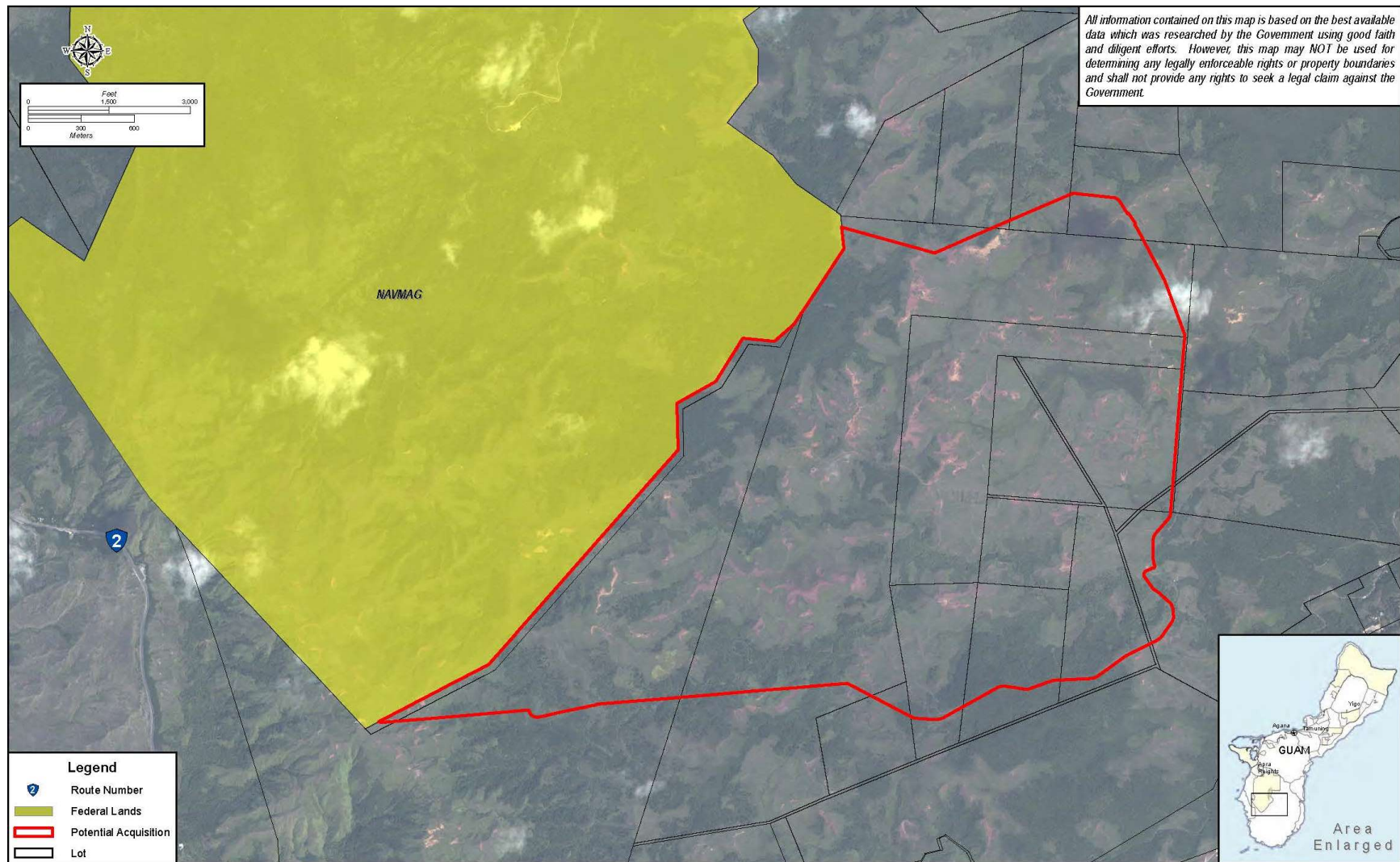


Figure 5.3-13. Lot Outlines: NAVMAG - East/West

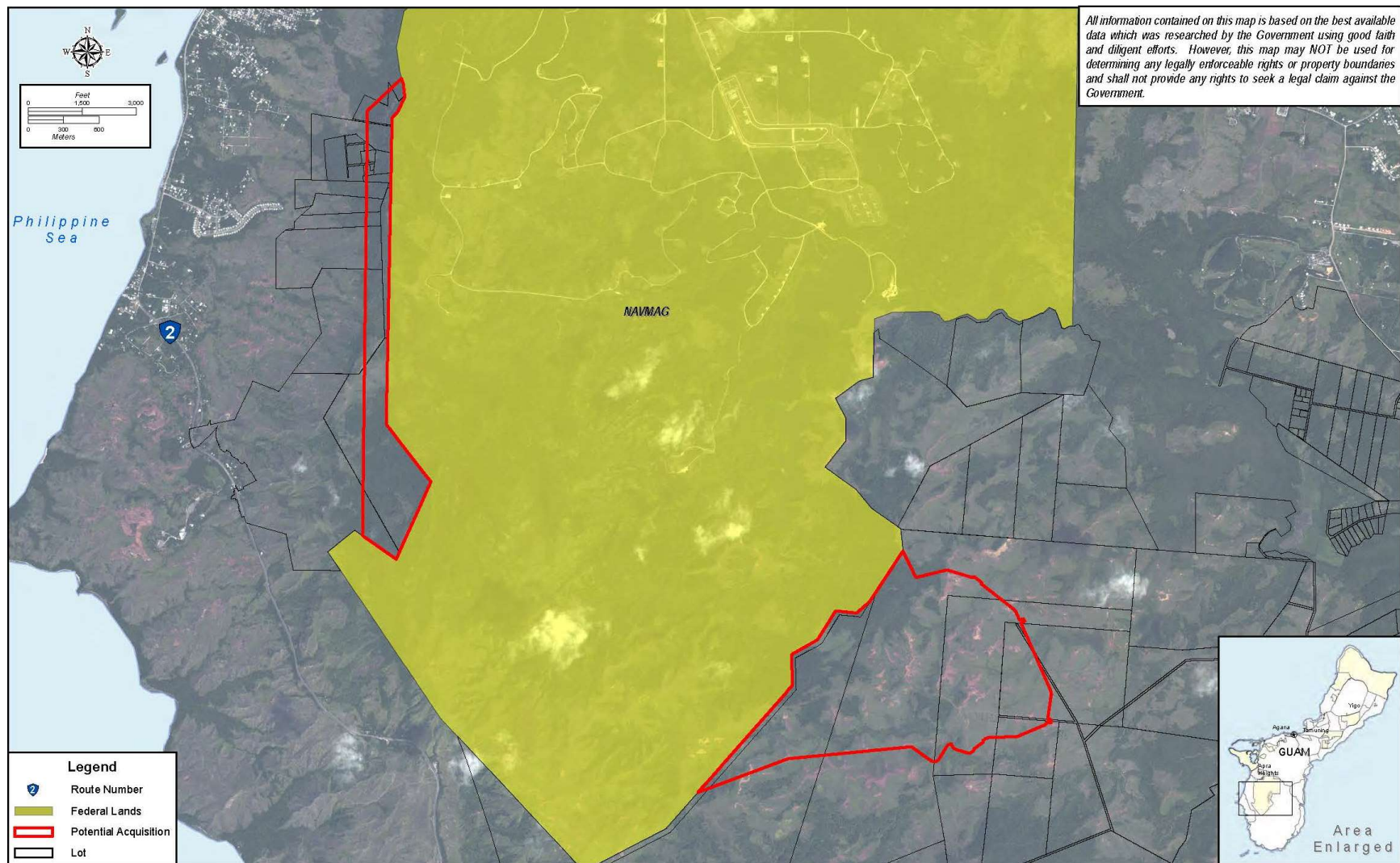


Figure 5.3-14. Lot Outlines: NAVMAG – L-Shaped

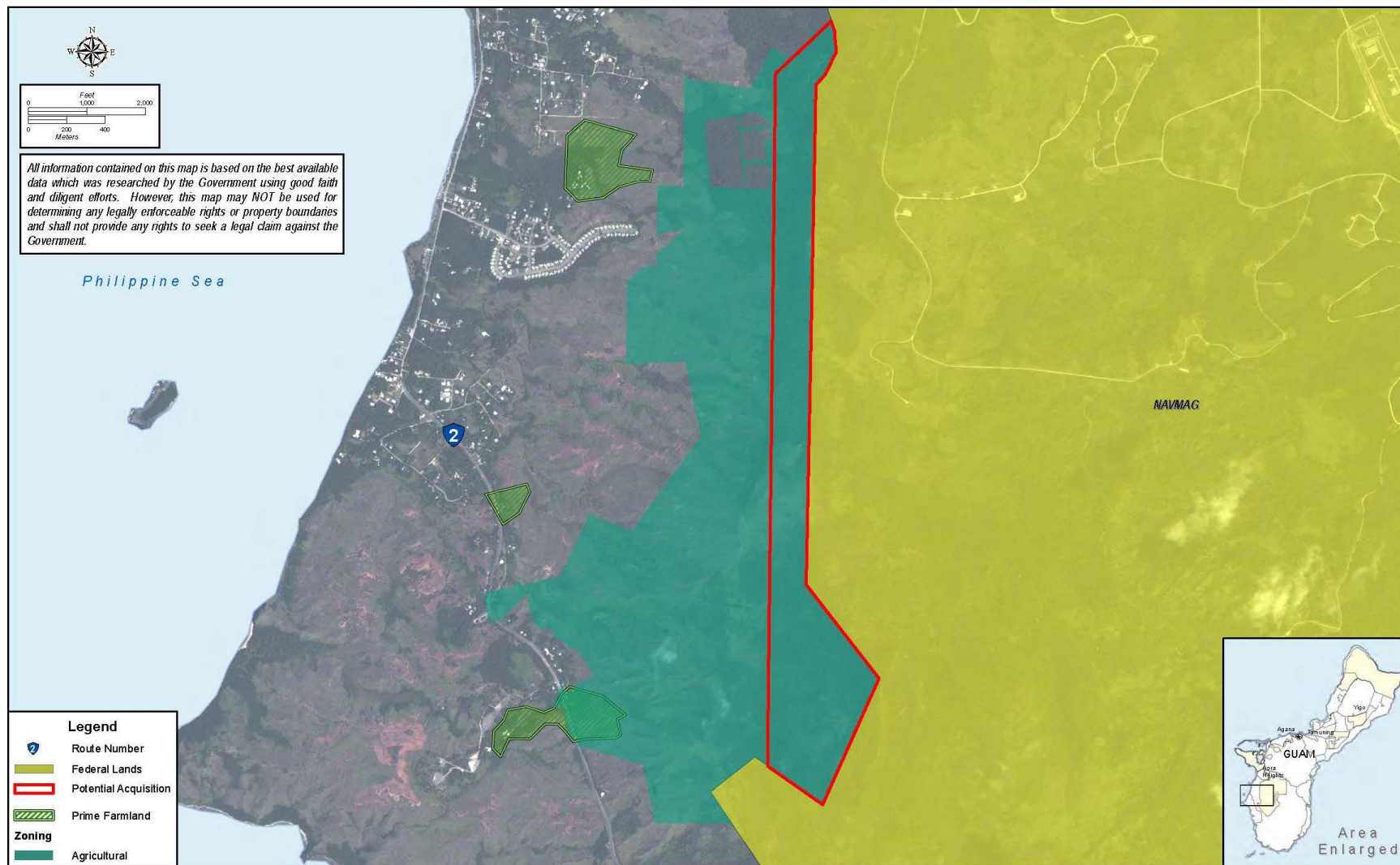


Figure 5.3-15. Land Classification: NAVMAG - North/South

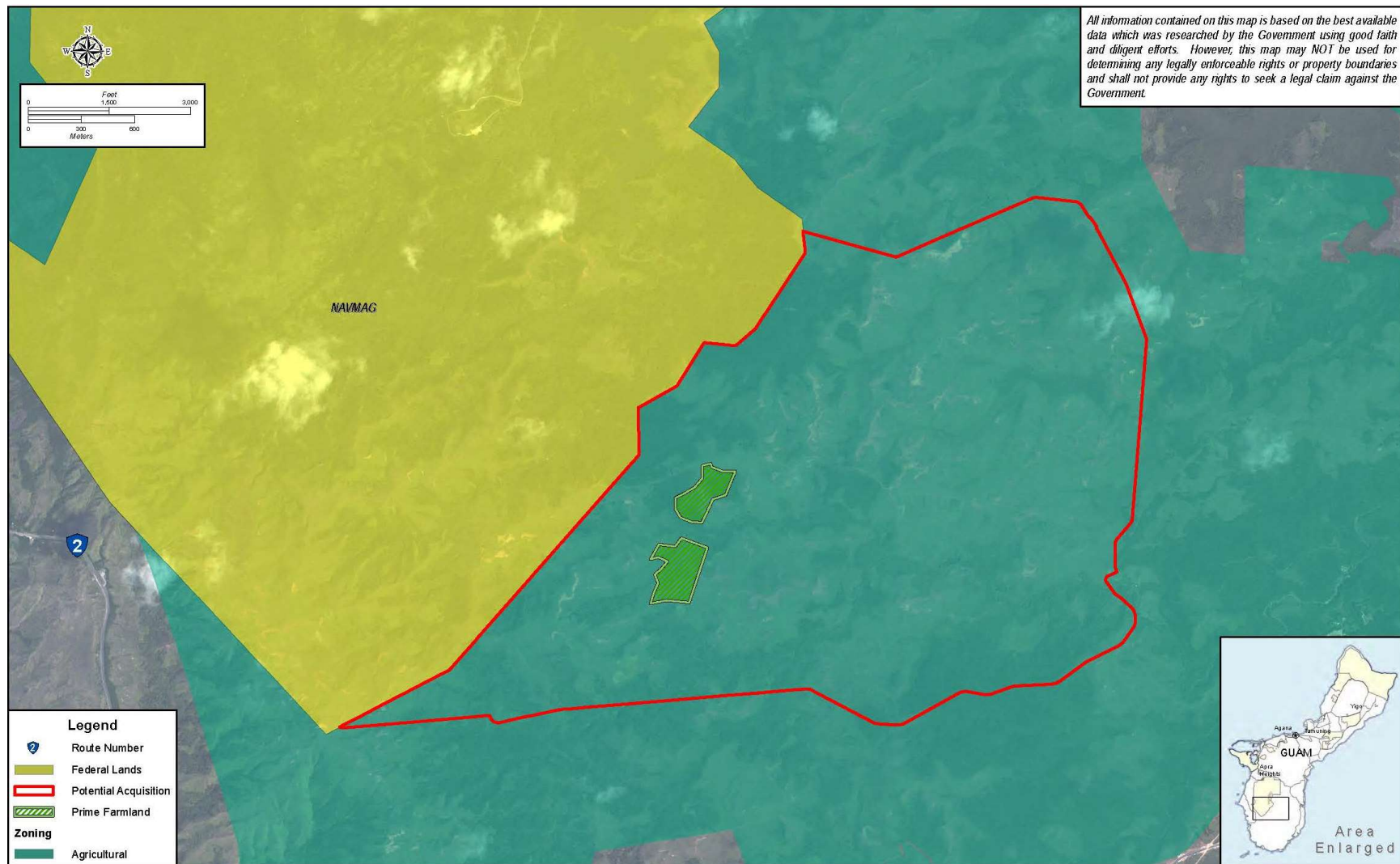


Figure 5.3-16. Land Classification: NAVMAG - East/West

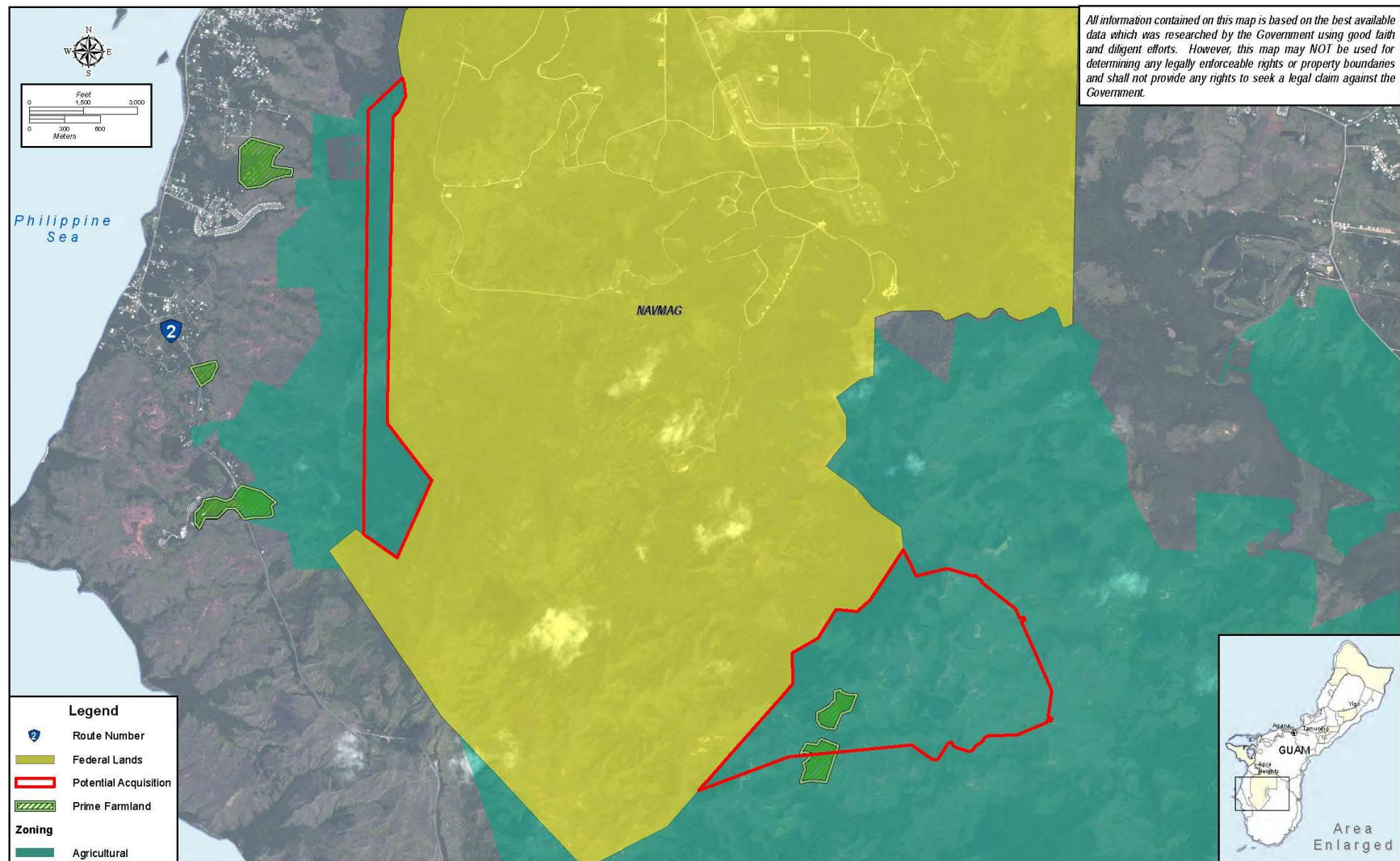


Figure 5.3-17. Land Classification: NAVMAG – L-Shaped

There are Prime Farmlands within the NAVMAG parcel alternatives East/West and L-Shaped, but not the North/South alternative. Table 5.3-4 lists the prime farmland acreages.

Table 5.3-4. Prime Farmlands: NAVMAG - East/West, L-Shaped¹			
<i>Type of Land Classification</i>	<i>NAVMAG – North/South (Acres)</i>	<i>NAVMAG – East/West (Acres)²</i>	<i>NAVMAG – L-Shaped (Acres)</i>
Prime Farmlands	0	33	20

Notes: ¹ Acreages are rounded and may not add up to the overall acreages identified in the text.

² Prime farmlands in the NAVMAG East/West parcel include former aquaculture ponds.

5.3.2.4 Utility Availability

Utility availability on the NAVMAG parcels and its surrounding area are depicted in Figures 5.3-18, 5.3-19, and 5.3-20. As illustrated in the figures, no utilities are supplied to the NAVMAG parcel alternatives.

5.3.2.5 Assessed Property Valuation

Assessed Property Valuation for the NAVMAG parcels are as follows:

- North/South, East/West, and L-Shaped (all land assessments, no buildings) - \$206,911/acre

5.3.2.6 Recorded Ownership

Ownership of the NAVMAG lots is listed in Table 5.3-5. Private land ownership is greater than GovGuam ownership in all alternatives, ranging from 62% in the North/South Alternative to 79% in the East/West Alternative (Figures 5.3-21, 5.3-22, and 5.3-23). The North/South Alternative represents the least land acquisition at 252 acres (102 hectares). The East/West Alternative requires the greatest land acquisition at 1,894 acres (766.5 hectares).

Because individual lot ownership information collected did not specify actual owner name, and certain individuals may own more than one lot in the area of interest, it is not possible to give an accurate account of the actual numbers of recorded lot owners that may be affected by land acquisition.

Table 5.3-5. Ownership: NAVMAG - North/South, East/West, and L-Shaped						
	<i>NAVMAG – North/South</i>		<i>NAVMAG – East/West</i>		<i>NAVMAG – L-Shaped</i>	
<i>Lot Owner</i>	<i>Acres</i>	<i>Parcel (% Acreage)</i>	<i>Acres</i>	<i>% Acreage</i>	<i>Acres</i>	<i>% Acreage</i>
Private	156	62%	1,498	79%	695	71%
Unknown	51	20%	36	2%	74	8%
GovGuam	46	18%	360	19%	205	21%
Total	252		1,894		974	

Note: The numbers have been rounded and totals may not equal actual total.

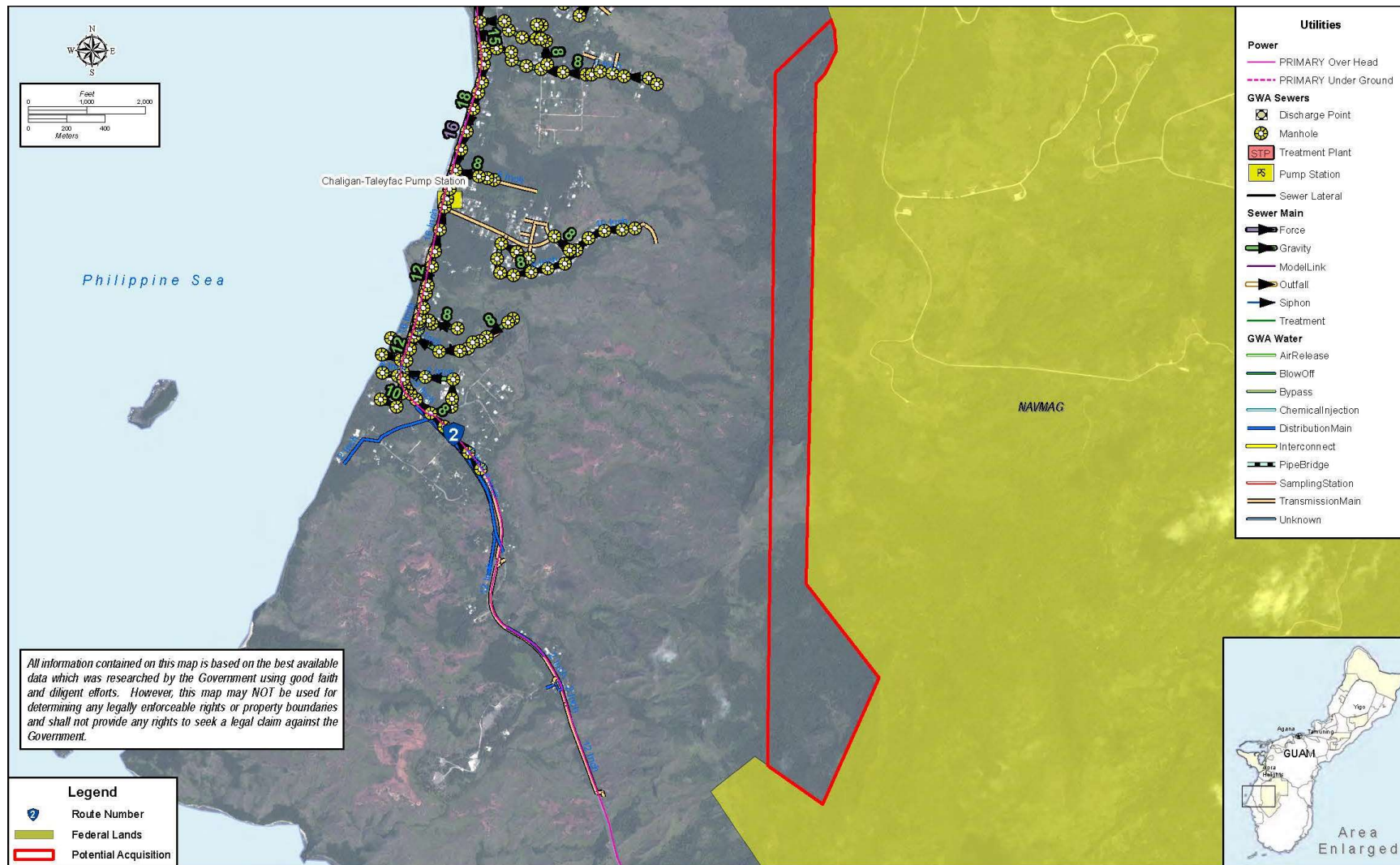


Figure 5.3-18. Utilities: NAVMAG - North/South

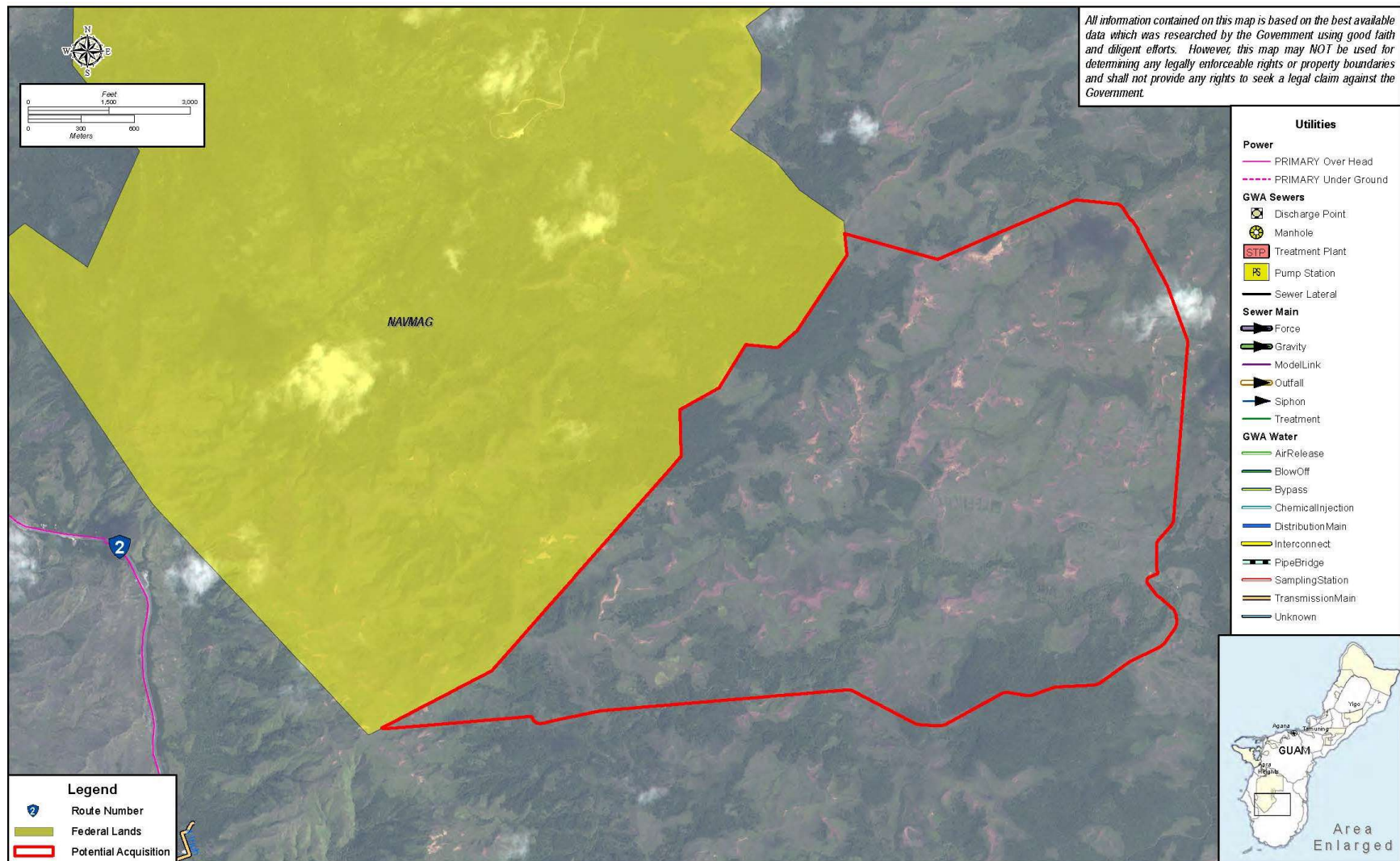


Figure 5.3-19. Utilities: NAVMAG - East/West

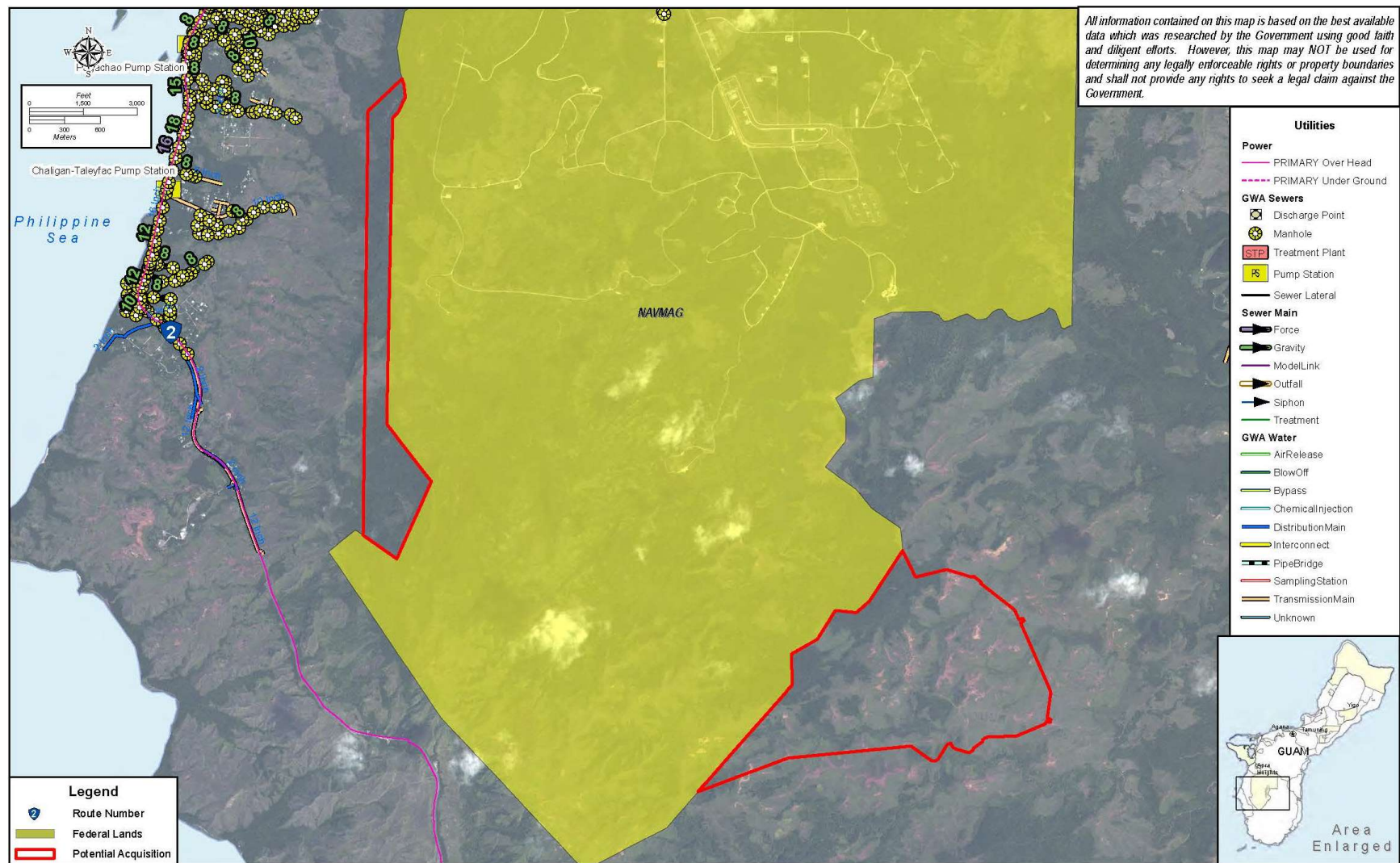


Figure 5.3-20. Utilities: NAVMAG – L-Shaped

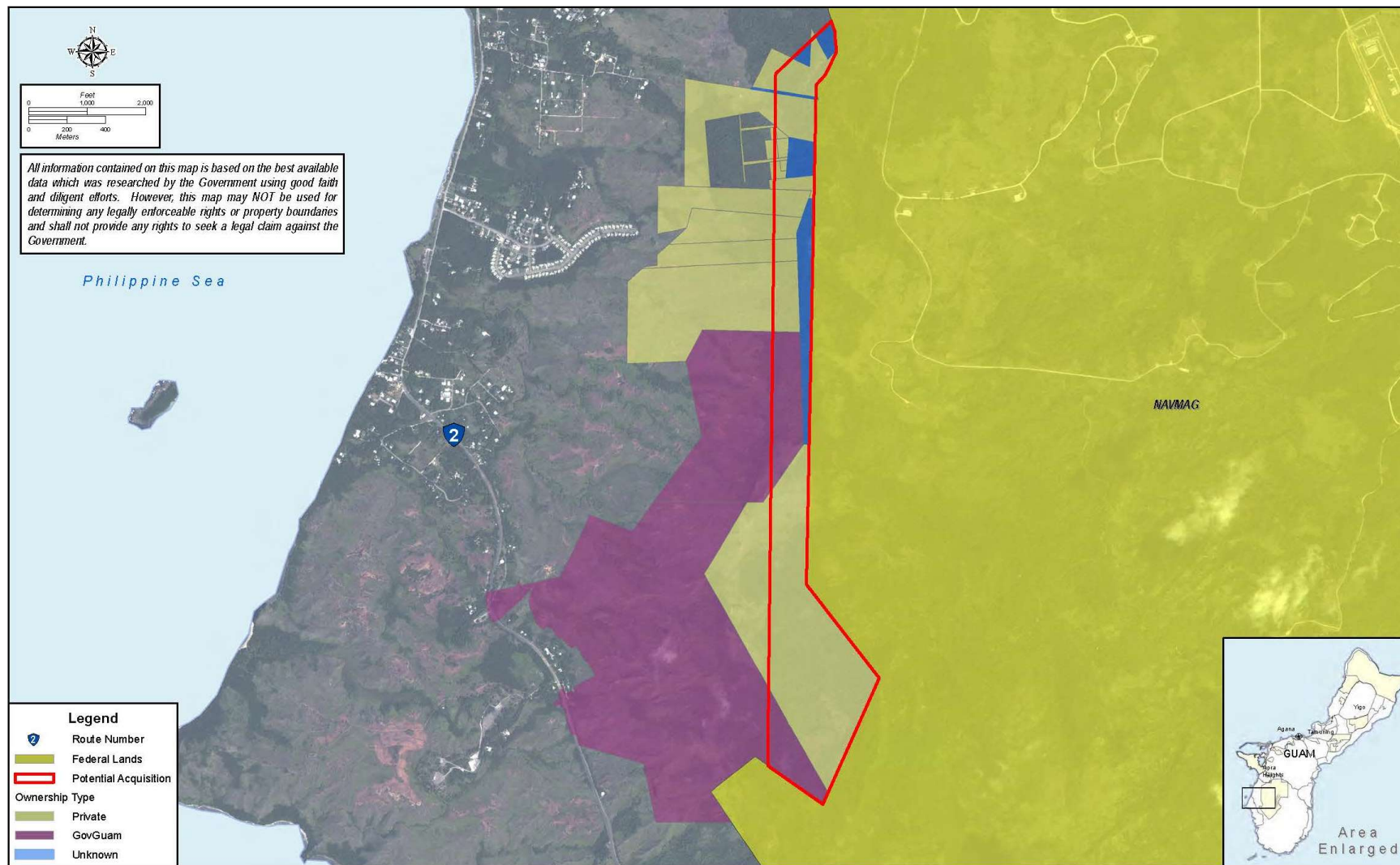


Figure 5.3-21. Ownership: NAVMAG - North/South

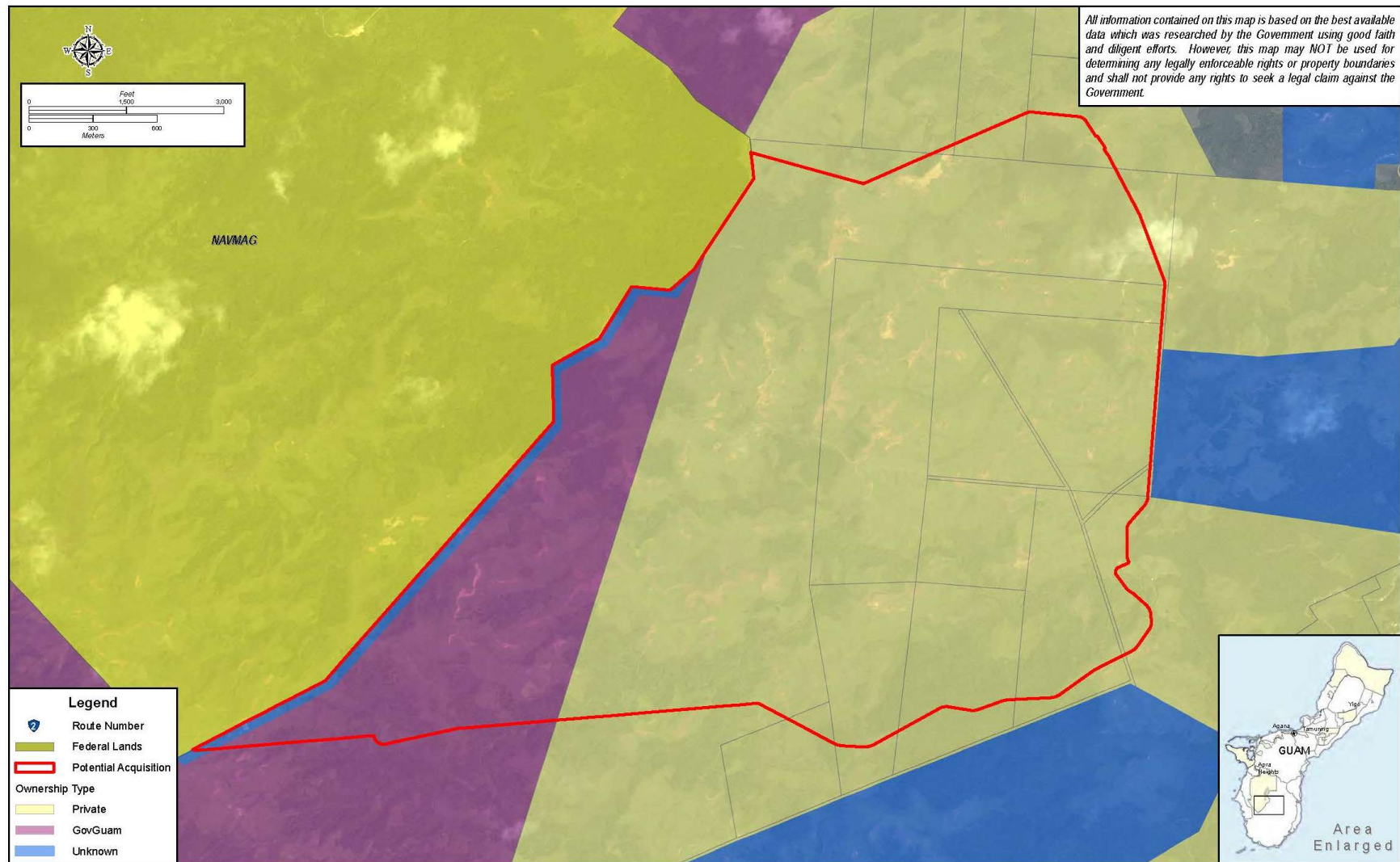


Figure 5.3-22. Ownership: NAVMAG - East/West

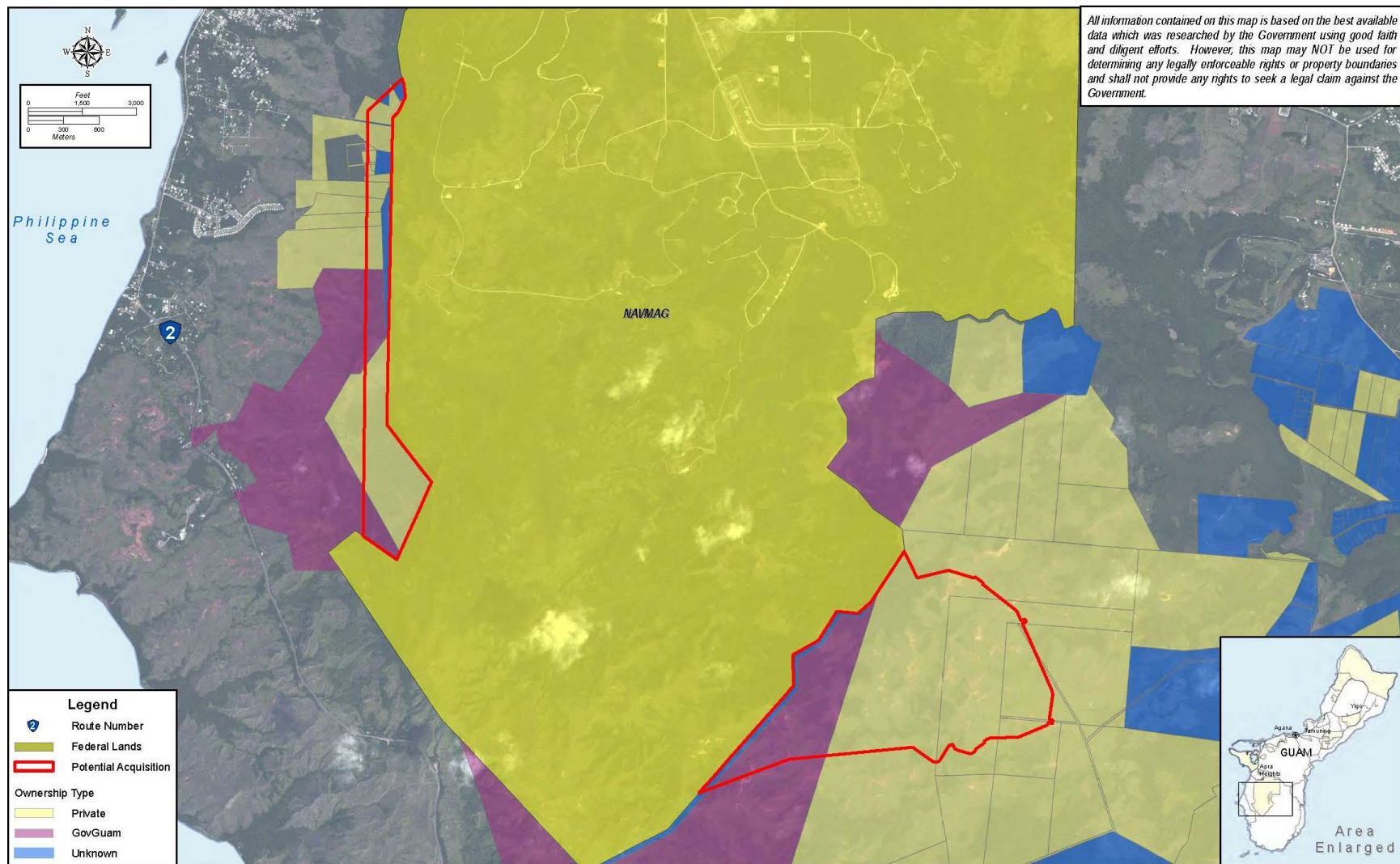


Figure 5.3-23. Ownership: NAVMAG – L-Shaped

5.3.3 Northwest Field Alternative

The NWF parcel alternative would require approximately 268 acres (108.5 hectares) (Figure 5.3-24) of management responsibility for land to be transferred.

5.3.3.1 Current Land Use

The current land use of the NWF parcel appears to be Conservation, as shown on Figure 5.3-25. Navy submerged lands border the northern edge of the property. The coast is characterized by a steep undeveloped cliff.

5.3.3.2 Land Classification and Prime Farm Lands

Table 5.3-6 shows the GBSP land classification of the NWF parcel is Federal Land (Figure 5.3-26); the parcel is owned by the U.S. Federal Government and is under the custody and control of the DoI.

There are no Prime Farmlands within the NWF parcel option, but there are lands classified as agricultural.

Table 5.3-6. Land Classification: NWF		
<i>Type of Land Classification</i>	<i>Parcel (Acres)</i>	<i>Parcel (% Acreage)</i>
Federal Land	268	100%

Note: Acreages are rounded and may not add up to the overall acreages identified in the text.

5.3.3.3 Utility Availability

Information on the utility access on the NWF parcel and its surrounding potential impact area was not provided by NAVFAC Pacific Real Estate.

5.3.3.4 Assessed Property Valuation

Assessed Property Valuation for the NWF parcel is \$109,298/acre.

5.3.3.5 Recorded Ownership

The NWF parcel is owned by the U.S. Federal Government and is under the custody and control of the DoI.

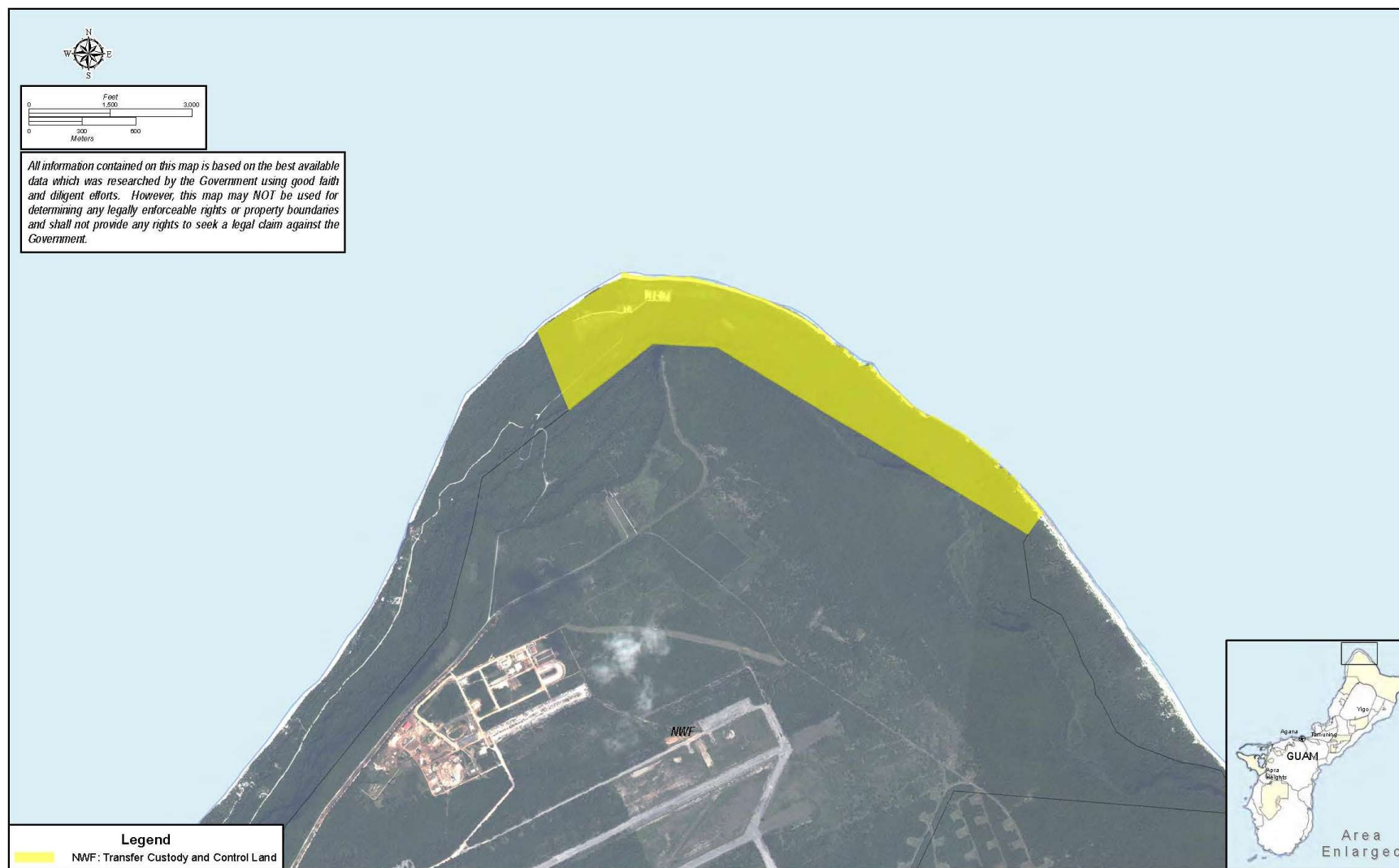


Figure 5.3-24. Aerial Map: NWF



Figure 5.3-25. Land Use: NWF



Figure 5.3-26. Land Classification: NWF

5.4 ECONOMIC AND SOCIOCULTURAL IMPACTS

Potential impacts associated with land acquisition could affect individual property owners, occupants, the surrounding community, and GovGuam. Individual owners and occupants might be impacted from an economic perspective or a sociocultural perspective. Economic impacts associated with land acquisition are those that are purely financial. Sociocultural impacts associated with land acquisition are less tangible and are presented broadly in this section under the assumption that conceptual frameworks such as social disarticulation and cultural marginalization (the deterioration of social structures, networks, or belief systems), and social and psychological marginalization, and stress and anxiety (a person's loss of confidence in society and themselves, feelings of injustice, and reduced social status) are valid.

5.4.1 Route 15 Alternative

5.4.1.1 Individual Owner/Occupants

None of the potentially acquired lots in the Route 15 alternative are privately owned.

Guam International Racing Federation, a CLTC licensee, operates a raceway park that would be affected by land acquisition associated with the Route 15 alternative. If the lease and license are still current at the time of acquisition, the raceway park land use would not be compatible with uses associated with the proposed action. Also, the acquisition of the Route 15 parcel would impact quarrying operations currently operating on those lands, which would be difficult to relocate due to the specific geological requirements associated with quarry operations.

With regard to sociocultural impacts, this alternative would require the acquisition of seven separate lots, all of which are owned by government entities (GovGuam, GALC, and CLTC). Of the lots required, none are privately owned.

5.4.1.2 Community

Recreation sites within the vicinity of the Route 15 parcel include Guam International Raceway, Marbo Cave, Pãgat Trail, Pãgat Cave and Village (and Cultural Site), and Taguan Trail. While the revised surface danger zone avoids direct impacts to Pãgat Village and Pãgat Cave, there are still potential indirect impacts from firing range noise that could lessen visitor enjoyment of these recreational resources. Also, the Route 15 LFTRC alternative has been designed to avoid impacting Pãgat Village, Cave, and Trail, primarily through the redesigned and reduced footprint for the surface danger zone both on land and over water.

The Route 15 parcel is classified for agricultural use; however, there are no designated prime farmlands (i.e., lands which are best suited and available for growing crops). Therefore, there would be no impact to agriculture from the loss of prime farmlands.

With regard to sociocultural impacts, the addition of an estimated 896 acres (362.6 hectares) of federal land on Guam would be considered by some citizens to be an adverse impact due to the current extent of federal land that is under DoD custody and control (approximately 25.9% of all land on Guam, see Table 5.1-1), which would increase to 26.5% with acquisition of the NAVMAG East/West parcel. However, because of the DON's commitment to the concept of "net negative," by the end of the Marine Corps relocation there would be no net increase in federal land under the custody and control of the DoD.

Implementation of this alternative would require the closure of Guam International Raceway, resulting in significant impacts to recreational resources (see SEIS Section 5.1.8). There would be adverse impacts

from a sociocultural perspective due to the potential for the loss of the raceway park to deteriorate social networks. Since groups of people currently use the raceway park for social gatherings, if these gatherings at the raceway park ceased then the related social networks may lose cohesiveness. Feelings of injustice may arise from deterioration of social networks.

5.4.1.3 Government of Guam

The CLTC has provided a commercial license to the Guam International Raceway Park for a term of 20 years, beginning in 1998, to operate on CLTC land. Table 5.4-1 shows the rent schedule for the raceway park. During the years 2015 through 2018, the portion of the term of the lease that would coincide with the proposed action, GovGuam is scheduled to earn approximately \$192,000.

Table 5.4-1. Guam Raceway Park Rental Fee Schedule		
Years	Monthly Rate	Total Payments
1998 - 1999	Waived	\$0
1999 - 2000	Waived	\$0
2000 - 2001	\$1,000	\$12,000
2001 - 2002	\$2,000	\$24,000
2002 - 2003	\$3,000	\$36,000
2003 - 2008	\$3,300	\$198,000
2008 - 2013	\$3,630	\$217,800
2013 - 2018	\$4,000	\$240,000
Total		\$727,800

Source: CLTC Non-Appropriated Funds Performance Audit, December 2005.

The Raceway Park also operates a coral quarry and shares 50% of the profits with the CLTC. Based on information in the CLTC Performance Audit published in 2005, quarry operations provide the CLTC with approximately \$70,000 per year; over the 2015 to 2018 period that remains on the lease and would coincide with the timing of the proposed action, GovGuam is scheduled to earn approximately \$280,000 in association with quarrying revenues.

If there is land acquisition of the Route 15 parcel and the Raceway Park license fees are lost, CLTC would stand to lose \$192,000 from 2015 to 2018. In addition, if coral quarry operations also ceased in 2015 due to land acquisition, the CLTC would lose a projected profit sharing revenue of \$280,000 from 2015 to 2018, based on past revenue stream. Total lost income to the CLTC (between 2015 and 2018), combining lost Raceway license fees and lost profit share from coral quarry operations is a projected \$472,000. Because the land acquisition process would compensate for highest and best use, there would be no impact to GovGuam associated with this loss of revenue.

5.4.2 Naval Magazine Alternatives

5.4.2.1 Naval Magazine (East/West)

Individual Owners/Occupants

With regard to economic impacts, if acquisition of privately-owned lots were to occur through negotiated purchase with the owners, there would be no adverse impact. As required under the Uniform Act, the purchase would take place at fair market value. Conversely, if the property was acquired through condemnation the federal government would still be required under the Uniform Act to reimburse the property owner at the fair market value. Therefore, the land acquisition would not cause an adverse economic impact to individual landowners.

With regard to sociocultural impacts, this alternative would require the acquisition of 19 separate lots, including one lot owned by GovGuam. Of the lots required, 17 are known to be privately owned and 1 lot has unknown ownership, so up to 18 different private parties could be affected. It is anticipated that, in all cases, a negotiated sale or lease between the federal government and a willing seller would be arranged, and there would be no adverse sociocultural impact. In the unlikely event that the land were acquired through condemnation, it is possible that the individual landowner would potentially consider the forced sale or lease of property to be an adverse impact (despite being paid fair market value).

Community

With regard to economic impacts, the NAVMAG (East/West) lands are either undeveloped in a natural state or represent conservation lands (see Table 5.3-3), and no current agricultural activities or other economically productive land uses were identified. Because the land that would be acquired does not currently have an economically productive use, and the fair market value would account for the highest and best use, there would be no adverse economic impact.

With regard to sociocultural impacts, the addition of an estimated 1,894 acres (766 hectares) of federal land on Guam would be considered by some citizens to be an adverse impact due to the current extent of federal land that is under DoD custody and control (approximately 26% of all land on Guam, see Table 5.1-1), which would increase to 27.3% with acquisition of the NAVMAG East/West parcel. However, because of the DON's commitment to the concept of "net negative²," by the end of the Marine Corps relocation there would be no net increase in federal land under the custody and control of the DoD.

Five recreational sites are located in the vicinity of the NAVMAG (East/West) alternative (see SEIS Section 5.2.7). Four of the five recreational sites are located on NAVMAG and are only open to installation personnel and their guests. The remaining recreational site, Talofofo Falls Park and Hiking Trail, is accessible to the public along the existing access road between route 4 and the DanDan Communication Site and is not located within the land acquisition boundary. Although access to Talofofo Falls Park and Hiking Trail may be temporarily affected during construction activities along the access road, the proposed construction activities along the access road would be short-term in duration, and associated sociocultural impacts would not be expected to be substantial.

Government of Guam

The current 1,498 acres (606 hectares) of land in the NAVMAG (East/West) parcel that are privately owned are subject to GovGuam property tax. The average per acre value for these parcels is \$206,911. The total tax base for private lands is estimated to be \$310 million (\$206,911 x 1,498 acres [606 hectares]). On this property, land owners pay an estimated \$263,500 in property taxes to GovGuam. Acquisition of this property by the federal government would represent a loss of 1.3% percent of FY 2011 GovGuam property tax revenues.

GovGuam owns 360 acres (146 hectares) of the land subject to acquisition under this alternative. At present, this land is not developed, leased or otherwise generating income for GovGuam. As such, either a sale or lease would generate a small beneficial economic effect.

GovGuam's debt ceiling, which limits the amount of debt it may issue through bond offerings, is equal to 10% of the assessed value of taxable land. Based on the tax assessment value of \$279 million (\$310 million x 0.9 assessment rate), GovGuam's debt ceiling would be adjusted downward by \$27.9 million if

² "Net negative" refers to the February 7, 2011 commitment by the Under Secretary of the Navy that the DoD would have a smaller footprint on Guam at the end of the Marine Corps realignment process (Under Secretary of the Navy 2011).

the NAVMAG (East/West) parcel were acquired. As of June 2012, GovGuam was \$7.2 million below its debt ceiling of \$1.139 billion. The reduction of \$27.9 million would equal 2.4% of GovGuam's total debt ceiling and would hamper GovGuam's ability to incur additional debt.

5.4.2.2 Naval Magazine (North/South)

Individual Owner/Occupants

With regard to economic impacts, if acquisition of privately-owned lots were to occur through negotiated purchase with the owners, there would be no adverse impact. As required under the Uniform Act, the purchase would take place at fair market value. Conversely, if the property was acquired through condemnation, the federal government would still be required under the Uniform Act to reimburse the property owner at the fair market value. Therefore, the land acquisition would not cause an adverse economic impact to individual landowners.

With regard to sociocultural impacts, this alternative would require the acquisition of 23 separate lots, including two lots owned by GovGuam. Of the lots required, four are known to be privately owned and 17 lots have unknown ownership, so up to 21 different private parties could be affected. It is anticipated that, in all cases, a negotiated sale or lease between the federal government and a willing seller would be arranged, and there would be no adverse sociocultural impact. In the unlikely event that the land were acquired through condemnation, it is possible that the individual landowner would potentially consider the forced sale or lease of property to be an adverse impact (despite being paid fair market value).

Community

With regard to economic impacts, the NAVMAG (North/South) lands are undeveloped in a natural state (see Table 5.3-3), and no current agricultural activities or other economically productive land uses were identified. Because the land that would be acquired does not currently have an economically productive use, and the fair market value would account for the highest and best use, there would be no adverse economic impact.

With regard to sociocultural impacts, the addition of an estimated 252 acres (102 hectares) of federal land on Guam would be considered by some citizens to be an adverse impact due to the current extent of federal land that is under DoD custody and control (25.9% of all land on Guam, see Table 5.1-1), which would increase to 26.1% with acquisition of the NAVMAG North/South parcel. However, because of the DON's commitment to the concept of "net negative," by the end of the Marine Corps relocation there would be no net increase in federal land under the custody and control of the DoD.

Five recreational sites are located in the vicinity of the NAVMAG (North/South) alternative (see SEIS Section 5.3.7). Four of the five recreational sites are located on NAVMAG and are only open to installation personnel and their guests. The remaining recreational site, Talofofa Falls Park and Hiking Trail, is accessible to the public along the existing access road between route 4 and the DanDan Communication Site and is not located within the land acquisition boundary. Although access to Talofofa Falls Park and Hiking Trail may be temporarily affected during construction activities along the access road, the proposed construction activities along the access road would be short-term in duration, and associated sociocultural impacts would not be expected to be substantial.

Government of Guam

The current 156 acres (63 hectares) of land in the NAVMAG (North/South) parcel that are privately owned are subject to GovGuam property tax. The average per acre value for these parcels is \$206,911. The total tax base for private lands is estimated to be \$32.3 million (\$206,911 x 156 acres). On this

property, land owners pay an estimated \$27,436 in property taxes to GovGuam. Acquisition of this property by the federal government would represent a loss of 0.14% percent of FY 2011 GovGuam property tax revenues.

GovGuam owns 360 acres (146 hectares) of the land subject to acquisition under this alternative. At present, this land is not developed, leased, or otherwise generating income for GovGuam. As such, either a sale or lease would generate a small beneficial economic effect.

GovGuam's debt ceiling, which limits the amount of debt it may issue through bond offerings, is equal to 10% of the assessed value of taxable land. Based on the tax assessment value of \$29 million (\$32.3 million x 0.9 assessment rate), GovGuam's debt ceiling would be adjusted downward by \$2.9 million if the NAVMAG (North/South) parcel were acquired. As of June 2012, GovGuam was \$7.2 million below its debt ceiling of \$1.139 billion. The reduction of \$2.9 million would equal 0.3% of GovGuam's total debt ceiling and would marginally hamper GovGuam's ability to incur additional debt.

5.4.2.3 Naval Magazine (L-Shaped)

Individual Owner/Occupants

With regard to economic impacts, if acquisition of privately-owned lots were to occur through negotiated purchase with the owners, there would be no adverse impact. As required under the Uniform Act, the purchase would take place at fair market value. Conversely, if the property was acquired through condemnation, the federal government would still be required under the Uniform Act to reimburse the property owner at the fair market value. Therefore, the land acquisition would not cause an adverse economic impact to individual landowners.

With regard to sociocultural impacts, this alternative would require the acquisition of 30 separate lots, including 3 lots owned by GovGuam. Of the lots required, 9 are known to be privately owned and 18 lots have unknown ownership, so up to 27 different private parties could be affected. It is anticipated that, in all cases, a negotiated sale or lease between the federal government and a willing seller would be arranged, and there would be no adverse sociocultural impact. In the unlikely event that the land were acquired through condemnation, it is possible that the individual landowner would potentially consider the forced sale or lease of property to be an adverse impact (despite being paid fair market value).

Community

With regard to economic impacts, the NAVMAG (L-Shaped) lands are either undeveloped in a natural state or represent conservation lands (see Table 5.3-3), and no current agricultural activities or other economically productive land uses were identified. Because the land that would be acquired does not currently have an economically productive use, and the fair market value would account for the highest and best use, there would be no adverse economic impact.

With regard to sociocultural impacts, the addition of an estimated 974 acres (281.3 hectares) of federal land on Guam would be considered by some citizens to be an adverse impact due to the current extent of federal land that is under DoD custody and control (25.9% of all land on Guam, see Table 5.1-1), which would increase to 26.6% with acquisition of the NAVMAG L-Shaped parcel. However, because of the DON's commitment to the concept of "net negative," by the end of the Marine Corps relocation there would be no net increase in federal land under the custody and control of the DoD.

Five recreational sites are located in the vicinity of the NAVMAG (L-Shaped) parcel (see SEIS Section 5.4.7). Four of the five recreational sites are located on NAVMAG and are only open to installation personnel and their guests. The remaining recreational site, Talofoto Falls Park and Hiking Trail, is

accessible to the public along the existing access road between route 4 and the DanDan Communication Site and is not located within the land acquisition boundary. Although access to Talofoto Falls Park and Hiking Trail may be temporarily affected during construction activities along the access road, the proposed construction activities along the access road would be short-term in duration, and associated sociocultural impacts would not be expected to be substantial.

Government of Guam

The current 695 acres (281.3 hectares) of land in the NAVMAG (L-Shaped) parcel that are privately owned are subject to GovGuam property tax. The average per acre value for these parcels is \$206,911. The total tax base for private lands is estimated to be \$143.8 million (\$206,911 x 695 acres). On this property, land owners pay an estimated \$122,232 in property taxes to GovGuam. Acquisition of this property by the federal government would represent a loss of 0.6% percent of FY 2011 GovGuam property tax revenues.

GovGuam owns 205 acres (83 hectares) of the land subject to acquisition under this alternative. At present, this land is not developed, leased, or otherwise generating income for GovGuam. As such, either a sale or lease would generate a small beneficial economic effect.

GovGuam's debt ceiling, which limits the amount of debt it may issue through bond offerings, is equal to 10% of the assessed value of taxable land. Based on the tax assessment value of \$129 million (\$143.8 million x 0.9 assessment rate), GovGuam's debt ceiling would be adjusted downward by \$12.9 million if the NAVMAG (L-Shaped) parcel were acquired. As of June 2012, GovGuam was \$7.2 million below its debt ceiling of \$1.139 billion. The reduction of \$12.9 million would equal 1.1% of GovGuam's total debt ceiling and would hamper GovGuam's ability to incur additional debt.

5.4.3 Northwest Field Alternative

Sociocultural impacts associated with land acquisition are less tangible and are conceptual frameworks such as social disarticulation and cultural marginalization (the deterioration of social structures, networks, or belief systems), and social and psychological marginalization, stress, and anxiety (a person's loss of confidence in society and themselves, feelings of injustice, and reduced social status). See Appendix E, Section 5.2.2 for more detail.

Alternative 5 would not require federal land acquisition. Custody and control of 268 acres (108.5 hectares) would transfer from DoI to DoD, and some areas that are currently accessible to the public would become restricted access areas. New restrictions on public access to the land and submerged lands encumbered by the NWF LFTRC could have adverse sociocultural impacts due to the potential that access restrictions will deteriorate social networks; i.e., if groups of people currently (or traditionally) use areas that would be encumbered to hold social gatherings, then the encumbrances could impact those groups by deteriorating the social networks inherent in those groups. Also, as social networks may deteriorate due to the encumbrances, feelings of injustice may arise.

5.5 SUMMARY OF LAND ACQUISITION IMPACTS

Land acquisition impact analysis (Chapter 5) focused on the economic and sociocultural aspects of federal land acquisition with particular emphasis on how land acquisition could impact individual landowners/occupants, the community at large and GovGuam. For the most part, sociocultural impacts were found to be adverse based on the widely held point of view on Guam that the federal government already has control of too much land on Guam and should be releasing lands, not acquiring them.

Given this point of view, it is likely that some individuals would perceive the acquisition of their land adversely, both personally and socioculturally, because the loss of property at a particular site would disrupt their ties to community and connection with the land.

Economic impacts are less problematic than sociocultural impacts because of existing federal regulations regarding land acquisition which automatically provides compensation for the economic impacts experienced by individual landowners and occupants whereas, disruption of community ties and connection to the land concerns are harder to assess.

Table 5.5-1 describes the characteristics of the acquisition for each alternative geographic location and configuration of the proposed LFTRC. One of the alternatives, NWF, would not require land acquisition. From a land-ownership perspective, NWF would have the least impact of all alternatives.

Of the alternatives that would require land acquisition, the NAVMAG (East/West) alternative would require the largest amount of land (1,894 acres [766 hectares]), the NAVMAG (L-Shaped) alternative would require the next largest amount of land acquisition (974 acres [281.3 hectares]), followed by the Route 15 alternative (896 acres required [362.6 hectares]), and the NAVMAG (North/South) alternative would require the acquisition of the least amount of land (252 acres [102 hectares]).

Table 5.5-1. Summary of Land Acquisition Impacts¹					
	<i>Live-Fire Training Range Complex Alternatives</i>				
	<i>Route 15</i>	<i>NAVMAG (East/West)</i>	<i>NAVMAG (North/South)</i>	<i>NAVMAG (L-Shaped)</i>	<i>NWF²</i>
Potential Increase in Federal Land (acres) ³	896	1,894	252	974	0
Private Land Potentially Acquired (acres)	0	1,498	156	695	0
GovGuam Land Potentially Acquired (acres) ⁴	23	360	46	205	0
GALC Land Potentially Acquired (acres)	197	0	0	0	0
CLTC Land Potentially Acquired (acres)	676	0	0	0	0
Unknown Ownership Land Potentially Acquired (Acres)	0	36	51	74	0
Number of Lots Potentially Acquired	7	19	23	30	0
GovGuam Lots Potentially Acquired	7	1	2	3	0
Private Lots Potentially Acquired	0	17	4	9	0
Unknown Lot Ownership	0	1	17	18	0
Potential Loss of Property Tax Revenues	\$0	\$263,500	\$27,436	\$122,232	\$0
Decrease in Debt Ceiling	\$0	\$27.9 million	\$2.9 million	\$12.9 million	\$0

Notes: ¹ Based on Version Control 4 GIS data.

² The NWF parcel (268 acres [108.5 hectares]) is owned by the federal government and managed by the DoI.

³ Increases in federal land include acreages for partial parcels. There is potential that more land would need to be acquired if remaining (non-acquired) portions of parcels would be rendered useless after acquisition.

⁴ GovGuam data does not include data for the GALC and the CLTC.

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Guam Bureau of Statistics and Plans

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A. CONTACTS

NOTE AN ADDITIONAL QUESTIONNAIRE HAS BEEN SENT TO THE COASTAL MANAGEMENT PROGRAM WITH SPECIFIC QUESTIONS FOR THAT PROGRAM.

Please provide contacts at your agency that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name: Thomas A. Morrison
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B. LAND USE

Is there an update to the North and Central Land Use Plan of 2009? Was it adopted?

The Plan was submitted to the legislature in late 2009; no changes were made to the plan. In July 2012, the Attorney General provided an opinion that the Plan is approved as an element of the Guam Comprehensive Development Plan due to inaction within the time prescribed in statute.

Is there an update to the 2008 Guam Mapbook?

The book itself is not updated; however the GIS street layer is current and available at the BSP.

Have master plans or other community land use plans been prepared?

The mitigation plan has been adopted. There is a setback analysis study completed on the shorelines in the southern Guam. Special Area Management Plans for communities in Dededo and Yigo are planned for January 2014.

Is there GIS data regarding land use or zoning available for our use?

GIS data layers are limited however available to the public for use. We are presently reviewing the latest NOAA Coastal Change Analysis, Land Cover Classification data set.

Is the following data on Guam land ownership consistent with your records?

- GovGuam Land: 63,988 acres (48% land on Guam)
- Federal Land: 37,088 acres (28% land on Guam)
- Private Land: 33,238 acres (25% land on Guam)

Here is the latest from the BSP GIS – additional verification may be needed:

GovGuam Land	25,581 acres	19.%
Federal Land	35,939 acres	27%
Private Land	72,957 acres	54%

C. EMPLOYMENT AND INCOME

Please direct us to any recent changes in Guam's civilian employment sector that may impact our analysis, specifically in regards to the following:

1. Salary trends:

June 2012 Guam Employment Report - Guam Department of Labor (Attachment A)

2. Most prominent industries:

2009 Guam GDP Report naming prominent industries – US Bureau of Economic Analysis (Attachment B)

2010 County Business Patterns –Guam State Data Center (BSP) and census.gov (Attachment C)

2007 Economic Census Guam – Guam State Data Center (BSP) and census.gov (Attachment D)

Annual Census of Establishments – Guam Department of Labor, Bureau of Labor Statistics (Please refer to excel spreadsheet file entitled, ace_official_release_mar11_03122012_release date_05142012.xls)

3. Consumer price index:

Guam Consumer Price Index Report 3rd Quarter – BSP (Attachment E)

4. Other

March 2012 Unemployment Report - Guam Department of Labor, Bureau of Labor Statistics (Attachment F)

2010 Guam Statistical Yearbook - Bureau of Statistics and Plans, Planning Information Program (Attachment G)

2010 Census Guam Demographic Profile Summary File, Guam State Data Center, Bureau of Statistics and Plans (Attachment H)

D. REVENUES

Please direct us to any recent changes in the following that may impact our analysis:

1. GIP on Guam:

2009 Guam GDP Report – US Bureau of Economic Analysis (Attachment B)

2. Changes in Guam's ability to produce the goods needed for construction projects (influencing capture rate):

Port Authority of Guam purchase of three cranes controversy as noted in the Guam news media sources (Attachment I)

3. Other:

Revenue reports at Bureau of Budget and Management Research (Attachment J)

Guam Office of the Public Auditor, 2011 Guam Financial Statement and other audit reports (Attachment K)

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

**Guam Bureau of Statistics and Plans, Coastal Management
Program**

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PLEASE NOTE THAT WE ARE UPDATING DATA COLLECTED ON THE COASTAL MANAGEMENT PROGRAM. QUESTIONS THEREFORE ARE FOCUSED ON THE ACTIVITIES OF THIS PROGRAM.

AN ADDITIONAL QUESTIONNAIRE HAS BEEN SENT TO THE DIRECTOR OF THE GUAM BUREAU OF STATISTICS AND PLANS, WHICH WILL BE USED TO UPDATE OUR INFORMATION ABOUT THE AGENCY AS A WHOLE.

A. CONTACTS

Please provide contacts at the Coastal Management Program that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name: THOMAS A. MORRISON
Title: Director, Bureau of Statistics and Plans
Phone: (671) 472-4201/2/3
Email: thomas.morrison@bsp.guam.gov

Questionnaire Point of Contact

Name: EVANGELINE D. LUJAN
Title: Administrator, Guam Coastal Management Program
Phone: (671) 475-9672
Email: vangeluja@yahoo.com

B. STAFFING

Please provide **FY2011 and FY2012** data for the below questions:

Staffing	FY2010	FY2011	FY2012
Total Working Staff (FTE Positions Filled)	# 11	#11	# 11
Total FTE Approved (Not Filled)	# 0	# 0	# 2
Estimated % Staff Time Spent on the Following:			
Permitting Review/Approval			35%
Monitoring/Enforcement			20%
Policy/Planning			20%
Administration			10%
Other: Public Outreach & Education			15%

Please comment on any significant staffing issues the Coastal Management Program has experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.) and how that has impacted your ability to conduct permit reviews:

Currently our program is unable to hire additional staff due to freeze in hiring and budget constraints. In addition, due to the amount of application reviews it makes it difficult for program staff to thoroughly conduct field work to verify information due to limited staff resources and work load, government official vehicle inoperative and the amount of applications submitted for review.

In FY11- we were able to hire through contract one GIS specialist. We have received additional assistance from the NOAA Coral Reef Fellowship program in the form of a full time biologist to assist the GCMP's marine biologist who leads the monitoring program for Guam was hired this year. These positions are full time contract employees.

There are 2 limited term positions a watershed coordinator and an outreach coordinator have been approved in FY 12. Both of these positions will also be available to review required documents.

Have military buildup activities on Guam impacted your program's permitting staffing capacity since 2008? If so, in what ways?

Due to limited staff resources and the given amount of time for review on all related proposed military buildup activities on Guam, it has impacted our program's staffing capacity and the ability to do required grant activities in a timely manner. The staff has had to work many additional hours to address the review of military buildup activities. Other grant activities were delayed. Staff time is prioritized for military build up activities. Additional staff time is spent on monitoring and inspecting project that may have negative impacts to natural resources.

C. PERMITTING

Please provide **FY2010-2012** data for the below permit review questions:

		FY2010	FY2011	FY2012
Permits	Total Number of Permits Reviewed (Federal Consistency and Application Review Committee)	# 113	# 144	# 134
	List the <i>types</i> of permits that you approve, and provide numbers approved per year. (note number reflects the number of applications approve/number of applications reviewed)			
	Permit Type: Federal Consistency	# 83	# 65	# 78
	Permit Type: Application Review Committee(approved/reviewed)	# 9/30	# 20/79	# 18/56
	Permit Type:	#	#	#
	Permit Type:	#	#	#

Please list any monitoring/enforcement actions your program conducts, and if those actions occur during construction or operations phases:

The GCMP is not an enforcement agency however; we do monitor development projects that go before the Federal Consistency process and/or the Application Review Committee (ARC) process. Should we encounter any suspected violations during a site inspection or in passing, we immediately contact in writing or by phone the respective networking enforcement agencies (i.e. Guam Environmental Protection Agency, Dept. of Public Works, Dept. of Parks and Recreation, Dept. of Agriculture and the Dept. of Land Management) to report any and all violations that fall within their purview that requires immediate enforcement action by their agency or department. We have built a greater partnership with the other natural resources agencies. We work together to address impact from erosion due to poor construction.

Please list any additional actions/reviews you undertake that have not yet been covered:

Review of all Scoping Comments, DEIS,EAs, Final EIS, monitoring and biological reports, legislative bills, request by contractors, design plans, project proposals, grant proposals, etc.

Please comment on any changes in your program's permit review processes since 2008:

GCMP has seen an increased amount of application reviews for both the Federal Consistency and the Application Review Committee proposed land and development projects. We review projects from our networking permit agencies such as Federal Highway road construction projects from the Departments of Public Works, Guam State Clearinghouse applications from the Department of Parks and Recreation, Department of Agriculture and the Guam Environmental Protection Agency. In addition to the increase in the number of applications, the applications are more complicated. Applications are reviewed for cumulative impacts. Impacts from sedimentation and erosion control are also included in the review of projects.

Has your program experienced any notable changes in your permitting activities since 2008 (for example, in the number or type of permit applications being submitted for review)? If so, please describe:

While our program is not a permitting agency, we do review land and/or development and marine environment applications through the Federal Consistency and Application Review Committee (ARC) process. Since 2008, we have reviewed more federal highway development projects and federal type of development activities that go through our federal consistency and/or Guam State Clearinghouse process. For the ARC, we would review more applications for “temporary workers facilities” and “storage facilities”. In 2012, there has been an increase in rezoning and commercial activities. There is an increase in reviewing highway and bridge projects.

Have military buildup activities on Guam impacted the number and/or composition of permit applications processed by your program?

We have seen an increase in reviews on land and development proposed activities such as retail/convenience stores; housing facilities; and storage facilities through the ARC process. These types of activities serve to accommodate the proposed structures and military and family dependants for the anticipated military buildup on Guam. In addition, through the Federal Consistency review process, the GCMP has seen an increase in reviews related to the military buildup such as the expansion of the Naval Hospital; the expansion of the Port Authority of Guam; and the expansion and renovation of Guam’s roads to name a few.

Please comment on progress on the Guam Seashore Reserve Plan and implications for your program’s permitting work related to seashore development:

The Guam Seashore Reserve Plan is currently in “draft” form. In the absence of our previous Assistant Attorney General who original reviewed the draft Guam Seashore Reserve Plan, our current legal counsel is presently reviewing the latest draft Plan. A “Guam Seashore Reserve Task Force” has been established and is responsible for incorporating any comments and/or changes to update the draft Plan.

Presently, as a member of the Development Review Committee (ARC), the Bureau of Statistics and Plans is responsible for reviewing all “Seashore Clearance” permit applications that go before the Guam Seashore Protection Commission (GSPC) for action.

Due to the transition of the new members of the Guam Legislature that will take effect in January 2013, we anticipate to present the draft Plan to them after presenting the draft Plan to the Chairman and members of the Guam Seashore Protection Commission with the current changes that will be incorporated upon the final review of the legal counsel and the Guam Seashore Reserve Task Force.

D. FOLLOWUP TO 2010 STUDY

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

The Guam North and Central Land Use Plan and the Guam Mitigation Policy has been formally adopted but not yet implemented. We are working to monitor projects and impacts to natural resources. We still need additional staff for monitoring and enforcing conditions placed on projects.

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

The official name of the program is the Guam Coastal Management Program (GCMP).

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Guam Department of Corrections

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A. CONTACTS

Please provide contacts at Guam Department of Corrections that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name:	Jose A. San Agustin
Title:	Director of Corrections
Phone:	688-5117/735-4131/2
Email:	jose.sanagustin@doc.guam.gov

Questionnaire Point of Contact

Name:	Antone F. Aguon
Title:	Lieutenant (COS II)
Phone:	688-6638/734-0779
Email:	antone.aguon@doc.guam.gov

B. STAFFING

Please provide data on full time equivalent (FTE) staffing in **FY2010-2012:**

Department of Corrections Staffing (FTE)	2010	2011	2012
Total:	231	228	214
Custody and Security:	207	208	195
Casework and Counseling:	6	6	5
Behavioral Health Services/Infirmary	04	04	03
Admin and Fiscal / Parole Division:	14	10	11
Comments: The numbers above reflect the filled positions for that fiscal year. Vacant Positions not included. However, as of 12-24-2012, DOC has (43) Uniform vacancies and (15) civilian vacancies. Due to funding issues, there is no plan to hire at this time.			

Please comment on any significant staffing issues your agency has experienced since 2008 (turnover/difficulty filling positions/positive changes etc.) and how that has impacted your ability to service your service population:

As of 12-24-12, we have forty-three (43) Uniform Vacancies, & fifteen (15) civilian vacancies. As a result of the personnel shortage, we accumulate approximately \$62,000 a pay period in overtime or an estimate 1.6 million a year. As of 12-24-2012, the department is behind six (06) pay periods of overtime owed to employees which is about \$350,000. In 2013, at least three (03) officers are retiring, and another four (04) are planning on relocating to the mainland. In spite of shortage of personnel, by distributing the work load between the current employees, we continue to operate has normal.

Have military buildup activities on Guam impacted your agency's staffing capacity since 2008? If so, in what ways?

No.

Please provide current departmental policy on the recommended number of corrections officers per number of inmates:

Due to the design of the prison, determining the prisoner (inmate & detainee) to officer ratio is difficult. Each of the eighteen (18) housing unit is designed differently. For example, Special Housing Unit (Max Unit) can hold maximum of (48) prisoners but because of its design, and the type of inmates housed there we need a minimum of five (05) officers per shift (a ratio of 9 to 1) to operate the unit effectively. On the other hand, General Population (Post#16) can hold (80) prisoners and can operate effectively with (03) officers a ratio of (26 to 1). In order to deal with this issue, the department created General Order 07-002; Minimum Manning Requirement. This general order provides guidance in determining the **MINIMUM** number of officers required per shift.

As of 12-24-2012, each shift [Alpha Platoon (2400-1200) & Bravo Platoon (1200-24)] requires a minimum of thirty-five (35) officers to handle the housing units. This does not include the officers needed to run Court transport, medical transport, dental transport, supply, galley, visitation, maintenance, library, Internal Affairs, and Special Operations. But due to the shortage of personnel, and other factors like annual/sick

leave, military drill, and other approved absences, and the fact that we are making an effort to minimize overtime that we cannot pay, each shift runs with an average of 20-26 officers a shortage of about (10) officers.

Please provide current departmental policy on the recommended number of corrections officers per number of detainees:

same as above

C. SERVICE POPULATION

Provide the number of individuals you have served in **2010-2012**:

Type of Service Population	Number served - 2010	Number served – 2011	Number served - 2012	Location where serviced/house d
Prison (Inmates)	247	219	224	ACF/HDF
Jail (Local Detainees)	269	315	326	ACF/HDF
Probationers	5	7	09	ACF/HDF
Overnighters	10	15	17	HDF
Federal/ICE	28	35	23	HDF
TOTAL (Daily Prison Population)/TOTAL DAYS	565/107,310(# of client days)	591/124,575(# of client days)	599/217,937(# of client days)	
Parolees	228*	249*	254*	*Daily Average Count

Additional clarification (if necessary): The Guam Department of Corrections consists of the Adult Correctional Facility (ACF) located in Mangilao, The Women's Facility also located in Mangilao, and The Hagåtña Detention Facility/Federal Detention Facility (HDF/FDF) located in Hagåtña. Because of the overcrowding, four (04) housing unit in Mangilao are filled with local detainees (pre-trial), parole violators, and probation violators. And due to other security issues like protective custody, etc. six (06) inmates are housed in either HDF or FDF.

The numbers above reflect the daily average prison population and were extracted from our Adult Correctional Management Information System (ACMIS).

With regards to the number of bookings, below is the statistical data; (inclusive of overnighters, Federal/Ice, and probation/parole violators).

2010- 2,970 bookings
 2011- 3,250 bookings
 2012- 3,370 bookings

Please comment on recent trends (including numbers served and types of corrections issues most prevalent) you have observed in regard to your agency's servicing of the following demographic groups:

Active duty military and/or military dependents:

Our average number of military personnel that are confined in our facility is about 6 to 10 active military personnel a year.

FAS Compact State immigrants:

Currently, approximately 27% of our 600 population (Inmates/Detainees) consists of FAS Immigrants.

H2B workers:

We are not seeking a huge influx of H2 workers. If we do get a H2 worker, he being brought in by Immigration.

Have military buildup activities on Guam had an impact on your agency's service population? If so, how and why?

Please comment on any trends/increases in immigration to Guam (as mentioned in previous interview) and impacts on your agency's service population:

The annual cost of servicing FAS Immigrants is about 7 million a year.

Please provide SCAAP grant data for the year 2010:

In 2010, we received approximately \$600,000.00

Please provide information on eligibility for SCAAP grants, compared to 2008:

Due to the financial issues of the federal government, over the last few years, we have seen an increase and decrease in the amount of SCAAP funding. In 2011, DOC received \$557,353.00 in 2012, DOC received \$398,111.00. I Don't the 2009 numbers readily available.

D. FACILITIES

List the locations where you provide services to the public, facility conditions, and whether they could handle additional growth (add any that we have missed):

Facility Name	Check Condition of Facility			Check Adequacy of Space			Briefly note reasons for condition and adequacy ratings
	Good	Fair	Poor	1*	2*	3*	
Director's Offices / Parole Services Division	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	In and effort to save money, the Directors Office and Parole officer relocated from DNA Building in Hagåtña to a butler building located within the Mangilao. Currently pay no rent & cannot accommodate Guam Parole Board.
Adult Correctional Facility	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The Mangilao facility is in poor physical condition. Overcrowded, poorly designed and inefficient.
Hagåtña Detention Facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Overcrowded, no space for expansion.
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Additional clarification (if necessary):

* 1 = Current space can accommodate more staff and service population.

* 2 = Current space at/above max; could be expanded or renovated to service more people.

* 3 = Current space at/ above max; cannot be expanded or renovated to service more people.

Please update us on your efforts to build additional facilities to house inmates. In the 2008 interview, attached for reference, you indicated efforts to build a 1,000-bed facility, a 300-bed facility, and outreach to the National Institute of Corrections event in 2010).

In 2010, four individuals attended NIC training titled "Planning of New Institutions". However, 2 of the 4 have left government service. As of 12-24-2012, no funding has been identified to build a new facility or to expand or renovate the existing facilities.

E. FOLLOWUP TO 2008 STUDY

Please comment on collaborative activities between your agency and the federal public safety agencies on Guam (for example, working agreement with Air Force), and the effectiveness of this collaboration:

We have a formal agreement/MOU between U.S. M and BICE. In the event the military needs for us to hold a prisoner, coordination is made between U.S. M and the agency requesting our services.

Please comment on any trends/increased interest in mixed martial arts (as mentioned in previous interview) and impacts on your agency's service population:

At this time, we have (01) individual who is member of a local MMA organization. Otherwise nothing significant to report on this subject.

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

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Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

<p>The department is required by law to produce a yearly Citizens- Centric Report. The report provides DOC's financial information & population report for FY 2010 and FY 2011. A copy of the report can be found at http://www.guamopa.com/index.php?pg=official-citizen-centric-report</p>
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Guam Department of Chamorro Affairs

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A. CONTACTS

Please provide contacts at the Department of Chamorro Affairs that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name: Joseph Artero-Cameron
Title: President, Department of Chamorro Affairs
Phone: 671-475-4278
Email: joseph.cameron@dca.guam.gov

Questionnaire Point of Contact

Name: Simeon M. Palomo
Title: Planner III, Department of Chamorro Affairs
Phone: 671-475-4278
Email: simeon.palomo@dca.guam.gov

B. BACKGROUND

Please comment on the 2011 merging of the Hagatna Restoration and Redevelopment Authority, Guam Council on the Arts and Humanities Agency, Guam Public Library System, and Guam Education Telecommunications Corporation dba PBS Guam into Divisions under the Department of Chamorro Affairs, and the impact on DCA's ability to perpetuate, promote, and preserve Chamorro heritage on Guam:

Here is the mission of the newly reorganized Dept. of Chamorro Affairs:

To create, develop, implement and maintain an integrated program for the preservation, promotion, and advancement of the native Chamorros and other Asian/Pacific Islander residents of Guam. It is intended that the public corporation be the guiding force in all aspects of Chamorro culture, language, preservation, education, arts, humanities, and history, through public policy, advocacy, research, publication, authentication, restoration, presentation, and production, and by providing and overseeing a repository for historical documents, cultural artifacts, and documentary and narrative film and video.

The new divisions of the department will provide the resources and support to implement the mission. Since the reorganization, there has been a concerted effort to support the culture and language. Also,

Joseph Artero-Cameron, President of Chamorro Affairs is tasked with:

(1) **Department of Chamorro Affairs** – a Public Non-Profit Corporation administering the local and/or federally funded programs:

- Office of the President
- Division of Chamorro Language and Culture
- Division of Research, Publication and Training
- Division of Guam Museum and Archives
- Division of Chamorro Village
- Division of Hagåtña Restoration and Redevelopment Authority
- Division of Guam Council of the Arts and Humanities
- Division of Guam Public Library Systems
- Division of Guam Public Broadcasting System

(2) **GUAM Coral Reef Conservation Programs / GUAM Fisheries/ and; GUAM Oceans Matters**, Guam's Governor Appointee & Point of Contact

(3) **Western and Central Pacific Fisheries Commission (WCPFC)**, Guam's Governor Appointed Head of Delegation

(4) **US Permanent Advisory Committee (USPAC)**, Guam's Governor Appointed Advisory member

(5) **Pacific Islands Ocean Observing System Governing Council (PacIOOS)**, Guam's Governor Appointed Governing Executive Committee Member

(6) **NOAA (National Oceans and Atmospheric Administration) Coral Reef Conservation Programs/Guam Local Action Strategy/All Islands Committee; and US Coral Reef Task Force**, Guam's Governor Appointee/Guam's Point of Contact

(7) **Western Pacific Regional Fishery Management Council**, Guam's Governor Appointed alternate-member and;

(8) **Guam Academy Charter Schools Council**, Guam's Governor Appointed Voting member/Confirmed by the Guam Legislature

Please comment on the current state of Chamorro cultural continuation within the Guam community and areas of progress as well as any barriers being encountered:

The continuation of the Chamorro culture within the Guam community is a delicate matter. Chamorros have been in Guam and the Marianas Islands for thousands of years, thus making them the “indigenous” people. It is encouraging that President Obama and the United States now support the United Nations Declaration of Indigenous People. For a culture to exist for thousands of years, such as the Chamorro culture, is becoming a rare instance. Cultures and languages are becoming extinct in a rapid pace. It must be stressed that the military buildup must also promote the preservation and progression of the island’s “indigenous people”. As President Obama noted, in reference to the UN Declaration, *“what matters far more than words, what matters far more than any resolution or declaration, are actions to match those words.”*

Thus, the Department of Chamorro Affairs requests that it be included in any discussions with federal agencies that are assigned to implement initiatives relative to the United States’ commitment to the UN Declaration of Indigenous Population.

One of the key barriers in ensuring the viability of the Chamorro culture in the Marianas Islands is political status. Unincorporated territorial status precludes the Chamorro people from controlling its land, sea and air rights, especially when it deals with United States security matters. However, the Governor’s Office may be more suited to address this issue.

C. POPULATION / DEMOGRAPHIC CHANGE

Please comment on the potential impact of population change (increase in non-Chamorro population) on the future of the following topics:

1. Political debates involving issues of Chamorro culture:

The continual reduction of the Chamorro population ratio as shown on Guam’s census 2010, in comparison to other groups, is already and will continue to be adversely affected in the efforts for sustainability of the Chamorro culture. It is the case with all indigenous groups. Political status, namely the status of a Territory, will always disallow the Guam citizens the same rights as a State, or other status. Population and demographic changes may or may not support Chamorro culture issues in the near future.

2. Political debates involving issues of Chamorro self-determination and political status:

Same as #1.

3. Political debates involving issues of WWII reparations:

Same as #1.

4. Cultural conflict within the community:

Same as #1.

5. Cultural sharing within the community:

It is incumbent of the Department of Chamorro Affairs to continue providing coverage of the Chamorro culture to the island’s residents. These efforts are best provided for by increased education and awareness of Chamorro language, history, culture and

heritage to those living on Guam. The military buildup provides a unique opportunity for active military and their dependents to be involved in community settings with the local Chamorros in all aspects of daily living and the integration of social activities that promote Chamorro culture.

6. Perpetuation of the Chamorro language:

Same as #1. In addition, there is now a more concerted effort to provide Chamorro language immersion classes on Guam. Perhaps the federal US Dept. of Education may opt to providing funding in the establishment of Chamorro language immersion schools in the Guam public school system that will benefit all students. All in all, the Chamorro language is at a crossroads and more needs to be done. Language strongly links to culture and heritage education.

Please identify any areas of potential cultural conflict and/or positive cultural sharing that occurs between Guam's Chamorro and local population and the following demographic populations:

1. Military population:

Military and civilian relations in Guam have been positive, for the most part. The size of the military population in a small island will, of course, create some challenges(e.g., economics, social, cultural, health, education, public safety, etc) to Guam's citizenry.

2. Migrants from the Federated States of Micronesia:

As with any incoming migrant population, culture differences will exist. Cultural similarities exist as well. The more pressing issue is US reimbursement for public services absorbed due to the compacts. In addition, dramatic population changes will affect any community. The compact agreements must abide by commitments on both local and federal governmental sides.

3. Incoming H2B construction workers:

More opportunities must be afforded to Guam residents before employment is offered to those not from Guam. Support of local community should always be considered first. Provide locals training opportunities that will avail gainful employment directly resultive of military buildup projects and activities.

C. CULTURE / ARTIFACTS / LAND

Please comment on current work / studies / discussion within the Guam community addressing the following topic areas, and areas of progress as well as any barriers being encountered:

1. Chamorro connection to land / sacred places:

The Chamorro connection to the land and sacred places is vital. When one says "taotao tano", it means that the person is of the land. Land is not just a commodity for the indigenous culture of Guam. Even Chamorro beliefs, such as the taotaomona, reference the cultural value of land. The military buildup must consider the sacred beliefs of the Chamorro culture. For military and civilian populations to exist harmoniously, there must be an appreciation of the value of historical and cultural sites, both situated in military and civilian locales.

2. Chamorro language:

Same as C.#6.

3. Chamorro history (museum / curating of artifacts):

The Guam Museum will have a permanent home in December 2014, with the opening of the **Guam and Chamorro Educational Facility**. However, there will be an immediate need for a repository to hold the many archaeological finds from buildup-related activities. This is a critical need that needs to be funded by the federal government funding all military buildup activities and CIPs.

4. Other:

Please identify any recent studies and surveys that you feel may contribute to our understanding of the environment related to Chamorro culture currently existing on Guam:

Rather than list recent studies and surveys, the Department of Chamorro Affairs recommends that Chamorro experts and organizations be contacted to gather the information and have a better understanding of the Chamorro culture. Studies and surveys may have the empirical data and social analyses, but one-to-one conversations with the Chamorro people will provide the complete story of the Chamorro people and culture. Just as the Chamorro lives and breathes his/her culture every day, it will be beneficial for others to establish relationships with them. As for the department, we recommend the publications of the Hale'-ta series. Please coordinate with DCA's Juanita Quintanilla should you request to purchase a copy of the entire series. The Hale'-ta series cover cultural and historical issues of the Chamorro people.

Here are some, not all, of others to start the conversation, whom have the indigenous citizen's utmost respect:

Joseph Artero-Cameron, President of Chamorro Affairs

Dr. Katherine B. Aguon, Phd., premiere historian and writer on Guam History & Language

*Antonio M. Palomo, former Museum Director/Historian on Guam History and Museum
Robert Underwood, President / Univ of Guam, historian and writer on Guam History & Language*

Anthony Ramirez – Dept. of Parks and Recreation [historian and writer of Guam History]

Anne Hattori – Univ of Guam [Guam Academia]

Omaira Brunal – Univ of Guam, Micronesian Area Research Center

Joe Quinata – Guam Preservation Trust Director

Lynda B. Aguon, Dept. of Parks and Recreation [State Historic Preservation Officer]

Antonio A Sablan – historian on Guam History and Chamorro Activist

C. BUILDUP

Have developments in military buildup activities on Guam impacted the work of your program and the topic areas outlined above If so, in what ways?

The buildup has not impacted the department yet. It is expected when buildup related activities increase, then the impact will be more profound. However, issues such as the funding and the building of the “repository” must be

addressed now in anticipation of the housing Guam/Chamorro artifacts to be found during buildup CIP activities.

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

Guam Department of Land Management, Land Planning Division

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PLEASE NOTE THAT WE ARE UPDATING DATA COLLECTED ON THE LAND PLANNING DIVISION. QUESTIONS THEREFORE ARE FOCUSED ON THE ACTIVITIES OF THIS PROGRAM.

ADDITIONAL QUESTIONNAIRES HAVE BEEN SENT TO OTHER DIVISIONS WITHIN THE DEPARTMENT OF LAND MANAGEMENT.

A. CONTACTS

Please provide contacts at the Land Planning Division that we might work with to ensure the success of the questionnaire/interview process.

Leadership

Name:	Monte Mafnas
Title:	Director, Department of Land Management
Phone:	671-649-5263 ext. 610
Email:	monte.mafnas@dml.guam.gov

Questionnaire Point of Contact

Name:	Marvin Q. Aguilar
Title:	Guam Chief Planner, Acting
Phone:	671-649-5263 ext. 311
Email:	marvin.aguilar@dml.guam.gov

B. STAFFING

Please provide **FY2010-2012** data for the below questions:

Staffing	FY2010	FY2011	FY2012
Total Working Staff (FTE Positions Filled)	# 12	# 12	# 11
Total FTE Approved (Not Filled)	#	#	# 1
Estimated % Staff Time Spent on the Following:			
Permitting Review/Approval			%
Monitoring/Enforcement			%
Policy/Planning			%
Administration			%
Other:			%

Please comment on any significant staffing issues your division has experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.) and how that has impacted your ability to conduct permit reviews:

The most difficult challenge Planning Division experienced and is still experiencing is tending to necessary administrative requirements as a result of private sector industries positioning themselves to accommodate anticipated land-related needs resulting from the build-up.

Have military buildup activities on Guam impacted your division's permitting staffing capacity since 2008? If so, in what ways?

The Division of Planning serves as the 1st tier government reviewing body for all business and building permit application. Military buildup activities on Guam have significantly affected our permitting staffing capacity since public announcement of the intended build-up. Increases in government-issued permits for businesses for services and sale of goods has strained operations as focus has been put on such reviewing efforts, causing the Division to lag on other vital Division mandates. To right-fit staffing needs, consideration must be placed on a staffing pattern that reflects the intended organizational distribution of workers per each divisional subsection. Presently there are seven (7) intended subsections within the Division that currently identifies 52% vacancies.

C. PERMITTING

Please provide **FY2010-2012** data for the below permit review questions:

		FY2010	FY2011	FY2012
Permits	Total Number of Permits Reviewed	2885	1836	2435
	List the <i>types</i> of permits that you approve, and provide numbers approved per year.			
	Permit Type: Business Licenses	1795	1158	1476
	Permit Type: Building Permits	506	301	493
	Permit Type: Clearing & Grading Permits	321	62	191
	Permit Type: GLUC Permits (Notice of Action)	60	62	191
	Permit Type: TWHF Health/Sanitary Permits	4	4	4
	Permit Type: Contractor's Licenses	5	46	25
	Permit Type: Liquor/Tobacco Licenses	73	41	57
	Permit Type: Building Occupancy Permits	120	185	152
	Permit Type: Child Care Health/Sanitary Clearance	2	2	2

Please list any monitoring/enforcement actions your division conducts, and if those actions occur during construction or operations phases:

The Division maintains a role of monitoring development projects that have:
<ol style="list-style-type: none">1. <i>Been approved by the Guam Land Use Commission. This may involve both during construction and operations phases.</i>2. <i>Been approved by virtue of compliance with the zoning code with minimum administrative action such as a Building or Clearing/Grading Permit.</i>3. <i>Occurred as a violation and required DLM involvement in the monitoring of compliance measures via other regulatory agencies, particularly Department of Public Works, Guam Environmental Agency, and Department of Parks & Recreation.</i>

Please list any additional actions/reviews you undertake that have not yet been covered:

--

Please comment on any changes in your division's permit review processes since 2008:

--

Has your division experienced any notable changes in your permitting activities since 2008 (for example, in the number or type of permit applications being submitted for review)? If so, please describe:

The Division of Planning experienced a significant spike in business licenses, particularly within the housing sales and rental market. The Division also observed an increase in large-scale housing subdivision projects which requires a subordinate division dedicated to such efforts where this subordinate division has yet to fill leadership and subordinate staff relative to its mandates under Title 21, Chapter 62, Subdivision Law is currently being handled by the Acting Guam Chief Planner with all precursory work being conducted by all planning staff as an additional duty.
--

Have military buildup activities on Guam impacted the number and/or composition of permit applications processed by your division?

Yes with an increase of time dedicated to reviewing a significant increase in permit applications (business licenses, building permits, clearing/grading permits, and GLUC land use permit applications as projected "Boots on Ground" forecasted dates approached.

D. FOLLOWUP TO 2010 STUDY

Please comment on any progress in worker housing/barracks (new developments, improvements in conditions, etc.) on Guam since 2008:

The Division notes an increase of 17% in Temporary Workers' Housing Facilities or TWHFs capacity consideration since 2008. Noteworthy is the fact that the administrative course design has changed with Division engagement and facilitation of Title 21, Ch. 61, §61309(c)(1), where administrative consideration requires any TWHF to occur on "M-1" (Light-Industrial) zones.

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

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**Guam Department of Integrated Services for Individuals with
Disabilities**

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A. CONTACTS

Please provide contacts at the Guam Department of Integrated Services for Individuals with Disabilities (DISID) that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name:	Benito S. Servino
Title:	Director, DISID
Phone:	671-475-4646 (W), 671-898-8695 (C)
Email:	benito.servino@disid.guam.gov

Questionnaire Point of Contact

Name:	Benito S. Servino
Title:	Director, DISID
Phone:	671-475-4646 (W), 671-898-8695 (C)
Email:	benito.servino@disid.guam.gov

B. STAFFING

Please provide data on full time equivalent (FTE) staffing for **FY 2010-12:**

Total Agency Staff	2010	2011	2012
FTE:	33	36	25
Comments: FTEs include warm bodies only			

Please comment on any significant staffing issues your agency has experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.), particularly for skilled positions, and how that has impacted your ability to support your service population:

We experienced difficulty in filling positions due to the budget situation within GovGuam and as a result of the Permanent Injunction. We had a significant decrease in staff. Note that the number of Social Workers and VR Counselors went down from (14) fourteen in 2008 to (8) eight in 2012. We also have been experiencing a challenge filling the Vocational Rehabilitation Administrator position due to a Certified Rehab Counseling Credential requirement.

Have military buildup activities on Guam impacted DISID's staffing capacity since 2008? If so, in what ways?

We are not tracking this information, so we cannot accurately state if the buildup had a direct impact on our staffing capacity.

C. SERVICE POPULATION

Please comment on recent trends (including numbers served and types of disability/health issues most prevalent) you have observed in regard to your agency's servicing of the following demographic groups:

Active duty military and/or military dependents:

Increase in the number of military dependents seeking services

FAS Compact State immigrants:

Increase in the number of FAS immigrants

H2B workers:

None

Have military buildup activities on Guam had an impact on your agency's service population? If so, in what ways?

We are not tracking this information, so we cannot accurately state if the buildup had a direct impact on our service population. However, we are collaborating with the Guam Regional Transit Authority (GRTA) on the construction and establishment of a One Call-One-Click Dispatch Center which will be housed at our agency to serve military dependents, active duty personnel and veterans which would help to improve services for our population.

Please comment on any trends/increases in immigration to Guam and impacts on your agency's service population:

What we have seen increasing is the number of veterans seeking assistance from the DVR, DSS, ADRC and DEEC sections. These are veterans who have been away from Guam and have come back to stay for good.

D. FACILITIES / TECHNOLOGY

List the locations where you provide services to the public, facility condition, and whether facilities could handle additional growth (add any we may have missed):

Facility	Check Condition of Space:			Check Adequacy of Space			Briefly note reasons for condition and adequacy ratings
	Good	Fair	Poor	1*	2*	3*	
Suite 702 & 703 – DNA Building, Hagatna	X	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	Due to reduced staff, there are more spaces available
Suite 601 and 602	X	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	Due to reduced staff, there are more spaces available

* 1 = Current space can accommodate more staff and service population.

* 2 = Current space at/above max; could be expanded or renovated to service more people.

* 3 = Current space at/ above max; cannot be expanded or renovated to service more people.

Please provide any updates on the Guam GetCare System, your agency's management of the system, and your use of data to improve services:

GetCare added more features and services such as options counseling

Please comment on your staff and technological ability to bill TRICARE for services that are rendered to the military population on Guam:

We need training to be able to bill TRICARE

Please comment on your staff and technological ability to track services that may be reimbursable for compact impact funding:

We can track the services for compact impact funding. We just need clear-cut definitions and guidelines as to which services can be reimbursed.

E. FOLLOWUP TO 2010 STUDY

Please comment on the changes required by the amended permanent injunction on your agency (transfer of authority back to GovGuam, transfer of services previously under DISID to DMHSA):

Based on a recent Court Order, DISID was removed from the Permanent Injunction with the condition that the administration and funding of the Community Rehabilitation Program and the Respite Care Program be transferred to DMHSA.

Please provide any updates on the proposed new building / one-stop shop mentioned in your 2008 interview (attached for reference):

There is \$1M funding from the Guam Regional Transit Authority that can be used for the construction of the One-Stop Community Resource building to include the One-Call-One Click Dispatch Center. There have been collaborative discussions to expand the use of the building facility to accommodate and house other key GovGuam Agencies.

Please comment on any changes in federal programs setting aside opportunities for the disabled on Guam:

DEEC set up the Assistive Technology Computer Center so that Individuals with Disabilities can have a place for seeking employment opportunities online; ADRC is now offering Options Counseling, DVR is now offering Job Placement Circle Recruitment program each Quarter

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

Most of the responses remain the same. However, there are changes in the number of staffing including a significantly reduced number of social workers and VR counselors from a total of 14 in 2008 to a total of 8 in 2012.

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

We are seeing an increase in the number of veterans seeking our DISID services.

**Guam Department of Land Management, Ancestral Lands
Commission**

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GUAHAN ANCESTRAL LANDS COMMISSION

Eddie Baza Calvo
Governor

Ray Tenorio
Lieutenant Governor

Monte Mafnas
Director

David V. Camacho
Deputy Director



December 27, 2012



To: *Mark Calvo*
Mark Calvo
Governor's Office

From: Monte Mafnas
Director of Land Management.

Subject: Socioeconomic Impact Assessment Study



Håfa Adai yan na magof na ha'ani!

Please see the attached regarding Socioeconomic Impact Assessment Study Update for the Guam Military Buildup Supplemental EIS, Land Planning Division, and the Guam Ancestral Lands Commission.

Should you have any questions, please feel free to contact our office.

Dangkulu na si yu'us mã'åse',

Monte Mafnas
Monte Mafnas

ITC Building, Dept. of Land Management Office, 3rd floor, West Wing | P.O. Box 2950, Hagåtña, Guahan 96932
Tel: (671) 473-5263/7 or 649-5263 x680, x681 | Fax: (671) 649-5383
E-Mail Address: galc.staff@dln.guam.gov Website: www.ancestralands.net

CFI 12-5028

GUAM SIAS SOCIOCULTURAL QUESTIONNAIRE
Guam Ancestral Lands Commission

PLEASE NOTE THAT WE ARE UPDATING DATA COLLECTED ON THE GUAM ANCESTRAL LANDS COMMISSION. QUESTIONS THEREFORE ARE FOCUSED ON THE ACTIVITIES OF THIS PROGRAM.

ADDITIONAL QUESTIONNAIRES HAVE BEEN SENT TO OTHER DIVISIONS WITHIN THE DEPARTMENT OF LAND MANAGEMENT.

A. CONTACTS

Please provide contacts within The Guam Ancestral Lands Commission (GALC) that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name: Monte Mafnas
Title: Director, Land Management
Phone: 649-5263 ext. 650 / 612
Email: monte.mafnas@dml.guam.gov

Questionnaire Point of Contact

Name: David V. Camacho
Title: Deputy Director, Land Management
Phone: 473-5263 or 649-5263 ext. 681
Email: david.camacho@galc.guam.gov

GUAM SIAS SOCIOCULTURAL QUESTIONNAIRE
Guam Ancestral Lands Commission

B. QUESTIONS

Please detail the process that GALC has taken to merge and consolidate with the Department of Land Management:

Through the Governor's authority under the Organic Act, Advisory 9 was signed to address the redundancy in work and cost containment.

Please provide information on the current staffing composition of the GALC (number of individuals currently sitting on the commission, and current full time staff):

1 Land Agent II (full time), 1 Private Secretary (full time), 7 Board Members

Please provide information on the number of lots currently under GALC management:

	# of Lots	Total Acreage
Total amount of land managed by GALC	577	5,373.400
Total amount of land released by GALC to-date	280	To be provided at a later date. Number of acreage is being retrieved from DLM records.

Do you have GIS maps of GALC lots?

Yes

Do you have land use data for GALC lots?

Yes

Please provide an update on GALC's work with Guam Economic Development Authority (GEDA) on the administration of Land Bank Lands:

GEDA is handling 10 parcel of properties. Six (6) lots active and is still under a lease agreement with GALC; Two (2) lot leases terminated; One (1) lot on hold; and One (1) lot on the negotiating table. Please see attached listing.

Have military buildup activities on Guam since 2008 impacted your program's work? If so, in what ways?

Yes, the military buildup created a big impact on our program especially on two (2) lots which were identified for Land Exchange with the Tiyan Airport Property owners. These two (2) properties are within the FAA area and Lot 7166, Pagat, which is being looked at by the military for either housing or firing range. Also the military buildup created a dent on our program in the anticipation of getting more excess properties to be released to the Government of Guam.

Have your applicants been impacted by military buildup activities on Guam since 2008? If so, in what ways?

The anticipation of Land Owners in getting their property released from military holding is zero. That property that had been released to them might be taken back for military usage.

GUAM SIAS SOCIOCULTURAL QUESTIONNAIRE
Guam Ancestral Lands Commission

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

A frequent question that is being asked is, 1) when will those properties that are being held by the Federal be released back to the Government of Guam and, 2) who is responsible in compensating the Land Owners for properties that are still within Federal/Military holding?

**Guam Department of Land Management, Chamorro Land Trust
Commission**

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PLEASE NOTE THAT WE ARE UPDATING DATA COLLECTED ON THE CHAMORRO LAND TRUST COMMISSION. QUESTIONS THEREFORE ARE FOCUSED ON THE ACTIVITIES OF THIS PROGRAM.

ADDITIONAL QUESTIONNAIRES HAVE BEEN SENT TO OTHER DIVISIONS WITHIN THE DEPARTMENT OF LAND MANAGEMENT.

A. CONTACTS

Please provide contacts within the Chamorro Land Trust Commission (CLTC) that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name:	Monte G. Mafnas
Title:	Director of the Department of Land Management, Chamorro Land Trust Commission and Guam Ancestral Lands Commission
Phone:	(671) – 649-5263 extensions 612 or 650
Email:	"Monte Mafnas" monte.mafnas@dln.guam.gov , monte.mafnas@cltc.guam.gov

Questionnaire Point of Contact

Name:	Same Point of Contact
Title:	
Phone:	
Email:	

B. QUESTIONS

Please detail the process that CLTC has taken to merge and consolidate with the Department of Land Management:

Pursuant to Executive Order Reorganizations Number 5 and 9; the merge and consolidation of DLM, CLTC and ALC is now complete, final and absolute.

Please provide information on the current staffing composition of the CLTC (number of individuals currently sitting on the commission, and current full time staff):

The staffing pattern of CLTC now consists of Director and Deputy Director of DLM; wherein CLTC now has seven (7) employees. DLM augments and supplements by providing three (3) employees from Land Administration Division, two (2) employees from Survey Division, two (2) employees from Records Division and one (1) employee from GIS Division.

Please provide information on the Chamorro homelands currently managed by the CLTC:

	# of Lots	Acreage
Estimated Total amount of land managed by CLTC; all Government Of Guam lands registered and unregistered that are not part of the reservation list made and approved for line departments or autonomous agencies.	Thousands	Approximate 10,000 acres +/-
Land currently leased for Residential purposes as of October 2011	1,737+/-	647+/-
Land currently leased for Agricultural purposes as of October 2011	113+/-	2,474+/-
Land currently leased for Commercial / Other (non-residential and non-agricultural) purposes as of October 2011	46	705+/-
Current Chamorro leases – Work in progress		
Current general (non-Chamorro) leases (Chamorro mixed with other ethnicity)		
Other 10,719+/- Paid CLTC applications to lease CLTC property as of December 2011. Approximate Chamorro applications equals		
Additional explanation:		

Do you have GIS maps of CLTC lots?

Some maps do exist but not including all CLTC lots at this point in time; our goal is to cocol with quality control and complete this exercise.

Please provide an update on the Legislature's 2009 moratorium on CLTC commercial leases:

The 2009 moratorium was self imposed by CLTC's board; the board did not want to issue any commercial leases until lifted by the new CLTC board. CLTC did do their due diligence by submitting three (3) times the draft rules and regulation but never accepted by the Legislature. The Chair of this Committee stipulated that he will complete the rules and regulation since 2009 but to no avail.

Have military buildup activities on Guam since 2008 impacted your program's work? If so, in what ways?

Verbal interest(s) expressed but nothing in writing.

Have your lessees been impacted by military buildup activities on Guam since 2008? If so, in what ways?

Guam Racing Federation is vehemently expressing and actively trying to save their leasehold interest.

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

I will review previous comments and incorporate my own opinion.

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

You are most welcome and look forward in moving forward and assisting a plan growth and living synergistically. I sincerely hope we can effectuate a win-win relationship.

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Guam Department of Mental Health and Substance Abuse

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A. CONTACTS

Please provide contacts at the Guam Department of Mental Health and Substance Abuse (DMHSA) that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name: Rey M. Vega
Title: Acting Director
Phone: 647-5330
Email: rey.vega@mail.dmsa.guam.gov

Questionnaire Point of Contact

Name: Leah Rassier
Title: Program Coordinator II
Phone: 647-5406
Email: leah.rassier@mail.dmsa.guam.gov

B. STAFFING

Please provide data on full time equivalent (FTE) staffing **FY 2010-12:**

	2010	2011	2012
Total Agency Staff FTE:			197
Mental Health Professionals FTE:			69
Comments:			

Please comment on any significant staffing issues your agency has experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.) and how that has impacted your ability to service the public:

Since 2008, the Federal Management Team has increase the agency staff from a low 125's to 197 in 2012. The impact has been good as it brought in more mental health professionals and services to the people of Guam. There continues to be three difficult positions that include psychiatrists, psychologists and behavioral analysts that are difficult to hire. Due to circumstances beyond the control of DMHSA, currently 39 critical positions have not been filled.

Have military buildup activities on Guam impacted your agency's staffing capacity since 2008? If so, in what ways?

No

How do you anticipate the new hospital, Guam Regional Medical City, will impact staffing?

None anticipated unless GRMC will open a psych facility.

Please comment on any progress in forming an MOU with the military to share staff and training:

No communication initiated with the military, no progress on MOU

Please provide any updated recommended ratio of Core Mental Health Professional to population, as recommended by HPSA Criteria:

No update

Please provide any updated recommended ratio of Psychiatrist to population, as recommended by HPSA Criteria:

No update

C. SERVICE POPULATION

Please comment on recent trends (including numbers served and types of mental health/substance abuse issues most prevalent) you have observed in regard to your agency's servicing of the following demographic groups:

Active duty military and/or military dependents:

N/A

FAS Compact State immigrants:

2010 – 305 2011 – 431 2012 – 660, the trend is a 40-45% increase each year
(stats from DMHSA Compact Impact Annual Report)

H2B workers:

N/A

Have military buildup activities on Guam had an impact on your agency's service population? If so, how and why?

No

Please comment on any trends/increases in immigration to Guam and impacts on your agency's service population:

N/A

Please comment on any progress in collaborating with the VA to service veterans on Guam:

No progress

D. FACILITIES / TECHNOLOGY

List the locations where you provide services to the public, facility condition, and whether facilities could handle additional growth:

Facility	Check Condition of Space			Check Adequacy of Space			Briefly note reasons for condition and adequacy ratings
	Good	Fair	Poor	1*	2*	3*	
Guam Hinemlo			X			X	Was not designed/built for therapeutic facility
Guma IFIL	X			X			
Therapeutic Group Home		X		X			
Rays of Hope							
Guma Asusena	X					X	Over capacity
Guma Kalachucha	X				X		
Guma Metgot	X				X		
Guma Kamia	X			X			
Guma Pahong	X			X			
Serenity Home	X			X			
Tamuning Main Facility	X				X		
Adult Inpatient Unit	X			X			
Children Inpatient Unit	X			X			
Drug & Alcohol	X				X		
Prevention & Training	X			X			
Children Adolescent Service	X			X			
Healing Hearts Center	X				X		

*1 = Current space can accommodate more staff and service population.

*2 = Current space at/above max; could be expanded or renovated to service more people.

*3 = Current space at/ above max; cannot be expanded or renovated to service more people.

Please provide any updates regarding implementation of your TIER data collection software system,

what data on your service population is available from that system, and your use of data to improve services and collection:

The Federal Management Team decided to scrape the TIER software system in March 2011. The FMT opted instead to acquire a "cloud based system" and issued an Invitation for Bid. We have just completed an Invitation for Bid on Oct. 25, 2012 issued intent to award the bid to Foothold Technology, Inc. on November 29, 2012. Upon the approval by the Governor of Guam of the Service Agreement, timelines will be established to commence training. Estimate Startup date is mid-January 2013. The agency looks forward to a 4-6 month implementation/training schedule. The EBHR (Electronic Behavioral Health Record system) will provide reports on all activities from clients, staff/personnel, programs, housing and inpatient units. All reporting requirements for Federal grants will be incorporated into the system. We will have a report builder to create reports and report on any data elements on the EBHR. We anticipate utilizing some aspects in our billing program.

Please comment on your staff and technological ability to bill TRICARE for services that are rendered to the military population on Guam:

We anticipate hiring or contracting billing specialists to manage the electronic billing system and submit electronic claims and supporting documents to insurance carriers to include TRICARE. We will have a manual system place to perform claims billing until such time that we complete our implementation of the EBHR system to include electronic billing and we are live on it.

Please comment on your staff and technological ability to track services that may be reimbursable for compact impact funding:

We currently are doing this manually; we collect client demographics and services. We are going to configure and implement the processes to track compact impact services in the EBHR system to report on Compact Impact breakdown and services. We are getting a cloud based system EBHR(Electronic Behavioral Health Record system) from Foothold Technology Inc. for the system and we will be installing a new network wiring infrastructure at the main facility as part of our technology upgrades. DMHSA, under the Federal Management Team, have hired two (2) computer analysts for the IT department.

GUAM SIAS PUBLIC SERVICE AGENCY
QUESTIONNAIRE Guam Department of Mental
Health and Substance Abuse

E. FOLLOWUP TO 2010 STUDY

Please comment on the changes required by the amended permanent injunction on your agency (transfer of authority back to GovGuam, transfer of services previously under DISID to DMHSA):

Sustainability of the services and programs, personnel hires/retaining are challenges DMHSA are faced with. The Treatment Teams approach is implemented and will provide better services to the clients. The biggest improvement will be the EBHR (Electronic Behavioral Health Record system), upon contract approval and implementation/training. With DISID the transfer of the respite program to DMHSA will just add another service program that DMHSA will have to program and manage.

Please provide updated information on the economic impact statement related to a fee schedule that was being commissioned at time of 2008 interview:

Public Law 31-239 which was signed into law by Gov. Eddie Calvo on 12/10/2012, adopted the proposed fee schedule for DMHSA. DMHSA can now bill for services.

Please comment on any changes in your work since the start of the building of the Naval Hospital on Guam (including provision of inpatient facilities):

No change

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

Since the 2010 study, the US District Court has turned over the operations of DMHSA to a Federal Management Team managed by Dr. James Kiffer. Under the FMT we have added new four new homes, renovated a home for long-term care, hired psychiatrists, psychologists, social worker, adult counselors and other personnel for quality assurance and client care. We are adopting a Treatment Team concept for treating clients. Treatment Team consists of behavioral health professions. Renovated the main facility in Tamuning, fix windows, painted the building, fire suppression system, contracted for a new network wiring infrastructure, will contract for "cloud based system" EBHR (Electronic Behavioral Health Record) system with a billing module to bill services now that we have a Fee Schedule. FMT has other projects on-going for client care.

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

N/A

**Guam Department of Public Health and Social Services, Division of
Public Health**

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PLEASE NOTE THAT WE ARE UPDATING DATA COLLECTED ON THREE BUREAUS WITHIN YOUR DIVISION. QUESTIONS THEREFORE ARE FOCUSED ON THE ACTIVITIES OF THE FOLLOWING BUREAUS:

- Bureau of Communicable Disease Control
- Bureau of Family Health and Nursing Services
- Bureau of Primary Care Services

A. AGENCY AND DEPARTMENTAL CONTACTS

Please provide contacts at your agency and specific bureaus that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name: James Gillan
Title: Director
Phone: (671) 735-7102
Email: james.gillan@dphss.guam.gov

Questionnaire Point of Contact

Name: Suzanne Sison
Title: Chief Public Health Officer
Phone: (671) 735-7364
Email: suzanne.sison@dphss.guam.gov

Bureau Points of Contact (if necessary)

Bureau of Communicable Disease Control

Name: Josephine O'Mallan
Title: CDC Program Administrator
Phone: (671) 735-7142
Email: josephine.omallan@dphss.guam.gov

Bureau of Family Health and Nursing Services

Name: Margarita Gay
Title: Community Health and Nursing Services Administrator
Phone: (671) 735-7111
Email: margarita.gay@dphssl.guam.gov

Bureau of Primary Care Services

Name: Linda Denorcey
Title: Health Services Administrator
Phone: (671) 635-4421
Email: linda.denorcey@dphss.guam.gov

B. STAFFING

Please provide data on full time equivalent (FTE) staffing for the following Bureaus in FY2010-2012:

- **Bureau of Communicable Disease Control**
- **Bureau of Family Health and Nursing Services**
- **Bureau of Primary Care Services**

	2010	2011	2012
Bureau of Communicable Disease Control (FTE) (BCDC)			
Total Bureau Staff	41	42	42
Communicable Disease Control Positions	19	19	20
Laboratory Positions	6	6	6
Bureau of Family Health and Nursing Services (FTE) (BFHNS)			
Total Bureau Staff	19	23	36
Nursing Staff	17	19	22
Bureau of Primary Care Services (FTE) (BPCS)			
Total Bureau Staff	57	65	70
Providers	8	9	8
Nurse Practitioners and Certified Nurse Midwife	2	2	2

Please comment on any significant staffing issues these bureaus have experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.), particularly in skilled positions, and how that has impacted your ability to service your service population:

BCDC:

Difficulty in filling new or vacated positions (local government's lengthy process and lower pay scale). Outdated local government positions (IT personnel); non-existent local government positions (e.g. Medical Assistant). Hiring freeze for vacated, locally funded positions. STD/HIV Program positions are filled, but additional positions will be required if the trends for STD infections continue to increase.

BFHNS

It has been difficult hiring nurses because of lack of funding or low salaries being offered at DPHSS.

BPCS

The Guam Community Health Centers (CHCs) have a high physician turnover, particularly those who are under the National Health Service Corp. scholarship or loan payment program. Most of the physicians under the NHSC resign from the CHCs after they complete their NHSC financial obligation so that they can return to the U.S. Mainland. The Guam Community Health Centers have experienced tremendous difficulty recruiting physicians and mid-level providers (e.g., certified nurse midwives, nurse practitioners, and physician assistants), nurses, and pharmacists. There also is a shortage of OB/GYNs to provide prenatal and postpartum care services to pregnant women. Over the past 4 years, the CHCs constantly struggles employing physicians, mid-level providers, and pharmacists due to the limited number of these professionals on island. However, the shortage of nurses is no longer an issue at this time since 29 students recently graduated from University of Guam School of Nursing and they are currently seeking

employment. Thus, there is a pool of nursing applicants interested in working at the Guam CHCs and many have submitted their application to work at the Guam CHCs. Given the pool of nurses available locally, the CHCs are in the process of recruiting 5 nurses who have recently graduated from UOG. The latter would positively impact the delivery of primary health care services since the CHCs would have the additional nursing personnel, which would aid in increasing provider productivity.

However, the CHCs do not have a pool of pharmacists and the starting salary of the pharmacists is well below the national rate, thus making it more difficult to recruit pharmacists. Although the CHCs have advertised for the recruitment of this position every year for the past decade, there are no applicants. Thus, the CHCs are direly in need of another pharmacist to work at Southern Region Community Health Center. With the position still vacant, the chief pharmacist has to divide her time working at both Northern and Southern Region Community Health Centers. The lack of additional pharmacists has adversely impacted the pharmacy hours of operation resulting in the Northern Region Community Health Center Pharmacy operating 3 days per week and the Southern Region Community Health Center Pharmacy opening 2 days per week. With the lack of pharmacists, the pharmacy cannot operate Monday through Friday from 8:30 a.m. to 5:00 p.m. at both CHC sites.

Moreover, the CHCs have implemented several modules of the Resource Patient and Management System (RPMS) Electronic Health Record System and aims to achieve phase I of “Meaningful Use” by 2013. In doing so, the CHCs would generate additional revenues from Medicaid. With additional revenues collected, the CHCs would have the financial resources to recruit more physicians and mid-level providers. Furthermore, the CHCs submitted the Health Professional Shortage Area (HPSA) application in hopes of increasing its HPSA score (score above 16) in order for Guam to have National Health Service Corp. scholars work in Guam.

Have military buildup activities on Guam impacted these bureaus’ staffing capacities since 2008? If so, in what ways?

BCDC

The military clinics are reporting a steady level of STD cases, however, due to the number of sex partners of military personal, additional staff will be needed to handle the case load. There has been an increase in the number of patients seeking immunizations.

BPCS

The CHCs benefits from the military build up in that the spouses of military personnel obtain employment at the Guam CHCs. In 2008, the CHCs have been fortunate in recruiting two physicians and each of these providers has a spouse who is an active military personnel stationed in Guam. The availability of these health professionals has positively impacted the CHCs’ staffing capabilities. Additionally, H2 construction workers who are uninsured or underinsured and do not have any primary health care provider end up becoming users of the Guam Community Health Centers since the centers accept all patients regardless of ability to pay. The additional new users positively impact the CHCs in that more

C. SERVICE POPULATION

Please provide an estimate of % population on Guam that is uninsured or underinsured for the following years:

2010 2011 2012

Source of information:

Please comment on recent trends (including numbers served and types of health issues most prevalent) you have observed in regard to your agency's servicing of the following demographic groups:

Active duty military and/or military dependents:

BCDC

One military dependent and two VA 's are currently under the Directly Observed Therapy (DOT) at the Department of Public Health and Social Services (DPHS) TB Control Program. DOT is the standard of care for all patients diagnosed and treated for active TB. All patients are directly observed by TB Staff while they ingest their TB medications and monitor them for any adverse drug reactions. About 20% of the clients served by the STD/HIV Program were active duty military and/or dependents.

BPCS

Sexually transmitted diseases screening, treatment, case management, health screening-blood pressure and blood glucose screening are being performed at the CHCs.

FAS Compact State immigrants:

BCDC

Ryan White HIV/AIDS Program (RWHAP) served 27 clients in 2012; 8 out of 27 (30%) were FAS immigrants. There were a total of 2,729 FAS Compact Immigrants seen by the TB Control Program for FY 2012. The Immunization Program served 64,105 clients in FY2012; 19,730 (31%) were FAS immigrants. 35% of clients served by the STD/HIV Program were FAS immigrants

BPCS

FSM immigrants live in crowded and substandard homes without electricity, running water, and a sewage system. Additionally, the lack of a solid waste disposal system results in garbage thrown all over the place, making the area a hazardous breeding ground for mosquitoes and rodents, which predisposes them to communicable/infectious diseases (i.e., Hepatitis, Gastroenteritis, parasitic diseases, etc). Most FSM children are highly susceptible to childhood preventive diseases (i.e., measles, mumps, rubella, hepatitis, hemophilis influenza, varicella, influenza, rotavirus, etc) since they are not adequately immunized. In 2010, a major outbreak of mumps occurred resulting in 502 confirmed cases (the highest since a 1958 epidemic of 1,268 cases), however, rates declined in 2011 subsequent to an intensive vaccination campaign involving 11 special vaccination clinics in schools, targeted neighborhoods, and remote areas where 1,523 doses of MMR vaccines were administered (Annual Summary of Notifiable Disease Report). FSM children also are in need of health care services to combat parasitic and skin diseases (impetigo and scabies), anemia, failure to thrive, otitis media (ear infections), etc. Dental caries is becoming a huge problem since many of these children have poor oral hygiene and often do not visit a dentist. Other than children, women of reproductive age are sexually active and have sex

with multiple partners without any protection against pregnancy and sexually transmitted diseases. According to the “Guam Annual Summary of Notifiable Disease” report, Guam’s Chlamydia and Syphilis rates continue to rise and the rates are even higher in 2011 as compared to the U.S. Guam’s Syphilis incidence rate more than doubled (from 6.9 in 2010 to 16.3 in 2011) and the 2011 rate is now higher than the U.S. rate of 14.93. Other than Syphilis, Guam’s 2010 Chlamydia rate was 564.8 as compared to the U.S. rate of 426.01 and Guam’s Chlamydia rate escalated from 564.8 in 2010 to 670.1 in 2011, which is attributed to the difficulty in tracking sexual partners for contact surveillance and follow-up. Chlamydia is rampant among the Micronesian population with an incidence rate of 2,077 cases per 100,000 population in 2011 and it is prevalent among females (73% females vs. 27% males). Undoubtedly, sexually transmitted diseases must be addressed to reduce the further spread of such diseases by increasing syphilis and Chlamydia screening, the latter through male urine and vaginal swab testing, and expedited partner treatment. Moreover, it is not uncommon for FSM women of childbearing age to keep having children. Although they cannot afford to have children, they nonetheless continue to do so and many of them do not obtain prenatal care in the first trimester of pregnancy or anytime during their pregnancy. Thus, there is a need to provide early prenatal care services for these women to reduce the risk of poor pregnancy outcomes such as low birth weight and infant mortality. Guam’s infant mortality is more than twice higher than that of the U.S. (2010 Guam infant mortality rate of 14.92 vs. U.S. rate of 5.9). Data from the Guam Department of Public Health and Social Services Office of Vital Statistics also reveals Guam’s infant mortality rate of 13.3 in 2011 and of the 42 infant deaths in 2011, 13 (30.9%) were among Chuukese infants. FSM women do not consider prenatal care as important so they lack knowledge of the importance of early and adequate prenatal care. Thus, FSM women are in need of early prenatal care, postpartum care, and family planning services, the latter to space their pregnancies. Other than the aforementioned health care needs, behavioral health care services also are needed as there is a growing number of FSM adolescent population who are being confined in Guam’s youth correctional facility. According to the data from the Guam Department of Youth Affairs, there were 606 youths admitted to the juvenile correctional facility in 2010 and of this number, 210 (35%) were among the FSM population. Many of the adolescents are in need of behavioral health services particularly substance abuse services since they abuse alcohol and drugs.

H2B workers:

BCDC

5% of clients served by the STD/HIV Program were H2B workers.

BPCS

H2B Construction workers who are working for a construction company that has an existing contract with the federal government related to military build-up construction projects may or may not be covered by any health insurance. Those without health insurance certainly would utilize the CHC services. Thus, the need to provide primary health care and preventive, and acute outpatient care services is needed for these H2B workers.

Have military buildup activities on Guam had an impact on your agency's service population? If so, how and why?

BCDC

About 30% of STD cases to DPHSS are reported from the military. Partners identified are from the civilian community. Increased treatment and partner services are anticipated.

BPCS

The military build-up has impacted the Guam CHCs in terms of providing primary health care, preventive health, acute care, and emergency/urgent care services to H2B construction workers who have no health insurance coverage. However, active military personnel and their dependents do not need to utilize the services of the Guam Community Health Centers since they go to the Naval Hospital or Andersen Air Force Base health services.

Please comment on any trends/increases in immigration to Guam and impacts on your agency's service population:

BCDC

The Chuukese population seems to be increasing, and will most likely continue to impact services. Although TB case rate for Guam 2011 is 20% less than that of 2010, Guam's TB incidence rate is still six times more than Hawaii and 15 times more than the US as a whole. About 40% of STD cases reported to DPHSS are identified as clients from FAS. Increased demands are being placed on locating, treating and referring partners for STD/HIV counseling. Due to transportation and language barriers, managing index cases and partners continue to be a challenge.

BFHNS

The medical clinic at Central Public Health has seen an increase in the number of pregnancies, and the number of women seeking prenatal care, postpartum care, and pregnancy testing services. There is an increase in the number of clients without health insurance. There is an increase in the number of TB contacts and clinic services and an increase in the number of children with special health care needs.

BPCS

Changes in Guam's demographic environment result from the influx of immigrants attributed to the "Compact of Free Association" signed between the U.S. federal government and the U.S. Associated Pacific Islands in 1986. This allows citizens from the FSM (Chuuk, Pohnpei, Yap, Kosrae), Palau, and the Marshall Islands to freely migrate into the U.S. and its territories (Guam, Northern Mariana Islands, and American Samoa). Guam's close proximity along with better opportunities and health care (the health care system in FSM particularly in Chuuk is in a debacle) makes Guam an attractive place for them to migrate. As FSM citizens, they are eligible for the Medically Indigent Program (U.S. citizenship is not a requirement), provided that they have established a one year residency. Thus, many come to Guam to seek health care, public assistance, and employment so the FSM citizens constitute an important subgroup of the population. The regional migrant population has tripled since 2000 skyrocketing from 11,094 to 32,635 and Guam is home to 18,286 (56%). In 2011, FAS migrants accounted for 21% of Guam's more than 30,000 public school students in comparison to 16.3% in 2010. The growing number of immigrants translates to rising costs for Guam's education, public safety, health, welfare, and housing. Even though Guam receives \$16 million annually to cover services for these migrants, it is miniscule. The cost for services to FAS citizens rose to \$96.9 million in 2011 (an increase of

52% as compared to last year) with the bulk of expenses on education (\$38.3 million) followed by health, welfare, housing (\$31.9 million), and then public safety (\$26.7 million).

Guam's Regional Immigrant Population Data:

Ethnicity	2010	2000	Change
Chuukese	11,230	6,229	80.3%
Palauan	2,563	2,141	19.7%
Pohnpeian	2,248	1,366	64.6%
Yapese	1,263	686	84.1%
Kosraean	425	292	45.5%
Marshallese	315	257	22.6%
Carolinian	242	123	96.7%
TOTAL	18,286	11,094	64.8%

Year	Freely Associated States #	Guam Population Percentage
2000	11,094	7.0%
2003	12,976	5.9%
2010	18,286	11.5%
2011	29,614	18.0%

CHC Users from the Freely Associated States (FAS) Trends 2007-2011

Year	Percentage of CHC Users
2007	26.4%
2008	27.5%
2009	28.4%
2010	30.2%
2011	30.3%

D. FACILITIES / TECHNOLOGY

List the locations where you provide services to the public, facility condition, and whether facilities could handle additional growth (add any we may have missed):

Facility	Check Condition of Space:			Check Adequacy of Space			Briefly note reasons for condition and adequacy ratings
	Good	Fair	Poor	1*	2*	3*	
Northern Region Community Health Center	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>The STD/HIV Offices has two cubicle spaces in an area of about 500 square feet. These two cubicle spaces do not provide 100% confidentiality for STD/HIV counseling, testing and referral. These cubicle spaces are also being used for interviewing clients to elicit sex and needle sharing partner contacts.</p> <p>The NRCHC was expanded and renovated on June 2006. The center is near its maximum capacity to accommodate more staff and service population.</p>
Southern Region Community Health Center	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The STD/HIV Office does not have a satellite office. STD/HIV testing is provided as point of care particularly for pregnant clients.</p> <p>The SRCHC was recently expanded and renovated in 2011. There is room to accommodate more staff and service population.</p>
Central Public Health Building	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Central PH is very old and outdated. Patient waiting area, medical clinic space and parking lot are totally inadequate. The STD/HIV Counseling/Testing area is about 700 square feet of space. Patient waiting area does not provide 100% confidentiality. Facility lacking true isolation rooms with negative pressure and proper filtration and ventilation.</p>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

* 1 = Current space can accommodate more staff and service population.

* 2 = Current space at/above max; could be expanded or renovated to service more people.

* 3 = Current space at/ above max; cannot be expanded or renovated to service more people.

Please provide updated information on the expansion of the Northern Region Community Health Center (NRCHC), and how that has impacted your ability to provide services:

BCDC

The STD/HIV Program has a satellite office located in NRCHC. Due to the high STD morbidities reported from the northern region, the STD/HIV Program can conduct faster and efficient STD/HIV surveillance and partner services. The expansion allowed for the Immunization Program to partner with NRCHC to conduct a monthly WIC Immunization Outreach Clinic for WIC-enrolled children 0-5 years of age on the first Friday of each month.

BPCS

The NRCHC has been expanded by 9,100 sq. ft with a new clinic addition (6,600 sq. ft.) and a new pharmacy wing (2,500 sq. ft.), and the existing generator room has been expanded to house a new 230 KW generator. The new clinic addition is comprised of eight exam rooms, a minor procedure room, a triage room, an audiological testing room, an isolation room, a decontamination room with 6 showers, a provider office, a social services office, a waiting room, a reception area to fit 60 people, a classroom to accommodate 50 individuals, restrooms, a reception area, soiled and clean utility rooms, a canopy entrance, and a reconfigured parking lot. Additionally, a new pharmacy wing has been constructed (2,500 sq. ft.), which includes space to drop and pick up medications, a prescription dispensing area, patient counseling room, one bathroom, storage spaces, and an area to store the CHCs' share of the "stockpile" distribution. Moreover, the existing generator room has been expanded to house a new 230 KW generator. Funding for this project has been derived from the following sources: \$1,780,000 Community Development Block Grant (CDBG) (\$980,000 in 2004 +\$800,000 in 2005 funded by the U.S. Housing and Urban Development), \$392,826 Health Care and Other Facilities grant funded by HRSA in 2005, \$1,125,000 Expanded Medical Capacity (EMC) grant including 230 KW generator (capital improvement \$61,000) (\$525,000 in 2005 +\$600,000 in 2006) funded by HRSA \$700,000 Compact-Impact fund funded by U.S. Department of the Interior, thus totaling \$3,997,826. With the NRCHC expansion and renovation, the center now has the infrastructure capabilities to isolate, control infections, and decontaminate individuals during a chemical and/or bio-terrorism attack. Additionally, the expansion and renovation of NRCHC has positively impacted the center's ability to recruit additional providers and support staff, thus allowing the CHC to extend its hours of operation in the evenings and on Saturdays. This has resulted in an increased number of medical visits and CHC users.

Please provide updated information on the expansion of the Southern Region Community Health Center (SRCHC), and how that has impacted your ability to provide services:

BCDC

The STD/HIV Program is pursuing a satellite office in the SRCHC as part of its strategy to expand STD/HIV testing to populations most at risk for STD/HIV. In 2013, the Immunization Program will expand its monthly WIC Immunization Outreach Clinic for WIC-enrolled children 0-5 years of age at SRCHC on the third Friday of each month.

BPCS

Southern Region Community Health Center (SRCHC) has been expanded by 19,638 sq. ft. to the current 14,989 sq. ft. (from 14,989 to 34,627 sq. ft.), thus providing a larger, better-organized, and functional facility. The expansion involves the 1st floor addition of 8,674 sq. ft., a second floor construction of 10,125 sq. ft. and an 839 sq. ft. building to house a new generator. The 1st floor expansion consists of: 6 exam rooms, 3 isolation

rooms, an oxygen room, a treatment room, a waiting room, a medical record file room, a medical record area, public restrooms, and a decontamination room. The upward expansion of a new second story (10,125 sq. ft.) consists of: CHC administration offices, Supplemental Nutrition and Assistance Program (SNAP) office, Women, Infants, and Children (WIC) office, a waiting room, a telemedicine room, 2 conference rooms, and restrooms. The expansion also provides the infrastructure for isolation, infection control, and decontamination thus enhancing SRCHC's services as an island-wide treatment facility during emergencies/disasters. An 839 sq. ft. building also has been added to house a 600 KW generator to provide continuous operation during power outages and a separate supply room has been constructed to store the CHCs' share of the Strategic National Stockpile distribution.

Having 6 more exam rooms (from 6 to 12 rooms) allows the redesigning of the patient flow to optimize provider productivity resulting in additional patients served and more visits occurring because satisfied patients do return to the clinic and often refer others to use the center. Additionally, a sewer system, water tank, a security alarm, a new 600 KW generator, a chain-linked fence, a reconfigured parking lot, and a service elevator (2,500 lbs) are included in the design. Funding for this \$7,890,203 project was derived from the following sources: \$6 million-Tobacco Asset Backed Bonds, \$687,090-CDBG grant (HUD), \$388,000 Capital Improvement Grant (U.S. Dept. of the Interior), \$718,195 (Capital Improvement grant-HRSA-ARRA), and 96,918 Program Income (reimbursements).

Please provide any updates on your agency's data management system, and your use of data to improve services:

BCDC

Staff/programs currently manage and track data using various/separate systems, i.e. Microsoft Excel or Access, EpiAnywhere, EpiInfo, CAREWare, GuWebIZ, etc. However, these systems run as separate silos since no integration/interfacing implemented at this time. The duplication of data entry for clients receiving services across multiple programs is on-going. The Immunization registry, or GuWebIZ, continues to be enhanced (upgrade to .net version, addition of the WebIZ Lite module to be used by schools and daycares, procured the Countermeasure Response & Administration module to be used for public health emergency responses, and enhanced reporting functions).

BPCS

The Guam CHCs have installed a certified Resource and Patient Management System (RPMS) electronic health record system developed by the Indian Health Service (IHS) and this system is a "open source" software. The CHCs anticipate meeting Stage 1 of Meaningful Use (MU) in 2013. All providers currently have access not only at the clinic, but also remotely through Virtual Private Network (VPN) connections. The EHR has been configured as a Multi-Divisional setup, which separates the Northern and Southern CHCs as Divisions and the RPMS EHR has administrative, financial, and clinical modules. With respect to Stage 1 of MU, the CHCs have been working on clinical templates using the Text Integration Utility (TIU) of the RPMS, which documents many

of the clinical care requirements. Additionally, point-of-care laboratories have been done. However, the lack of a bi-directional laboratory interface by the major regional laboratory provider is a challenge; and being able to transmit and receive laboratory data with multiple regional laboratories requires custom programming. Thus, the CHC plans on implementing the laboratory module of RPMS in the first quarter of fiscal year 2013. Other than the laboratory module, the immunization module of RPMS is anticipated to be configured by the first quarter of 2013. Furthermore, this year, the pharmacy module is configured, but the CHCs are working on a customization on the drug file to adequately monitor, track, and dispense both 340B and non-340B drugs, which should be done within the next few months. The e-prescribing system has been certified by Surescripts and the CHCs are beginning to initiate testing with the Surescripts Production server and Hawaii-Pacific REC has been very helpful in this process. However, Guam does not have a Health Center Controlled Networks (HCCNs) in the region or Regional Extension Centers assisting with this process. The CHCs also are already able to generate a Continuity of Care Document and currently the CHCs are awaiting the secure messaging capabilities of the Guam Health Information Exchange (HIE) to become operational. Moreover, the CHCs are in the process of training staff to use the “super billing” module (e.g., billing, cash collection, and accounts receivable) of RPMS to replace its legacy system. This year, the Guam CHCs, were awarded a HRSA Rural Network Planning Grant in the amount of \$85,000 to plan for the implementation of an RPMS network with other healthcare providers on Guam.

With the RPMS Electronic Health Record System, the CHCs can generate data to improve 16 clinical and 5 financial performance measures, which are required to be reported by Health Resources and Services Administration. The 16 performance measures are as follows: HBA1 c levels; blood pressure readings less than 140/90; PAP Smear testing; prenatal care in the first trimester; low birth weight; 2 year old children receiving the appropriate immunizations; adults screened for depression; children receiving fluoride varnish treatment; children and adults with Body Mass Index percentile documentation; nutrition and physical activity counseling; adults queried about tobacco use and advised to quit smoking or using tobacco; patients with asthma receiving pharmacological therapy; adults with coronary artery disease prescribed a lipid lowering therapy; adults with acute myocardial infarction, coronary artery bypass graft, percutaneous transluminal coronary angioplasty, or ischemic vascular disease receiving aspirin therapy; and adults having colorectal cancer screening.

Other than improving health indicators, the CHCs strive to enhance its financial viability aiming to: maintain rate of total cost per total patient less than or equal to 554; maintain rate of medical cost per medical visit less than or equal to 175; maintain a change in net assets to expense ratio greater than or equal to 0; maintain a working capital to monthly expense ratio greater than or equal to 1; and increase to 33% the percentage of charges collected at the CHCs.

Please comment on your staff and technological ability to bill TRICARE for services that are rendered to the military population on Guam:

The Guam CHCs will be implementing the “Superbilling” module of the Resource Patient Management System (RPMS) Electronic Health Record System. The CHCs accept private insurance indemnities and staff have the ability to bill local private insurance indemnities, Guam State Medically Indigent Program, and Medicare. The CHCs currently do not see the military population since all of them receive primary and preventive care services at Anderson Air Force Base or Naval Hospital, which do have systems set up to bill Tricare. Currently, the CHC staff is unaware of the Fee Schedule for Tricare and the technological ability to bill Tricare is not set-up at this time. However, the CHCs can set up Tricare so that it would have the ability to bill Tricare and this can be possible if the CHCs can obtain technical assistance with the Tricare billing process and procedures as well as assistance from Information Technology staff in setting up the RPMS system so that reimbursements can be made from Tricare. The CHC staff needs to receive training on Tricare billing.

Please comment on your staff and technological ability to track services that may be reimbursable for compact impact funding:

BCDC

RWHAP is 100% federally funded. Reimbursement for services does not apply.

BPCS

The CHCs also have a system in place to maximize collections of payments and reimbursements for services including policies and procedures for eligibility determination, billing, credit, and collection. The CHCs maximize the collection of payments and reimbursements for services through billing statements, financial counseling, payment plan, sliding fee discount, the amendment of the MIP reform law, and the updating and enforcement of billing and collection policies and procedures. The CHC cashiers have attended medical and billing coding training to maximize reimbursements from third party payers, Medicaid, Medicare, and Self-pay patients. The CHCs also have an encounter form with ICD 9 and CPT coding so that medical and ancillary services can tracked and billed resulting in reimbursements from private insurance indemnities and compact impact funding. Additionally, the CHCs over the past years have received Compact-Impact funding and the AS400 Financial Accounting system and EXCEL spreadsheets are utilized to track all CHC expenditures and encumbrances for supplies and contractual services funded through Compact Impact.

FY 2004-2011 COMPACT-IMPACT REIMBURSEMENTS OWED TO CHCs

FISCAL YEAR	AMOUNT
2004	161,358.11
2005	259,612.35
2006	187,861.86
2007	274,549.05
2008	397,306.78
2009	434,502
2010	426,617.92
2011	418,574.11

E. FOLLOWUP TO 2010 STUDY

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

10 cases of HIV infection have been reported to the HIV Surveillance Program to date (for 2012). Guam has been averaging 6 new cases of HIV infection per year. The military does not report their HIV cases to DPHSS. 2009-2011 Surveillance data demonstrates that Chlamydia cases have increased. As a result of the STD Burden Assessment data, about 25% of Chlamydia cases screened are between the ages of 15-25 years of age.

Updates on the CHC payor mix and the 2008-2011 BPCS's budget:

FY	TOTAL Expenditures	LOCAL	Program Income	Federal (CHC Grant only)	Compact Impact	In-Kind (MCH Program)
2009	5,067,185.15	2,476,272.41	826,231.74	1,092,180.00	644,670.44	27830.56
2010	4,534,101.28	2,389,421.47	748,706.89	1,128,071.00	231,533.32	36,368.60
2011	5,459,517.26	2,580,040.19	1,106,067.26	1,283,663	433,822.90	55,923.91

YEAR	2009	2010	2011
None/ Uninsured	3,418 (24%)	3350 (23.3%)	2915 (20.9%)
Medicaid	6,837 (48%)	6902 (48%)	6891 (49%)
Medicare	168 (1%)	222 (1.5%)	189 (1.4%)
MIP	3,439 (24.2)	3436 (23.9%)	3635 (26.1%)
Private	325 (2%)	440 (3.1%)	317 (2.3%)
TOTAL	14,187	14,350	13,947

BUDGET 2009-2011

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

Questions:

Would H2B workers be covered by any health insurance if they are contracted for military construction projects?

How many H2B workers are anticipated for military projects on Guam?

Would federal funding related to military build-up activities be made available for capital improvement activities in support of health services for federally funded programs administered by DPHSS including Federally Qualified Community Health Centers? If so, how much funding would be available?

**Guam Department of Public Works, Engineering and Construction
Divisions, Capital Improvement Projects, Building Permits and
Inspection**

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GUAM SIAS PUBLIC PERMITTING AGENCY QUESTIONNAIRE

Guam Department of Public Works, Engineering and Construction Divisions, Capital Improvement Projects, Building Permits and Inspection

PLEASE NOTE THAT WE ARE UPDATING DATA COLLECTED ON THE BUILDING PERMITS AND INSPECTION DEPARTMENT. QUESTIONS THEREFORE ARE FOCUSED ON THE ACTIVITIES OF THIS PROGRAM.

A. CONTACTS

Please provide contacts within your Building Permits and Inspection Department that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name:	Joseph D.U. Guevara
Title:	Building Inspection & Permits Administrator-Acting; Chief Building Inspector; Flood Plain Management Administrator
Phone:	(671) 636-3104/3108 (Cell: 788-4445)
Email:	joseph.guevara@dpw.guam.gov

Questionnaire Point of Contact

Name:	Same as above
Title:	
Phone:	
Email:	

GUAM SIAS PUBLIC PERMITTING AGENCY QUESTIONNAIRE
Guam Department of Public Works, Engineering and Construction Divisions, Capital Improvement
Projects, Building Permits and Inspection

B. STAFFING

Please provide **FY2010-2012** data for the below questions:

Staffing	FY2010	FY2011	FY2012
Total Working Staff (FTE Positions Filled)	# 25	# 23	# 18
Total FTE Approved (Not Filled)	# 02	# 03	# 08
Estimated % Staff Time Spent on the Following:			
Permitting Review/Approval			40%
Monitoring/Enforcement			40%
Policy/Planning			05%
Administration			15%
Other:			%

Please comment on any significant staffing issues your department has experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.) and how that has impacted your ability to conduct permit reviews:

From 2008-2010, we have operated without a Chief Building Inspector, 2 Building Inspectors, and one Construction Inspector. In 2011, the CIP was without a Building Inspection and Permits Administrator, and 2 construction inspectors.

Due to lack of funding, we have not been able to hire replacements for the above listed positions. This has resulted in a longer lead time for scheduled inspections, as well as having some services discontinued by our office, i.e., sign enforcement, abandoned structures enforcement, and elevator inspections.

We are also no longer able to offer 24-hour emergency electrical inspections, as our budget does not allow for overtime pay. This has customers waiting overnight or over the weekend until their power meters can be approved for installation. This may cause great delay for the new installations of GPA's Smart Meters to several thousand homes, as it is required by law to have a DPW Building Inspector inspect all meters prior to their installation.

Have military buildup activities on Guam, including DoD funding of roadway projects, impacted your department's permitting staffing capacity since 2008? If so, in what ways?

The only significant DoD funding for roadway projects since 2008 is the current reconstruction of Route 11 (Cabras Port Road) and the Agana Bridges Restoration/ Routes 1 & 8 Intersection reconstruction. These projects have not impacted the department's permitting staffing capacity.

GUAM SIAS PUBLIC PERMITTING AGENCY QUESTIONNAIRE
Guam Department of Public Works, Engineering and Construction Divisions, Capital Improvement
Projects, Building Permits and Inspection

C. PERMITTING

Please provide **FY2010-2012** data for the below permit review questions:

		FY2010	FY2011	FY2012
Permits	Total Number of Permits Reviewed	#	#	#
	List the <i>types</i> of permits that you approve, and provide numbers approved per year.			
	Permit Type: Please see attached for FY 10, 11, and 12	#	#	#
	Permit Type: for types and numbers of permits issued.	#	#	#
	Permit Type:	#	#	#
	Permit Type:	#	#	#

Please list any monitoring/enforcement actions your department conducts, and if those actions occur during construction or operations phases:

Please see attached

Please list any additional actions/reviews you undertake that have not yet been covered:

Please see attached

Please comment on any changes in your department's permit review processes since 2008:

No changes made.

Has your agency experienced any notable changes in your permitting activities since 2008 (for example, in the number or type of permit applications being submitted for review)? If so, please describe:

Yes. There has been an increase in work force housing construction.

Have military buildup activities on Guam impacted the number and/or composition of permit applications processed by your department?

Yes.

GUAM SIAS PUBLIC PERMITTING AGENCY QUESTIONNAIRE
Guam Department of Public Works, Engineering and Construction Divisions, Capital Improvement
Projects, Building Permits and Inspection

D. FOLLOWUP TO 2010 STUDY

Please comment on any progress in worker housing (new developments, improvements in conditions, etc.) on Guam since 2008:

Please see attached

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

Documents not provided to me.

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

A. Contacts

Leadership

Name: Joseph D.U. Guevara
Title: Building Inspection & Permits Administrator, Acting
Chief Building Inspector
Flood Plain Management Administrator
Phone: Office: 671-646-3104/3108
Cell: 671-788-4445
Email: joseph.guevara@dpw.guam.gov

Questionnaire Point of Contact:

Name: same as above

B. Staffing:

	FY2010	FY2011	FY2012
Total Working Staff (FTE Positions Filled)	10	9	7
Total FTE Approved (Not Filled)	3	3	3

Estimated % Staff Time Spent on the Following

Permitting Review/Approval	40%
Monitoring/Enforcement	40%
Policy/Planning	5%
Administration	15%
Other:	

Please comment on any significant staffing issues your department has experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.) and how that has impacted your ability to conduct permit reviews:

From 2008-2010, we've lost a Chief Building Inspector, 2 Building Inspectors, and a Construction Inspector. From 2011 to present, we've lost a Building Inspection & Permits Administrator, and 2 Construction Inspectors.

Due to lack of funding, we have not been able to hire replacements for any of the above listed positions. This has resulted in a longer lead time for scheduled inspections, as well as having some services discontinued by our office (such as sign enforcement, abandoned structures enforcement, and elevator inspections).

We are also no longer able to offer 24-hour emergency electrical inspections, as our budget does not allow for overtime. This has customers waiting overnight or over the weekend until their new power meters can be approved for installation. This may cause great delay for the new installations of GPA's Smart Meters to several thousand homes, as it is required by law to have a DPW Building Inspector inspect all meters prior to their installation.

Have military buildup activities on Guam, including DoD funding of roadway projects, impacted your department's permitting staffing since 2008? If so, in what ways?

This question is better answered by Highways Division

C. PERMITTING

Please provide FY2010-2912 data for the below permit review questions:

Permits	Total Number of Permits Issued	FY2010
Permit Type:		
New Construction/Residential		371
Residential Additions		127
New Construction/Commercial		5
Commercial Additions		61
New Construction/Multi-Family Dwelling		3
Church Addition		1
Clinic Additions		3
New Construction/Cold Storage		1
New Construction/Condominium		1
Condominium Addition		1
Day Care Addition		2
Hotel Addition		1

Permits	Total Number of Permits Issued	FY2011
Permit Type:		
New Construction/Residential		210
Residential Additions		110
New Construction/Commercial		10
Commercial Additions		88
New Construction/Clinic		1
Clinic Additions		1
New Construction/Church		2
Church Additions		2
Convent Additions		1
Hotel Additions		3
Restaurant Additions		1
School Additions		1
New Construction/Dormitory		1
New Construction/Storage		2
New Construction/Warehouse		1
Warehouse Addition		1
New Construction/Multi-Family Dwelling		6
Multi-Family Dwelling Addition		1
Condominium Additions		1
Government		62
Permit Renewal		14

Miscellaneous	244
Demolition	23
Relocation	1
Grading	101
Sign	36

Permits	Total Number of Permits Issued	FY2012
New Construction/Residential		224
Residential Addition		93
New Construction/Commercial		8
Commercial Addition		54
New Construction/Apartment		2
Apartment Addition		3
New Construction/Church		4
Addition		1
Hotel Addition		2
Restaurant Addition		2
New Construction/Warehouse		2
Warehouse Addition		1
New Construction/Townhouse		1
New Construction/Storage		9
New Construction/Hospital		1
New Construction/Canopy		1
School Addition		1
New Construction/Wall		1
New Construction/Tower		1
Government		98
Permit Renewal		13
Miscellaneous		385
Demolition		12
Relocation		16
Grading		121
Sign		32

Please list any monitoring/enforcement actions your department conducts, and if those actions occur during construction or operations phases:

Foundation inspection/Construction Phase
Slab inspection/Construction Phase
Wall inspection/Construction Phase
Frame inspection/Construction Phase
Electrical, plumbing & mechanical inspection/Construction Phase
Flood inspection/Construction and/or Operations Phase
Roof inspection/Construction Phase

Site inspection/Construction and/or Operations Phase
Grading inspection/Construction Phase
Civil works inspection/Construction Phase
Final Inspection/Construction Phase
Business License Inspection/Operations Phase
Complaints/Operations Phase
Maintenance inspection/Operations Phase
Notices of Violation/Construction and/or Operations Phase
House numbering/Operations Phase
Sign Permits/Operations Phase

Please list any additional actions/reviews you undertake that have not yet been covered:

As the Flood Plain Management Administrator, I review all building applications for adherence to the Flood Plain Management 2000.

As the acting Building Inspections & Permits Administrator, I help to make decisions, give input, and help to disseminate information related to the Guam Building Code as Member on various boards, committees and/or agencies to include the following:

The Guam Building Code Council
The Guam Contractor's License Board
The Agency Review Committee under the Guam Land Use Commission
The Guam Energy Office

Please comment on any changes in your department's permit review processes since 2008:

None made.

Has your agency experienced any notable changes in your permitting activities since 2008 (for example, in the number or type of permit applications being submitted for review)? If so, please describe:

Yes.

We have had an increase in work force housing construction.

Have military buildup activities on Guam impacted the number and/or composition of permit applications processed by your department?

Yes.

D. Follow up to 2010 Study

Please comment on any progress in worker housing (new developments, improvement in conditions, etc.) on Guam since 2008:

From 2008 to 2010 there was an increase in development in anticipation of the military buildup. From 2011 to the third quarter of 2012, when it became apparent that the buildup was delayed, the development slowed down.

For example, in 2008, one developer had anticipated building 14,000 units and ended up completing only 2000 units by 2010. None of these units were used as the anticipated contract with a contractor fell through due to the delay.

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

This questionnaire/interview was not provided to me.

If you would like to provide any additional comments you think may be relevant to this study or to ask questions that you might have, please do so here:

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Guam Fire Department

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A. CONTACTS

Please provide contacts at the Guam Fire Department (GFD) that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name:	Joey C. San Nicolas
Title:	Fire Chief
Phone:	671-642-3321 / 671-642-3325
Email:	joey.sannicolas@gfd.guam.gov

Questionnaire Point of Contact

Name:	Edward C. Artero II
Title:	Fire Lieutenant
Phone:	671-642-3321 / 671-642-3454
Email:	edward.artero@gfd.guam.gov

PLEASE NOTE: AN ADDITIONAL QUESTIONNAIRE HAS BEEN SENT TO THE GUAM FIRE DEPARTMENT FIRE PREVENTION BUREAU TO UPDATE OUR INFORMATION ABOUT PERMITTING ACTIVITIES THAT WILL BE FLOWING THROUGH THAT BUREAU.

B. STAFFING

Please provide data on full time equivalent (FTE) staffing for **FY2010-2012:**

Firefighters (including EMTs)	2010	2011	2012
Northern District FTE:	112	110	102
Southern District FTE:	112	110	102
Personnel equip to perform open water rescues:	34	34	34
Civilian Employees (Agency-Wide)			
FTE:	269	264	258

Please comment on any significant staffing issues GFD has experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.) and how that has impacted your ability to service the public:

The Guam Fire Department has been experiencing a large amount of retirements in key leadership positions. Just in the last two (2) years we've experienced sixteen (16) retirements, with eleven (11) of those holding leadership positions, and three (3) deaths. We are having extreme difficulty filling all of these positions due to the Government of Guam financial conditions. With these financial conditions, our leadership positions are being left vacated and not fulfilled.

This has not led to any positive changes because we have personnel in lower ranks filling/performing duties and responsibilities that that are normally held by a higher rank in the organization.

Additionally, with all this loss of personnel and the big impact that we are constantly facing with Military Deployments, our manpower/staffing levels have dropped below the NFPA safety standard of having a minimum of four (4) personnel on a Fire Apparatus. This has not impacted our ability to service the public, but it has definitely been an impact on our personnel psychologically, mental health wise.

Have military buildup activities on Guam impacted GFD's staffing capacity since 2008? If so, in what ways?

The Military buildup on Guam has not impacted our staffing capacity, but we have one-third of our personnel in the Guard and Reserve components, and the constant call up/activation of our personnel being deployed overseas has caused a big impact on our staffing.

C. LOCATION OF SERVICE

Please comment on any active role your agency plays in addressing concerns on Department on Defense (DoD) property:

The Guam Fire Department is an Executive Branch of the Government of Guam. The leadership in our Administration at the Governor and Lieutenant Governor's office of Guam will be our avenue to address our concerns if any, or in cases like this where we

are completing an assessment or survey. As of this time, we currently do not have any issues with DoD property in our ability to provide our services to the community.

Please comment on any active role military fire plays in addressing concerns outside of DoD property:

Just in the last two (2) years, the Fire Chiefs on both Andersen Air Force Base and Navy Installations have collaborated positively with our Fire Chief. The Navy EMS has assisted us tremendously with mutual aid calls outside of DoD property. Andersen Air Force Base Fire has also provided extensive support for wildland fires outside of DoD property and with Search and Rescue missions inside DoD property.

Also worth mentioning is Navy Helicopter Squadron HSC 25 plays a major role in our entire Ocean related Search & Rescue Missions with U.S. Coast Guard.

Please comment on current collaborative activities between your agency and the federal public safety agencies on Guam (for example, mutual assistance aid agreement with military fire protection services, other MOUs, joint training exercises, access through military land, etc.) and the effectiveness of this collaboration:

We currently have an excellent relationship with Federal Public Safety. We have a good understanding of the Mutual Aid agreements between the Guam Fire Department and Navy, Joint Region Marianas. They have and continue to assist us with EMS/Ambulance calls, Wildland Fires, Search and Rescue, and Training exercises.

D. FACILITIES

List your fire stations, their condition; and whether they can handle additional growth (add any we have missed):

Fire Stations	Check Condition of Station			Check Adequacy of Space			Number of Units Located at Station	Briefly note reasons for condition and adequacy ratings
	Good	Fair	Poor	1*	2*	3*		
Northern District								
Tamuning	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3	Building is inadequate to meet the current needs of the personnel that are assigned there. Issues with plumbing, electrical, space for sleeping quarters, etc.
Sinajana	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2	Same issues as Tamuning.
Barrigada	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	
Dededo	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	
Yigo	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3	
Astumbo	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	
Rescue Base 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Southern District								
Agat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	
Inarajan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	
Piti	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	
Umatac	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	
Yona	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	
Talofofo	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Same issues as Tamuning.
Rescue Base 2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Additional clarification (if necessary):								

* 1 = Current space can accommodate more staff and service population.

* 2 = Current space at/above max; could be expanded or renovated to service more people.

* 3 = Current space at/ above max; cannot be expanded or renovated to service more people.

E. FOLLOWUP TO 2010 STUDY

Please comment on your current ability to meet updated NFPA fire protection standards on a consistent basis (response time, population, hazards):

The Guam Fire Department is currently meeting the NFPA standards with regard to response time. There may be a couple of times during the year when we have maintenance issues with Fire Apparatus and Ambulances that may slightly delay response time, but we are meeting this standard on a consistent basis.

Please comment on the upgrade of your system in tracking EMS response times and how that has impacted your work:

Although, we have upgraded our system with regard to Ambulance Billing, we have not been able to obtain proper software systems to capture NEMSIS data.

We've been informed that our Ambulance Biller, LifeQuest is able to extract data from the information we input on our Ambulance alarms. However, we have not been given full access to the software or statistical data that is being collected by the biller.

Please comment on your agency's ability to maintain the equipment necessary to provide service to the island of Guam, including the purchase of a ladder/truck:

With regard to Fire Apparatus, the Guam Fire Department continues to struggle in aspiring to have a proactive preventive maintenance system. Part of our challenge, is we do not have back up/spare Fire Apparatus to be able to take Fire Trucks off line to service them. Vehicles do get serviced but have to be put back in service as soon as possible. This has not impacted our ability to adequately provide service to the community. We do have an aging fleet, and we do need to acquire new Fire Apparatus to our inventory.

We did receive funding through the Department of Interior and Compact Impact funds to procure five (5) Fire Apparatus, which includes one (1) ladder truck. There is a slightly lengthy procurement process. There is a new Guam law that states any procurement over \$500,000 must be reviewed by the Office of the Attorney General.

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

In reviewing the previous report that was completed, we have discovered some errors that we would like to correct. This will be on section B. Data and decisions about staffing and service levels. The numbers should be:

FY 2005

Northern District: 142
Southern District: 142
Total FTE: 295

FY 2008

Northern District: 136
Southern District: 136
Total FTE: 282

To provide a summary of current report and previous report.

Total FTE

2005	-	295
2008	-	282
2010	-	269
2011	-	264
2012	-	258

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

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Guam Fire Department, Fire Prevention Bureau

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GUAM SIAS PUBLIC PERMITTING AGENCY QUESTIONNAIRE
Guam Fire Department, Fire Prevention Bureau

A. CONTACTS

Please provide contacts at the Fire Prevention Bureau that we might work with to ensure the success of the questionnaire/interview process.

Leadership

Name: Fire Captain Joey A. Manibusan
Title: FIRE MARSHAL, FIRE PREVENTION BUREAU, GUAM FIRE DEPARTMENT
Phone: 646-8810
Email: guamfireinspector@gmail.com

Questionnaire Point of Contact

Name: SA
Title:
Phone:
Email:

GUAM SIAS PUBLIC PERMITTING AGENCY QUESTIONNAIRE
Guam Fire Department, Fire Prevention Bureau

B. STAFFING

Please provide **FY2010-2012** data for the below questions:

Staffing	FY2010	FY2011	FY2012
Total Working Staff (FTE Positions Filled)	# 13	# 13	# 15
Total FTE Approved (Not Filled)	#	#	#
Estimated % Staff Time Spent on the Following:			
Permitting Review/Approval			40%
Monitoring/Enforcement/Fire Investigations			53%
Policy/Planning/ Administration			7%

Please comment on any significant staffing issues your bureau has experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.) and how that has impacted your ability to conduct permit reviews:

No significant effects on staffing or workload on the Fire Prevention Bureau due to proposed military buildup.

Have military buildup activities on Guam impacted your bureau's permitting staffing capacity since 2008? If so, in what ways?

SA

GUAM SIAS PUBLIC PERMITTING AGENCY QUESTIONNAIRE
Guam Fire Department, Fire Prevention Bureau

C. PERMITTING

Please provide **FY2010-2012** data for the below permit review questions:

		FY2010	FY2011	FY2012
Permits	Total Number of Permits Reviewed	# 628	# 589	# 808
	List the <i>types</i> of permits that you approve, and provide numbers approved per year.			
	Permit Type: Construction	# 188	# 219	# 238
	Permit Type: Operation	# 440	# 370	# 570

Please list any monitoring/enforcement actions your bureau conducts, and if those actions occur during construction or operations phases:

Additional 1,500 (approx) fire code inspections conducted for the purposes of new businesses, occupancy inspections, day cares, schools, etc...

Please list any additional actions/reviews you undertake that have not yet been covered:

SA

Please comment on any changes in your bureau's permit review processes since 2008:

Positive changes have occurred not related to military activities. Examples include (but not limited to) Nationally Certified Pro Board Fire Inspectors, Fire Fighter II's, and Hazmat Operations within the Fire Prevention Bureau. Execution of the Citations/Fines Program. Improved and more effective execution of the Fees Program. These positive changes have occurred under Fire Chief Joey San Nicolas.

Has your bureau experienced any notable changes in your permitting activities since 2008 (for example, in the number or type of permit applications being submitted for review)? If so, please describe:

See above table.

Have military buildup activities on Guam impacted the number and/or composition of permit applications processed by your bureau?

No significant activities have affected the Fire Prevention Bureau.

GUAM SIAS PUBLIC PERMITTING AGENCY QUESTIONNAIRE
Guam Fire Department, Fire Prevention Bureau

D. FOLLOWUP TO 2010 STUDY

Please comment on any progress in worker housing (new developments, improvement in conditions, etc.) on Guam since 2008 and their ability to meet fire code requirements:

With the exception of one (1) plan submitted for the Okkodo Workforce Housing which was built with the anticipation of the military buildup, I am not aware or qualified to comment on any relationship or correlation of the numbers of plans reviewed and the military buildup.

Note: Okkodo Workforce housing was only completed approximately 1/3.

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

No comments on previous comments provided by GFD.

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

Recommendation: Request the Department of Revenue and Taxation distribute surveys to Business License Applicants to determine how many are opening up as a result of the anticipated buildup and how many have shut down as a result of no military buildup.

Guam Police Department

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A. AGENCY CONTACTS

Please provide contacts at the Guam Police Department (GPD) that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name:	Fred E. Bordallo, Jr.
Title:	Chief of Police
Phone:	671-475-8509
Email:	fred.bordallo@gpd.guam.gov

Questionnaire Point of Contact

Name:	Mar R. Rivo
Title:	Police Captain
Phone:	671-475-8443
Email:	mar.rivo@gpd.guam.gov

B. STAFFING

Please provide data on full time equivalent (FTE) staffing by precinct for **FY2010-2012**:

Sworn Police Officers (FTE)	2010	2011	2012
Yigo:	0	0	0
Dededo:	38	35	39
Tumon/Tamuning:	38	38	38
Hagatna:	37	37	36
Agat:	33	35	33
Talofofo:	0	0	0
Comments:			

Please provide updated information on the potential newly created Yigo precinct and reformulation of the Agat precinct mentioned in the 2008 interviews (attached for reference) and if/how those changes impact your ability to service the population of Guam:

The construction of the Yigo Precinct has not begun. Its construction is dependent on government funding that has not been budgeted.

The construction of the Agat Precinct was completed in June 2010. Its creation has allowed the precinct to function in a police structure, which includes interview rooms for adults and minors respectively, holding cells, ADA compliance, and a sense of security for the officers, which were major concerns that the previous precinct building lacked. The facility provides the general public access to the facility since it's located within a residential district, provides ample parking and general public areas.

Please comment on any significant staffing issues GPD has experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.) and how that has impacted your ability to service the public:

The Guam Police Department has been challenged with servicing the community with limited personnel and other resources since prior to 2008. With the growing population and fiscal constraint, GPD's ability to serve the public will continue to lag, unless it receives fiscal relief from the local or federal government to hire employees. The personnel shortfall has caused the department to exceed its overtime budget annually due to excessive overtime work needed to sustain its operations. Furthermore, prolonged work hours and excessive workload are causing fatigue and unhealthy physical conditions on the personnel.

Another factor that continues to drain the department's personnel resources is the activation of sworn and civilian personnel into active military duty in support of the war. Their departure significantly causes personnel shortages at every level. Those who remain are compelled to perform collateral duties in addition to and/or above their regular duties in order to meet operational demands.

To address its staffing shortage, GPD recruited volunteer community members into the department's Civilian Volunteer Police Reserve program, without wages based on hourly rate. These volunteers are trained and given law enforcement authority by GPD to

perform as police officers. The program currently has over 100 volunteer members and increasing. However, their ability to assume duty is very limited since some of them are gainfully employed, while the others have personal obligations.

Another remedy to the staffing shortage was the enactment of a Guam law that enables GPD to employ retired police officers and Civilian Volunteer Police Reserves as full-time paid police officers on limited term appointments. Their employment to full-time temporary positions is allowed for the duration of the incumbents' absence from GPD due to military deployment or extended medical leave, and is also dependent on funding availability. GPD has not employed any retirees or civilian volunteers since the enactment of the law, but it intends to initiate temporary employments when the sworn personnel report for a year-long active military duty in February 2013.

Have military buildup activities on Guam impacted GPD's staffing capacity since 2008? If so, in what ways?

The population increase on account of the military buildup activities has strained GPD's ability to service the public. GPD continues to serve the public with less personnel resources, both sworn and civilian personnel. As a result, handling of calls for service and case investigations are delayed due to overwhelming workload. Similarly, GPD's public service for police clearances, applications for firearms identifications and registrations, traffic accident reports, and other administrative services increased, but service lagged due to shortage of civilian personnel.

The following is an illustration of GPD's personnel strength for the years indicated:

Employees	2008	2009	2010	2011	2012
Sworn Officers	325	311	307	303	303
Civilian Personnel	75	73	66	68	66
Total	400	384	373	371	369
<i>Statistics provided by GPD Human Resources Section (December 13, 2012)</i>					

The illustration indicates a decrease in sworn personnel between 2008 and 2011. The decline was due to resignations by sworn personnel for better job opportunities. Civilian personnel manpower also decreased between 2008 and 2010 for the same reason.

With federal funding assistance from the FY 2009 Community Oriented Policing Services (COPS) grant, GPD recruited 14 new police officer trainees. Hiring for an additional 15 new police officer trainees is work in progress with funds provided by the COPS grants for FY 2011 and FY 2012 respectively.

The hiring of the officers has and will help strengthen GPD's police force, but is still insufficient to satisfy the department's staffing requirement. GPD requires about 280 additional officers to comfortably service the public.

C. SERVICE POPULATION

Provide the number of arrests island-wide for the following years:

2010: 2,656 **2011:** 2,134 **2012:** 2,139

Please provide information on precinct population numbers for 2010-2012:

Precinct	2010 Population	2011 Population	2012 Population	Villages included in Precinct
Tamuning/Tumon:	19,685	19,742	19,799	Tamuning and Tumon
Agat:	22,547	22,612	22,678	Agat, Asan, Inarajan, Merizo, Piti, Santa Rita, Talofofo, and Umatac
Dededo:	65,482	65,672	65,862	Dededo and Yigo
Hagatna:	51,644	51,795	51,945	Agana Heights, Barrigada, Chalan Pago, Hagatna, Mangilao, Mongmong-Toto-Maite, Sinajana, and Yona
Yigo?:	No Precinct	No Precinct	No Precinct	None

Please comment on recent trends (including numbers served and types of policing issues most prevalent) you have observed in regard to your agency's servicing of the following demographic groups:

Active duty military and/or military dependents:

According to the Guam Census statistics, there are 6,275 active service members and 7,247 military dependents, at total of 13,522, on Guam as of September 30, 2011.

GPD arrests statistics from 2010 to 2012 indicate 76 service members were arrested in 2010; 54 in 2011; and 57 in 2012. The prevalent offenses committed by military personnel in 2010 were (ranked from most violated to least) driving under the influence (DUI), simple assault, drunkenness, disorderly conduct, and aggravated assault. The prevalent violations in 2012 were simple assault, DUI, drunkenness, robbery, aggravated assault, other sex offenses, and theft.

Statistics to illustrate the number of military service members and dependents victimized by crime is unavailable since GPD does not have the manpower to manually collect the requested data.

FAS Compact State immigrants:

According to the Government of Guam FY 2011 Compact Impact Report, there are 24,499 FAS population on Guam.

GPD arrests statistics from 2010 to 2012 indicate 1,495 FAS immigrants were arrested in 2010; 931 in 2011; and 1,075 in 2012. The prevalent offenses violated in 2010 were (ranked from most violated to least) were driving under the influence, drunkenness, simple assault, disorderly conduct, aggravated assault, and vandalism. The prevalent violations in 2011 were driving under the influence, simple assault, drunkenness, disorderly conduct, liquor law violation (open container), and drug abuse violations. The prevalent violations in 2012

were driving under the influence, simple assault, drunkenness, aggravated assault, family violence, and burglary.

Statistics to illustrate the number of FAS immigrants victimized by crime is unavailable since GPD does not have the manpower to manually collect the requested data.

H2B workers:

GPD does not currently collect the data since it is not a requirement of the department's crime reporting system.

Have military buildup activities on Guam had an impact on your agency's service population? If so, how and why?

An obvious consequence of the population growth on Guam is the increased vehicular traffic on major roadways. Routine traffic congestions in areas with high population density had grown worst, sometimes resulting in traffic accidents.

A concern that should be addressed, if not already, is having available shelters to house the population during typhoon season or situations that will require mass evacuation. Unless the housing units for imported laborers are built typhoon-proof, these laborers will share evacuation shelters with the population, which will cause overcrowding, health and a security concern.

Please comment on any trends/increases in immigration to Guam and impacts on your agency's service population:

According to the FY 2011 Compact Impact Report, the Free Associated State (FAS) immigrant population on Guam for 2010 peaked at 24,499 immigrants and remained stable through 2011. They migrated to Guam to seek better education, employment, cohabit with family members, or for various reasons. Their presence on Guam has had an impact on the safety of vehicle operators on the roadway, specifically drunk driving. Based on GPD's statistics, driving under the influence (DUI) was the prevailing violation of law committed by FAS immigrants. Of the 362 vehicle operators arrested in 2012 DUI, 221 (61%) were FAS immigrants. In 2011, GPD arrested 422 for DUI, 221 (52%) were FAS immigrants. In 2010, there were 624 arrested on DUI charges, 244 (39%) were FAS immigrants.

The 2010 Guam Census indicates an increased population on Guam. One of the obvious consequences of the population growth is the increased vehicular traffic on major roadways. Routine traffic congestions in areas with high population density had grown worst, sometimes resulting in traffic accidents.

GPD statistics indicate an increase in the arrests of tourists. There have been incidences when tourists committed theft of high valued items or fraud by using stolen credit cards to purchase expensive items from businesses located in Tumon. According to the statistics, GPD arrested 24 Japanese, 5 Chinese, and 3 Korean tourists in 2012. In 2011, GPD reported having arrested 4 Japanese and 1 Chinese national. In 2010, GPD arrested 1 Japanese national.

D. FACILITIES

List your station locations, their condition; and whether they can handle additional growth (add any we have missed):

Main Stations	Check Condition of Space:			Check Adequacy of Space			Briefly note reasons for condition and adequacy ratings
	Good	Fair	Poor	1*	2*	3*	
Yigo Precinct?							Not built.
Dededo Precinct	X			X			
Tumon/Tamuning Precinct	X					X	No available space to expand.
Hagatna Precinct		X				X	No available space to expand.
Agat Precinct	X			X			
Talofofo Precinct							Not built.
Additional clarification (if necessary):							

* 1 = Current space can accommodate more staff and service population.

* 2 = Current space at/above max; could be expanded or renovated to service more people.

* 3 = Current space at/ above max; cannot be expanded or renovated to service more people.

F. FOLLOWUP TO 2010 STUDY

Please comment on collaborative activities between your agency and the federal public safety agencies on Guam (for example, sharing of patrol duties in heavily populated tourism areas, mapping of areas with high incident rates, immigration issues), and the effectiveness of this collaboration:

The Guam Police Department's (GPD) Highway Patrol Division has provided numerous traffic related trainings to both AAFB and Naval Security personnel; and the military forces has reciprocated by providing sharing facilities and supplies for the department.

GPD's Special Operations Division has collaborated with the U.S. Coast Guard (USCG). The USCG has provided training and assisted the GPD Marine Patrol Section on conducting inspections on watercraft and other marine related transport apparatus.

Whenever the U.S. Navy expects a huge contingent of personnel for a short port stop on Guam, such as a Navy aircraft carrier involving more than 5,000 sailors, the command from the carrier group would meet with GPD command staff to conduct security briefings for the safety of the visiting Sailors. The Naval Command routinely provides "shore patrol" personnel consisting of U.S. Navy Sailors to assist GPD in maintaining order with the Sailors who are provided "liberty" status. A majority of the visiting Sailors patronize the businesses in the Tumon area, which are popular for its nightclubs, restaurants, and beaches. The military augmentation has proven to be a successful collaborative effort since it relieves GPD from responding to minor incidents involving Sailors who are drunk

and disorderly. The Shore Patrol intervenes by taking custody of the Sailors, thereby availing GPD for priority calls.

GPD's Criminal Investigation Division has collaborated in several joint investigations with the US Naval Criminal Investigation Services (USNCIS) and the U.S. Air Force Office of Special Investigations (OSI) involving military service members.

The Guam Police Department has always maintained a close working relationship with the military forces on island. Their collaboration has enabled all parties to share their training, knowledge, information, and other resources to help make Guam a safe place for its residents, the military community, and its visitors.

Please comment on your current approach to the handling of off-base infractions that involve Active Duty personnel:

Military service members and dependents that are cited or arrested by the Guam Police Department for violating local laws off-base are processed or prosecuted through the Guam's legal system.

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

An update to Item No. 8 of the previous questionnaire is the inclusion of the Records and Identification Section (RIDS) and the Federal Programs Section (FPS) to the list of locations where GPD provides services to the public.

RIDS conducts a revenue generating operation through the collection of fees for administrative services it provides the public. Some examples of the services include processing applications for firearms identification cards and registrations, police clearances, traffic accident and police report abstracts, collection of fees for special event services, private shooting range operating permits, and other administrative services.

The most prevalent service RIDS provides to the public is the processing of police clearances. A police clearance is mostly required from job seekers when applying for employment. The table below illustrates the number of police clearance transactions for the years indicated.

YEAR	TRANSACTION	REVENUE
FY 2013 (as of November 2012)	7,841	\$82,144
FY 2012	40,075	\$479,865
FY 2011	53,104	\$541,982

RIDS' office of operation is in a leased office space located in the International Trade Center building in Tamuning. The office space is at maximum use, but it can be renovated to accommodate more employees and clientele.

The Federal Programs Section (FPS) also conducts a revenue generating operation through the collection of fees for boat registrations. The FPS receives federal funding

through a grant administered by the U.S. Coast Guard to administer the Recreational Boating Safety Program.

The FPS' business office is in a leased office space located in Sinajana. The office space is at maximum use, but it can be renovated to accommodate additional employees.

With expected increase in both the general population and military personnel, additional resources are needed to enable the department to respond effectively in combating crime and in providing protection to the island community. In addition to its personnel shortfall, the department's ability to respond to calls for service is constrained by the lack of vehicles. Its fleet of vehicles is deteriorating due to overuse and lack of funding support for maintenance, vehicle supplies, repair, batteries and other necessities.

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

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Submitted by:

GUAM POLICE DEPARTMENT

FRED E. BORDALLO, JR.
Chief of Police

Date: December 18, 2012

Guam Community College

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A. CONTACTS

Please provide contacts at Guam Community College (GCC) that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name: Mary A.Y. Okada
Title: President/CEO
Phone: 671-735-5700
Email: mary.okada@guamcc.edu

Questionnaire Point of Contact

Name: Marlana O.P. Montague
Title: Assistant Director, AIER
Phone: 671-735-5612
Email: marlena.montague@guamcc.edu

B. STAFFING

Please provide data on full time equivalents (FTEs) non-adjunct faculty at GCC for years **2010-2012**:

Non-Adjunct Faculty	SY2010	SY2011	SY2012
FTE:	69	72	73
Comments: These staffing levels (actual) do not include the growth budget submission that the college has included in our request for appropriations every year. These staffing patterns can be made available on request. These FTE staffing levels exclude FTE faculty and counselors in the secondary school programs (CTE) which is reported in the question following immediately after this.			

Please also provide data on the number of FTE faculty and counselors GCC employed in its secondary school program **in 2010-2012**.

Secondary School Program Staff	SY2010	SY2011	SY2012
Faculty FTE:	39	40	40
Counselors FTE:	4	5	5
Comments: These staffing levels (actual) do not include the growth budget submission that the College has included in our request for appropriations every year. These staffing patterns can be made available on request. These FTE staffing levels are specifically for the GCC Career and Technical Education programs in the five (5) Guam Department of Education High Schools. It is inclusive of two (2) FTE faculty who are limited term appointment (LTA) employees.			

Please comment on any significant staffing issues GCC has experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.) and how that has impacted your ability to service your students:

There are no significant staffing issues.

Have military buildup activities on Guam impacted your program's teaching staffing capacity since 2008? If so, in what ways?

No, there is no direct link to military buildup activities.

If applicable, what strategies have you adopted to cope with any turnover/vacancy difficulties (including the hiring of adjunct faculty)?

N/A

C. SERVICE POPULATION

Please provide data on post-secondary student enrollment at GCC in **years 2010-2012**:

	2010	2011	2012
Post-Secondary Enrollment:	3445	3589	3985
Comments: These post-secondary student enrollment numbers are unduplicated counts for the terms within each academic year including fall, spring, and summer semesters. These post-secondary enrollment numbers exclude students enrolled in the GCC Continuing Education program.			

Please comment on recent trends (number enrolled, classes taken, use of online classes, etc.) you have observed in regard to enrollment at GCC of the following demographic groups:

Military and/or military dependents:

In academic years 2010 thru 2012, there were a total of 16 students who reported their residency status as military personnel (AY 2009-2010 is 1; AY 2010-2011 is 8; and AY 2011-2012 is 7). Also for the same period, there were a total of 78 students who reported their residency status as a military dependent (AY2009-2010 is 22, AY 2010-2011 is 25, and AY 2011-2012 is 31).

FAS Compact State immigrants:

In academic years 2010 thru 2012, there were a total of 1,639 students who reported their ethnicity as one of the seven ethnic origins used by GCC to identify Micronesian students-Kosraean, Marshallese, Palauan, Pohnpeian, Chuukese, and Yapese. The following is a breakdown of the 1,639 students by academic year: AY 2009-2010 is 552; AY 2010-2011 is 447; and, AY 2011-2012 is 610.

H2B workers:

Not eligible

Please comment on any impact on enrollment GCC has experienced due to the opening of the new Allied Health Building and related course offerings:

Since the opening of the new Allied Health Building in December 2009, the college has seen a record increase in enrollment beginning in the spring of 2010, with a 19% increase in enrollment from the previous spring 2009. The fall semester enrollment trends have also shown this increasing enrollment trend with a 39% increase in enrollment in the fall of 2011 compared to the fall of 2008 and a 15% increase in enrollment in the fall of 2011 compared to the fall of 2009.

The number of students declared in the Certificate in Pre-Nursing degree program has also increased since the fall of 2009. There were a total of 183 students declared in the Certificate in Pre-Nursing degree program in the fall of 2011 as compared to 84 students declared in the same degree program in the fall of 2009 resulting in a 118% increase. Overall, there were a total of 328 students declared in the four (4) Allied Health-related degree programs offered in the fall of 2011 (Associate of Science in Medical Assisting is 101; Certificate in Medical Assisting is 21; Certificate in Practical Nursing is 23; and, the

Certificate in Pre-Nursing is 183) as compared to a total of 262 students declared in the same degree programs in the fall of 2009, resulting in a 25% increase in the number of declared students in GCC's Allied Health degree programs.

D. FACILITIES

List your main facilities; their current condition; and whether they can handle additional growth (if we missed any facilities, please add them in the spaces provided):

Facility	Secondary or Post-Secondary	Location	Check Condition of Facility			Check Adequacy of Space			Briefly note reasons for condition and adequacy ratings
			Good	Fair	Poor	1*	2*	3*	
Guam Community College Main Campus	Post-Secondary and Secondary	Mangilao, Guam	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	Certain buildings will be undergoing major renovations
Southern High School	Secondary	Santa Rita, Guam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	Classrooms provided to GCC for CTE programs
Simon Sanchez High School	Secondary	Yigo, Guam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	Classrooms provided to GCC for CTE programs
Okkodo High School	Secondary	Dededo, Guam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	Classrooms provided to GCC for CTE programs
JFK High School	Secondary	Tamuning, Guam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	Classrooms provided to GCC for CTE programs

* 1 = Current space can accommodate more staff and service population.

* 2 = Current space at/above max; could be expanded or renovated to service more people.

* 3 = Current space at/ above max; cannot be expanded or renovated to service more people.

Please describe the use of online classes and comment on your institution's ability to maintain systems to accommodate online coursework. Has this impacted facility requirements and/or staffing levels?

The college has limited offerings for distance education at the present time, pending a strategic plan to determine feasibility and capacity requirements.

FOLLOWUP TO 2010 STUDY

Please comment on any changes in provision of and/or demand for coursework, including online classes, relevant to meeting the **construction** training needs of the military buildup (including apprenticeships, packaged classes, etc.):

Additional classes are being provided for photovoltaics and renewable energy. This is an anticipated need for energy efficient initiatives associated with new buildings and facilities that will support the military buildup construction.

Please comment on any changes in provision of and/or demand for coursework, including online classes, relevant to meeting the **long-term** training needs of the military buildup:

Additional courses will be developed if the need exists.

Has GCC been able to retain its teaching spaces at local high schools?

Yes. There is an expansion project at Okkodo High School that will allow for ProStart and Nursing programs. However, funding to support faculty recruitment has not been secured yet.

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

No updates or comments at this time.

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

The college has updated its campus master plan. If you would like a copy, please let us know. Also, the 2012 Fact Book should be finalized soon that provides detailed information on student demographics, student retention, transition, and certificate and degree programs that may be useful.

Guam Department of Education

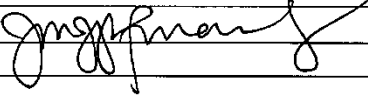
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GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE
Guam Department of Education

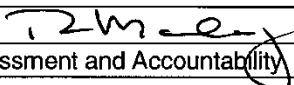
A. CONTACTS

Please provide contacts at Guam Department of Education (DOE) that we might work with to ensure the success of this process.

Leadership

Name: Jon J.P. Fernandez	
Title: Superintendent of Education	
Phone: 671-475-0459	
Email: superintendent@gdoe.net	

Questionnaire Point of Contact

Name: Robert H. Malay	
Title: Deputy Superintendent, Assessment and Accountability	
Phone: 671-475-0459	
Email: rhmalay@gdoe.net	

GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE
Guam Department of Education

B. STAFFING

Please provide the following data on full time equivalent (FTE) staffing in **SY2010-2012:**

Teaching Staff	SY2010	SY2011	SY2012
FTE Elementary School Teachers:	1245	1228	1281
FTE Secondary School Teachers:	557	582	590
FTE High School Teachers:	572	555	556
Support Staff (all FTE positions other than teachers)			
FTE Elementary School Support Staff:	509	494	455
FTE Secondary School Support Staff:	238	246	235
FTE High School Support Staff:	202	236	260

Please comment on any significant staffing issues Guam DOE has experienced since 2008 (turnover/difficulty filling positions/positive changes etc.) and how that has impacted your ability to service your students:

The supply of fully certified, highly qualified teachers on Guam is limited. With a potential early retirement option available for current Government of Guam employees, the impact could be extremely significant in our Department.

Have military buildup activities on Guam impacted your program's teaching staffing capacity since 2008? If so, in what ways?

Not at this point in time.

Please comment on current teacher absentee rates and the impact to your agency's work:

The most current employee attendance rate as of June 2012 was 91% for the entire district. With an increase of more than 900 students and decrease of more than 700 positions all absentees impact the classroom.

Please provide updated information on the mandated teacher to student ratios codified through Guam Federation of Teachers AFT Local 1581 AFL-CIO and Guam Education Policy Board contract agreements:

Currently no collective bargaining agreement exists. Student to teacher ratios would be a negotiated condition of a new agreement.

Please comment on any impact recent growth/change in the Department of Defense schools system has had on your operations, including teacher and support staff retention and recruitment:

Several of our teachers apply to and are hired by the Department of Defense school system. With an extremely limited pool of applicants, this requires creative staffing solutions in the Department of Education.

Does your agency maintain records of the number of military spouses employed at your schools as teachers?

- ☒ No;
☐ Yes; please detail:

GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE
Guam Department of Education

C. STUDENT POPULATION

Please provide data on student enrollment in Guam DOE schools in **SY2010-12**:

Student Enrollment	SY2010	SY2011	SY2012
Elementary School:	14,454	14,454	14,605
Secondary School:	7,212	7,231	7,217
High School:	9,415	9,731	10,002
Comments: Since the last questionnaire with student population data from 2005-2008, we have experienced an increase of 930 students from SY 2008 – SY 2012.			

Please comment on recent trends in enrollment you have observed in regard to the following demographic groups:

Military dependents (the previous interview indicated your Department of Research, Planning and Evaluation could potentially provide data regarding military dependents in Guam DOE schools):

Data is collected annually on students whose parents live or work on federal property – to include military dependents. However, the data that is collected does not delineate active duty military dependents from dependents whose parents work for the federal government or other contractors working on federal property.

As an example, as of January 1, 2012 a reported 481 students in the public school system are dependents of parents who work on Andersen Air Force Base. However, we do not have information on how many of those students are dependents of military personnel or federal civilian workers/private contractors. As such, this data will not show a true picture of the number of military dependents attending a Guam public school.

FAS Compact State immigrant dependents:

Over the last three years there has been a steady increase in the number of FAS students enrolled in the DOE Schools. In SY09-10, the FAS student population was 5,073 (16.5%) and in SY10-11, it increased to 6,559 (21.1%). The total FAS student enrollment for SY11-12 was 6,979. This number represents 22.3% of the total student population of the Guam Department of Education schools.

H2B worker dependents:

No information is available. DOE does not collect data on this demographic group.

GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE
Guam Department of Education

D. FACILITIES

Please list the general condition of schools within each of your school districts, and your central office locations, and whether they can handle additional growth:

District	Check Condition of Schools in District			Check Adequacy of Space at Schools/Facilities			Briefly note reasons for condition and adequacy ratings
	Good	Fair	Poor	1*	2*	3*	
Haya	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Kattan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 New School
Lagu	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3 New Schools
Luchan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 New School
Central Office Facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

* 1 = Current space can accommodate more staff and students.

* 2 = Current space at/above max; could be expanded or renovated to service more students.

* 3 = Current space at/above max; cannot be expanded or renovated to service more students.

Please comment on any progress made on opening new GPSS schools or renovating existing schools, and how/if these changes have affected your ability to meet the educational needs of Guam's public school students:

Aside from the recently built four (4) new leased (G.E.F.F.) schools and the newly renovated/rebuilt JFKHS (IBC), there is no progress on opening any new schools. As repairs and renovations are ongoing utilizing the Adequate Education Act Trust Account, it is difficult to assess how these efforts are affecting GDOE's ability to meet the educational needs of the students.

Please comment on the capacity of schools in the north, compared to in the south, to meet student requirements:

Even with the addition of the five new schools in the north, the majority of space available remains on our southern campuses.

Please comment on the Department's ability to meet other facilities/supply requirements at schools (buses, supplies, etc.):

Due to continuing budget constraints over the past budget cycles, the Department has not been able to meet its requirements to effectively maintain its facilities with adequate staffing and supplies.

Facilities and Maintenance Budget

For FY2012:

Requested Budget: \$22M

Requested Additional Positions: 66, Approved

Approved Budget: \$5.9M

Added Positions: 0

For FY2013:

Requested Budget: \$21.3M

Requested Additional Positions: 66, Approved

Approved Budget: \$5.0M

Added Positions: 0

GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE
Guam Department of Education

E. FOLLOWUP TO 2010 STUDY

Please comment on the recent funding the Guam Department of Education received through the American Recovery and Reinvestment Act (ARRA) State Fiscal Stabilization Fund (SFSF), and any other additional significant funding received, and how this will contribute to the capacity of public schools on Guam:

The funding that was received through the American Recovery and Reinvestment Act was focused on improving the facilities that we have. The funding did not allow for us to expand the footprint of the facilities that currently exist, but did allow for us to provide some much needed improvements. A significant portion of the funding went to repairing all of the roofing at our schools and upgrading the electrical and fire alarm systems. Further the renovation and refurbishing of the Southern High School Fine Arts Building and Gymnasium are being addressed through this funding. Three schools, George Washington HS, Untalan MS and Price ES have classrooms that are being renovated to help implement Science, Technology, Engineering and Math (STEM) initiatives. Lastly, a number of technology upgrades are being made throughout the district to include the use of Interactive Smart Boards, Lap Tops and Mobile Carts, projectors, cameras and a financial management system.

Please comment on any progress on redistricting that has occurred since 2008, and how that has affected your ability to meet student educational needs:

After the opening of Adacao Elementary in 2008, there has been no other redistricting that has occurred. However, given the limited amount of space available in the northern schools, a plan to shift students south will need to be seriously considered to provide safe learning environments.

Please comment on any progress on the institution of charter schools that has occurred since 2008, and how that has affected your activities:

There are schools that have applied to become charter schools, but at this particular point in time, only one has been approved. The impact this has on the public school system is a reduction in authorized budget set by law as \$5500/student will be carved out of the Department of Education's budget to assist the charter school with opening its' doors.

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

In reviewing of the previous submission there is one minor accuracy changes:
12.d. – With the reopening of JFKHS, JFK and George Washington are no longer sharing a facility in double session. George Washington, however, is currently under a double session with their school population as 17 classrooms are being renovated.

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

The northern and central region could be adversely impacted during the build-up if redistricting is not feasible. There exists a need to construct no less than 4 additional schools: 2 elementary, 1 middle and 1 high school. These additional schools will assist in alleviating the heavily populated schools in those regions.

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Guam Department of Youth Affairs

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A. CONTACTS

Please provide contacts at the Guam Department of Youth Affairs that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name:	Adonis J. Mendiola
Title:	Director
Phone:	(671) 735-5010
Email:	adonis.mendiola@dya.guam.gov

Questionnaire Point of Contact

Name:	Grace Taitano
Title:	Youth Development Administrator
Phone:	(671) 735-5035
Email:	grace.taitano@dya.guam.gov

B. STAFFING

Please provide data on full time equivalent (FTE) staffing for **FY2010-2012:**

Key Staff	2010	2011	2012
Youth Service Worker FTE:	48	47	44
All Other Agency Staff FTE:	38	37	43
Comments:			

Please comment on any significant staffing issues your agency has experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.) and how that has impacted your ability to provide for your service population:

Since 2008 we continue to have an increase in the turnover of our youth corrections staff. The government does not have the resources to entice and maintain a desired staffing level. Currently the pay grade and step of a youth service worker are lower than the adult correctional pay. The handling of juvenile clientele should be categorized to deserve more pay as it is more difficult and stressful to work with children under the age of 18 as laws that protect the children often hamper the ability to provide proper services. The impacts of staff shortage fall on the current or remaining staff that will have to endure longer shift work and eventually will lead to burnouts and resignations. Positive changes made since then to speed up the recruitment processes is to have a continuous listing, the cognizant government agency for recruitment is the Department of Administration (DOA), they are fully aware of our needs and are working hard to continually monitor our position listings. Department will also look at posting our vacancy in the local newspaper to reach more of our target audience.

Have military buildup activities on Guam impacted your agency's staffing capacity since 2008? If so, in what ways?

No

Please provide current departmental policy on the recommended number of youth service workers per number of clientele at the Youth Correctional Facility:

1:11

Please provide current departmental policy on the recommended number of youth service workers per number of clientele at the Cottage Homes (juvenile offenders, status-offenders, non-offenders and continuing jurisdiction of the court):

1:4

C. SERVICE POPULATION

Provide the number of individuals you have served in **2010-2012**:

Type of Service Population	Number served (2010)	Number served (2011)	Number served (2012)	Location where serviced/housed
Youth Development	9,990	11,755	8,613 as of 9/30/12	YCF/CH and Resource Centers
Youth Corrections	477	606	426	YCF/CH
Rehabilitation and Support	*2-VRSS *1-Galley	*2-VRSS *1-Galley	*2-VRSS *1-Galley	VRSS-Building C Galley-Cafeteria
TOTAL	10,470	12,364	9,042	
Additional clarification (if necessary): *duplicated count from Youth Correction's count				

Please comment on recent trends (including numbers served and types of issues most prevalent) you have observed in regard to your agency's servicing of the following demographic groups:

Military dependents:

As an overview, DYA has not seen any admission trends for military dependent children. Recent data from the last two years reveal that little to no dependents were admitted to DYA which is consistent from many years past. If anything, it appears that military families are opting not to use our local government juvenile justice system/facilities.

FAS Compact State immigrants/dependents:

Over the last few years there have been significant population increases in only one of the major FAS immigrants who have made Guam their home: the Chuukese. The Chuukese juvenile delinquent population is far and away outnumbering all other FAS ethnic groups (Pohnpeians, Kosraean, and Yapese) and other ethnic groups at DYA to include the local Chamorro indigenous youth and Filipinos youth who make up the first and second highest population groups, respectively. Chuukese delinquent youth numbers and percentages have been rising alarmingly over the past couple years. Ten years ago Chuukese youth made up anywhere between 12 and 14% of the DYA population. Those percentages have more than doubled to an average of 31 to 33% on average of the DYA youth. That increase is obviously directly related to the overall population rise of Chuukese immigrants and a large increase of Chuukese youth who were actually born on Guam. That being said, this trend is disturbing and clearly some Chuukese youth, whether they are newcomers or born on Guam, are experiencing significant problems with the juvenile justice system.

A recent spot survey of the population count this week shows that for the two dorms that house male juvenile delinquent criminal offenders, more than 52% were of Chuukese ethnic descent.

H2B Worker dependents:

Like the military dependent families, we have had little to no H2B worker dependent children. The bulk of H2B workers are from the Philippines so more to the point, DYA admissions have few Filipinos local or H2B dependent otherwise. This is also consistent

with admission records from many years back that Filipinos make up almost 30% of Guam's population, yet they have represented only 4.2% on the average of DYA's incarcerated juveniles.

Have military buildup activities on Guam had an impact on your agency's service population? If so, how and why?

DYA has not seen any appreciable impact from the military buildup when one considers population of incarcerated juveniles or status offenders.

Please comment on any trends/increases in immigration to Guam and impacts on your agency's service population:

As mentioned earlier, the most disturbing upward trends for criminal admissions is the increase in Chuukese criminal youth arrests and confinement. Over the past ten years, their numbers have more than doubled. Male Chuukese delinquents make up more than half of the dorm population outnumbering the local indigenous Chamorros. As in the past, many of the crimes committed and violations of court order for the male juvenile Chuukese are alcohol-related. This is not a new trend. They do not seem to respond to D&A treatment as well as other ethnic groups. This singularly has had significant impact on DYA's resources, facility-wise and staffing-wise. As detailed in other portions of this report, there have been significant staffing shortages overall and more so, there have been very few new hires who are of ethnic Chuukese descent. While the population has risen, staff have been stressed and taxed tremendously to a point where many staff have resigned or retired. However, there has been a concerted effort by administration to hire and train more and more new staff.

Two positive trends seen over the past few years was 1) a dramatic drop in Chamorro youth in DYA facilities with Chamorros making up 47% in 2009, 41% in 2010, and 34% in 2011, and 2) good continuing trend of Filipino youth remaining low averaging 4.2% of the total DYA admissions over the past three years when Filipinos make up about 30% of the total Guam population.

Please comment on any trends in disproportionate minority composition of your clientele (as mentioned in previous interview) and impacts on your agency:

As in the above narrative, Chuukese youth are the only DMC-related populations for Guam's only youth correctional facility. Chuukese make up approximately 8 to 10% of Guam's population based on census estimates yet they represent about 32% % of DYA's overall population over the last three years.

Several factors may be causing this disproportionate problem for Chuukese youth:

1) Access to alcohol is easy and adult male role modeling for alcohol consumption is ubiquitous. Consequently, adult Chuukese males are also high and disproportionate in the adult correctional facility. Treatment for these youth not very effective possibly due to language and cultural barriers, access and compliance, transportation and poor communication.

2) Unsuccessful educational experiences for a majority of Chuukese youth on Guam is a major factor in DMC issues because of language and cultural barriers, lack of commitment to education, miscommunication and lack of understanding of juvenile

justice system, not complying with court orders, poverty, lack of resources, and inherent and unfair stereotyping of these immigrants in all child-serving agencies.

Solutions need to be comprehensive and cannot be solved by one agency or government. There needs to be substantive commitment and buy-in from all child-serving agencies on Guam, the Chuukese government, and the US Federal government.

D. FACILITIES

List facilities, their conditions, and if they can handle additional growth (add any we have missed):

Facility	Check Condition of Facility			Check Adequacy of Space			Number of spaces available for population housed by DYA, if applicable	Briefly note reasons for condition and adequacy ratings
	Good	Fair	Poor	1*	2*	3*		
Mangilao	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Buildings more than 30 yrs. Old
Talofofo	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Buildings are more than 20 years old
Dededo	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Opened in 2008, plans for this building were made with serving children in mind
Mongmong-Toto-Maite	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		DYA shares space with GHURA, plans to expand or relocate
Agat (Haya)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Additional clarification (if necessary):

* 1 = Current space can accommodate more staff and service population.

* 2 = Current space at/above max; could be expanded or renovated to service more people.

* 3 = Current space at/ above max; cannot be expanded or renovated to service more people.

E. FOLLOWUP TO 2008 STUDY

Please update us on your efforts to run a school house, in partnership with the Guam Trades Academy, Guam Community College and the Department of Labor:

Guam Community College (GCC) – College Access Challenge Grant Program provides academic tutoring services and in partnership with the Guam Department of Education, GCC will offer Career Technical Educational courses (carpentry, tourism, and electronics/computer networking; Department of Labor/Agency for Resources Human Development provides Passports to Careers (seasonal and summer training/employment); and the University of Guam's 4H Programs provides skills-building workshops in culinary, seamanship, and agriculture.

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

Continuation sheet:

As of 11/30/2012 YCF staff count is as follows:

Job Title	Count
Superintendent	1
Youth Service Supervisors	4
Youth Service Worker II	6
Youth Service Worker I	19
Youth Service Assistant	14

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**Guam Department of Labor, Alien Labor Processing and
Certification Division**

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PLEASE NOTE THAT WE ARE UPDATING DATA COLLECTED ON THE ALIEN LABOR PROCESSING AND CERTIFICATION DIVISION. QUESTIONS THEREFORE ARE FOCUSED ON THE ACTIVITIES OF THIS PROGRAM.

WE WILL ALSO BE CONTACTING THE DIRECTOR OF THE GUAM DEPARTMENT OF LABOR TO UPDATE OUR INFORMATION ABOUT THE AGENCY AS A WHOLE.

A. CONTACTS

Please provide contacts at the Alien Labor Processing and Certification Division that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name: George A. Santos
Title: Director of Labor
Phone: (671) 475-7043
Email: george.santos@dol.guam.gov

Questionnaire Point of Contact

Name: Greg S. Massey
Title: ALPCD Administrator
Phone: (671) 475-7005
Email: greg.massey@dol.guam.gov

B. STAFFING

Please provide **FY2010-2012** data for the below questions:

Staffing	FY2010	FY2011	FY2012
Total Working Staff (FTE Positions Filled)	# 6	# 6	# 5
Total FTE Approved (Not Filled)	# 0	# 0	# 1
Estimated % Staff Time Spent on the Following:			
Petition Review/Approval			40%
Monitoring/Enforcement			40%
Policy/Planning			10%
Administration			10%
Other:			0%

Please comment on any significant staffing issues your division has experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.) and how that has impacted your ability to review petitions:

The division has lost one FTE staff due to retirement and another is retiring in 2013. With cost containment measures within the Government of Guam, it is unlikely that any additional hiring will be authorized without federal assistance until well after build up activities start. Increased petition activity in anticipation of the Marine relocation will begin to stress resources. Without additional staffing resources in place prior to the start of build up activities, it is likely that significant delays in Temporary Labor Certification processing may occur.

Have military buildup activities on Guam impacted your division's staffing capacity since 2008? If so, in what ways?

Yes, indirectly. Speculation and preparation by the private sector anticipating build up activities based on the previous timelines seemed to spur construction activity. Employers also seemingly started building up manpower capacity to position themselves for impending projects that were imminent based on previous construction timelines. This increased activity did affect staffing and capacity until 2011 when H-2B numbers started a steady drop.

C. PETITIONS

Please provide data for the years **FY2009 through FY2012** for the below items:

		FY2009	FY2010	FY2011	FY2012
H-2B Workers	Total Number of H-2B Workers on Guam (<i>Number represents yearly average</i>)	# 1718	# 1892	# 1431	# 1088
Permits	Total Number of ALPCD Applications processed (ID Card Applications)	# 2050	# 1794	# 1728	# 1342

Please list any monitoring/enforcement actions your agency conducts, and if those actions occur during construction or operations phases:

Guam's jurisdiction is unique in that H-2B related labor certifications and enforcement authority rests with the Government of Guam. The department conducts jobsite inspections on a random and targeted basis. Employers are required to submit reports on their current workforce on a monthly basis and such reports undergo random audits. Ongoing collaboration with federal agencies, including US ICE, USCIS, US State Department, Air Force OSI and Navy NCIS help ensure that federal regulations are monitored along with local H-2B compliance regulations.

Please list any additional actions/reviews you undertake that have not yet been covered:

ALPCD registers workers upon their arrival to Guam. Each worker must obtain an H-2B ID card issued by Guam DOL. ALPCD also conducts worker housing inspections, performs Prevailing Wage Determinations and participates in local and federal Human Trafficking Task Forces

Please comment on any changes in your division's H2B petition processes since 2008, including any changes in fees being charged:

Program procedures have not changed since 2008. Enforcement activities have been increased. In 2009 the Guam legislature increased the H-2B Registration fee to \$1,091.00. Also in 2009 legislation was passed to allow for the prorating of the initial registration fee in cases where the worker's immigration status is valid less than a year from the date of their arrival on Guam.

Have applications for H-2B visas increased since 2008?

- ☐ No;
☐ Yes, but this is *not* impacted by the military buildup;
☒ Yes, and this is believed to be impacted by the buildup.

Please comment and provide any statistical data that we can refer to:

The number of H-2B workers did increase, but then decreased due to the pause in the build up.

D. FOLLOWUP TO 2010 STUDY

Please comment on any progress in worker housing (new developments, improvements in conditions, etc.) on Guam since 2008:

The 2010 NDAA mandated a recruitment plan set by the Secretary of Labor and a certification to the Secretary of Defense prior to any employer's usage of H-2B workers on Marine Relocation projects. That recruitment plan has been formalized and the Secretary of Labor has delegated authority to the Guam DOL to manage the program through a MOU. Two test cases have been done with current build up projects and it is interesting to note that although there were many initial responses from CONUS construction applicants, most were either not qualified, not available or unwilling to take the job offer on Guam. This reinforces the idea that much of the construction work on the build up will be performed by foreign workers from the region.

Please comment on any impacts of the lifting of the work visa cap for Guam:

The lifting of the cap has been and continues to be beneficial to Guam. The cap exemption is also crucial to the build up. With the delays and limitations inherent with the cap, it would be problematic to reach manpower deadlines that would come into play with large construction volume. Without the cap exemption, we do not see the H-2B visa program as a viable manpower solution should foreign workers be needed to complete build up projects.

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

H-2B Cap is not applicable to Guam and authorization will expire in 2014, however the cap exemption is tied to the CNMI immigration transition period, which would likely be extended for an unknown period after 2014.

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

**Guam Department of Public Health and Social Services, Division of
Environmental Health**

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PLEASE NOTE THAT WE ARE UPDATING DATA COLLECTED ON THE DIVISION OF ENVIRONMENTAL HEALTH. QUESTIONS THEREFORE ARE FOCUSED ON THE ACTIVITIES OF THIS PROGRAM.

AN ADDITIONAL QUESTIONNAIRE HAS BEEN SENT TO THE DIRECTOR OF THE GUAM DEPARTMENT OF PUBLIC HEALTH AND SOCIAL SERVICES TO UPDATE OUR INFORMATION ABOUT THE AGENCY AS A WHOLE.

A. CONTACTS

Please provide contacts at the Division of Environmental Health that we might work with to ensure the success of the questionnaire/interview process.

Leadership

Name: M. Thomas Nadeau
Title: Chief Environmental Public Health Officer
Phone: (671) 735-7221
Email: masatomo.nadeau@dphss.guam.gov

Questionnaire Point of Contact

Name: Cynthia Naval
Title: Planner IV
Phone: (671) 735-7204
Email: cynthia.naval@dphss.guam.gov

B. STAFFING

Please provide **FY2010-2012** data for the below questions:

Staffing	FY2010	FY2011	FY2012
Total Working Staff (FTE Positions Filled)	23	23	22
Total FTE Approved (Not Filled)	25	33	33
Estimated % Staff Time Spent on the Following:			
Permitting Review/Approval			9.1%
Monitoring/Enforcement			40.9%
Policy/Planning			13.6%
Administration			31.8%
Other: Health Education			4.5%

Please comment on any significant staffing issues your division has experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.) and how that has impacted your ability to conduct permit reviews:

Continued difficulty in filling positions (EHS III, Engineer); absence of Engineer in 2012 for extended periods of time that lengthened the waiting period for pre-operation inspections (a part of the permitting process) to over one month; and recent implementation of new position series has allowed the use of another staff to fill-in for the Engineer and reduce permit inspection waiting time to 15 days.

Have military buildup activities on Guam impacted your division's permitting staffing capacity since 2008? If so, in what ways?

The permitting of new Temporary Workforce Housing has not reached the volume anticipated several years ago, so the increase in workload due to the military buildup has not occurred. Thus, the impact on capacity due to buildup activities is minimal.

C. PERMITTING

Please provide **FY2010-2012** data for the below permit review questions:

		FY2010	FY2011	FY2012
Permits	Total Number of Permits Reviewed	# 526	# 552	# 535
	List the <i>types</i> of permits that you approve, and provide numbers approved per year.			
	Permit Type: Health Regulated Establishments (Sanitary Permit)	# 491	# 519	# 489
	Permit Type: Occupancy Permit	# 35	# 33	# 46
	Permit Type:	#	#	#
	Permit Type:	#	#	#

Please list any monitoring/enforcement actions your division conducts, and if those actions occur during construction or operations phases:

Occupancy Permit Inspection (post-construction but pre-operation); Pre-operation Inspection (post-construction); Sanitation Inspections (operations phase).

Please list any additional actions/reviews you undertake that have not yet been covered:

--

Please comment on any changes in your division's permit review processes since 2008:

In FY2012, the Division temporarily ceased operations at the One-Stop Center, located at the Department of Public Works, and moved these operations to the Division office at the Central Public Health facility.

Has your division experienced any notable changes in your permitting activities since 2008 (for example, in the number or type of permit applications being submitted for review)? If so, please describe:

The number of permits for "new" establishments hit a high of 615 in 2008, decreased to 449 in 2009, and has very slowly increased since then.

Have military buildup activities on Guam impacted the number and/or composition of permit applications processed by your division?

No.

D. FOLLOWUP TO 2010 STUDY

Please comment on any progress in worker housing/barracks (new developments, improvements in conditions, etc.) on Guam since 2008:

One phase of the Ukudu Workforce Housing development was completed and permitted in 2011; no other substantive changes in the amount or type of permitted worker housing has occurred.

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

Guam Environmental Protection Agency

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A. CONTACTS

Please provide contacts at Guam EPA that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name: Eric M. Palacios
Title: Administrator, Guam Environmental Protection Agency
Phone: 671-475-1658
Email: eric.palacios@epa.guam.gov

Questionnaire Point of Contact

Name: Jesse T. Cruz
Title: EMAS Administrator
Phone: 671-475-1658
Email: Jesse.cruz@epa.guam.gov

B. STAFFING

Please provide **FY2010-2012** data for the below questions:

Staffing	FY2010	FY2011	FY2012
Total Working Staff (FTE Positions Filled)	60	51	53
Total FTE Approved (Not Filled)	17	24	15
Estimated % Staff Time Spent on the Following:			
Permitting Review/Approval			80%
Monitoring/Enforcement			10%
Policy/Planning			2.5%
Administration			2.5%
Other:			5 %

Please comment on any significant staffing issues your agency has experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.) and how that has impacted your ability to conduct permit reviews:

Since FY08 Guam EPA has had a huge turnover within the Agency, specifically within the Water Division and the Air/Land Division. We have lost senior managers as well as program managers and have not back-filled these positions. Most critical are the Chief Engineer and the Chief planner. The middle managers lost has created a significant loss of institutional knowledge and training that the agency has invested in. Agency is having a challenging time filling vacant positions as current GovGuam salaries are not competitive with private sector, DOD, and autonomous agencies. Current staff is doing the best that they can with limited support. Due to the non-funding of DOD MILCON projects the work load is not as severe as expected. Majority of work load was private sector positioning itself for the MILCON projects. Also due to staffing shortages, agency went through a realignment of divisions to deal with the shortage of senior managers.

Have military buildup activities on Guam impacted your agency's permitting staffing capacity since 2008? If so, in what ways?

Yes, we have lost two engineers directly to DOD, two to autonomous agencies and countless others indirectly that are not applying to vacancies because of salary discrepancies and better opportunity within the civilian sector.

Please comment on plans mentioned in the 2008 interview (attached for reference) to utilize contractors for staffing needs, and how this has impacted your agency's capacities:

This plan has not materialized due to slow down of the number funded MILCON projects and Guam EPA's own funding has not materialized. Agency is anticipating the need as MILCON projects get funded.

Please comment on staffing requirements to monitor provision of promised mitigations mentioned in 2008 interview (attached for reference) and if this need has materialized:

The number of inspectors mentioned has not materialized due to funding difficulties. Several separate opportunities have emerged to provide assistance to the Agency, but all were short term. Agency and Navy initiated an "engineer

intern” for two years to assist in review and inspections of DOD projects. Also a separate NOAA grant was obtained to hire an environmental inspector for one year as it related to MILCON Projects. *The agency has hired an inspector through the grant from NOAA, and the selectee will begin working this month.* Also since build-up related projects were not funded, no large mitigation projects were initiated.

C. PERMITTING

Please provide **FY2010-2012** data for the below permit review questions:

		FY2010	FY2011	FY2012
Permits	Total Number of Permits Reviewed	1,383	1,375	1,232
	Permit type: Air, Solid Waste, Hazardous Waste, pesticide	365	517	267
	Permit Type: Residential Bldg./Commercial & Misc.	683	502	546
	Permit Type: Grading/Clearing/Stockpiling	135	178	164
	Permit Type: UIC, Test Boring, Exploratory, Well drilling	90	80	105
	Permit Type: Plan Review: Military Project, DPW, GWA and Housing Development and similar projects.	110	98	150

Please list any monitoring/enforcement actions your agency conducts, and if those actions occur during construction or operations phases:

Monitoring of affected body of water, issued stop work order to projects without permits, not adequate BMPs, and not in compliance with the approved plans. These things occur during construction phases. Compliance related activities for Solid/Hazardous Waste Programs, Air and Pesticides.

Please list any additional actions/reviews you undertake that have not yet been covered:

Reviewed plans and specification for Waterline and related projects for the 30%, 60%,90% and 100% design submittals prior to issuance of occupancy permit clearance from this Agency. This requirements applies to Gov’t of Guam, Military, GWA and Private projects pursuant to Safe Drinking Water Act. Closing of Navy and AAFB landfills. installations of new water production wells, certification of drinking water laboratories, wastewater operators, installation restoration projects, HAZ waste inspections, co-inspections of federal facilities, air permits, pesticides permits and solid waste permits and dredging activities (removal/storage/disposal). Increase monitoring of Coral Reefs near Milcon projects.

Please comment on any changes in your agency’s permit review processes since 2008:

The review process were very challenging during the last 3-years (2008 – 2011) due to in-house procedures and the turn-around of technical staff. However, beginning early 2012 the process has been streamlined to be more efficient which is also base on priority and issued permits and release review comments are slightly more efficient due

to new review process implemented by the Agency. The Agency is constantly modifying and improving its permitting process base on the resources available.

Has your agency experienced any notable changes in your permitting activities since 2008 (for example, in the number or type of permit applications being submitted for review)? If so, please describe:

The permit application increases dramatically from 2008 to 2010 due to the anticipation of the military build-up and was stable from 2011 to 2012. Plan review increases due to MILCON project by the Military, DPW highway projects, GWA projects, GPA projects and various residential sub-divisions, including the affordable housing projects initiated by the current administration.

Have military buildup activities on Guam impacted the number and/or composition of permit applications processed by your agency?

The MILCON projects have impacted the number of plans and permits that this agency issued or reviewed for the last three (3) years. Initial infrastructure projects for the build-up were reviewed by this agency. Clearing and Grading, Solid/Hazardous permits, Air permits, Pesticides permits have increased from 2011 to the present due to military projects. Yes, the private sector has been positioning itself for the build-up and has submitted plans for approval, but actual construction has been limited to initial groundbreaking/work to meet the minimum permit requirements. Once MILCON projects get funded, Agency is expecting the projects to move forward at an accelerated pace both on the DOD and civilian sector. Current project list are all smaller to medium, with larger ones anticipated within the upcoming year.

D. FOLLOWUP TO 2010 STUDY

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

Situation with GIAA has stabilized and Agency is not expecting to be evicted. But depending on GIAA needs possibility of being evicted. Agency is working on issue.

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

Within the current budget issues with the US Congress and USPEA, Guam EPA's budget is expected to be impacted further. Agency funding is 97% from USPEA'S budget. Agency will have issues keeping and attracting new staff to maintain or increase its work load. Agency is the primary local regulatory authority for all infrastructure and environmental issues. We look forward to the actual interviews scheduled for January 2013 so that we may further discuss these topics.

Guam Memorial Hospital Authority

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A. CONTACTS

Please provide contacts at Guam Memorial Hospital Authority (GMHA) that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name: Joseph P. Verga, MS, FACHE
Title: Hospital Administrator/CEO
Phone: (671) 647-2418
Email: joseph.verga@gmha.org

Questionnaire Point of Contact

Name: William N. Kando
Title: Hospital Chief Planner
Phone: (671) 647-2316
Email: william.kando@gmha.org

B. STAFFING

Please provide data on full time equivalent (FTE) staffing for **FY 2010-12:**

	2010	2011	2012
Total Agency Staff - FTE			
Total Staff:	1253	1080	1077
Key Staff – FTE			
Physician:	92	92	94
Nurse/Allied Health:	556/263	504/209	506/209
Comments:			

Please comment on any significant staffing issues GMHA has experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.), particularly for skilled positions, and how that has impacted your ability to service the public:

Medical Staff, Nursing Staff, and Allied Health Professionals have been and continue to be the most difficult positions to fill and retain, as GMHA has difficulty competing for them due to global shortages for these types of positions. Some recruitment and retention strategies that GMHA has had to employ is increasing the compensation for many of these types of positions and recruiting off-island. The most difficulty has been in the “specialty care” nursing units (ED, OR, CCU/ICU). On a positive note, with so many new nurses coming out of the UOG Nursing Program and GovGuam giving them “preferential hire” credit, all of our other nursing units are well staffed to date.

Have military buildup activities on Guam impacted GMHA’s staffing capacity since 2008, and if so, in what ways?

GMHA is almost always over-capacity relative to its staffing (we don’t have enough staff to cover all of our acute care beds); however, this has not been the result of military buildup activities. In order to better serve Guam’s patient population needs, one of its strategies that is currently underway is its Emergency Department and CCU/ICU Expansion Project. GMHA will be expanding the size of its ED by a magnitude of 3 times the existing square footage; and the CCU/ICU will be similarly expanding by slightly less than 3 times its previous square footage. We are also in the process of developing our 2013 Strategic Plan, which shall include a fresh analysis of GMHA’s future master planning/expansion needs.

How do you anticipate the new hospital, Guam Regional Medical City, will impact staffing?

GMHA believes that every healthcare agency/organization/clinic has an impact on its healthcare staffing, as these Guam healthcare entities compete for very finite human resources. Though we don’t have any data at this time that allows us to quantify that impact, relative to the new hospital (namely, Guam Regional Medical City), GMHA believes that fair competition is good for Guam. Also, those healthcare professionals that have been employed by GMHA for a long time (in the old retirement plan) are less likely to just move over to the new private hospital, as they will not want to give up on their retirement plan. The new hospital may attract more professionals to Guam from off-island and some of these individuals may decide to apply for employment at GMHA. So we don’t see any severe negative impact on GMHA to date.

C. SERVICE POPULATION

Please provide the following data on your **current** average annual activity volume:

- Average number of patients cared for per day at GMHA = 165 Acute / ER 98
- Admissions 11,438 (acute Inpatient for 2012)
- Outpatient Visits 6,150
- Emergency Room visits 28,333 for FY 2012
- Deliveries 2,528 for FY 2012

Please comment on recent trends (including numbers served and types of health issues most prevalent) you have observed in regard to your agency's servicing of the following demographic groups:

Active duty military and/or military dependents:

GMHA does provide some services to military dependents that cannot be provided at the U.S. Naval Hospital Guam. GMHA bills Tricare for these services.

FAS Compact State immigrants:

In FY12, 7,902 FAS Compact State immigrants sought medical care at GMHA.

H2B workers:

In FY12, 15 H2B workers required medical care at GMHA mostly for Emergency Room Services. This data is significantly lower than previous Fiscal Years (FY '10 – 54; FY'11 – 32). H2B workers are generally insured for healthcare.

Have military buildup activities on Guam had an impact on GMHA's service population? If so, how and why?

Guam's current population is approximately 180,000. GMHA has calculated, based upon the current U.S. national average of acute care beds per 1,000 population being approx. 2.7, that Guam needs approx. 500 acute care beds. GMHA believes there is a severe shortage of acute care beds on Guam; and that this shortage must be addressed by either expanding the existing Guam Memorial Hospital or building a much larger replacement public hospital. GMHA believes this acute care bed shortage will be further exacerbated by the anticipated population increases that will occur with the impending Civilian/Military Buildup.

Please comment on any trends/increases in immigration to Guam and impacts on GMHA's service population:

One of the reasons GMHA continues to struggle financially is because the expense/cost to GMHA, as a result of FAS Compact State Immigrants, is approx. \$20M/year. However, GMHA only receives approx. \$3M-\$5/year from Compact Impact Funds. Guam is always rightfully fighting to get more of these funds from the Department of the Interior; and when that happens, GMHA should be one of the highest priority agencies to receive these funds given that our current Accounts Payables has been well in excess of \$20M for several years now.

D. FACILITIES / TECHNOLOGY

List the locations where you provide services to the public, number of beds available, facility condition, and whether facilities could handle additional growth (add any we may have missed):

Facility	Number Acute Beds	Number Non-Acute Beds	Check Condition of Space			Check Adequacy of Space			Briefly note reasons for condition and adequacy ratings
			Good	Fair	Poor	1*	2*	3*	
Guam Memorial Hospital	158	105	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The Guam Memorial Hospital (GMH) was relocated to its current location in 1978; however, GMHA has completed approx. \$60M in Capital Improvement Projects (CIPs) from 1989 to 2012. Therefore, building is still in fair to good condition with the exception of the Z-Wing which is approx. 50 years old.
Skilled Nursing Facility	40	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The Skilled Nursing Unit (SNU) in Barrigada was built in 1996 and started service in 1999, so the facility is still fairly new relative to its infrastructure life span.
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

* 1 = Current space can accommodate more staff and service population.

* 2 = Current space at/above max; could be expanded or renovated to service more people.

* 3 = Current space at/ above max; cannot be expanded or renovated to service more people.

Please provide any updates on your agency's data management system, and your use of data to improve services and collection:

GMHA is planning a conversion to a new revenue cycle software system. The conversion is tentatively planned for February 1, 2012. The new software will provide enhanced capabilities for the revenue cycle staff – from registration through billing and collections.

In addition, the Revenue Cycle staff will be conducting an internal review of its procedures and processes to align human assets with the work to be completed. The Revenue Cycle staff will create metrics for monitoring work performances and accomplishments.

Please comment on your staff and technological ability to bill TRICARE for services that are rendered to the military population on Guam:

The Revenue Cycle (billing and collection) software system assigns insurance companies to the patient. When a patient having TRICARE registers at GMHA, the software program allows the charges and claims to be attributed to TRICARE.

Please comment on your staff and technological ability to track services that may be reimbursable for compact impact funding:

Generally, GMHA's Revenue Cycle staff can create insurance carriers wherein all transactions (charges, billing, and collections) are captured and reported.

E. FOLLOWUP TO 2010 STUDY

Please comment on any plans to build a new civilian hospital on Guam. Has a feasibility study been conducted?

Yes, GMHA has completed a Hospital Expansion Feasibility Study this past June of 2012. Though there are no concrete plans to build a new "public" civilian hospital at this time, GMHA is in the process of developing its 2013 Strategic Plan, which shall include a fresh analysis of GMHA's future master planning/expansion needs.

Please comment on any existence of continued competition with the private sector for employees:

GMHA believes that every Guam healthcare agency/organization/clinic has an impact on its healthcare staffing, as these healthcare entities compete for finite human resources. Though we don't have any data at this time that allows us to quantify that impact, relative to the new hospital (namely, Guam Regional Medical City), GMHA believes that fair competition is good for Guam. Also, those healthcare professionals that have been employed by GMHA for a long time (in the old retirement plan) are less likely to just move over to the new private hospital, as they will not want to just give up on their retirement plan. The new hospital and other private sector healthcare clinics may attract more professionals to Guam from off-island and some of these individuals may decide to apply for employment at GMHA. So we don't see any severe negative impact on GMHA to date.

Please comment on any developments in your work since the start of the building of the Naval Hospital on Guam:

As the U.S. Naval Hospital Guam is building its new hospital, GMHA is currently expanding its Emergency Department and CCU/ICU Expansion Project in order to better serve Guam's patient population needs. We are also in the process of developing our 2013 Strategic Plan, which shall include a fresh analysis of GMHA's future master planning/expansion needs.

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

None to report for this submission.

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

None.

**Guam Power Authority, Office of the General Manager of
Consolidated Utilities Services**

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PLEASE NOTE THAT WE ARE UPDATING DATA COLLECTED ON THE OFFICE OF THE GENERAL MANAGER OF CONSOLIDATED UTILITIES SERVICES. QUESTIONS THEREFORE ARE FOCUSED ON THE ACTIVITIES OF THIS OFFICE.

A. CONTACTS

Please provide contacts at the Office of the General Manager of Consolidated Utilities Services that we might work with to ensure the success of the questionnaire/interview process.

Leadership

Name: Joaquin C. Flores, P.E.
Title: General Manager
Phone: (671) 648-3225/3205
Email: jflores@gpagwa.com

Questionnaire Point of Contact

Name: Joven G Acosta, P.E.
Title: Engineering Manager
Phone: (671) 648-3214
Email: jacosta@gpagwa.com

B. STAFFING

Please provide **FY2010-2012** data for the below questions:

Staffing	FY2010	FY2011	FY2012
Total Working Staff (FTE Positions Filled)	# 522	# 536	# 543
Total FTE Approved (Not Filled)	# 70	# 56	# 25
Estimated % Staff Time Spent on the Following:			
Permitting Review/Approval			30%
Monitoring/Enforcement			25%
Policy/Planning			10%
Administration			10%
Other: Other Engineering Functions as required (processing of work orders, design, project inspections, cost estimating, etc.)			25%

Please comment on any significant staffing issues your office has experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.) and how that has impacted your ability to conduct permit reviews:

At this time, GPA continues to be current with its permitting reviews. Turn-around time for residential building plan review is 3 days, while commercial building plan review (requiring field inspections) is 3 to 10 business days depending on the complexity.

Have military buildup activities on Guam impacted your office's permitting staffing capacity since 2008? If so, in what ways?

GPA's Surveyor Supervisor had left GPA in 2008 to work with a private Engineering firm in anticipation of military projects. This has led to GPA having to procure outside services of a licensed surveyor since 2008.

Please comment on the implementation of the Certified Technical and Professional Pay Adjustment Scale mentioned in the 2008 questionnaire (attached for reference) and the ability of this implementation to assist in staff recruitment efforts:

Upon the Consolidated Commission on Utilities' (CCU) adoption and approval of a new pay plan for CTP positions, GPA implemented and transitioned into the new pay plan with a pay adjustment to 5th market percentile in 2008. The CCU approved transitional pay adjustments toward the 50th market percentile over a period of five years. In 2009, GPA attempted to perform another transitional pay adjustment up to the 15th market percentile. However, based on budget limitations, CTP positions currently sit between the 10th and 12th market percentiles. To date, no additional transitional pay adjustments have been made. The transition of CTP positions into a new scale has assisted in GPA's recruitment efforts. However, while GPA's CTP pay scale has provided incentive for recruitment, the number of positions recruited is largely dependent on funding availability in any fiscal year.

C. PERMITTING

Please provide **FY2010-2012** data for the below permit review questions:

		FY2010	FY2011	FY2012
Permits	Total Number of Permits Reviewed	# 681	# 548	# 412
	List the <i>types</i> of permits that you approve, and provide numbers approved per year.			
	Permit Type: New Residential	#482	#345	#264
	Permit Type: Commercial	#132	#134	#102
	Permit Type: Renovation	#24	#27	#18
	Permit Type: Other – Government (CLTC, HPO)	#43	#42	#28

Please list any monitoring/enforcement actions your office conducts, and if those actions occur during construction or operations phases:

Prior to construction: GPA performs plan reviews and field inspections to ensure compliance with GPA requirements.

During construction: GPA performs inspections and material reviews during construction to ensure compliance with GPA Rules/Regulations, NESC, and local mandates.

Please list any additional actions/reviews you undertake that have not yet been covered:

Review and evaluation of feeder loading to ensure large loads can be accommodated.

Design of line extensions or plant improvement projects to accommodate new customers/loads.

Construction of line extensions or plant improvement projects to accommodate new customers/loads.

Please comment on any changes in your office's permit review processes since 2008:

Has your office experienced any notable changes in your permitting activities since 2008 (for example, in the number or type of permit applications being submitted for review)? If so, please describe:

Please see permitting numbers above.

Have military buildup activities on Guam impacted the number and/or composition of permit applications processed by your office?

No, as far as permitting goes. However, GPA has been providing extensive design and/or project management services for the following:

FY 2010

- 1.P494 Harden Electrical System (Orote, SRF, CS)
- 2.JFY 2010 Finegayan Utilities
- 3.GE PSLF Power Flow Simulations (Environmental Impact Study)

FY 2011

- 1.SFOL Andersen Substation

- 2.North Ramp Utilities Offsite Feeders (Harmon-Andersen Lines)
- 3.Turn over of Navy – GPA Estates
- 4.Soil Remediation

FY 2012

- 1.T-22 Transformer Harmon
- 2.Naval Hospital Pole Relocation
- 3.Fuel Pipeline / Piti Switchgear
- 4.Mamizu Phase I T-28 Transformer Orote
- 5.T-9 Transformer and Switchgear Agana
- 6.GE PSLF Power Flow Simulations (Environmental Impact Study)

D. FOLLOWUP TO 2010 STUDY

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

None.

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

Military operations as well as military expansion activities continue to be supported by GPA through in-depth design review and engineering construction support concerning relevant projects affecting additions to DoD joint use assets as listed below:

Orote/Cold Storage/SRF Substations (located in Big Navy)
 Apra Substation
 Piti Substation
 Hagatna Substation
 Harmon Substation
 Radio Barrigada Substation
 Marbo Substation
 Andersen Substation (Andersen Air Force Base)
 NCS Finegayan
 Potts Junction

Oftentimes, GPA would have to work overtime hours to provide support to DoD and to maintain the level of service during normal working hours to other ratepayers.

Guam Waterworks Authority, Engineering Division

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GUAM SIAS PUBLIC PERMITTING AGENCY QUESTIONNAIRE
Guam Waterworks Authority, Engineering Division

PLEASE NOTE THAT WE ARE UPDATING DATA COLLECTED ON THE ENGINEERING DIVISION. QUESTIONS THEREFORE ARE FOCUSED ON THE ACTIVITIES OF THIS DIVISION.

A. CONTACTS

Please provide contacts at the Engineering Division that we might work with to ensure the success of the questionnaire/interview process.

Leadership

Name: Thomas F.A. Cruz, P.E.
Title: Chief Engineer
Phone: (671) 647-2613
Email: Thomas@guamwaterworks.org

Questionnaire Point of Contact

Name: Menglou Wang, P.E.
Title: Assistant Chief Engineer
Phone: (671) 647-0492
Email: menglou@guamwaterworks.org

GUAM SIAS PUBLIC PERMITTING AGENCY QUESTIONNAIRE
Guam Waterworks Authority, Engineering Division

B. STAFFING

Please provide **FY2010-2012** data for the below questions:

Staffing	FY2010	FY2011	FY2012
Total Working Staff (FTE Positions Filled)	# 25	# 22	# 21
Total FTE Approved (Not Filled)	# 14	# 23	# 5
Estimated % Staff Time Spent on the Following:			
Permitting Review/Approval			15%
Monitoring/Enforcement			10%
Policy/Planning			5%
Administration			5%
Other: CIP project delivery related to USEPA Court Order			65%

Please comment on any significant staffing issues your division has experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.) and how that has impacted your ability to conduct permit reviews:

There has been a reallocation of resources from the Engineering Division since 2008. The GWA Planning Section no longer falls under the responsibility of the Engineering Division. Although this moved occurred the Planning Section continues to coordinate and communicate with the Engineering Division when it comes to proposed development on the island that they are made aware of during the Guam Land Use Commission (GLUC) meetings. Essentially the Planning Section will still get comments from the Engineering Division regarding a proposed project, and then submit these comments to the GLUC.

The Engineering Division has however also seen a couple of new engineers come into the division but there was also a loss of two engineering staff. To date GWA Engineering Division has four (4) licensed engineers and three (3) engineers with their EIT certificates.

Have military buildup activities on Guam, including potential DoD funding of well development, impacted your division's permitting staffing capacity since 2008? If so, in what ways?

The impacts related to military buildup activities, including well development have not been fully experienced and this primarily was due to the fact the buildup was delayed. Thus there were no major impacts to the permitting staff capacity. It is important to note the building permit review process is handled by the New Area Development/ Planning Section which is under the Engineering Division.

Please comment on your agency's compensation structure revision and scholarship program to attract engineers in training, as mentioned in the 2008 questionnaire (attached for reference) and the ability of these adjustments/implementations to assist in staff recruitment efforts:

GWA's compensation structure has improved slightly the recruitment and hiring of engineering staff. Since 2008 the engineering department has seen the hiring of junior engineers with EIT certificate as well as a couple of licensed engineers.

GUAM SIAS PUBLIC PERMITTING AGENCY QUESTIONNAIRE
Guam Waterworks Authority, Engineering Division

C. PERMITTING

Please provide FY2010-2012 data for the below permit review questions:

		FY2010	FY2011	FY2012
Permits	Total Number of Permits Reviewed	# 487	# 365	# 285
	List the <i>types</i> of permits that you approve, and provide numbers approved per year.			
	Permit Type: single family dwelling/new water or sewer	+/- 45%	+/- 45%	+/- 50%
	Permit Type: multi-family dwelling/new water or sewer	+/- 25%	+/- 25%	+/- 20%
	Permit Type: commercial / new water or sewer	+/- 25%	+/- 25%	+/- 25%
	Permit Type: Other	+/- 5%	+/- 5%	+/- 5%

Please list any monitoring/enforcement actions your division conducts, and if those actions occur during construction or operations phases:

Monitoring/enforcement actions primarily revolve around the field inspection of service connections taps of water or sewer, and water and/or sewer main installation during the construction phase. Inspectors inspect the work conducted by private contractors to ensure the work meets GWA standards.

Please list any additional actions/reviews you undertake that have not yet been covered:

Capital Improvements projects related to the USEPA Court Order will be a main focus of GWA this fiscal year and for the next couple of years. GWA continues to work towards executing design and construction work related to the court order to meet deadlines established by the Court.

Please comment on any changes in your division's permit review processes since 2008:

Currently GWA is in the process of hiring a permanent replacement to the permit section supervisor to manage the Permits Section and inspectors and handle day to day activities within the office. The previous permits section supervisor recently retired from GWA. The Engineering Division is managing this temporary matter with the assignment of a senior engineer supervisor to the permits office.

Has your division experienced any notable changes in your permitting activities since 2008 (for example, in the number or type of permit applications being submitted for review)? If so, please describe:

There was noticeable work related to workforce housing meant for military build-up projects however many of these workforce housing facilities were not constructed or was put on hold. GWA would anticipate however that when military buildup projects occur and permitting activities rise up, that there will be a need for additional staff to monitor and inspect new construction activities outside of the fence.

Have military buildup activities on Guam impacted the number and/or composition of permit applications processed by your division?

Data related to the Permits Section does not appear to reflect any major impact to the number and/or composition of permit applications. For the most part the main projects that have come before GWA that were related to the military build-up were for workforce housing at various location around the island but these projects did not occur. The normal process is for GWA to first provide a position statement to the Guam Land Use Commission about the workforce

GUAM SIAS PUBLIC PERMITTING AGENCY QUESTIONNAIRE
Guam Waterworks Authority, Engineering Division

housing project, if the developer went that route first, then from there the developer would have multiple meetings with our New Area Development/Planning Section to discuss details about the impacts and requirements of the development. If no activities occur after GWA had provided comments then the project is shelved until further action occurs by the contractor.

D. FOLLOWUP TO 2010 STUDY

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

GWA continues to work towards executing design and construction projects related to the 2011 USEPA Court Order. There are tremendous implications as a result of this court order thus GWA management has obtained engineering support via a Program Management Office (PMO). The scope of work of the PMO is diverse however majority of their initial work activities are tied to the Court Order stipulations.

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

During the initial military buildup drive a few construction companies submitted Guam Land Use Commission Applications or building permit packages related to "work force" housing. These companies were apparently gearing up for military construction contracts yet to be awarded. At the time there were many meetings between GWA and DoD in which information was shared regarding work force housing however there were instances of uncertainty in this matter. These work force housing facilities were being proposed throughout the island thus each one had its issues to overcome. As a means of ensuring clarity between GWA and any entity working on military buildup projects, GWA request that one (1) engineering FTP be provided to work to coordinate and communicate with GWA on all matters military buildup related. This FTP would not only work on matters related to contractors working on military buildup projects but any and all design or construction projects that have an impact to GWA such as water source interconnectivity if possible, new sewer connection activities, and production well monitoring in relation to the aquifer sub-surface modeling. These are just to name a few.

Additionally, it is the position of the GWA Engineering Division that there will likely be negative infrastructure impacts to the civilian community resulting from "induced" growth related to the military build-up. The support of an FTP as requested above will be good however the financial support of improvements to infrastructure outside of the base prior to the arrival of the induced growth will allow GWA Engineering Division to manage growth accordingly.

**Guam Department of Parks and Recreation Including the Guam
Historic Resources Division, State Historic Preservation Office**

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"RESPONSE" 12/2012

GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE

Guam Department of Parks and Recreation

Including the Guam Historic Resources Division, State Historic Preservation Office

PLEASE NOTE THAT WE ARE UPDATING DATA COLLECTED ON THE YOUR AGENCY AS A WHOLE, AS WELL AS THE STATE HISTORIC PRESERVATION OFFICE SPECIFICALLY.

QUESTIONS LISTED UNDER SECTION D ARE FOCUSED ON THE ACTIVITIES OF THE STATE HISTORIC PRESERVATION OFFICE ONLY.

A. CONTACTS

Please provide contacts at your agency that we might work with to ensure the success of this questionnaire/interview process.

Leadership:

Name: Lynda Bordallo Aguon
Title: Guam State Historic Preservation Officer (Supervisor, Guam Historic Resources Division, Dept. of Parks and Recreation
Phone: 1-671-475-6294 / 6337
Email: lynda.aguon@dpr.guam.gov

Questionnaire Point of Contact:

Name: same as Leadership
Title:
Phone:
Email:

State Historic Preservation Office Point of Contact:

Name: same as Leadership
Title:
Phone:
Email:

Ken

"RESPONSE" 12/2012
GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE
Guam Department of Parks and Recreation
Including the Guam Historic Resources Division, State Historic Preservation Office

B. STAFFING

Please provide the following staffing data for **FY 2009-2012**:

	FY 2009	FY 2010	FY 2011	FY 2012
Total Agency Staff				
FTE Office Staff:	#	#	#	#
Guam Historic Resources Division (State Historic Preservation Office)				
FTE Office Staff:	# 11	# 9	# 8	# 9
Additional Clarification (if necessary):				

Please comment on any significant staffing issues your agency has experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.) and how that has impacted your ability to service the public:

Recruitment for an Archaeologist is ongoing. As of January 4, 2013, the open competitive recruitment for an Archaeologist has garnered 2 applicants, of which, only one was rated qualified. Additional staff is urgently needed to assist the State Archaeologist in reviewing numerous reports and plans of various nature. The Division is responsible for reviewing local and federal projects. The Division is staffed with 1 Archaeological Technician and 2 Historic Preservation Specialist who are supervised by the State Archaeologist. The Division has seen an increase of 25% in project reviews. Without adequate staffing, complete development/project reviews cannot be accomplished within the expected time frame of 14 – 30 days. Reviews will continue to be prolonged and complaints frequent.

Have military buildup activities on Guam impacted your agency's staffing capacity since 2008? If so, in what ways?

Yes. The workload has increased due mostly as a result of increased military and civilian construction projects. The staffing capacity does not reflect the increased in workload. See above statement.

C. FACILITIES / OPERATIONS

List the facility types you provide for public use, the approximate number of those particular facilities on Guam, whether they are adequate for the public's current level of demand, and general condition:

Facility Type	Approx. # of this facility type on Guam	Check Adequacy of Site			Check General Condition of Facilities			Briefly note reasons for adequacy and condition ratings
		Good	Fair	Poor	Good	Fair	Poor	
Beach Parks		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Historic Parks		<input type="checkbox"/>	X <input type="checkbox"/>	X <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lack of funding for

"RESPONSE" 12/2012

GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE

Guam Department of Parks and Recreation

Including the Guam Historic Resources Division, State Historic Preservation Office

								site and facilities maintenance
Recreation Facilities		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Please comment on any progress being made in building a sports complex in Dededo (mentioned in 2008 questionnaire and attached for reference), and the impact to your operations:

Please indicate if you collect data on the usage of your recreational facilities, and provide statistics if possible:

Please comment on any public/private partnerships that your agency has developed to provide sport leagues/classes at your facilities, and if any of these partnerships have been with Department of Defense entities:

List the facilities under your agency's purview for which users need to obtain a permit for use, or are charged a fee for use:

Facility	Fee Charged for Use?			Permit Required for Use?			Comments
	Yes	No	Amount	Yes	No	Application Fee?	
	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		Should it be required?

D. PERMITTING ACTIVITIES OF THE STATE HISTORIC PRESERVATION OFFICE

Please estimate the % of State Historic Preservation Office staff time spent on the following activities:

Estimated % Staff Time Spent on the Following:	
1. <u>Administration Program</u> : securing grants, managing grants, procurement, financial management, policy development, program management, federal reporting, etc.: 1 Staff / SHP Officer	100% / 45%
2. <u>Survey and Inventory Program</u> : 2 Staff – Survey / 1 Staff – Inventory	5% / 100%

"RESPONSE" 12/2012

GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE

Guam Department of Parks and Recreation

Including the Guam Historic Resources Division, State Historic Preservation Office

3. <u>Review and Compliance Program</u> : permitting, ARC, and Section 106 project reviews; includes inspections, monitoring, enforcement, other tasks associated with this Program: 2 Staff / 2 Staff / SHP Officer	95% / 98% / 35%
4. <u>Planning Program</u> : SHP Officer	10%
5. <u>National Register Program</u> : SHP Officer / Historian	10% / 0%
6. <u>Other</u> – public awareness, public education: 2 Staff	2%

Please comment on any significant staffing issues the State Historic Preservation Office has experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.) and how that has impacted your ability to conduct permit **and 106** reviews:

The increase in volume of permits and applications without the corresponding increase in staff to adequately and properly review these permits and applications, creates the corresponding inability to conduct the proper permit review in a timely manner. The increase is also reflected administratively, in the field workload and labor distribution, e.g. site inspections and reports, project reviews, consultations and resolutions, Federal and local review and compliance requirements, filing and correspondence, research and documentations. In addition to this, reports of various nature must be reviewed by a qualified archaeologist. The 3 Division staff supervised by the State Archaeologist do not review these reports due to their own workload and capabilities. An open recruitment is currently in place to hire an Archaeologist to assist the State Archaeologist and the historic preservation program in general.

Have military buildup activities on Guam impacted the State Historic Preservation Office's permitting staffing capacity since 2008? If so, in what ways?

Yes. Military buildup related projects, both in and outside the bases, have increased tremendously resulting in backlogging the review and compliance program process overall. There is also an increase in housing development speculations by private developers, military opportunists, and land speculators that directly and indirectly contributed to the increase in permit and development reviews, including an "overflow" in government permitting activities. The technical have been mostly affected. The increased workload has created a "bottle-neck" in the review and permitting process. More staff is required for the growing workload created by the military buildup.

Please provide **FY2011 and FY2012** data for the below permit review questions:

	FY2011	FY2012
Total Number of Permits Reviewed	# 909	#1,089
List the <i>types</i> of permits that you approve, and provide numbers approved per year.		
Permit Type: All DPW permits, GPA, GWA, GTA Permits	# 909	# 1,089
Permit Type: All Guam Land Use development applications	# 75	# 58
Permit Type: All NEPA / ACOE / Federal Grants (civilian and government projects)	# 66	# 19
Permit Type: All Section 106 NHPA projects (Federal, local, military and civilian)	# 288	# 135

Please list any monitoring/enforcement actions your office conducts, and if those actions occur during construction or operations phases:

"RESPONSE" 12/2012

GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE

Guam Department of Parks and Recreation

Including the Guam Historic Resources Division, State Historic Preservation Office

Issuance of notices of violation and certificates of approval. Occurs during and after construction phase.

Please list any additional actions/reviews you undertake that have not yet been covered:

The Guam SHP Office does not only review permit applications, they prepare positions statements for the ARC, GLUC, and other departments and agencies requesting for such, including reviewing Federal Consistency applications via Bureau of Statistics and Plans. When time and staff allow, Division staff conduct historical and archaeological educational presentations, attend training, workshops, and conferences.

Please comment on any changes in your office's permit review processes since 2008:

Policy on Reviewing Permit Applications in place. Applicants must submit adequate and proper documentation before applications are reviewed to prevent delays.

Has your office experienced any notable changes in your permitting activities since 2008 (e.g., in the number or type of permit applications being submitted for review)? If so, please describe:

The volume of Section 106 requests, Federal grants, GLUC-DLM applications, archaeological work, DPW permits etc., have increased.

Have military buildup activities on Guam impacted the number/composition of permit applications processed by your office? If so, how and why?

Yes. Military projects often requires DPW permits for projects both in and outside military bases, and all require the review of SHPO. See above.



"RESPONSE" 12/2012
GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE
Guam Department of Parks and Recreation
Including the Guam Historic Resources Division, State Historic Preservation Office

E. FOLLOW UP TO 2010 STUDY

Please comment on any progress being made to outsource/privatize various elements of departmental purview, in the interest of efficiency (mentioned in 2008 questionnaire and attached for reference), and the impact to your operations:

There is no plan to outsource regulatory project reviews, state or federal.

Please comment on the current prevalence of public safety issues (public drunkenness, fights, drownings) as mentioned in your 2008 interview (attached for reference). Please provide any data showing an increase/decrease in such issues over time, as well as partnerships with local and military public safety agencies to address these issues.

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

Ken

Judiciary of Guam

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GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE
Judiciary of Guam

A. CONTACTS

Please provide contacts at the Judiciary of Guam that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name:	Joshua F. Tenorio
Title:	Director of Policy, Planning and Community Relations
Phone:	671-475-3278
Email:	jtenorio@guamcourts.org

Questionnaire Point of Contact

Name:	Robert S. Cruz
Title:	Deputy Administrator of the Courts
Phone:	671-475-3128
Email:	rcruz@guamcourts.org

GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE
Judiciary of Guam

B. STAFFING

Please provide data on full-time equivalent (FTE) staffing for **FY 2010-2012:**

Staff Type	2010	2011	2012
Judges FTE:	9	9	9
Other Judiciary Staffing FTE:	357	361	361
Additional Clarification (if necessary):			

Please comment on any significant staffing issues your agency has experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.) and how that has impacted your ability to service the public:

There have not been any significant staffing issues impacting the service to the public. Since FY2010, vacancies have not been filled due to a lack of funding. In fact, with the number of employees who serve in the Guard and Reserve, we are forced to hire limited-term employees to fill in the gaps to minimize disruption to the public we serve, until personnel return from deployment. The Judiciary of Guam has a very low employee turnover rate and recruitment difficulties are minimal and affect mostly professional, certified positions (e.g., counselors, etc.).

Have military buildup activities on Guam impacted the Judiciary's staffing capacity since 2008? If so, in what ways?

No, Judiciary staffing has yet to be impacted by the military buildup. As indicated above, the Judiciary staffing levels remain status quo.

Please provide any updates on the recommended number of additional personnel necessary to adequately support the work of each Judge:

The current staffing level for judicial officers and staff is insufficient to meet judicial mandates and Guam's present population. Guam's organic growth necessitates an additional judge to address the present caseload with corresponding staff. Additional personnel will be necessary in the event the military buildup occurs, and as judges are appointed, support staff will be required for each newly appointed judge, which includes: Courtroom Chamber Clerk, Court Bailiff and Law Clerk. At this time, it is difficult to provide a projected amount given the total number of military personnel and related civilians relocating to Guam have yet to be finalized.

Please correct critical information contained in the Final Environmental Impact Study (FEIS), or Supplemental Environmental Impact Study (SEIS) as it relates to personnel needs of the Judiciary of Guam, and judge to service population ratios. (1) By the year 2014, the Judiciary of Guam and the National Center for State Courts estimates in a study conducted in 2010 (Attachment A entitled Judiciary of Guam Facilities Master Plan, Final Report, January 2010) that 4 additional judicial officers will be needed to adequately service the population, which will bring the total of judicial officers to 13 for the Superior Court of Guam. (2) The ratio of Guam Judiciary Judge to service population is 1:23,890. Please see Attachment B, a letter dated August 18, 2010 addressed to Major General David Bice, USMC (Ret), Executive Director, Joint Guam Program Office. (3) The Judiciary of Guam is a co-equal branch of Government of Guam. Please consider this a branch of government, and not an Executive Branch agency (FEIS at p. 16-113).

GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE
Judiciary of Guam

The plan now calls for transferring about 4,800 Marines to the island, rather than the 8,000 originally projected. About two-thirds of the relocating troops will do so on a rotational basis, meaning the island will not need to accommodate as many family members as had initially been planned, the official told [American Forces Press Service](#) on background.

C. SERVICE POPULATION

Please comment on recent trends (including numbers served, types of judicial issues most prevalent, etc.) you have observed in regard to your agency's servicing of the following demographic groups:

Active duty military and/or military dependents:

Presently, the Probation Services Division supervises approximately 70 active duty military personnel on supervised release or probation for various criminal offenses. Our previous case management system captured only generic employment/unemployment information and hence we were unable to provide statistical information on past trends with active duty personnel or their dependents. In addition to working with active duty military probation clientele, our office also provided services to at least 30 active duty military victims of crime in terms of referral for services and victim assistance.

FAS Compact State immigrants:

Please see Attachment C for specific information, including total number of court case filings, and approximate cost in serviced, non-reimbursed costs for Fiscal Years 2010-2012.

H2B workers:

Previous case management system captured only generic employment/unemployment information not specific to H2B status. However, this attribute will be added into our Case Management System effective January 1, 2013. Thereafter, these statistics will be captured and available.

GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE
Judiciary of Guam

D. FACILITIES

List the locations where you provide services to the public, and whether they can handle additional growth (add any we have missed):

Facility	Check Condition of Facilities			Check Adequacy of Space			Briefly note reason for condition and adequacy rating
	Good	Fair	Poor	1*	2*	3*	
Judicial Center in Hagatna	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	X	<input type="checkbox"/>	Need at least two additional courtrooms to support current and natural growth. Parking is max'd out but with funding for adjacent land acquisition and at grade parking construction for an additional 101 parking stalls, it will bring parking capacity from poor to fair conditions.
Northern Court Satellite	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	Requires additional square footage to accommodate support services related to court operations (i.e., drug testing, class rooms, Jury Orientation, etc.).
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

* 1 = Current space can accommodate more staff and service population.

* 2 = Current space at/above max; could be expanded or renovated to service more people.

* 3 = Current space at/ above max; cannot be expanded or renovated to service more people.

Please make any further comments on the facilities that you have listed above here:

The number of courtrooms and office space required is a function of number of judges, caseload, and ancillary services that the Judiciary undertakes. Additional judges and staff will necessitate additional square footage.

GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE
Judiciary of Guam

D. FOLLOWUP TO 2010 STUDY

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

For the most part the Facilities Master Plan is current (please see Attachment A entitled Judiciary of Guam Facilities Master Plan, Final Report, January 2010). The requirements proposed facilities in the Master Plan are scalable and may be adjusted based on need.

In addition, the Judiciary of Guam sent a letter to Major General Bice dated August 18, 2010 (Attachment B), which addresses inaccuracies and corrections requested to be made in the Supplemental Environmental Impact Study (SEIS).

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

The Judiciary has taken its planning and preparation process for the buildup to a point where funding to meet the facilities challenge remains unresolved.

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Guam Naval Police Department

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A. AGENCY CONTACTS

Please provide contacts at the Guam Naval Police Department that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name: David Dimmick
Title: Deputy Security Officer, Naval Base Guam
Phone: 671-339-6611
Email: david.dimmick@fe.navy.mil

Questionnaire Point of Contact

Name:
Title:
Phone:
Email:

B. QUESTIONS

Please comment on how the implementation of Joint Region Marianas has impacted your operations since 2008:

No Impact

Have developments in military buildup activities on Guam impacted the Naval Police Department's staffing or facilities capacity since 2008? If so, in what ways?

No

Are there plans to build Department of Defense (DoD) corrections facilities on Guam?

No

Do you keep statistics on the following crimes involving active duty military personnel?

Crime	No or N/A	Yes	Use this space to provide data, website for access to information, contact person we can contact, or hard-copy documentation.
Overall Crime Statistics	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Raelyn Valdez 671-339-2022
Sexual Assaults	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Raelyn Valdez 671-339-2022
Prostitution	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Drug Use / Substance Abuse (including alcohol)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Raelyn Valdez 671-339-2022
Domestic Violence/Child Abuse	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Raelyn Valdez 671-339-2022
Additional clarification (if necessary):			

Please comment on DoD policies regarding active duty military personnel involved in the above crime types:

There are numerous policies that address the above listed crimes.

Do you collect data on crime involving military dependents? If yes, please explain:

All crimes that take place on Navy property are documented.

C. FOLLOWUP TO 2010 STUDY

Please comment on collaborative activities between your agency and the GovGuam public safety agencies (for example, sharing of patrol duties in heavily populated tourism areas, mapping of areas with high incident rates, immigration issues, emergency response), and the effectiveness of this collaboration:

There is currently a Shore Patrol staffed by Tenant Commands that provides foot patrols in the Tumon and Tumaning club areas. These patrols are non-Law Enforcement personnel and are there as a deterrent to misbehavior by military personnel and to report crimes to Guam Police.

Please comment on your current approach to the handling of off-base infractions that involve Active Duty personnel:

Guam Police handle all off base infractions and the infraction is later addressed by the subjects Command in military courts or NJP.

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

No significant changes.

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

None

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Guam Public Library System

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A. CONTACTS

Please provide contacts at GPLS that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name: Joseph Artero-Cameron
Title: President, Department of Chamorro Affairs
Phone: (671) 475-4278
Email: joseph.cameron@dca.guam.gov

Questionnaire Point of Contact

Name: Teresita (Terry) L.G. Kennimer
Title: Library Technician Supervisor, GPLS
Phone: (671) 475-4754
Email: teresita.kennimer@gpls.guam.gov

B. STAFFING

Please provide data on full-time equivalent (FTE) library staffing in the **years 2010-12:**

Library Staff	2010	2011	2012
FTE:	30	25	24
Comments:			

Please comment on any significant staffing issues GPLS has experienced since 2008 (turnover/difficulty filling positions/positive changes, etc.) and how that has impacted your ability to service the public:

GPLS has historically had issues due to budget constraints when it comes to hiring or filling librarians, library technician's, administrative support, and a Library Information Technology Systems positions. Other areas such as, power, water, contractual services, & salaries must be taken care of before GPLS could fill any position. **At one point in time and only for one physical year, the Guam Public Library System was appropriated funding under the Territorial Educational Facilities Fund (TEFF) that is provided to the Guam Department of Education.** Our main key function that support the library's mission and goals, staffing issues from 2008 to 2012 did impact the ability to serve our users for the five (5) Branch Libraries in Agat, Barrigada, Dededo, Merizo, and Yona that are opened either 9 hrs to 18 hrs per week, the Main Branch 49 hrs per week, and the Bookmobile 19 hrs. Due to the shortage of manpower and GPLS policy that every effort must be explored to ensure uninterrupted patron services and library doors always remained open at the scheduled hours, GPLS employees are required to cover absentees at a moment's notice, at any of the branches and/or bookmobile.

Library Technicians are assigned to different task behind the scenes such as in the Collection Development of new and donated items/materials received, ensuring that these are properly catalogued, performed technical processing procedures, weeding, shelving, acquisitions, processing of Federal Depository Library documents, Military Environmental Impact Statements, Serials/Periodical, Talking Book Cassette Tapes and Digital Talking Books to be able to provide the resources to our users. This has tremendously impacted our services to the community; the resources will be untouched for days, or weeks. This includes, Public Service such as, Circulation and Reference Desk Information/Services, computer access, children's/teens/adults programs, community outreach events. A total of six (6) employees were hired from 2009 to 2011; three (3) Library Technicians, one (1) Computer Systems Analyst II, one (1) Program Coordinator, and one (1) Building Custodian. GPLS breakdown of total employees per fiscal year, in 2008, twenty-seven (27), thirty-two (32) in 2009, thirty (30) in 2010, twenty-five (25) in 2011, and twenty-four (24) in 2012. During those years, a total of eight (8) employees either retired, resigned, transferred or promotional to another department.

In October 2011, GPLS became a Division under the Department of Chamorro Affairs by the Reorganization Advisory No. 6 and the Reduction in Force Advisory No. 2 to consolidate other cultural and learning resources and services divisions into the Department of Chamorro Affairs (DCA). The Reorganization and Reduction in Force Advisory identified positions within library on the layoff plan, position identified are: "seven (7) Library Technician I, one (1) Library Technician II, two (2) Building

Custodians, one (1) Administrative Officer, one (1) Secretary I, and one (1) Administrative Aide position” are identified as the positions for layoff. After receiving the Reorganization Advisory notices, GPLS employees have begun to seek other means of income from other government agencies and private sectors; this included one employee who was qualified for retirement, and one resulting in resignation. This leaves GPLS with a total of twenty-four employees that consist of; thirteen (13) library technicians, one (1) library technician supervisor, four (4) building custodians, four (4) administrative support, one (1) bookmobile driver, one (1) program coordinator. Aside from the Reduction in Force statement it also stated that: “GPLS Branch Libraries facilities will be transferred to the mayors of Merizo, Agat, Barrigada, and Dededo. Due to lack of funds to sustain the department at its current level, and the finding of redundancies and lack of work will be for learning centers of excellence and to build community partnerships to staff and open these facilities for at least five days in the week.” To date, Branch Libraries facilities are still under the purview of the GPLS/DCA, and GPLS library technicians and administrative aide are being utilize to assist other divisions within the Department of Chamorro Affairs due shortage of manpower.

Have military buildup activities on Guam impacted GPLS’s staffing capacity since 2008? If so, in what ways?

GPLS did not meet the staffs needed to this date, to accommodate the needs of our users. Comments to the previous question on the issues and experiences regarding filling position, and funding are the few barriers that GPLS is encountering.

Please provide any updates on the recommended librarian to service population ratio provided by the Guam Public Library System Board:

A former Territorial Librarian/Director testified during a Legislative Public Hearing in 2000 on Bill 25-389 and was signed into law as PL: 26-162, “An Act appropriate funds needed to reopen the branches of the Guam Public Library System”. In her testimony she stated, “None of the public libraries on Guam have ever been staffed and equipped with even the minimum requirements to operate according to American Library Association (ALA) standards and GPLS policies. ALA Standards for Adequate Public Library Services (as adopted by the Guam Public Library Board) requires the following: six professional librarians for every 50,000 people plus one professional librarian for every 7,500 when over 50,000; one professional librarian in each branch library; one professional librarian to service the institutional libraries and the visually impaired, etc., etc.” GPLS to this date holds this statement as a true fact and its challenges to serve the community and its needs in a multicultural and geographically remote area. GPLS provides services to all island residents, and that public libraries are the cornerstone of the communities they serve.

Please provide any updates on the hiring freeze impacting the Library system:

Issues and experiences regarding filling position, and funding are the few barriers that GPLS is encountering. Professional librarians and support staff such as: administrative officer, custodians, clerks, etc., are equally important and necessary so that the library technicians can devote their undivided attention to the patrons with the services to which they are entitled. See 1st comment response.

Please provide any updates on the availability of on-island graduate-level training for Library and Information Services:

In 2011, Library Education for the U.S. Affiliated Pacific (LEAP) – Cohort Program, funded by the Institute of Museum and Library Services (IMLS) to provide support to recruit and educate the next generation of librarians, along with the University of North Texas College of Information-Department of Library and Information Sciences and the Pacific Resources for Education and Learning (PREL) established a distance learning scholarship program to provide financial support to eligible residents of the U.S. Affiliated Pacific Islands seeking a graduate degree in library and information science. GPLS have one (1) individual staff, Program Coordinator I, with a Bachelors Degree in Criminal Justice who had interest in furthering his education on Masters in Library and Information Science. However, timing and family obligation were barriers to the employee who was unable to pursue.

C. FACILITIES

List library facilities, and indicate whether facility spaces are adequate for the current level of demand (add any facilities we have missed in the space provided):

Library Branch	Approx. number of hours of operation per week	Check Condition of Facility			Check Adequacy of Space			Briefly note reason for condition and adequacy rating
		Good	Fair	Poor	1*	2*	3*	
Agat	16	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Barrigada	16	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Dededo	16	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Merizo	16	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Yona	16	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hagatna	50	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Bookmobile	19	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

* 1 = Current space can accommodate more staff and service population.

* 2 = Current space at/above max; could be expanded or renovated to service more people.

* 3 = Current space at/ above max; cannot be expanded or renovated to service more people.

Please make any further comments on the library facilities that you have listed above here:

The Dededo Library Branch still remains open to the public twice a week despite the interior and exterior needing some cosmetic work to be done. The exterior of the building needs a fresh coat of paint as well as the interior of the library. The interior is in desperate need of its floor tiles to be replaced due to tiles being broken and worn. As for the adequacy rating for the Hagåtña Main Library, a check on number two (2) was made because of a grant that was awarded from the Department of Interior for an expansion to be made to the existing facility.

D. FOLLOWUP TO 2010 STUDY

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

All previous questionnaires/interviews provided in 2010 remains the same.
References and supporting documents are attached.

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

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Salvation Army

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A. CONTACTS

Please provide contacts at your organization that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name:	Michael Lutcher
Title:	Captain
Phone:	671-486-3032
Email:	michael.lutcher@salvationarmy-guam.org

Questionnaire Point of Contact

Name:	Lou Hongyee
Title:	Lighthouse Recovery Center Program
Phone:	671-477-9801
Email:	lou.hongyee@salvationarmy-guam.org

Questionnaire Point of Contact

Name:	Patrick Camacho
Title:	Family Services Center
Phone:	671-477-9819
Email:	patrick.camacho@salvationarmy-guam.org

B. SERVICE POPULATION

Please comment on recent trends (including numbers served and types of issues most prevalent) you have observed in regard to your agency's servicing of the following demographic groups:

Active duty military and/or military dependents:

SA tracks the data, but only 1-2 people every couple of years. Confidentiality is critical so people who do not want the military to know may come to us.

There is open dialogue between SA and military. SA is applying for accreditation through U.S. Dept. of Transportation to help with substance abuse treatment to military.

There were four veterans in the PHRP program.

FAS Compact State immigrants:

The grant data tracking system does not track FAS Compact State immigrants by island or nationality. They have increased as recipients of SA programs. Of the FMS immigrants, Chuuk are biggest service population; other groups will not come in because of pride. Sometimes immigrants from Pohnpei or the Marshall Islands use our services.

H2B workers:

There were 2 people in the Family Services Center (FSC) program.

Chamorro:

The normal distribution of Chamorros in the population has participated in SA programs.

Have military buildup activities on Guam had an impact on GMHA's service population? If so, in what ways?

Domestic issues among military and dependents might cause need for SA services. For example, if the family wife is military, but husband was on base and caused problems, he might be kicked off, and became homeless, he then requires SA services.

Similarly, military families who are not adequately able to care for their dependents may need SA services.

Please comment on any trends/increases in immigration to Guam and impacts on your service population:

There is culture shock for islanders coming into Guam. On their islands they can drink and drive and here courts tell them to get treatment. Culturally, the Chuuk older generation blame alcoholism on themselves, while the newer generation blames the alcohol. Compared to other cultures, Chuuk seems to be the most poverty-stricken community. They do not know what is acceptable on Guam before coming here.

C. SUBSTANCE ABUSE / CRIME

Please comment on the current trends regarding the following issues on Guam:

SA does not feel qualified to comment on this question. Their knowledge would not be any different from common knowledge such as read in the newspaper.

1. Prostitution:

Recommend checking with Oasis.

2. Drug / Substance abuse:

A lot of crime is related to drug use, primarily burglary associated with alcohol and meth. The worsening economy prompts some poor families with no job skills or education to start dealing drugs.

3. Sexual Assaults:

SA does not really engage this issue.

4. Gangs:

There is not a real gang presence on Guam, not like on the mainland.

Please provide insight into the cultural differences and/or structural elements that may contribute to the involvement of the following populations in these types of crime:

SA does not feel qualified to comment on this question. Their knowledge would not be any different from common knowledge such as read in the newspaper.

Active duty military and/or military dependents:

FAS Compact State immigrants:

H2B workers:

Chamorro:

D. PUBLIC HEALTH AND SOCIAL SERVICES

Please comment on the current trends regarding the following issues on Guam:

1. General access to health care / preventative care:

It still very poor. Many locals go to Hawaii or the Philippines for better care or major surgery. The local hospital always seems to be in financial difficulty. People who seek services at public health just don't pay. There has been an improvement in providing Medicaid and Medicare.

GovGuam does not handle food stamps well. People on the program might use drugs and then get kicked off. They have little alternatives to reform themselves so it becomes a downward spiral.

Guam offers limited opportunity to reinvent yourself once you have trouble or a bad reputation.

2. Access to immunization and/or health records:

There is more immunization more outreach. There has been no observed change in access to health records. Electronic records would be great. SA wishes the Guam could to track client going from one clinic to another to get morphine.

3. Communicable diseases such as tuberculosis, hepatitis b, and cholera:

TB is always in the newspaper. Schools seem to have outbreaks. The Lighthouse Recovery Center requires a TB test before entering program.

Hepatitis B – There has been an increase in incidence among the SA population because of types of clients SA helps. It happens to them eventually from excessive drug use over time.

Cholera – nothing to report.

Please comment on the current state of access to public services (including access to quality and adequate living conditions with adequate infrastructure for living) by the following populations on Guam:

SA does not feel qualified to comment on this question. Their knowledge would not be any different from common knowledge such as read in the newspaper.

Active duty military and/or military dependents:

FAS Compact State immigrants:

H2B workers:

Chamorro:

E. FOLLOWUP TO 2010 STUDY

Have military buildup activities on Guam impacted the work of your program? If so, in what ways?

There was a big influx of immigrants up until the U.S. Senators put a stop to the buildup. Then people left.

New roads and more people driving and more traffic accidents have affected us and our service population.

Please update us on your new 30-bed facility, work towards achieving CARF accreditation, and your resulting ability to meet military substance abuse treatment needs:

The facility had to drop to 28 beds. Accreditation has been a slow process. SA is trying to get more staffing but it only has capacity to hold ground, not move forward. The bad economy is making it harder to move forward on the project and SA is instead spending on providing on basic services. SA needs a full time person to get accreditation, which they want to get so they can partner with the military and help out with substance treatment. Note, CARF accreditation is distinct from the U.S. DOT one mentioned above.

Please provide updates to any collaborative agreements/contracts you have allowing you to support the work of GovGuam agencies, the VA, or other agencies:

SA has an MOU with UoG for interns for interns to get credit with the Lighthouse Recovery Center program.

SA is working on MOUs with Civil Defense to help with feeding volunteers.

SA has been contracted by DMHSA, Mental Health, GHURA, and VAO.

SA participates in the Guam Homeless Coalition with other non-profits (e.g., Sanctuary, WesCare, and Oasis).

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

University of Guam

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UNIVERSITY OF GUAM
UNIBETSIDÂT GUAHAN

OFFICE OF THE PRESIDENT

UOG Station, Mangilao, Guam 96923
Telephone: (671) 735-2990 • Fax: (671) 734-2296

December 28, 2012

Scott Glenn
Cardno Tec
Scott.Glenn@cardnotec.com
Honolulu, Hawaii

Dear Mr. Glenn:

I am pleased to submit the information to your questionnaire to update the rSIAS. I look forward to discussions in person or by phone to answer any other inquiries.

We hope you are able to provide us information we requested as well.

If you have further questions or need to arrange for a meeting, please contact Mr. David Okada. His contact information is in your questionnaire.

Sincerely,

Helen H.D. Whippy
Acting President

GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE
University of Guam

A. CONTACTS

Please provide contacts at University of Guam (UoG) that we might work with to ensure the success of this questionnaire/interview process.

Leadership

Name: David S. Okada
Title: Chief Planning Officer
Phone: 671-735-2902/2990
Email: dsokada@uguam.uog.edu

Questionnaire Point of Contact

Name: David S. Okada
Title: Chief Planning Officer
Phone: 671-735-2902/2990
Email: dsokada@uguam.uog.edu

GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE
University of Guam

B. STAFFING

Please provide data on full time equivalent (FTE) non-adjunct faculty at UoG in **years 2010-12**:

Non-Adjunct Faculty	2010	2011	2012
FTE:	198	185	TBD
Comments: Information based on Fall semester. Fall 2012 information not available, yet.			

Please comment on any significant staffing issues UoG has experienced since 2008 (turnover, difficulty filling positions, positive changes, etc.) and how that has impacted your ability to service your students:

Faculty staffing issues are primarily related to insufficient GovGuam operational funding support. Some positions are due to being hard to fill. As faculty positions become vacant, they are either not filled or funds are diverted to a higher priority position or need. UOG continues to operate under austerity financial measures to protect remaining funds to support payroll and other critical expenses. Adjunct hires have increased from 24% in Fall 2007 to 53% in Fall 2011. This survey does not include shortages in staff or administrative positions. Impact on students would be a delay in graduation or affect their retention due to not being able to take courses which could be offered more often.

Have military buildup activities on Guam impacted your program's teaching staffing capacity since 2008? If so, in what ways?

Yes, some impact. Several faculty members have technical expertise in a variety of areas and provide support to the community, federal, and GovGuam agencies related to the environmental or socioeconomic fields. With less faculty, any additional task has a higher overloading affect that may impact teaching capacity.

What strategies have you adopted to cope with any turnover/vacancy difficulties (including the hiring of adjunct faculty, if applicable)?

On a case by case basis, strategies include increasing FTE overloads, hiring more adjuncts, increasing class sizes, capping enrollment, converting certain courses to on-line learning, and/or cancelling courses.

GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE
University of Guam

C. STUDENT POPULATION

Please provide student enrollment information for school years **2010-12**.

	2010	2011	2012
Student Enrollment:	3,639	3,721	3,702
Comments: Based on Fall semester enrollment.			

Please comment on recent trends (number enrolled, types of classes taken, use on online classes, etc.) you have observed in regard to enrollment at UoG of the following demographic groups:

Military and/or military dependents:

Trends for military personnel and dependents for undergraduate and graduate levels show a slight decrease in numbers. This may be the result of several factors – PCS'd, deployed, or graduated. For graduate level studies, the numbers may have also slightly dropped due to discontinuing the fast track program for the School of Education Special Education program and the reduction of the number of cohorts opened during the course of the year.

FAS Compact State immigrants:

Trends from FAS at the high school levels show a general increase, especially from Fall 2010 to Fall 2011. Trends from FAS at the college levels also show a general increase, especially from Fall 2010 to Fall 2011. A small portion of this increase may be the result of the fully on-line program of the Masters in Education for Reading.

H2B workers:

N/A.

GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE
University of Guam

D. FACILITIES

List the locations where you provide services to the public, their condition, and whether they can handle additional growth (add any we have missed):

Facility Name	Secondary or Post-Secondary	Location	Check Condition of Facility			Check Adequacy of Space			Briefly note reasons for condition and adequacy ratings
			Good	Fair	Poor	1*	2*	3*	
**UOG Main Campus	Post-Secondary	Mangilao	**X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	**Overall, main campus facilities are in good condition subject to normal preventive maintenance efforts. The Field House would be the only facility that would be rated fair to poor mainly due to major life cycle replacements/repairs in the roofing, AC, electrical, plumbing, bleachers, and hardwood gym flooring systems. Below are additional facilities since the 2008 report on main campus.
Science Building Annex	Post-Secondary	Mangilao	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	Lecture type classrooms built to a specific size.
Health-Science Annex	Post-Secondary	Mangilao	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	Lecture type classrooms built to a specific size.
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Additional clarification (if necessary):									

* 1 = Current space can accommodate more staff and service population.

* 2 = Current space at/above max; could be expanded or renovated to service more people.

* 3 = Current space at/ above max; cannot be expanded or renovated to service more people.

Please describe the use of online classes and comment on your institution's ability to maintain systems to accommodate online coursework. Has this impacted facility requirements and/or staffing levels?

UOG currently uses a third party off-campus vendor to host and maintain its Learning Management System (LMS). The LMS supports fully on-line, hybrid, and web-enhanced courses each semester for about 50% of the students and faculty. On average, 10 percent of the semester's course schedule is offered fully online. The majority of these courses are multiple section offerings in English and Math. There is one fully on-line graduate program – Masters of Education in Reading.

Since LMS is hosted off-campus, the campus internet connection is used by students on-campus to access their classes. The campus internet connections have been modestly upgraded to accommodate the demand. As the on-line community grows, plans are to add a

GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE

University of Guam

dedicated port for on-line activity only. There has been no change to on-campus computer lab configuration or location.

The LMS is supported locally by the Center of On-Line Learning (COLL) comprised of four employees: associate director, program coordinator, instructional designer, and LMS technician. The COLL is responsible for LMS training for faculty and students, program and course management, technical support, and educational technology for LMS integration. The COLL is under the Telecommunication and Distance Education Operations (TADEO) office located in Dean's Circle, House #6. The COLL works with an On-line Steering Committee to develop university policy and strategic on-line planning. The committee members are representatives from each academic unit, faculty senate, and COLL administration.

The impact on staffing levels has been minimal with the addition of the COLL staff. The participation and administration of academic representatives are handled by each dean.

GUAM SIAS PUBLIC SERVICE AGENCY QUESTIONNAIRE
University of Guam

E. FOLLOWUP TO 2010 STUDY

Please comment on any changes in provision of and/or demand for coursework, including online classes, relevant to meeting the **construction** training needs of the military buildup:

While not "construction training" specific, UOG has incorporated within its graduate and undergraduate business degree programs, a Project Management component within our operations management courses which can support construction management skill sets.

Please comment on any changes in provision of and/or demand for coursework, including online classes, relevant to meeting the **long-term** training needs of the military buildup:

Long-term training needs related to the military buildup are not assessed here due to lack of information provided, per our request.

We have included previous questionnaires/interviews conducted with your agency published in our 2010 study. Please review these documents for current accuracy and provide any comments and/or updates here:

UOG has completed its Physical Master Plan update.

Thank you for the time and energy that you have put into completing this survey! We appreciate your help with this study. If you would like to provide any additional comments you think may be relevant to this study or to ask any questions that you might have, please do so here:

We would like the Department of Defense Education Office System for Guam, affecting all components of services, to consider unbundling Guam from its higher education contract that covers this region. Specifically, we request that local U.S. accredited universities and colleges on Guam be allowed the privilege of offering classes/degree programs on base. Guam is not a "foreign country" where this restriction should apply.

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Appendix B

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**Fishermen's Co-op and Western Pacific Regional Fisheries
Management Council**

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Agency Name: Fishermen's Co-op and Western Pacific Regional Fisheries Management Council

Date: January 25, 2013 at the Fishermen's Co-op, 1515-1600

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Manny Duenas	Fishermen's Coop	President	gfcfa@ite.net	671-472-6323
John Calvo	WPRFMC	Guam Coordinator	john.calvo@noaa.gov	671-649-3150
Gerardo Gambirazzio	Marine Corps Activity Guam	Community Plans & Liaison Officer	gerardo.gambirazzio@fe.navy.mil	671-355-2336
Faith Caplan	Cardno TEC, Inc.	SIAS Team	faith.caplan@cardnotec.com	808-528-1445

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Multiple DoD projects:
 - a. Public is weary of DoD projects and public meetings. The public is weary of the multitude of meetings pertaining to the DoD projects.
 - b. It is difficult to distinguish the NEPA proposed projects.
 - c. Noted that they find the scoping meetings a “dog and pony” and it does not feel like a dialogue or discussion. It is one-sided. Many people feel that their concerns are not being taken seriously.
 - d. Comments are submitted during scoping but there is no indication that they are actually considered in the DEIS.
 - e. Start the meetings later; 5-6 pm is peak traffic time, so should start after peak traffic time.
 - f. Community centers are better than schools for the meetings. Agat and Piti Community Centers have better access from major roads.
5. Subsistence fishing:
 - a. There is only one fisherman that refers to himself as a commercial fisherman. There is no fish auction. All fishing on Guam is subsistence, cultural, traditional, not-for-profit.
 - b. Hard to place a market valuation on fishing in the community.
 - c. It is hard to make a profit, primarily due to the fuel costs. Also, boat maintenance and parts acquisition are very costly as Guam is very far from the sources.
 - d. Immigrants from Federated States of Micronesia (FSM) and other countries do not use sustainable fishing practices. They load up their boats with maximum fishermen and coolers. This was one result of the U.S. Compact of Free Association which allowed for unhindered migration that has never been addressed by the federal government. The impacts of underfunded and unfunded mandates imposed upon the people of Guam have contributed to the climate of mistrust.
 - e. Recreational “armchair” fishermen do not practice sustainable fishing practices. We don’t “play” with our fish.
 - f. Any increase in population is likely to have an adverse impact on fishing. And fishing access.

- g. Average boat is only 20 feet long and is not equipped for long sea-going voyages.
 - h. Underwater graffiti is attributed to military populations.
 - i. Young people think fishing is too much work or too expensive to do to feed your family or community. Fishing is becoming more of a recreational activity.
 - j. There is land ownership in Chamorro culture but not water/ocean. There are no fights over who gets access to fishing areas. There is respect for village traditional fishing areas.
6. Access:
- a. Shore access is already restricted due to military restrictions and private land owners that block access to the beaches. There are no laws that guarantee access to beaches fronting private land.
 - b. The military already restricts access to some of the best fishing areas. The red flags indicating live fire training seem to always be flying.
 - c. Boating around the Surface Danger Zone areas to get to fishing areas is time consuming and expensive due to fuel costs. The fringing reef (fishing areas) is relatively close to shore (300-600 feet) so the boats can usually avoid having to travel long distances.
 - d. It is becoming more and more difficult for “old timers” to access the beach.
 - e. Sumay marina was just improved but the military personnel are more likely to use the private marinas. People are already requesting slips at the private marinas.
 - f. There are seamounts and great fishing off of Finegayan and North of Guam (Rota Bank). For 4-6 months (October to April) out of the year (winter), these are the only accessible areas due to weather. Further restriction of fishing in these waters is not acceptable. The weather is generally too rough to go south from Agana Boat Harbor, so the boats head north along the west coast to Finegayan and points north of Guam.
 - g. To get to southern fishing areas it is best to leave from Agat in the south.
7. Military Build-up SEIS:
- a. Prefer there be no additional restrictions on submerged land use. Naval Munitions Site alternatives are better than others because no submerged land is affected.
 - b. If pressed to make a choice, the east coast live-fire training ranges are better than the west coast ranges and the AAFB range alternatives. But the east coast site has cultural impacts associated with Pagat Village
 - c. Indoor ranges are not proposed but they should be.
 - d. Show the existing military ranges on the maps. Prefer existing ranges be used. If new ranges are created then existing range submerged lands should be made more accessible. Do not increase the amount of submerged land restricted to the public.
8. Other comments:
- a. Guam is pro-military, but there are issues of military impacts that have yet to be fully addressed, such as PCBs bioaccumulating in the fish. And humans, we are after all the “top predator.”
 - b. There is too much fishing regulation. It tends to interfere with sustainable practices. Local fishermen are capable of self-policing. For example, recent regulations on the use of scuba gear and fishing is relevant to so few people, not worthy of the time and energy spent in

getting it drafted and reviewed. This is an example of “fashionable conservation” that has little to do with big picture issues like erosion. Increasing the number of threatened and endangered species of coral does not necessarily address impacts on fishing resources.

9. Action:

- a. J. Calvo suggests reading documents that he can provide: one by Judith Amesbury*.
- b. Suggest SIAS team view the video/movie “The Insular Empire: America in the Mariana Islands” This would provide some insight into the frustration the local community has with dealing with the federal government.

* Judith Amesbury authored and/or co-authored several articles. One that is comprehensive is “Review of Archaeological and Historical Data Concerning Reef Fishing in the U.S. Flag Island of Micronesia: Guam and the Northern Mariana Islands” authored by Judith R. Amesbury and Rosalind L. Hunter-Anderson (Micronesian Archaeological Research Services) prepared for the Western Pacific Regional Fishery Management Council, Final Report August 2003. The Report can be found at the website: <http://www.wpcouncil.org/coralreef/Documents/Mariana%20Archeological%20Review%20FINAL.pdf>

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Guam Army National Guard

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Agency Name: Guam Army National Guard

Date: January 25, 2013 at GUNG Headquarters, 1400-1500

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Benny Paulino	Guam Army National Guard	The Adjutant General	benny.m.paulino.mil@mail.mil	671-735-0406
John Guerrero	Guam Army National Guard	Captain, Public Affairs Officer	john.a.guerrero4.mil@mail.mil	671-988-3733
Scott Glenn	Cardno TEC, Inc.	SIAS member	scott.glenn@cardnotec.com	808-528-1445
Rick Rust	Matrix Design, representing the Governor's Office	Senior Associate	rick_rust@matrixdesigngroup.com	671-777-1674

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Please describe your current membership numbers.
 - a. Guam Army National Guard - 1,297 members
 - b. Guam Air National Guard - 407 members (authorized for 302 but received a waiver)
 - c. Coast Guard reserve - 32 members
 - d. Army Reserve - about 400 members
 - e. Air Force Reserve – about 400 members
 - f. Navy Reserve – about 200 members
5. Please describe the public safety services you provide to Guam.
 - a. Counter-drug mission to support the island's schools and youth programs espousing drug demand reductions.
 - b. 94th Civil Support Team provides 24/7 availability for the island to respond to chemical, biological, radiological, nuclear, and explosives incidents in support of local first responders.
 - c. Units in the command have adopted several island parks/historical sites that they visit monthly for clean-ups and minor maintenance work, as part of the Island Beautification Task Force effort. The command as a whole also executes quarterly trash pick-up along Army Drive (Route 16).
 - d. The Guam Guard receives numerous requests from the private and public sector organizations for volunteer support on a monthly basis, such as clearing of large debris in the villages, and provides that support if it is legally and logistically possible.
 - e. During emergencies, the Governor can activate GUNG to provide a variety of services:
 - i. Augment the Guam Police Department in terms of safety and traffic control, security, and maintaining public order;
 - ii. Assist the Department of Public Works (DPW) in debris clearing;
 - iii. Assist people to shelter by repairing shelter areas, transporting people to them, and providing security at shelter areas;

- iv. Provide water tanks for hard-to-reach points on the island. DPW has 5,000 gallon water tanks; GUNG has five 600 gallon tanks that can be transported quicker and with more ease to more remote parts of the island;
 - v. Support FEMA distribution of supplies; and
 - vi. Provide generators for critical power needs. For example, Civil Defense lost their generator during an emergency, so GUNG provided the generator.
 - f. Having additional troops on island would be helpful during catastrophic events.
6. Please describe the benefits that members can access including:
- a. Please confirm that active duty Army National Guard members are eligible to send their dependents to the DOD schools.
 - i. Yes
 - b. Medical / Tricare
 - i. Tricare had been an issue for the Guard members in the CNMI and for Soldiers deployed there. There were no Tricare providers in the CNMI, so military members had to do co-pays and were supposed to be reimbursed for these expenses. The newest information we have received is that there are a few providers there now that are listed in the Tricare Remote Program. CNMI Soldiers who are deployed must enroll their dependents into Tricare Prime Remote, and they may be assigned a primary care manager who will coordinate their care. They receive care from Tricare Network providers or a Tricare authorized provider within the region. When visiting a non-network provider, they can expect to pay upfront, to be reimbursed after filing a claim.
 - ii. Guard members can use the Naval Hospital, but appointments are on a space-available basis if they are enrolled in Tricare Reserve Select. It makes it difficult to plan ahead under these conditions. We hope that when the new Navy hospital is completed, our Soldiers on TRS could avail of a better appointment system.
 - iii. When soldiers use the Naval Hospital or other military health care facility, there is no co-payment if they are enrolled in a Tricare program. Public hospitals and other outside care facilities require a co-payment. Use of these civilian care facilities is a higher cost for our young Soldiers and their families.
 - c. Commissary access
 - i. Yes
 - d. Other?
 - i. AAFES and NEX, NBG and AAFB recreational facilities
7. Please describe the impact of buildup on the ability of your agency to:
- a. Recruit
 - i. Guam is very patriotic community, so recruiting is good. The largest celebration here is the annual Liberation Day Parade held on July 21st. To us, it's our 4th of July, as this is the date Guam was liberated toward the end of World War 2, from the Japanese Imperial military's occupation of the island. The Guam Guard and the active duty units regularly participate in this parade with marching units and equipment. For the older generation, it's a reason to be thankful. And for the younger

generation, it's a reminder of what their elders had to go through. In a very strong way, the Liberation Day parade reinforces this sense of patriotism among our island residents.

- ii. The desire to enlist and serve the country is very high. All active duty, Guard and reserve organizations benefit from this. Through the Guard, our members get a taste of military life and may decide to go on active duty. If a Guard member decides to transfer to the active duty component, I allow them. Some of them would continue and serve out their active duty career. There are some who would complete their initial tour and return to Guam and re-enlist in the Guard or Reserve.
 - iii. The buildup may increase the desire of the Guam population and Guardsmen to join the Marines. It would be great to have a small Marine Corp reserve unit; that is the only reserve unit not represented on island currently.
- b. Train
- i. The buildup should help increase training resources for larger elements such as a battalion. The Guam Guard stands to benefit through access to the additional training ranges such as those planned for the Marines. Current firing ranges do not fully meet our needs, let alone the requirements of the Marines. We have to travel off-island to certify our Soldiers for some of our weapons systems. That is an additional cost for us, as it will be for the Marines.
 - ii. We feel that our use of the new ranges to be built for the Marines would not impact their training, as we would be using them on weekends. Throughout the years, all components - active duty, Guard and reserve - have worked out the use of the existing ranges, and have not really had any issues in scheduling their training at these ranges. In fact, our Guard engineers within the last year had helped work on improving the small arms ranges on Naval Base Guam, following a request from the Navy.
 - iii. Having the Marines on Guam would promote more training and opportunities for the ROTC at UOG, and at the high schools. There is one high school, near NCTS in Dededo, with a Marines JROTC program.
 - iv. The increased Marines presence on island could help enhance the military's work to support the island community's civic needs. The Guard currently supports funeral honors requests for all veterans, including Marines. With a significant Marine contingent on island, a Marine funeral honors detail could respond to support a Marine veteran that passes away. There are also many requests for color guards. "It would be refreshing to see another color guard at many of these events."
- c. Match guard members with job opportunities
- i. Our Guard and Reserve members may have an edge in employment opportunities because of their military background. Our members may be able to get employment at new, planned training ranges, because they already have experience working and/or certification to manage these types of ranges.
8. Are National Guard members ever deployed overseas?
- a. Yes, ever since 9/11, all the reserve units have deployed. It started out with smaller teams. Over the years, deployment progressed to larger units, such as platoons and company-size

elements were deployed. At the end of next month, we will deploy about 600 Soldiers from the 1st Battalion 294th Infantry Regiment. This would be the largest group from a reserve component unit on Guam to deploy for a combat mission. This fiscal year, FY2013, is a milestone in our history, as this is the period with the highest number of Guam Guard Soldiers and Airmen, approximately 800, ever deployed to support Overseas Contingency Operations.

- b. How do members deal with deployments in terms of their jobs/employment?
 - i. Many of our Guard members enlist right out of high school. Some desire to continue their military career in the active duty component. In the end, of those whom we allow to transfer, some serve out their career in active duty, while some complete their tour and return to us as seasoned, and experienced Soldiers and Airmen. This benefits the reserve component and the community as a whole.
 - ii. We have about 200 members who are unemployed. But many of them enlisted right out of high school or recently graduated from college, and have not really entered the civilian job market yet.
 - iii. The Employer Support for the Guard and Reserve (ESGR) is a Department of Defense agency that seeks to develop and promote and culture in which all American employers support and value the military service of their employees. ESGR does this by advocating relevant initiatives, recognizing outstanding support, increasing awareness of applicable laws, including the Uniformed Services Employment and Reemployment Rights Act (USERRA), and resolving conflict between employers and service members. Paramount to ESGR's mission is encouraging employment of Guardsmen and Reservists who bring integrity, global perspective and proven leadership to the civilian workforce. The ESGR Guam-CNMI Committee, led by Mr. David Sablan as the State Chair, has 20 Volunteers and 3 staff members that support the more than 2,700 citizen-members of the National Guard and Reserve on Guam, Saipan, Tinian and Rota. As a former State Chair myself, I have seen first-hand the value the ESGR brings in supporting the missions of the reserve component. Although there are cases where conflicts could not be reconciled. If this mediation does not work, then the Dept. of Labor and the U.S. Attorney General may get involved. However, I have found that most businesses here on island are very supportive of our troop deployments. The more common issues have been with other federal agencies, in terms of hiring reservists, and releasing employees for training.
9. Other impacts that you see impacting your members?
- a. None of significance. The TAG does not believe misbehavior or impacts on culture would affect the Guard.

10. Open Topic (None)

11. Conclusion & Action Items (None)

**Guam Bureau of Statistics and Plans,
Guam State Data Center**

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Agency Name: Bureau of Statistics and Plans (BSP) - Guam State Data Center

Date: January 23, 2013 at Adelup Conference Room, 0800 to 0900

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Calvin A. Saruwatari	BSP - Guam State Data Center	Planner III	calvin.saruwatari@bsp.guam.gov	671-472-4201
Monica J. Guerrero	BSP - Guam State Data Center	Planner III, SDC Lead	monica.guerrero@bsp.guam.gov	671-472-4201
David Kiernan	Cardno TEC, Inc.	Project Manager - SIAS	david.kiernan@cardnotec.com	805-564-4940

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Data published by the Bureau of Statistics and Plans' Business and Economic Statistics Program (BESP):
 - a. Import and Export reports
 - i. Gathered from Port of Guam records
 - ii. Each published quarterly
 - b. Consumer Price Index (CPI)
 - i. Gathered from in-store price surveys
 - ii. September 2012 is most recent release (published quarterly)
5. The Guam State Data Center is the liaison to the U.S. Census Bureau. It is managed by the Planning Information Program (PIP) of the Bureau of Statistics and Plans.
6. Other data sources available for Guam (from update questionnaire):
 - a. Government revenue information
 - i. Office of Public Accountability (OPA) - audit reports (most recent 2011)
 - ii. Bureau of Budget and Management Research (BBMR) - revenue reports
 - b. Salary trends and employment - Guam Department of Labor (GDOL)
 - i. Current Employment Survey (employment and wages)
 - ii. Unemployment Report
 - c. 2012 Economic Census is ongoing (U.S. Census Bureau assisted by GDOL)
 - d. County Business Patterns - U.S. Census Bureau data available for Guam
 - e. Annual Census of Establishments - GDOL (assisting USDOL)
7. Guam's exports
 - a. Guam does not have any real exports, but there are transshipments (anything that lands at port and leaves is counted). Not much being produced on Guam, even tuna transshipments and processing is on the decline.

- b. Data is published by the BSP/BESP (see Note 4 above).
- 8. The U.S. Department of the Interior's Office of Insular Affairs (OIA) has contracted the U.S. Department of Commerce's Bureau of Economic Analysis (BEA) to produce the gross domestic product (GDP) determinations for the U.S. island areas (Guam, Commonwealth of the Northern Mariana Islands, American Samoa, and U.S. Virgin Islands). OIA originally intended for Guam and the island areas to produce their own GDP numbers through the teaching of input/output modeling to key personnel. However, technical difficulties caused OIA to contract the work out.
- 9. The Guam Statistical Yearbook is a comprehensive sourcebook of current and historical socio-economic statistics that reflect Guam's economic development and performance over time. It is available on the BSP website: bsp.guam.gov.
- 10. Russian visa waiver went into effect in January 2012, resulting in an increase in Russian visitors. Chinese visa waiver (mainland China) is held up for now.
- 11. Population dynamics
 - a. Public school enrollment has been flat.
 - b. Guam's population increased about 3 percent from 2000 to 2010. Census results show that there are fewer persons in the 0-14 years of age group and persons 25-39 years of age living on Guam in 2010 compared to 2000. Census results show an 8 percent decline in the young population (0-14 years), from 47,156 to 43,319 in 2010. Between 2000 and 2010, there was also a 16 percent decrease in the population 25-39 years of age, from 38,601 in 2000 to 32,492 in 2010.
 - c. Population rotation - Data from the 2010 Census shows that there was only a small increase in the number of Chamorros on Guam. There is anecdotal evidence of Chamorros (descendants of the indigenous people of the Mariana Islands) moving to the states, but the numbers from Guam could not be determined from the stateside 2010 Census and American Community Survey. Also, there was only a small increase in persons of Asian ethnicity and races. The increase in Pacific Islanders from the nearby Micronesian island areas (Federated States of Micronesia, Republic of Palau, and Republic of the Marshall Islands, collectively known as the Freely Associated States) who have moved to Guam is not enough to offset the population "lost" when compared to population projections based on births and deaths between 2000 and 2010.
- 12. Conclusion & Action Items
 - a. The Bureau of Statistics and Plans will provide information on the military population on Guam. (This has been provided and is attached.)

**Guam Bureau of Statistics and Plans,
Land Use**

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Agency Name: Guam Bureau of Statistics and Plans - Land Use

Date: January 23, 2012 at Adelup Conference Room; 0800-0900

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Evangeline Lujan	BSP Guam Coastal Zone Management Program	Administrator	vangelujan@yahoo.com	671-475-9672
Victor Torres	BSP	GIS Manager	victor.torres@bsp.guam.gov	671-472-4201
Rick Rust	Matrix Design, representing Governor's Office	Senior Associate	rick_rust@matrixdesigngroup.com	671-777-1674
Faith Caplan	Cardno TEC, Inc.	SIAS team	faith.caplan@cardnotec.com	671-528-1445
Scott Glenn	Cardno TEC, Inc.	SIAS team	scott.glenn@cardnotec.com	671-528-1445
Albert Borja	NAVFAC Marianas	Compliance Specialist	albert.borja@fe.navy.mil	671- 339-2957

Meeting Record

1. Introductions
2. Overview of SIAS
3. Interview Method
4. Guam Comprehensive Development Plan:
 - a. not updated lately
5. Most up-to-date zoning, land use and ownership maps.
 - a. See Action items.
6. Setback Analysis Study. The scope of this study:
 - a. to develop new legislation
 - b. new setbacks
 - c. currently being reviewed
 - d. prioritize certain vulnerable areas e.g., southern village
7. NOAA Coastal Change Analysis (partnership with BSP and U.S. Forest Service):
 - a. Used digital globe data, high resolution
 - b. C-cap land loss classification
 - c. USFS land cover layer
 - d. Vegetation layers
 - e. BSP reviewing the report and ground-truthing the data
 - f. Will be available end of 2013
8. Land cover classification:
 - a. Last version was 2005 and this is still the best available, pending completion of the Coastal Change Analysis.
 - b. The land classification data is being incorporated into the Coastal Change Analysis. Historically, there was a terrestrial mapping product and a coastal /ocean product, but the purpose of the Coastal Change Analysis is to combine the data into one product.
 - c. Could be a good source for agricultural use. Also shows conservation lands.

9. “Special Area Management Plans”:
 - a. Two are proposed so far: Dededo and Yigo.
 - b. These are the first ones
 - c. They are basically land use master planning documents to capture community vision and guide future development.
10. Dos Amantes Plan is adopted.
11. North and Central Land Use Plan
 - a. Attorney General (AG) opinion states the plan is adopted.
 - b. New Director of BSP will consider the next steps to be taken for implementation (i.e., zoning).
 - c. It is considered best available information inclusive of community vision and developers are already proposing projects that are consistent with the plan.
 - d. Used as a guidance document to Guam Land Use Commission.
 - e. Developers seem to appreciate the guidance.
12. Land Ownership/Land Use Classification:
 - a. Historically, BSP has been the source of best available information (GIS) on zoning and land use. See action item list for GIS request.
 - b. The 2010 FEIS used BSP numbers for total GovGuam land, private, federal and land classification maps.
 - c. The zoning/land use mapping is really a DLM function and SIAS team will ask DLM for the same information. See Action List.
 - d. There appears to be a difference in the estimates of GovGuam land (48% in the 2010 FEIS compared to 19% in BSP response to questionnaire) and private land (25% in 2010 FEIS compared to 54% in 2010 BSP response). There has been a shift in land ownership. Ancestral lands (GovGuam) have converted to private.
 - e. BSP has requested DoD maps. See action list.
13. Zoning:
 - a. The 2010 FEIS used a zoning classification map provided by BSP. This is not really zoning. It was more of a master planning land use classification system. But it was the best available information to use for the FEIS impact assessment.
 - b. Zone change process: There are two distinct ways to get property re-zoned:
 - i. DPW:
 1. Application to DPW. Reviewed for completeness.
 2. Application Review Committee (ARC) reviews application.
 3. GLUC publishes newspaper notice, considers ARC recommendations, deliberates, makes a determination.
 - ii. Legislature:
 1. Applicant approaches Senator and lobbies for development project zone change.
 2. No public review process.
 3. BSP is not involved, although sometimes provide testimony.

14. Action Items:

- a. GIS (requested Victor Torres provide):
 - i. street layer update for 2008 Mapbook
 - ii. official zoning
 - iii. land use “zone map” and parcels/lots. Received January 26, 2013
 - iv. ownership: federal vs. GovGuam vs. private
 - v. public facilities (fire stations, police etc.)
- b. DoD GIS:
 - i. SIAS team will request NAVFAC PAC Real Estate to provide GIS for Guam federal lands.
 - ii. DLM GIS:
 - 1. SIAS team will ask DLM for GIS data.
 - iii. Resolution of GIS datasets:
 - 1. GovGuam will need to determine which GIS data to use, if there is a discrepancy.
This effort would be assisted by Navy Real Estate GIS for federal lands.

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Guam Coastal Management Program

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Agency Name: Guam Coastal Management Program (part of Guam BSP)

Date: January 24, 2013 at GCIC 3rd Floor, 1000-1100

Attendees:

Attendee Name	Organization	Title	Email	Phone
Evangeline Lujan	Guam Coastal Management Program	Administrator	vangelujan@yahoo.com	671-475-9672
Terry Perez	Guam Coastal Management Program	Planner	terry.perez@bsp.guam.gov	671-475-9673
Raymond Caseres	Guam Coastal Management Program	Planner	ray.caseres@bsp.fuam.gov	671-475-9671
Faith Caplan	Cardno TEC, Inc.	SIAS Team	faith.caplan@cardnotec.com	808-528-1445
David Kiernan	Cardno TEC, Inc.	Project Manager - SIAS	david.kiernan@cardnotec.com	805-564-4940

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Staffing:
 - a. Are the full time contract employees (GIS, biologist, watershed coordinator and outreach coordinator) included in the staffing table under FTE?
 - i. No, they are in addition to the numbers listed.
 - ii. The positions identified remain unfilled and are awaiting funding approval.
5. Impact of Military Build-up:
 - a. The consistency determination for the military buildup described in the 2010 FEIS was conditional. As the project construction is phased in, the GCMP reevaluates the specific proposals every two years. DoD submits additional information for each project. A complete CCD package is not resubmitted, just supplemental information and final design.
 - b. They are still reviewing studies related to the CVN.
 - c. Through involvement in the Application Review Committee (ARC) GCMP reviews proposals for workforce housing. These projects spiked in the 2010 timeframe but there have been no recent private projects related to the military buildup. There is no time restriction on the approval.
 - d. GCMP hopes that projects previously approved that have not moved forward, due to uncertainty about the buildup, will resume.
 - e. Overall, GCMP is not concerned about the military build-up.
 - f. As an agency GCMP has been working to clean up GIS data sets, prioritize restoration projects, and improving areas that would not be impacted (such as certain wetlands) so that the cumulative impacts of any development project are less drastic.
 - g. GCMP advocates for better building codes.

6. Monitoring:
 - a. Although GCMP is not an enforcement agency, they coordinate with enforcing agencies and act as a “networking agency” for other agencies that do have enforcement authority. GCMP receives complaints from citizens, pass along concerns to the enforcement agencies and/or participate in site inspections.
 - b. As a member of the ARC, GCMP provides recommendations and suggests conditions on development proposals. GLUC may or may not agree and they are the ultimate decision-making body.
 - c. There are times where a project is not approved in part due to BSP, GCMP recommendation and GCMP is asked to justify their position in public.
 - d. Inspections are part of the larger mission to protect resources and are not mandated. Construction phase visits are on an ad hoc basis.
 - i. Their participation may be requested by others.
 - ii. There is no formal inspection checklist or guideline that GCMP follows.
 - iii. There are no inspections on federal land unless USDA and USEPA invite them.
7. Federal Coastal Zone Consistency Determination
 - a. Although the Federal Consistency Determination is not a permit process, nearly 100% of the Coastal Zone Consistency Determinations are “approved.”
 - i. The only exception was the Guam and CNMI Military Relocation Buildup. It was conditionally approved as a program, but individual project information was to be provided as it became available. There is no interest in going to litigation. The preference is to come to an agreement.
8. Application Review Committee:
 - a. The BSP approval rate appears to range between 25-30%. This is not necessarily the same as the GLUC approval rate.
 - i. Can you describe the most common deficiencies, in general terms?
 1. zoning
 2. signage
 3. space limitations
 4. conditional use
 5. zone change
 6. setback
 - ii. GLUC is like a Zoning Board. BSP focuses on master planning and does not focus on implementation (i.e., zoning codes)
9. Guam Seashore Reserve Plan:
 - a. Currently, the GLUC is also the Guam Seashore Protection Committee (GSPC). If there is a Seashore Clearance Permit review it is the GSPC that reviews it
 - b. The goal is to get the Guam Seashore Reserve Plan adopted this year. It has been through a few Attorney General reviews.
 - c. When adopted it will replace the existing Seashore Clearance Permit process and transfer approval authority to a new commission that is not administratively attached to DLM.

- d. It target coastlines that are deemed more vulnerable.

10. Guam North and Central Land Use Plan:

- a. It is adopted, but there is no zoning map associated with it.
- b. Developers appreciate the plans and propose projects that are consistent with the plan.
- c. It represents the community vision for their community.
- d. The goal is to have a community plan for all geographic areas, but they are using this one as a test case. Based on this experience, there may be ways to streamline approval.
- e. Are there a number of projects that are on hold pending implementation? No. It is only a guidance document.
- f. Do you expect the implementation of the plan to impact your workload? Yes. There will be an educational component and there will be effort involved in updating zoning codes.

11. Guam Mitigation Policy:

- a. Similar to north and central land use plan, the mitigation policy is adopted but implementation rules have not been developed. This takes political will.
- b. Do you expect the implementation of the plan to impact your workload? Yes. There will be an educational component, they will need to develop rules for implementation, and there will be monitoring responsibility.
- c. GEPA would not be the lead agency on this effort.

12. Action Items: none

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Guam Commission on Decolonization

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Agency Name: Guam Commission on Decolonization

Date: January 29, 2013 at Commission Office, 1000-1100

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Edward Alvarez	Commission on Decolonization	Executive Director	cheftan@hotmail.com	671.475.9545
Caroleen Toyama	NAVFAC Pacific	Naval Technical Representative - SIAS	caroleen.toyama@navy.mil	808.472.1088
David Kiernan	Cardno TEC, Inc.	Project Manager - SIAS	david.kiernan@cardnotec.com	805.564.4940
Scott Glenn	Cardno TEC, Inc.	SIAS Team	scott.glenn@cardnotec.com	808.528.1445
Gerardo Gambirazzio	Marine Corps Activity Guam	Community Plans and Liaison Officer	gerardo.gambirazzio@fe.navy.mil	671.355.2336
Manny Guarin	NAVFAC Marianas	Deputy Guam Buildup PM	Manuel.Guarin@fe.navy.mil	671.339.4355
Albert Borja	NAVFAC Marianas	Compliance Specialist	albert.borja@fe.navy.mil	671.339.2957

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Please provide an overview of the purpose of the Commission on Decolonization.
 - a. The purpose of the Commission is to educate the people of Guam about the existing legal relationship between Guam and the U.S.; to plan and implement a referendum on the legal status of Guam, and prepare a Constitution suitable to the chosen legal status. The commission is also supposed to help educate the public for this vote by informing them about the three possible political status options.
 - i. Most fundamental aspect of Guam's relationship with the U.S. is still unresolved. Sovereignty is the fundamental right of any government and we do not have the right to choose that relationship. "The U.S. has one foot in and one foot out when it comes to Guam." That is colonialism. This commission started back up because it was a priority of the new (current) administration). Guam is not at the table when discussing national issues or passing national laws. It cannot afford to comply with all the legal requirements coming from the U.S. that do not consider the effect on Guam.
 - ii. When the UN was established in 1946, the founding nations, including the U.S., committed in the Charter to give territories and colonies political sovereignty. Guam was listed by the U.S. as a territory. However, no timeframe was laid out.
 - iii. Guam is the only island in Micronesia that has not gone through a process for securing their political destiny. Other islands went through it because they were managed under the UN Security Council, while Guam was under the UN Decolonization Office. This is primarily due to Guam's strategic importance as compared to other Micronesian islands.
 - iv. Guam deserves to go through the sovereignty process.

- v. The role of the Commission is to get the U.S. to follow through with the decolonization process. It is ironic that the people making the decision about political status are the same people who may have a vested interest in keeping Guam in its current in-between status.
 - vi. The Commission on Decolonization's biggest need right now is funds to implement its work.
 - b. The Commission was started up because the issue of political status is becoming a high priority. "When something is close to dying, people start caring." The Chamorro culture is experiencing a loss of land, culture, and language. People want self-determination out of recognition of this loss in order to revitalize their culture.
 - c. The Commission has been doing education and outreach to schools and media. People are not familiar with the word "decolonization" but they understand the concept. They understand that Chamorros have been colonized for a very long time and deserve the chance to make a choice about what they want for themselves and for this island.
 - d. After raising local awareness, the Commission went to the UN to begin pursuing the decolonization process through the UN. Through this, Guam is forming a coalition with the Virgin Islands, Samoa, and Puerto Rico.
5. Please describe the current political status choices for Guam's people.
- a. There are three choices:
 - i. Independence
 - ii. Free Association
 - iii. Statehood
 - b. For all cases, the first step is to have a registry of qualified Chamorro votes and hold a referendum. Qualified voters are those who have some ancestor on Guam by 1898 and still maintain residency in Guam. The referendum would be only open to the qualified Chamorro voters. Commission cannot advocate a particular status, but its job is to educate each status. There is a chairperson on the commission for each status type. The goal is to hold the referendum in 5 years.
 - c. After one of the three choices is made, a Constitutional Convention will be held, in which all people on Guam can vote. The Commission would assist in writing the new Constitution.
 - d. This would allow Guam to establish ground rules for its relationship with the U.S, whether it become an integrated part of it, form a compact relationship with it, or relate to it as an independent political entity.
 - e. Guam came close to making the choice under the U.S. Congress process, but did not complete it. Afterward, the Guam law was changed to require the decolonization process to go through the United Nations.
6. Please provide information on the goals of your Commission and the steps that you are employing to reach those goals.
- a. See above.
7. What potential impacts does the Commission believe the buildup may have on your work?

- a. Having the military give a statement saying that political status/self-determination is just as important as military buildup would win a lot of support. The military defends freedom; it should be an advocate for freedom even when there isn't war. It is appropriate for them to make a formal statement advocating Guam's right as well. The U.S. makes formal statements defending the political destiny for other countries, such as Libya, Egypt, Tunisia, and Lebanon, but doesn't do the same for Guam and the other U.S. territories. This needs to be addressed and timelined.
 - b. When the military buildup happens, efforts like decolonization might become backburner issues because social/media will focus on buildup.
 - c. Request examples of how a military buildup has helped the surrounding economy on the mainland to local people's confidence that local economy will improve and money will not just be behind the fence. Some university researchers are saying that military buildups on the whole do not benefit local economies.
8. Please comment on the potential for "minoritization" of the Chamorro population due to increased in-migration and population increase and how this does/does not impact your Commission's work.
 - a. "Time is not on our side; time is on the U.S. side." Increasing immigration will reduce the percentage of Chamorros in terms of Guam's overall population.. US immigration policies have allowed Chamorros to become a minority in their own island. The unique interests of Chamorros as Guam's indigenous people may soon be lost as other ethnic groups become more numerous and seek to further Americanize the island. Intermarriage doesn't necessarily reduce the numbers since the native inhabitant definition is not based on percentage of Chamorro blood by just simple ancestry. The increased presence of non-Chamorros is used as an argument against self-determination since many people would not be allowed to vote. This is misleading as the vote has nothing to do with residency, but rather it is an attempt to address a historical grievance.
 - b. The decrease reduces our ability to get self-determination.
9. Open Topic
 - a. Youth are proud to be Chamorro now. People are trying to recover the language. Chamorro born and raised in U.S. come back to Guam and want to learn about culture and language.
 - b. There is concern that the military will not follow through on its commitments.
10. Conclusion & Action Items (None identified.)

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Guam Community College

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Agency: Guam Community College

Date: January 22, 2013 Pres. C/R-bldg. 2000/2nd Floor, 1000-1100

Attendees:

Attendee Name	Title/Organization	Title	Email	Telephone
Mary Okada	Guam Community College	CEO/President	mary.okada@guamcc.edu	671.735.5700
Caroleen Toyama	NAVFAC Pacific	Naval Technical Representative - SIAS	caroleen.toyama@navy.mil	808.472.1088
David Kiernan	Cardno TEC, Inc.	Project Manager - SIAS	david.kiernan@cardnotec.com	805.564.4940

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. GCC's ability to adapt to needs of economy and buildup -
 - a. With the buildup, certain GCC programs will remain steady while other programs will increase but remain cyclical. GCC can address needs by increasing and decreasing focus on certain programs, as needed.
 - b. GCC monitors needs for programs and can adapt quickly to the needs of the economy.
 - c. Industry and government representatives talk to GCC and suggest which programs/curriculum to ramp up. Can ramp up/react within a month if it involves only a class or two. But can take longer for an entire program to ramp up - 1 to 2 years.
 - d. Discussions occur with the Office of Continuing Education and the Navy to identify programs that may be necessary down the road. Done on a course by course basis. If GCC knows what is needed and when, then GCC can react.
 - e. Can adapt to very specific needs - by occupation for instance.
 - f. Want to focus on sustainable workforce capabilities.
 - g. Don't see any areas need to be ramped up for buildup, at this point.
 - h. There has not been a spike in construction training programs. There was some federal money for construction related curriculum, and this created an increase, but other than that there has been no ramp up.
5. Please describe any collaboration programs with the Department of Youth Affairs and Guam Department of Education.
 - a. A plan in the works, recently received grant to develop a program.
 - b. DYA kids will enter program (at the DYA facility). While kids are at DYA they will participate in career development programs (construction, culinary), and then, once they leave DYA, they will transition into same program at high school (same curriculum).
6. FAS/FSM students
 - a. Significant numbers of Micronesian students at GCC.
 - b. Samoan students in the Guam Trades Academy stayed at Ukudu village.

- c. FAS students pay their own way so generally GCC does not get compact impact payments.
 - d. What happens on Guam depends on what happens in region. Other colleges in region are up for accreditation. If those schools don't get accredited then Guam schools will be impacted.
 - e. The College of Micronesia has an associate's degree in public health, but not at Guam Community College.
 - f. Enrollment continues to go up.
7. Please describe the construction training programs in photovoltaic and renewable energy. Does this training include the planning, design, or permitting of renewable energy projects?
- a. National Science Foundation funded the development of curriculum in renewable energy and photovoltaics. Training includes installation training for commercial and residential buildings. Program is tied to electronics department. Course started this semester. Military is currently doing a lot of photovoltaic installations, this program will help meet the employment needs.
8. Open Topics
- a. Science labs at GCC – chemistry and marine biology.
 - b. 2012 Factbook on GCC website.
 - c. Since 2009 have four new buildings - nursing, learning resources (study center), Foundation building (adult education), student center (TRIO program, student government center). All 4 have photovoltaic systems.
9. Conclusion & Action Items (None)

SIAS Team review information on website (Factbook website for 2012-2013:
<http://ifs.guamcc.edu/adminftp/academics/services/aad/aier/factbookvolume7.pdf>).

Guam Contractors Association

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Agency Name: Guam Contractors Association

Date: January 22, 2013 at Adelup Conference Room 1000 to 1100

Attendees:

Attendee Name	Organization	Title	Email	Telephone
John M. Robertson	AmOrient Contracting representing Guam Contractors Association	President (Am Orient)	john.robertson@amorient.com	671-472-3301
Caroleen Toyama	NAVFAC Pacific	Naval Technical Representative - SIAS	caroleen.toyama@navy.mil	808-472-1088
David Kiernan	Cardno TEC, Inc.	Project Manager - SIAS	david.kiernan@cardnotec.com	805-564-4940

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. General construction activity on Guam
 - a. General activity is still slower than normal. Competition has been quite fierce. Big firms going after small (\$1M) projects and bidding cheap to keep employees busy.
 - b. DoD work has been declining. This year expected \$150M in DoD work.
 - c. The four building that are mid-construction:
 - i. 4-towers have been stalled for past 2 or 3 years. Developer had a “bad” business plan that focused on high end clientele, about \$650k just for space with owner needing to furnish another \$150k to fit out.
 - ii. Developer left project as permit was being challenged, developer won the challenge. Resumption still delayed for unknown reasons. However, one of those reasons has to be related to the Senate directive to halt the relocation of Marines from Okinawa to Guam.
 - d. GovGuam road projects are commencing using federal money. The program is being administered by the Federal Highway Administration – FHWA and managed by Guam Department of Public Works (DPW). Program Management is by Parsons Corporation.
 - i. While fixing roads, for most part the projects are not improving infrastructure below the roads, such as underground water, wastewater, power and telecommunication. Projects should improve under-road infrastructure at the same time as road improvements. This is not being done because of funding but should be.
 - ii. Navy water lines are deteriorated and need to be replaced. These are a Navy asset not only on base but within major roadway rights of way. Salinity destroys under road infrastructure. Corrosive atmosphere on Guam.
 - iii. The mileage of roadway and number of bridges repaired to date is relatively small given the time and expense involved in planning.
 - e. MARAD (Maritime Administration) is managing \$50 Mil of Capital Improvement Projects at Port Authority of Guam. Have started 3 projects and designing the 4th. Tearing down warehouse number 2, built bomb proof in the 1950’s. Don’t need warehouses now because of

containerization of most cargo. Need the room for break bulk cargo. MARAD with EA Engineering, Science & Technology Inc together with consultants now working on design to extend container yard. Master plan was for full blown buildup amounting to over \$200 Mil but has been pared way down because of delay in the military buildup and reduced number of marines to be relocated from Okinawa to Guam. A recently completed project installed new lighting in the existing container yard. It was funded by an \$800,000 grant arranged by the Port Authority

5. Permitting

- a. Enforcement is lagging. GEPA is trying but they do not have enough personnel.
- b. Permitting “takes a long time.” Example: Needed permits for improvements to gas stations. Permits should have taken 3 weeks but took 3 months. GEPA was holding up the process because they do not have enough personnel.
- c. Permitting agencies not permitting efficiently. Governor Calvo has made some big differences and insisted departments be user friendly and, more recently, it is helping.
- d. Cement has been a problem because there is only one vendor and that vendors silo only holds 9,000 metric tons. A new silo has been built by a competitor but can’t be used because it is held up in right-of-way and permitting process.

6. Issues at the Port

- a. No current problems with a bottleneck at the Port.
- b. Horizon pulled out but Matson picked up slack.

7. H2B workers

- a. Some contractors have a business model to use H2B workers primarily from the Philippines and have workforce housing camps. Other contractors rely on a workforce made up of local residents. Formerly there was some abuse of H2B’s – example: H2B’s would work on a Navy project for 40 hrs and then induced to work more on the weekends at private sector projects. This is not happening so much anymore.
- b. H2B workers are often more reliable and better trained than local workers.
- c. About the same cost for local and H2B workers. H2B’s are like indentured servants, while local workers tend to be unreliable.
- d. H2B permit fee increased from \$1,000 by \$250, to \$1,250 in order to accommodate Public Health inspections of camps. Not a big change.

8. GCA Trades Academy

- a. GCA Trades Academy, initiated in 2006 is trying to enable local workers to join workforce and eliminate the need for reliance on H2B workers. The Guam Community College has a similar program that also encompasses other industries such as hospitality.
- b. Trades academy teaching work ethic. Trades academy teaching Micronesians – at the Center for Micronesian Empowerment.
- c. Trades academy has established training in the Freely Associated States (FAS) and assisted in setting up such a facility in Saipan.

- d. Student enrollment at the GCA Trades Academy is down at this time because of delay in implementing construction for the military buildup.

9. Open topics

- a. MOU between GCA and GCC and it is working for the benefit of students in the trades.
- b. The University of Guam has initiated a School of Engineering and will break ground for that department later this year. It is now a two year program with full credit transferability to University of Hawaii at Manoa and University of Iowa.
- c. Hotel occupancy is currently high...Russian and Japanese tourists increasing.
- d. One hotel is under construction. It will have a convention center.
- e. GCA is optimistic about the future of the industry. The military buildup will happen. Plan in Pacific is done well and is smart. Center for Strategic and International Studies said the buildup needs to happen and now. GCA expects the U.S. Congress will heed this advice.
- f. GUASA, another local organization founded by members of the Guam Chamber of Commerce hired a lobbyist in Fall 2011 to promote the buildup. The lobbyist is supplying information to members of the Senate where Guam does not have a voice. The strategy appears to be working in the Senate. Congresswoman Bordallo in House of Representatives does a great job.
- g. Some contractors have just left Guam. Some took large financial risks that turned out bad because there was no buildup or more precisely because the buildup has been deferred.
- h. All contractors have been injured by postponement of the military buildup. They have purchased additional equipment in order to respond quickly to task orders and have built new offices, warehouses and worker camps. In spite of this, contractors are not wasting time complaining. Those permanently here and those that intend to stay expect to recover their investments in due time.
- i. Small businesses have been damaged, perhaps the most, because of inadequate resources to wait for better times. Construction activity is slow and the economy in general is weak.
- j. Lot of people on the bench (available construction workers). Some unemployed workers went into service sector jobs for lower pay.
- k. Not many people come to Guam from mainland looking for construction jobs...lot of FAS come looking for jobs have no skills.
- l. GCA is happy to assist DoD and NAVFAC.
- m. GCA has monthly meetings. Board members are elected, no 2 board members can be from one company.
- n. GCA has developed a program where smaller companies can take advantage of discounts on health insurance and 401k plans.
- o. "Bring it on." (In reference to the buildup)
- p. GCA testified against the PLA in 2010. Came out the way GCA hoped. Ruling was for no unions on Guam. Reasons for ruling: Guam had not been unionized in the past and because federal government would be required to pay much more for construction because of higher pay (union) rates. The private sector and local economy, especially hotels and restaurants would not be able to support those rates and tourism would be adversely impacted.

10. Conclusion & Action Items

- a. The GCA and the engineering-construction industry are fully supportive of the realignment of forces in the Western Pacific.
- b. The business community in general, supports a greater military presence on Guam as a means of enhancing the economy. Negative impacts are seen as inconsequential.
- c. The Guam population as a whole is also supportive of the military, including the military buildup. The statistics show about 75% fully supportive, 20% are neutral and 5% are against.
- d. The Guam Legislature majority in 2011 appeared to be opposed to the military buildup. However, when they came to realize their constituents favored the buildup, they reversed course in order to gain votes. The five that were most outspoken against received fewer votes in 2012 than in 2008. One was not reelected.
- e. The current Governor is fully supportive of the realignment of military forces in the Western Pacific including the buildup on Guam.

Guam Department of Agriculture

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Agency Name: Guam Department of Agriculture

Date: January 28, 2013 at Adelup Conference Room, 1400-1500

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Celestino Aguon	DOA	Division of Aquatic & Wildlife Resources Acting Director	tino-aguon@hotmail.com	671.735.3955
John Borja	DOA	Agricultural Development Services	borjajohn@hotmail.com	671.734.3944
Manny Cruz	DOA	Deputy Director		671.735.3962
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Russell Campbell	DOA	Biosecurity Division	guament@teleguam.net	671.477.7822
Jeff Quitugua	DOA	Division of Aquatic & Wildlife Resources	jeff.quitugua@yahoo.com	671.735.3955
Scott Glenn	Cardno TEC, Inc.	SIAS member	scott.glenn@cardnotec.com	808.528.1445
Gerardo Gambirazzio	Marine Corps Activity Guam	Community Plans and Liaison Officer	gerardo.gambirazzio@fe.navy.mil	671.355.2336

Meeting Notes

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Please confirm that these are the 5 divisions of your agency, and indicate the type of permitting activity that each division engages in that may be associated with the buildup:
 - a. Division of Aquatic & Wildlife Resources (DAWR)
 - i. Reviews clearing and grading permits. Multiple military actions could require many permits, creating a backlog and delay in processing.
 - ii. Reviews imports of species besides those monitored by the Animal Control Division. Reptiles are not allowed but soldiers may try to bring them.
 - iii. Assists the Coastal Management Program with Federal Consistency reviews.
 - iv. Permits involving endangered or listed species; work with USFWS and NOAA.
 - v. Does Federal consistency review with Coastal Management Office or U.S. DOA.
 - vi. Reviews anything under Title 5 Guam Code Annotated Chapter 63 Articles 1-3 – All natural resources including marine, terrestrial, and forestry.
 - vii. Reviews local and federal draft EAs and EISs. DOA's goal with respect to the military buildup is to consistently comment and remind the military of the need to develop a biosecurity plan for the entire island and related to the buildup.
 - viii. Runs a hunting program, sell licenses, and promulgates regulations. There is an issue with the military no longer allowing hunting on its lands. Ungulates can breed there and move out onto non-DoD lands, impacting the local environment. The DoD used to have a hunting program and DOA would like to restore it.
 - b. Forestry and Soil Resources
 - i. Is responsible for wildfire fire suppression

- ii. Issues tree-cutting permits. If the military needs to clear trees on local government property, it must get a permit; e.g., DoD runs power distribution lines over GovGuam property.
 - iii. Does replanting/restoring of native habitat.
- c. Agricultural Development Services (ADS)
 - i. Provides seed and crop supply for farmers and small gardeners.
 - ii. Increase activity of dependents on base want to start doing small gardening; people want to eat natural foods; so creating demand for more people wanting to be farmers; increases more grading and clearing of property.
 - iii. Increased development in expectation of the buildup is impacting large agricultural tracts, which are being considered for workforce housing. In the south, large agricultural lots are being lost to wind power.
 - iv. There is also conflict over water and irrigation for farms and housing.
- d. Plant Inspection Facility
 - i. Enforces federal USDA regulations for SITC (Smuggling Interdiction and Trade Compliance).
 - ii. Monitors the importation of fruits, vegetables, and other products into Guam to control for invasive species.
 - iii. Micronesian Biosecurity Plan (MBP) – the military buildup will introduce increased risk to the island. GovGuam cannot afford to monitor all of the imports as it is. Okinawa or other parts of Asia are high risks areas for Guam. Large quantities of imported materials from there increase the risk for Guam. In turn, because Guam is a transportation hub for the region, it creates indirect/ cumulative impact on the region; e.g., coconut rhinoceros beetle coming to Guam increases risk to Hawaii.
 - iv. Guam is already losing major keystone plant species in the northern forest because of a mix of invasive species.
 - v. The inspection infrastructure should be in place before the buildup starts.
 - vi. People moving to Guam want to bring plants. Those must all be inspected upon arrival.
- e. Animal Control
 - i. A big issue is military personnel abandoning their pets when they rotate off island. Instead of spending the relocation allowance for the pet, many individuals keep it. Suggest the military tag pets so they can be tracked and held responsible.
 - ii. Military and dependents feed feral cats and dogs that then leave military lands and impact restoration sites.
 - iii. If military can't take pets, then what to do with them? Military take the pet relocation money and keep it
 - iv. Wild dogs can be a danger to military/dependents hiking.
- f. Please provide an update on your plans to establish a separate division to focus on environmental review
 - i. Aquatic & Wildlife Resources leads DOA participation in the Guam EPA and NEPA processes.

5. Please provide an estimate of the number of the above permits your agency processes yearly for the following years:
 - a. 2009
 - b. 2010
 - c. 2011
 - d. 2012
 - e. Numbers were provided by handout.
6. Describe the land management functions your agency has specific to a land classification.
 - a. The Biosecurity Division may quarantine areas.
 - b. DAWR reviews environmental documents and permits related to land use.
 - c. ADS oversees 48 agricultural leases as well as provides farmer certifications to over 300 Guam farmers using both private and Chamorro Land Trust Commission Property.
7. Confirm your agency operate 5 marine reserves.
 - a. Yes, DOA monitors/manages five marine preservers, including Sasa, Piti-Bombholes, Achang, Tumon, and Pati MPAs.
8. Please provide the # of full time staffing that you employ that you are involved in permitting activities.
 - a. Numbers were provided by handout.
9. Estimate the % of those staffs' time spent on:
 - a. permit review – numbers were provided by handout.
 - b. monitoring/enforcement – numbers were provided by handout.
10. Have military buildup activities on Guam impacted your division's staffing capacity since 2008? If so, in what ways?
 - a. On the initial Cetti Bay reforestation project, DOA hired 10 people to implement the projects. In Feb 2012 a revised cooperative agreement was made budgeting 3 personnel. Currently, there is one person supporting the project.
 - b. Environmental review requires staff time to do properly.
 - c. Access to DoD bases has been difficult, if not impossible, to do recovery work.
 - d. The higher number of land and grading permits, as well as farming activity, toward businesses and land development in anticipation for the increase in population from the military buildup, has increased demand on administrative and field inspections of property and farm certification.
11. Open Topic
 - a. The Biosecurity Plan still needs to be implemented. It is crucial to the environmental health of Guam.
 - b. DOA would like to continue to work with the military on future reforestation/landscaping projects.

- c. DOA requests that the military restore the hunting program to at the least the military, and possible for the public.
- d. Training ranges will close access to restoration areas and hunting areas, giving invasive species and ungulates more protection.
- e. DOA would like to work with the military more on wildfire suppression, specifically to provide helicopter support from Navy to help transport material equipment supplies and do water drops.
- f. The military does not seem to support recovery of Guam's native species. The INRMP for NBG and AAFB discuss species recovery, but they do not actively pursue it.
 - i. One benefit from AAFB in the north is that there has been no development of the native forest there. AAFB has been very cooperative in comparison with other branches of the military.
- g. There may be a potential increase in boating and hiking recreation from military and dependents that could impact near-shore resources. Hiking can occur in conservation areas that could impact endangered/indigenous species. Military personnel tend to enjoy off-roading. Also, wild dogs could affect hikers.
- h. Erosion is a major concern. Standard U.S. mainland BMPs are not as effective in Guam. Request for the military to use more Guam appropriate BMPs in its mitigation measures.
- i. Military is supposed to be responsible for inspections
- j. Want to work with military on education and outreach so it better understands what legal obligations to GovGuam it has, such as getting tree-cutting permits.
- k. DOA wants to work with the military to realize its 2010 FEIS ROD commitment to use 51% native vegetation. It recognizes the challenge that currently nurseries may not be able to meet demand.

12. Conclusion & Action Items – None

Handout provided by DOA is attached to the meeting notes.

Guam Department of Chamorro Affairs

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Agency Name: Guam Department of Chamorro Affairs

Date: January 22, 2013 at Adelup Conference Room, 1400-1500

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Joseph Artero-Cameron	Department of Chamorro Affairs	President	joseph.cameron@dca.guam.gov	671-475-4278
Mark Calvo	Guam Military Buildup Office, Governor's Office	Director	mark.calvo@guam.gov	671-472-8931
Caroleen Toyama	NAVFAC Pacific	Naval Technical Representative - SIAS	caroleen.toyama@navy.mil	808-472-1088
David Kiernan	Cardno TEC, Inc.	Project Manager - SIAS	david.kiernan@cardnotec.com	805-564-4940
Scott Glenn	Cardno TEC, Inc.	SIAS Team	scott.glenn@cardnotec.com	808-528-1445

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Do you have data reflecting the % of young people with the ability to speak Chamorro vs. older population – we would like to verify the following statement: “Most young people on Guam are assimilating in the sense that they speak ‘only English’”
 - a. Yes, youth on Guam primarily speak English. A recent study was conducted of language use. Mr. Artero-Cameron will send the data following the interview. Less than 2% of native speakers speak to children in Chamorro. Fluency and lucidity is diminished. Note, “Chamorro” is both a noun and an adjective to describe the language and culture.
 - b. Loss of language is the loss of culture. Out migration (San Diego, Maryland, Oregon, Seattle, Las Vegas, North Carolina, to name a few states) of Chamorro is diluting the culture. Chamorro are looking for greener pastures; cost of living on Guam has sky-rocketed. Those who move away look to local Guamanians as a vanguard. Task at hand is to overcome challenges to maintain language and culture. There is some concern that a pidgin is forming, but little evidence of it so far.
 - c. There is an insurgence with youth in the Chamorro language. There are efforts to increase the use and learning of Chamorro.
 - i. The Guam Legislature requires kindergartners up to middle school children to take Chamorro language classes. Recent law passed to mandate the teaching of the Chamorro Language in all public high schools. The DCA is working with the University of Guam to create a Chamorro language course.
 - ii. Schools and parents are exploring immersion programs. Mt. Carmel School has a Chamorro immersion program for kindergarten through the 8th grade to emphasize language. The Hurao Academy runs a Chamorro language after-school immersion program and produces educational materials about the language and culture for others to use.

- iii. Creation of a global online network of cultural practitioners. Websites such as “Guampedia” provide information on Chamorro culture. There are also websites and forums for only using Chamorro. Interests in creating a “google” tool to translate Chamorro words, phrases and sentences is very much real.
- 5. What has been the discussion around a temporary repository for artifacts discovered during construction?
 - a. There is a programmatic agreement between GovGuam and the Navy. The Navy is required to fund the construction of a cultural repository in a culturally responsible way. This includes paying for a SHPO officer to oversee the process. Currently Guam has repository space for current artifacts, but new space is needed for artifacts that would come from buildup archeological findings. The repository is to be built prior to the start of construction so that as artifacts are uncovered they can be brought to the repository.
- 6. Please share the cultural similarities that exist between the Chamorro and FAS/FSM population you mentioned in the questionnaire and discuss the potential to build community with those similarities.
 - a. There has been an increase in FAS/FSM population on Guam. FAS/FSM in-migration is not really expected because the FAS/FSM may only use Guam as a pit stop, because they can go anywhere in the U.S. Nonetheless, the ever growing population of FAS/FSM migrants to Guam has greatly impacted the social programs of food stamps, welfare, low cost housing, medical care, etc.
 - b. The difficulty is a perception of the FAS/FSM immigrants as causing crime and a generally negative impact on the community. FAS/FSM don’t commit crime to other groups, generally, their crimes are amongst their community. Mr. Artero-Cameron does not see a true negative impact from FAS/FSM in-migration on Chamorro culture. The FAS/FSM migrants carry on their day-to-day language of their own country. English is primarily learned in the Guam Public School system.
 - c. FAS/FSM residents, in general continue to participate in their country’s elections via absentee ballots, so they do not necessarily contribute to Chamorro minoritization in a political sense.
 - d. Compact payments are not sufficient to cover the costs to GovGuam, the U.S. Department of Interior does NOT equitably reimburse Guam for its provision of services to FAS/FSM indigent populations requiring education, shelter, food and medical attention. There is a bigger population and impact in Hawaii but Guam gets less money because Hawaii has bigger resident population.
- 7. Can you provide information on the programs that you have been involved with in cooperation with DoD that:
 - a. Provide an orientation to Guam and Chamorro culture for incoming Navy and Air Force and their families.
 - i. The Navy and Air Force have great programs to provide information to service members on Chamorro culture. They have improved programs to include television and immersion (rather than older methods such as simple speeches or presentations).

- ii. The military now has a zero tolerance policy for negative behaviours toward the local population. Having troops doing 6-month rotational tours should not be a problem. Uncle Sam will watch over and make sure rotational troops will not act inappropriately. Rotations will not be an excuse for troops to cause trouble.

8. Open Topic

- a. Guam is a very lovely island. There is a great concern about natural resource issues and the impacts from development, such as runoff, watershed projects, fisheries, and ocean matters. Chamorro culture is tied to natural resources and maintaining those resources is also maintaining Chamorro culture.

9. Conclusion & Action Items

- a. Mr. Artero-Cameron will send the interview team a copy of the Chamorro language study.*

* An internet search yielded a survey entitled: “Pa’a Taotao Tano’ Chamorro Language Assessment Survey (CLAS) Project Report,” published in September 2010. The Report has been sent with the meeting notes to confirm this is the study that Mr. Artero-Cameron was referring to.

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Guam Department of Corrections

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Agency Name: Guam Department of Corrections

Date: January 25, 2013 at Department of Corrections Compound; 0800-0930

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Francisco B. Crisostomo	DOC	Facility Superintendent/Warden	francisco.crisostomo@doc.guam.gov	671-734-1089
Linda Ortiz	DOC	CCSD	linda.ortiz@doc.guam.gov	671-734-2459
Joe Mesa	DOC	Fiscal	joseph.mesa@doc.guam.gov	671-735-2142
Mark Perez	DOC	MIS	mark.perez@doc.guam.gov	671-734-2457
Rick Rust	Matrix Design, representing the Governor's Office	Senior Associate	rick_rust@matrixdesigngroup.com	671-777-1674
Faith Caplan	Cardno TEC, Inc.	SIAS Team	faith.caplan@cardnotec.com	808-528-1445
Caroleen Toyama	NAVFAC Pacific	Navy Technical Representative - SIAS	caroleen.toyama@navy.mil	808-472-1088

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Military Build-up:
 - a. There is concern that Guam is not ready to handle the increase in population because of impacts to traffic, water, and wastewater systems which are already taxed.
 - b. C. Toyama described the new military population as smaller than previously described in 2010. All resource areas are being addressed in the SEIS.
 - c. The impact to DOC is based on population numbers. It is less important whether they are military or H-2B workers or immigrants. Generally, the greater the increase of population, the more prisoners will need to be housed. The military population is not viewed as being prone to criminal activity.
 - d. Criminal activity on Base is handled by Naval or Air Force security.
 - e. Guam has MOUs (Memorandum of Agreement) with U.S. Federal Marshals and U.S. Immigration and Customs Enforcement (ICE) to pay a per diem, \$75 and \$65, respectively, for holding prisoners or detainees. The rates need to be renegotiated and DOC is in the process of proposing the change. Crimes by military and/or their dependents outside DoD properties are handled by GovGuam.
5. New prison:
 - a. The 1,000-bed prison project that was planned 3-5 years ago is still required to meet existing shortfall of bed-space. This was a project that was proposed as mitigation in the FEIS. It may not be a mitigation measure in the SEIS. It is important we document existing conditions to assess potential impacts.
6. Federated States of Micronesia (FSM):

- a. A large number (about 20% based on attachment) of inmates are FSM immigrants under Compact of Free Association.
 - b. There is an effort to get repeat offenders deported.
 - c. This criminal population is a drain on resources.
7. Military Prisoners:
- a. The military security responds to criminal activity that occurs on bases.
 - b. Historically, there was a military holding cell at the local precinct, but it is no longer present.
 - c. AAFB and Navy Base have holding cells.
 - d. There is a MOU with the Military to house temporary detainees at a set per diem rate. The rate is inadequate and needs to be renegotiated. Additionally, DOC needs to collect for all costs incurred: medical, transport, food etc.
 - e. In 2010, DOC asked for information on per diem rates in Okinawa. They did not receive a reply. See action list.
 - f. The long-term military incarceration rate is extremely low totaling of about 5 persons in recent history.
 - g. Military personnel do not receive veterans benefits while incarcerated.
8. H-2B:
- a. These workers are deported for criminal activity.
 - b. Suggest that SIAS team look at Camp Rojas report. C. Toyama recalls looking for the report but it was not currently available. The major concern is that H2B workers would stay on Guam, blending into the Guam community. This was the case in the construction of Camp Rojas.
 - c. L. Ortiz mentioned an exhibition at UoG on the Camp Rojas population and where they ended up in the general population. The statistics would be useful. See action list.
9. Illegal immigrants:
- a. In 1991 illegal immigrants arrived by boat and were housed in DOC facilities. This was a major hardship for DOC resources with temporary lock-up cells that were provided.
 - b. H2B workers and other immigrants find a way to stay illegally in the community (they tend to blend in).
 - c. The illegal population stays below the “radar” and engages in illegal activities.
 - d. There is a shortage of inspections at the workforce housing. This responsibility falls under Department of Labor not DOC.
10. Action Items:
- a. C. Toyama will ask NCIS for information on crime rates in Okinawa.
 - b. C. Ortiz will try to find information of the Camp Rojas UoG exhibit.
 - c. DOC to verify the per diem rates for various types of detainees covered under the multiple MOUs. What services are covered? Transport, medical etc.
 - d. The per diem rate for INS has been adjusted from \$75 to \$85 a day. The rate for the USM is under renegotiation.
 - e. R. Rust will provide report prepared by Matrix that was completed after the 2010 FEIS.

11. Attachments:

- a. M. Perez provided information on DOC “Service Population Breakdown as of 01/23/13.”
This is attached.

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Guam Department of Education

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Agency Name: Guam Department of Education

Date: January 25, 2013 at Adelup Conference Room, 1530-1700

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Jon Fernandez	DOE	Superintendent	superintendent@gdoe.net	671-475-0459
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Scott Glenn	Cardno TEC, Inc.	SIAS Team	scott_glenn@cardnotec.com	808-528-1445
Celeste Boccheri- Warner	Matrix Design, representing the Governor's Office	Vice President	celeste_werner@matrixdesigngroup.com	671-777-1676
Mike Hrapla	Matrix Design, representing the Governor's Office	Vice President	mike_hrapla@matrixdesigngroup.com	671-777-1675
Rick Rust	Matrix Design, representing the Governor's Office	Senior Associate	rick_rust@matrixdesigngroup.com	671-777-1674

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. If available, would you please provide a copy of the Superintendent's Annual State of Public Education Report (ASPER).
 - a. The ASPER is a large document and is on the website. The last six ASPERs can be downloaded from <https://sites.google.com/a/gdoe.net/rpe/home/annual-state-of-public-education-report-asper>.
5. What is the current status of the Collective Bargaining Agreement (CBA)?
 - a. The CBA is negotiated between the Guam Education Board and the Guam Federation of Teachers and expired in November 2011. At this time the GDOE is seeking guidance from the Department of Administration (DOA) to determine if a recent ruling by DOA on the Guam Port Authority CBA is applicable to GDOE as less than 50% of the bargaining unit are dues paying members.
6. What is the target student-to-teacher ratio being negotiated in the CBA?
 - a. Since the CBA expired, GDOE has been operating in the spirit of the contract, which has the following teacher to student ratios:
 - i. Secondary schools, general classroom – 1:28
 - ii. Intermediate grades 4-5 – 1:25
 - iii. Primary grades 1-3 – 1:24
 - iv. Kindergarten – 1:18
 - v. For ESL and special education – 1:12

- b. Support staff is determined separately, not under the CBA. Technological improvements may increase the need for more support staff.
7. The questionnaire indicated that the GDOE has data on the number of students whose parents work on federal property. Can that data be provided to us?
- a. GDOE cannot specifically track military parents. They are doing update of students with parents who work on federal property that will be completed at the end of Jan 2013.
8. Is there available data on student ethnicity at the primary and secondary school levels?
- a. GDOE provided a table of numbers from Jan 2013.
 - b. FSM is major factor in impacting ability to meet school population needs. Chuukese among FSM has increased year over year. Challenges with the Chuukese population include: lack of English language ability, lack of formal education before entering the Guam school system, different cultural/behavior expectations, and moving back and forth between Guam and FSM.
9. How have the trends identified in the questionnaire (e.g., increase in FAS students or H2B population) affected the social fabric at schools and/or quantitative education metrics?
- a. The FSM population primary impacts northern schools, where the Chuuk student population ranges between 40 and 50%. GDOE is adjusting its service provisions at individual schools to meet that school populations needs. GDOE has started an Early Newcomers Center to acclimate FSM students.
 - b. FAS families have a difficult time adjusting to Guam educational requirements and male/female gender roles.
 - c. The expansion of schools will require redrawing attendance districts, which may cause feelings of dislocation among the local populations. It will also create challenges for bussing students.
 - d. GDOE is developing a better data management system to analyze trends in the school system; e.g., discipline data to decrease bullying or monitor students moving across the island to ensure continuity in their educational experience.
10. What are the primary factors in calculating employee attendance rate? Can teachers be absent from the classroom but still be present fulfilling other official duties?
- a. Teachers not in the classroom but at work doing other administrative duties counts as being absent. This is something being reconsidered for the next CBA.
11. Please describe any areas of collaboration that GDOE undertakes with Guam Community College and the Department of Youth Affairs.
- a. DYA – DOE staffs their school. There is strong collaboration between the DOE Student Support Services Division and DYA. Both do community outreach to help students transition between DYA and DOE. GDOE has an alternative school as a “time out” to avoid having to send students to DYA. DYA’s focus is to students leaving its programs more opportunities; DOE’s focus is on not sending them to DYA unless necessary.
 - b. GDOE, UoG, and GCC have a partnership called “Triboard.”
 - i. GCC – has career and technical education programs that are open to any student.

- ii. UOG – promotes STEM career paths. GDOE has its own STEM initiative that will feed into UoG’s future engineering program. Also collaborate on a dual-enrollment program to simultaneously earn high school and college credit.
 - c. GDOE wants to do a Parent Information Resource Center to assist parents in planning for their children’s education and provide community support to the parents.
12. We have heard from other sources that FSM/FAS students have higher truancy rates. Is this true? Is there a cultural component to FSM/FAS truancy rates, or are high FSM/FAS truancy rates more of a socioeconomic issue?
- a. GDOE is currently assessing its data tracking to determine if it should track truancy by ethnicity.
 - b. As hearsay, the impression seems to be that the Chuuk population has higher truancy rates.
13. Can you provide an update on Chamorro immersion programming in schools and impact on language use?
- a. No immersion school in the GDOE system has been established to date. There is the Hurao Academy (private school).
 - b. GDOE looks for opportunities to integrate Chamorro into regular classes and meet formal program requirements set by law.
 - c. The youth are interested in Chamorro on their own.
14. Quality of facilities
- a. Do existing facilities still have forced shut downs or delayed openings because of health and safety concerns?
 - i. Closures stem from repairs needed for critical facilities, such roof repairs from cracks in the roof, fire alarms, electrical upgrades, restrooms/doors/windows repair, and cafeteria equipment.
 - ii. Last time it happened was about a year ago at Untulan. There was an issue with changing vendors not completing in time for the school year.
 - iii. Other agencies, such as the GFD, have become more stringent with compliance enforcement, which has caused GDOE to do more renovation.
 - b. How long are Adequate Education Act Trust Account funds expected to be available?
 - i. The funds are a one-time grant. Once they are fully encumbered the account is finished. GDOE received \$60 million and must provide U.S. DOE with monthly progress updates.
 - c. Please describe the leasing of facilities. Are these long-term leases? How does leasing affect GDOE investing in education resources?
 - i. GDOE leases schools in a lease/lease-back arrangement. The landlord is responsible for maintenance and security.
 - d. What is the projected timeline for building the needed facilities (2 elementary schools, 1 middle school, and 1 high school)?
 - i. GDOE does not have a timeline yet. First, it intends to do a needs assessment.

15. Open Topic

- a. Depending on the military's alternatives, individual schools could be greatly affected based on where construction goes and workforce housing and dependents chose to live. GDOE would like to be able to incorporate these factors into its needs assessment.

16. Conclusion & Action Items - None

Guam Economic Development Authority

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Agency Name: Guam Economic Development Authority (GEDA)

Date: January 28, 2013 at ITC Building 5th floor Conference Room; 1000-1100

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Michael J. Cruz	GEDA	Project Director	mcruz@guamgeda.net	671-647-4332
Diego Mendiola	GEDA	Program Coordinator III	dmendiola@investguam.net	671-647-4332
Carl Quinata	GEDA	Industry Development Specialist	cquinata@investguam.com	671-647-4332
Arleen Evangelista	GEDA	Public Finance Administrative Assistant		671-647-4332
Caroleen Toyama	NAVFAC Pacific	Navy Technical Representative - SIAS	caroleen.toyama@navy.mil	808-472-1088
David Kiernan	Cardno TEC, Inc.	Project Manager - SIAS	david.kiernan@cardnotec.com	805-564-4940

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. What have been recent trends in investment on Guam? How do these trends relate to the buildup?
 - a. Recently, November 2012, GEDA presented opportunities to a Taiwan group as part of Select USA.
 - b. Took back 12 potential projects. Actively looking at these development projects.
 - c. Looking to get investment from Vietnam and Japan, Philippines, Korea. Investment focus is on Asia because Guam is being marketed as “America in Asia,” meaning Guam offers benefits of U.S. investment closer to Asia.
 - d. Investment has been picking up in recent years but very slowly.
 - e. Taiwanese investment has been picking up – Taiwanese visa waiver has helped this.
5. Real estate activity has picked up, some building some stuff in approval process or in process of land purchase. Will the buildup will help investment on Guam
 - a. Yes and no. The buildup has been used as a platform to attract investment. The military is a pillar of the economy. But, GEDA has also focused on Guam itself (improvement outside of buildup).
6. Please describe progress/trends for the following GEDA Programs:
 - a. Investment Incentives
 - i. Qualifying certificate, EB5, Guam Trusts.
 - ii. Under the Qualifying Certificate Program GEDA monitors every transaction for which a tax credit is being claimed.
 - b. GEDA Loan Program
 - i. SSBCI, Micro loans, Agriculture development fund,
 - c. GEDA Public Finance Program
 - d. GEDA Industrial Park Program
 - e. Grant Program

7. Has the relationship between GEDA and the Chamorro Land Trust Commission (GALC) changed since the CALC has merged into the department of Land Management?
 - a. GEDA and GALC have a client/agent relationship to generate revenue for GALC. GALC lands consist of only Spanish crown lands with no original owner).
 - b. GEDA is trying to establish this kind of relationship with the CLTC; this potential relationship is in the approval process – respective boards and the governor need to approve (would only be commercial land).
 - c. Since 2007 GALC lands have generated \$2.4M about \$600k/yr, in lease revenue.
 - d. Do compliance review for raceway – lease with CLTC (which is not in GEDA purview) but because the raceway has a qualifying certificate for tax credits, GEDA reviews raceways transactions.
8. Major new tenant – Matson leased 30 acres have developed 15 acres.
9. Describe major recent developments for GEDA in terms of real property management.
 - a. Matson was a pretty big deal. They now lease more GALC land than any other single tenant. Matson needed a place for freight over-flow that they anticipated would come as a result of boom activity from buildup.
10. Open Topic
 - a. Economic model for Guam – talk of purchasing a Guam model. Prior administrator talked of it purchasing an economic model specific to Guam but unsure of current status.
 - i. GEDA would want to use the model to assess major projects. Use for predictive measures understanding potential policy changes.
 - b. GEDA is concerned about how Section 30 funds will be allocated (will rotational troop tax \$'s go to Guam)? Rotational nature affects Guam finances. DOI works with IRS to get funds.
 - c. GEDA would like Japanese build-up money spent as soon as possible. GEDA expects this money might only be available for 5 years.
11. Conclusion & Action Items (None)

Guam Environmental Protection Agency

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Agency Name: Guam Environmental Protection Agency

Date: January 29, 2013 at Guam EPA, 0800-0900

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Eric Palacios	Guam EPA	Administrator	eric.palacios@epa.guam.gov	671-475-1658
Caroleen Toyama	NAVFAC Pacific	Naval Technical Representative - SIAS	caroleen.toyama@navy.mil	808-472-1088
Scott Glenn	Cardno TEC, Inc.	SIAS Teamr	scott.glenn@cardnotec.com	808-528-1445
Manny Guarin	NAVFAC Marianas	Deputy Guam Buildup PM	Manuel.Guarin@fe.navy.mil	671-339-4355
Albert Borja	NAVFAC Marianas	Compliance Specialist	albert.borja@fe.navy.mil	671-339-2957

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Permit processing:
 - a. Please describe how you were able to streamline (make more efficient) your permitting process, beginning in early 2012.
 - i. Refocused efforts to prioritize permits that dealt with economic development, focusing on applications that sought to boost the economy and improve the financial standing of GovGuam.
 - ii. New development permits and federal highway projects were prioritized.
 - iii. Changed the culture of GEPA to focus on GEPA objectives and incentivize doing good work and quickly moving permit applications through the process. Made sure permit conditions had a tighter nexus with the proposed action.
 - iv. Revised internal SOPs and made them more efficient.
 - v. Before these changes, the quickest turnaround for a permit was 6 month. Now the average permit, such as one for land use, takes 6-8 weeks. The standing record is 8 days.
 - b. The Administrator has discretionary authority to waive certain projects – e.g., sinkhole waiver, but refrains from using it to limit the potential for abuse.
 - c. Works closely with the Department of Public Works (DPW) to make referrals to and from the One-Stop Service more efficient.
 - d. Improved permit tracking to make sure permit applications don't fall through the cracks and more internal collaboration to make sure no one forgets about a permit.
 - e. Upgrading equipment and using more electronic tools like spreadsheet. Collaborated with Guam Community College through an MOU to train GEPA staff on for Microsoft tools and assisted GCC with addressing non-point source pollution.
 - f. Are MILCON projects located entirely within the DoD fence-line subject to GEPA review?
 - i. GEPA reviews all MILCON projects. Those projects can have impacts on groundwater, natural resources, or anything that the local community could equivalently impact.

- ii. GEPA reviews during the design-submittal procedures – water, sewer, and wellhead protection, and potentially other aspects.
 - iii. Reviews operational permit.
 - iv. GEPA’s main focus during reviews is on erosion and run off issues.
 - v. GEPA also reviews USACE Water Quality Certification, Section 401, and Section approvals.
- 5. Staffing:
 - a. Are the 15 FTE approved (unfilled positions) due to lack of qualified applicants?
 - i. The salary package is not competitive.
 - ii. Engineers aren’t graduating and going into this field.
 - iii. GEPA’s funding process is that GovGuam advances the cost and is reimbursed by federal funds. That is 97% of GEPA’s budget. There is sometimes a 6-month lag time. GovGuam cannot carry the cost of additional positions for that long.
 - 1. Recently, federal reimbursement has been more prompt – within 30 days sometimes – and GEPA has hired 4 more people, some of them from other agencies.
 - iv. U.S. EPA understands that the local pay structure is based on legal requirements. GEPA is working on reclassifying the work its employees do to be more specific so that they can qualify for higher pay.
 - v. If work increases for one agency, then sister agencies are will loan staff. GEPA has one person detailed down at DPW to help applicants there who will interface with GEPA.
 - b. Do you anticipate the approved position funding levels would remain the same in the near term?
 - i. GEPA is coming to the end of a 5-year funding cycle. The next 5-year cycle will be about the same.
 - ii. GEPA anticipates that the U.S. Congress will eventually cut radon and recreational beach monitoring programs funding.
 - c. Is there any staffing support from USEPA?
 - i. USEPA used to provide staff up until about 5 years ago.
 - d. Under what conditions would USEPA provide staffing support?
 - i. This is a national trend, so it is unlikely anyone would be sent to staff GEPA.
 - e. What happens if the USEPA funding (currently at 97%) is reduced to the point where you cannot meet the mission?
 - i. GEPA is developing revenue sources from program fees and fines and better permit identification at the One-Stop Center.
 - ii. GEPA is a full line agency, but because it is primarily federally funded, it has more autonomy than other line agencies. It is reviewing its fees and will consider going to its board to raise them.
- 6. Fees:
 - a. Are there fees associated with monitoring violations and stop work orders?

- i. Yes, application processing, certification for BPA pesticides and water treatment and labs (e.g., \$50 for labs), sampling fees, and Notice of Violation fines.
 - ii. GEPA keeps fees and penalties assessed for violations. Also, GEPA is looking to increase the fees so they can recoup the actual costs. Currently fees are not enough to cover operating costs.
 - b. Is there any revenue generating activity?
 - i. Yes, GEPA is having staff certified as trainers, such as for HAZWOPPER. It can then provide it to other agencies at a lower rate than the private sector. GEPA's purpose is not to take away private business, but trying to help fellow agencies.
7. Open Topic
- a. Guam may experience a shortage of aggregate for construction. There is no basalt on island; cement might be an issue too. Material may have to be imported, which is a very difficult permit to get. Or, a new quarry would have to be created, with a quarry permit needed from GEPA.
8. Conclusion & Action Items (None)

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**Guam Department of Integrated Services for Individuals with
Disabilities**

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Agency Name: Guam Department of Integrated Services for Individuals with Disabilities

Date: January 24, 2013 at DISID Office, 1000-1200

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Ben Servino	DISID	Director	benito.servino@disid.guam.gov	671.475.4646
Helena Kubo	DISID	Human Services Administrator	helena.kubo@disid.guam.gov	671.475.4624
Francisco Reyes	DMHSA/DISID	Aging and Disability Resource Center (ADRC) Program Administrator	francisco.reyes@disid.guam.gov	671.475.4646
Zeni Natividad	DISID	DEEC Administrator	zenaida.natividad@disid.guam.gov	671.475.4610
Caroleen Toyama	NAVFAC Pacific	Naval Technical Representative - SIAS	caroleen.toyama@navy.mil	808.472.1088
Scott Glenn	Cardno TEC, Inc.	SIAS Team	scott.glenn@cardnotec.com	808.528.1445
Brian San Nicolas	Governor's Office	Special Assistant to the Governor, Health Care	brian.sannicolas@guam.gov	671.475.3221
Randy Sablan	JGPO Forward ASN (EI&E)	Assistant Environmental Director	randel.sablan@fe.navy.mil	671.339.5440

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. For the Guam Get Care System, please describe:
 - a. Number of monthly hits:
 - i. The website receives about 38,000 hits/month, including from the mainland. The hits may include DOD/military folks being rotated to Guam who might have family needs. Information available on the website is used to help make decisions for care.
 - b. The Aging and Disability Resource Center (ADRC) initiative is part of a nationwide effort to restructure services and supports for older adults and persons with disabilities, and it complements other long term care system change activities designed to enhance access to community living. The goal of the ADRC program is to empower individuals to make informed choices and to streamline access to long-term support.
 - c. Mr. Reyes also shared the Guam ADRC vision statement: The Government of Guam will mirror our island's compassion and inclusiveness. Any door that is "knocked on" will be met with the Hafa Adai spirit. Once "through the door," the information and access will be uniform, relying on a centralized database that can be used by clients, families, the community, as well as professionals, to learn, locate and access services and funding.
 - d. In 2005, Guam received federal funding from the Administration on Aging (AoA) [renamed Administration for Community Living (ACL)] in partnership with the Centers for Medicare and Medicaid Services (CMS), to establish an ADRC program. More than a dozen agencies – from the Mayors' Council of Guam to Catholic Social Services – helped develop Guam's ADRC program into a nationally recognized model for serving older adults and persons with disabilities. In FY2011/12, eight agencies served more than 4,100 clients under this program. Both clients and providers consistently report high rates of satisfaction with program services.

- e. Guam built this ADRC program around an information system called GuamGetCare. The front end of this system includes a public website (www.GuamGetCare.org).
 - i. Each month, hundreds of consumers and caregivers use this website to assess their needs, learn about service options, and locate community-based programs.
 - ii. Individuals can even maintain a personal health record through this website.
 - iii. In addition to these public “self-serve” resources, individuals can also contact a community-based provider in the DISID/DSC network for assistance. These agencies use GuamGetCare to provide information, make referrals, perform eligibility assessments, process intakes, and track clients and services (all while the system makes sure that local and federal monitoring/reporting requirements are met).
 - iv. These agencies also use GuamGetCare to provide “options counseling” – i.e. helping individuals facing debilitating chronic conditions understand their options and make informed choices about where and how they want to live. Since its inception, this counseling has helped hundreds of individuals remain in their homes and communities rather than moving to an institutional setting (such as a skilled nursing facility).
 - f. Guam GetCare can be considered the “bloodline”; the glue that connects all service providers (public/private) to share information and coordinate care.
 - i. The ADRC is a special unit of DISID funded through a federal grant from the Administration on Aging. It currently does not receive local funding. Mr. Reyes is looking for ways to continue the center past its grant.
 - ii. It advances the “no wrong door” concept – that someone can find assistance no matter who they contact.
 - iii. There are plans to expand the ADRC scope of services to train counselors and issue ID cards to individuals with disabilities for easier provision of government services.
 - iv. Also in the planning is to create a registry of individuals with disabilities for use in emergency management/assistance, and a registry of volunteers to assist people with disabilities during emergencies.
 - v. Stakeholders are currently working to create a web-based Referral Clearinghouse within its existing ADRC software. This clearinghouse will standardize how partners make and document referrals. Ultimately, this will eliminate missing, incomplete, and illegible information, and will “close the loop” on the referral process by providing the appropriate parties with real-time status updates.
 - vi. Guam ADRC has recently added a database field to start tracking veterans; haven’t produced a report yet about demographics.
 - g. DISID has an MOA with the Department of Public Health & Social Services (DPHSS) and its Division of Senior Citizens; however, the MOA is not specific to senior citizens. Catholic Social Services is the contracted case manager for the division. SH Enterprises is the contractor for congregate meals. Kloppenberg Enterprises, Inc. is the contractor for transportation services. DSC uses Guam GetCare as their main database instead of their own database because theirs is insufficient for their own grant reporting requirements.
5. Please describe the Guam Regional Transit Authority (GRTA) collaboration on One-Call-One-Click Dispatch Center serving military dependents.

- a. The U.S. Department of Transportation had joined with the Departments of Veterans Affairs, Labor, Defense, and Health and Human Services to establish an initiative (FTA Veterans Transportation and Community Living Initiative Capital Grants Program) that will improve transportation options and mobility for America's veterans, service members, and their families.
 - b. GRTA had collaborated with DISID to apply for this grant initiative and submitted a funding proposal to establish a One-Call/One-Click Center and Partial Funding will be utilized for the Construction of DISID Community Resource Center.
 - c. As a result, GRTA was awarded \$1,305,000 to create this One-Call/One-Click transportation center for military, veterans and community transportation providers that are highly impacted by limited access to public transit options in this region.
 - d. The new Center will be constructed at DISID's property across from JFK High School and adjacent to the K-Mart in upper Tumon. The One-Call-One-Click Center will tie into the 211 call system, which has live operators to answer questions. It will help provide transportation for its service population by coordinating rides with taxis, hotels, and other community transportation providers.
6. How many military dependents were served in recent years?
 - a. DISID does not currently collect data on veterans.
 7. How many veterans are returning to Guam and using services? What are the typical services these veterans need?
 - a. See above.
 8. Open Topic
 - a. DISID seeks to collaborate with DoD on the following:
 - i. Executive Order 13548 requires federal entities to hire people with disabilities, but does not seem to be well implemented at federal facilities in Guam. DISID would like to work with DoD on implementing EO 13548.
 - ii. DDESS on special education to help transition those children from school to work as they age.
 - iii. Naval Hospital on individuals transitioning out of their care to private/GovGuam care.
 - iv. Morale, Welfare, and Recreation because DISID helps all individuals with any disability, not just mental health. DISID is mandated to work with anyone who comes to it, including military members.
 - b. DISID collaborates with the public health centers, child protective services, non-profit advocacy groups, the mental health court, UoG, and GCC.
 - c. DISID does compliance evaluation with the ADAA (American Disabilities Act Amendments Act 2008). It trains ADA Coordinators for every GovGuam agency. It is inspecting agency facilities for ADA compliance. It is conducting outreach and education with local business and non-profits to better understand and implement ADA requirements.
 9. Conclusion & Action Items - None

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**Guam Department of Labor,
Alien Labor Processing and Certification Division**

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Agency Name: Guam Department of Labor - Alien Labor Processing and Certification Division

Date: January 23, 2013 at GCIC Building, 1000-1130

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Greg Massey	GDOL - ALPCD	Administrator	greg.massey@dol.guam.gov	671.475.7005 671.300-4551
Scott Anderson	GDOL - ALPCD	Labor Law Enforcement Specialist II	scott.anderson@dol.guam.gov	671.475.7003 671.300-4550
Gary Hiles	GDOL - BLS	Chief Economist	gary.hiles@dol.guam.gov	671.475.7060
Mike Hrapla	Matrix Design, representing the Governor's Office	Vice President in charge of DoD programs	mike_hrapla@matrixdesigngroup.com	443.274.6111
Celeste Werner	Matrix Design, representing the Governor's Office	Vice President & Director of Planning	celeste_werener@matrixdesigngroup.com	602.288.8344
Caroleen Toyama	NAVFAC PAC	Naval Technical Representative - SIAS	caroleen.toyama@navy.mil	808.472.1088
David Kiernan	Cardno TEC	Project Manager - SIAS	david.kiernan@cardnotec.com	805.564.4940

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Can you provide more detail on causes for delays to processing certifications?
 - a. Staffing shortages can cause delays for processing. ALCPD processes and inspects (worker housing) so those two responsibilities can conflict with each other and cause delays.
 - b. There is no conflict with regard to worker housing inspections. Indeed staffing shortages will cause delays once the volume of labor certifications increase. Without additional staffing, we may have to shift staff to help process labor certifications from other function, which would then have a negative effect on our ability to do enforcement, worker registration and project inspections. Housing inspections are the least of our workload as the primary inspecting authority is the Department of Public Health & Social Services.
5. H2B workers
 - a. It might be that up to 90% of off-island workers are H2Bs for the buildup, if current construction volume continues for non-build up activities.
 - b. It can cost more to use H2Bs so use of H2Bs is a supply issue – good local workers hired by other companies and using H2Bs only makes sense when there are no other workers. Wages/cost - H2B \$20/hr vs. local \$13.56.
 - c. Housing, regulatory & legal fees, and feeding costs are disincentives to use H2Bs.
 - d. It is not mandated to provide medical insurance to H2B workers but most do not provide it. Of 73 employers, approximately 10 provide health insurance services. All employers provide workers compensation insurance. DoD requires health insurance for H2Bs; indirect workers may not have healthcare.

- e. Have never seen H2B workers bring dependents. H1s do bring families but not so much for H2Bs.
 - f. H2B registration fee is \$1,090, it was \$200. The increase just drives up construction cost. Was looked at by the Guam Legislature as a disincentive to use H2Bs, but hasn't turned out that way.
 - g. H2B needs to be specialized (e.g., carpenter). Guam DOL has traditionally not approved unskilled construction positions for H-2B.
6. H-2B Cap
- a. Cap waiver for Guam is tied to the transition period in the CNMI. It does mean something if the cap is implemented (waiver halted) because the cap is for all of USA; not sure how many H2B's Guam would get if it becomes subject to the cap again.
 - b. In years when the cap gets full, there are only two windows, within a fiscal year, to apply under the cap so it would be difficult for employers to meet project begin dates unless the project is planned around the cap cycle. Employers would lose flexibility, which could cause significant delays.
 - c. Currently there are no other big projects driving H2B.
 - d. Currently a low number of H2B workers on Guam. There hasn't been a need to bring in large numbers of H2Bs; there are about 900 now, many of whom are not in construction.
 - e. 73 employers use H2Bs. Black Construction, for instance, does not use H2Bs because they brought in H2Bs many years ago who have become permanent resident aliens or US citizens.
 - f. How to convert from H2 to nationalized? Not sure if nationalized is a proper term – permanent certification, to stay in the US without H2 visa, is not an easy process; it can take 5-6 years.
7. Please describe the 2010 National Defense Authorization Act recruitment plan and MOU and provide further detail on the two test projects and the applicants for them.
- a. Test case...Agana Bridge – Federal Highways and DoD (NAVFAC) called shortly prior to project starting date. The employer put out 218 employment notices to the mainland. Employers got 212 responses. Out of the 212, 157 responders met minimum requirements. Out of the 157, 13 didn't report to interview, 28 refused the job because wages were too low, 103 could not be contacted, and 5 rejected offers. Only 8 were hired, then 6 declined the job, leaving 2, then they skipped out on plane ticket. 0 came to Guam.
 - b. Another test case - 54 workers needed, 19 met requirements, 2 refused, 1 found a job elsewhere, 14 could not be contacted....0 hired.
 - c. Hiles: If military really wants non-H2B workers, they can get them. Look at the hospital (Naval Replacement Hospital project), they got all non-H2B workers.
 - d. Hiles: When bids say require U.S. workers, they get them. For buildup they changed the language. Current language rewards not using mainland workers. If need 50 or a hundred workers, don't really need H2s. The larger the scale of the project, the greater the percentage of H2 workers needed.
 - e. Massey: It is true that MILCON projects were prohibited from using non-U.S. workers in the past and that they were able to get U.S. workers, however we believe that these higher wages also raise construction costs significantly. You'll also note that construction activity was

relatively low at this period and U.S. workers were more available, while H-2B numbers were also extremely low between 2000 and 2006.

8. Inspections

- a. ALCPD has ramped up enforcement recently. Up to 350 inspections per year. Able to do this because they staffed up.
- b. DOL departments, wage and hour and workers comp could use more staff.
- c. Labor brokering is being regulated against. It is considered a violation. Better enforced now.
- d. 3 camps were going to be built, only Ukudu built, but it is a ghost town. They have a permit to house 500, could get up to 2000. Wastewater is a serious permitting issue right now, will require effort to get to 2000.
- e. There are two types of workforce housing. Five or less H2Bs in a dwelling not considered workforce housing (for some inspection purposes). About 80% of H2Bs are now in apartment units. Contractor will rent units and put 5 in each. Not subject to permitting by DEH etc. DOL will inspect those units. Contractor tells DOL where housing is, ALPCD inspects those, but landlords typically do OK with housing conditions.
- f. If workers in apartments they will typically carpool to work – take trucks.
- g. Only when construction activity gets big is when barracks are needed.
- h. Some workforce housing permitting is done by public health.
- i. If lots of contractors then use small units, if few contractors will use camps more.
- j. Reactionary on housing inspections. H2B will complain if any sub-standard housing comes up.
- k. G. Massey provided OSHA requirements.
- l. Barracks / housing inspections are done about once a year but mostly on request.
- m. Last horrible barracks was Chinese. Shut them down. That employer won't be working here anymore. Joint investigation with feds resulted in Human Trafficking case and employer will be jailed for many years. Rare to find substandard housing.

9. Is there a cultural awareness or environmental awareness training program for H-2B workers?

- a. No, there is no need to because 96.31% Filipino, 1.84% Japan, 0.082% other. There is not much cultural difference between these folks and locals.
- b. Not a difference in crime rates for H2B workers.

10. Open Topic

- a. In response to an inquiry from Celeste Werner, Mr. Massey explained that at current staffing levels, if there were 1,500 H2B workers on island then there would be strain on ALCPD's ability to conduct its operations.

11. Conclusion & Action Items – Follow-up meeting with Gary Hiles (this took place February, 25 at GCIC building at 1600).

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**Guam Department of Labor,
Bureau of Labor Statistics**

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Agency Name: Guam Department of Labor – Bureau of Labor Statistics

Date: January 25, 2013 at GDIC Building, 1600-1700

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Gary Hiles	Guam BLS	Chief Economist	gary.hiles@dol.guam.gov	671.475.7062
David Kiernan	Cardno TEC, Inc.	Project Manager - SIAS	david.kiernan@cardnotec.com	805.564.4940

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. General Discussion
 - a. Construction labor
 - i. The U.S. has high unemployment in its construction sector, so there are (non-H2B) workers available to come to Guam.
 - ii. Currently Guam has high unemployment so there is local labor available.
 - iii. The labor force participation rate recently increased from a record low of 57.8 percent in September 2007 to 60.2 percent in September 2012. The participation rate remains near the low side of the range and well below the peak of 71.3 percent reached in June 1991 during the economic boom indicating substantial labor availability in the out of the labor force category as well as the unemployed which is near 11 percent.
 - iv. FSM/H2B labor fills supply gaps and tends to keep wages from increasing due to labor shortages (relevant to construction and other types of work). FSM workers are increasingly filling more skilled jobs such as waitress, cashier, driver and heavy equipment operator positions. As the Compact of Free Association was in 1985, a number of FSM workers now entering the labor force were born in Guam as U.S. citizens and grew up and educated on Guam as well.
 - v. Skill level for FSM workers is improving slowly. Provide a great source of “helper labor” – low skilled construction workers.
 - b. H2B labor – Employers are required to advertise, to attract U.S. workers, but they do not advertise as well as they could/should. If employers really want US workers they should send people to HI/CONUS to recruit and meet potential employees. It can be very difficult/risky for U.S. workers to move to Guam after only having had telephone conversations.
 - i. The argument that “nobody wants to come to Guam” is fallacious. People come to Guam all the time to work, doctors for instance.
 - ii. About 80% of construction workers now are non-H2B, if the buildup ramps very slowly then it would be possible to maintain close to that percentage.
 - iii. The Final EIS projected that about 25% or 5,000 of the buildup workers could be recruited from the U.S. Since the buildup will be smaller and spread out over a longer period of time, the 5,000 U.S. workers could fill most of the buildup labor needs with U.S. workers rather than foreign workers.

- c. Tourism – The number of visitors has plateaued at a decent level. At 1.3 million visitors, the most in 15 years (and the most all time).
 - i. The Russia visa-waiver has had a very small effect on the overall economy.
 - ii. The Visit America Program has improved visa processing.
 - d. General construction activity – currently two hospitals under construction (Naval Hospital and the Medical City) as well as a new hotel.
 - i. Medical City conflict with GMH – Medical City will take good (paying and/or insured) customers from GMH. GMH is already running deficits. New Medical City could amplify problems for GMH.
 - e. Inflation
 - i. Guam inflation typically mirrors U.S. inflation. Currently, a little less than 3% (per year) on Guam.
 - ii. Inflation on Guam can drift from US inflation when driven by strong demand.
 - iii. A smaller/slower buildup may not cause any spikes in inflation. The revised buildup will still add somewhat to inflation but at a much lower level than in the original plans.
5. Conclusion & Action Items - None

**Guam Department of Land Management,
Guam Ancestral Lands Commission,
Chamorro Land Trust Commission**

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Agency Name: Guam Department of Land Management, Guam Ancestral Lands Commission, Chamorro Land Trust Commission

Date: January 22, 2013 at ITC Building, 3rd Floor Conference Room; 0815-1030

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Monte Mafnas	DLM	Director	monte.mafnas@dml.guam.gov	671-649-5263
David Camacho	DLM, GALC	Deputy Director	david.camacho@galc.guam.gov	671-649-5263
Edgardo Taguiam	DLM	Cartographic Supervisor	edgardo.taguiam@dml.guam.gov	671-649-5263
Marvin Aguilar	DLM, Land Planning Division	Territorial Chief Planner (Acting)	marvin.aguilar@dml.guam.gov	671-797-6278
Mike Cruz	DLM	Project Director	mecruz@guameda.net	671-647-4332
Larry Toves	GEDA	Real Property Mgr.	ltoves@guameda.net	671-647-4332
Joey Leon Guerrero	DLM, GALC		joey.leonguerrero@galc.guam.gov	671-473-5263
Ernest Santos	DLM	Land Agent Supervisor	ernest.santos@dml.guam.gov	671-649-5263
Jhoana Marie Casem	DLM, GALC	Staff	jhoana.casem@galc.guam.gov	671-473-5263
Anita Orlino	DLM, GALC	GALC		671-473-5263
Mark Calvo	Office of the Governor	Director Guam Buildup	mark.calvo@guam.gov	671-472-8931
Caroleen Toyama	NAVFAC Pacific	Naval Technical Representative - SIAS	caroleen.toyama@navy.mil	808-472-1088
Faith Caplan	Cardno TEC, Inc.	SIAS Team	faith.caplan@cardnotec.com	808-528-1445
Rick Rust	Matrix Design, representing the Governor's Office	Senior Associate	rick_rust@matrixdesigngroup.com	671-777-1674

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
 - a. DLM asked when more detail on the projected military population will be provided. Response was that the information will be presented in the DEIS. It is not available yet and there will be assumptions associated with the population breakdown. The SEIS team is currently at data collection phase. Impact analysis will be in the DEIS.
4. Department Organization
 - a. Organizational chart was provided.
 - b. Consolidation of DLM, GALC and CLTC was intended to maximize efficiencies, eliminate redundancies and minimize costs.
5. CLTC
 - a. Staffing:
 - i. Are there four divisions? YES
 1. Administrative Services - Yes
 2. Logistical Support - Yes

3. Residential and Agricultural Leasing - Yes
 4. Commercial Licensing - Yes but there is an MOA with GEDA to provide support for commercial licensing.
- ii. The following is still true, but here are two vacancies: The five-member CLTC is appointed by the Governor and confirmed by the legislature. The CLTC Chairman is one of the five members and also appointed by the Governor.
 - iii. Are there any changes to the board structure or appointment process? - No
- b. Proposed Action:
- i. Reviewed the graphics presented in SEIS scoping posters.
- c. CLTC lands:
- i. Lease rates for residential (\$1), agricultural (\$1), and commercial (varies with proposed use and is based on 2 appraisals). Priority is to address homelessness and then farming. DML does not actively seek developers.
 - ii. The goal is to be autonomous and generate revenue. Currently, budget comes from the General Fund. They have premium property and are willing to wait for development plans that represent highest and best use of the land.
 - iii. There are about 10,740 Chamorro leases. Native Chamorro designation is not based on ethnicity but on residency on Guam as of August 1, 1950.
 - iv. Guam Racing Federation parcel: 7-year lease with an option for 25 more years.
- d. Moratorium on Commercial leases:
- i. Will impact lease revenue.
 - ii. There is a backlog of approximately 50 applications for commercial leases “license for commercial lease” that are being delayed because of a moratorium on commercial leases.
 - iii. The moratorium will continue until draft regulations and rules are accepted. The delay is due to staffing shortages- not due to politics.
- e. Impact of Military:
- i. Monte Mafnas stated that DLM is unconditionally in support of the build-up.
 - ii. DLM requests that the federal government register (clear title) of the land they return to GovGuam.
 1. The land that is conveyed to GovGuam from the federal government is often encumbered with easements and other land use restrictions. This often renders the property unusable or limits highest and best use of the lot. DLM requests the land be returned free of easements and other encumbrances, unless the easements need to support ongoing DoD activities. The majority of the encumbrances on the property appear to be remnants of historical military use and have no current purpose.
 2. It takes time and money to “register” the lots and clear the titles through court for these properties. DLM does not have the resources to do this. It results in significant delays in the return of property to individual landowners. This is a major issue because the land cannot be returned to landowners unless there is clear title. DLM requests that the federal government complete the registration process prior to returning land.

3. DLM requests that the federal government clear title on all affected lots that are being are proposed for acquisition.
 - iii. There is no zoning of military lands. When the lands are released back to Guam, zoning defaults to agricultural if there is no specific zoning application. There is a need to integrate the parcels back into the land inventory with appropriate zoning. There are no community master plans to guide the zoning (except for the North and Central Land Use Plan).
6. GALC
- a. Staffing:
 - i. There have been no changes to the board structure with the recent reorganization into DLM?
 - ii. Do any members of “DLM” staff provide support to the 2 full-time GALC staffers? Yes.
 - b. Land:
 - i. Questionnaire response reports 5,373 acres are managed by GALC. How many acres of managed land are currently leased? Approximately 50 acres.
 - ii. DLM will provide annual lease rate and revenue of the leases. (see Action list)
 - c. Proposed Action:
 - i. DLM would prefer that there were fewer alternatives for live-fire training because it interferes with planning at multiple areas of the island. If the alternatives were focused in one geographic area they could focus on planning in the remaining areas. They have to wait until 2015 to resume planning efforts.
 - ii. A better location for a live fire training alternative would have been south of the Route 15 Pagat option and adjacent to Navy Barrigada because there is less public land and only about 50 private landowners. This is an area in Marbo that was planned for the Sasayan subdivision. Land acquisition would still be an important issue but perhaps less emotionally charged than acquisition of public lands. This was discussed with Mr. Bice.
7. DLM
- a. Proposed Housing Projects:
 - i. “large-scale housing subdivision” projects:
 1. Emerald Ocean View Towers: high end condos, 4 towers adjacent to Guam Memorial Hospital. Younex is the developer. Korean investors are having financial issues. Incentives for the project may be EB-5 visa attracting foreign investment and military buildup speculation. The project may resume as a timeshare or other tourist product, instead of residential.
 2. Sigua, near Leo Palace: 5,000 homes for the middle to high end market are planned for development over the next 20 years. Land was free as the original owner donated it to Texas A&M, who is in a joint venture with the developer. It is likely to be approved for construction.
 - ii. Other comments:

1. There is no judgment on the long-term financial viability of a project during GLUC review. This facilitates speculation. GLUC will ask questions on housing inventory and the need for more housing.
 2. There was concurrence that there is plenty of housing inventory to support the induced or indirect military relocation project.
- b. Workforce Housing:
- i. Workforce housing projects were developed to support military relocation. There were no other drivers.
 - ii. Review the 2010 FEIS Table 4.3-26 of proposed workforce housing projects:
 1. Younex (#1 on Table). “Ukudu” Originally 18,000 person capacity, but reduced to 1,800 and then only built about 500. There were conditions imposed on construction of more than 500 units, namely support for Northern District Wastewater Treatment Plant improvements. The units are not being used on a regular basis but there was a news report that the units would be used for transient military housing. Those present did not have further knowledge of that proposed use.
 2. The listed projects 2, 3, 4 and 7 are approved and constructed, but not utilized as workforce housing. Some have reverted to their original use (apartments). The other projects listed never completed the permit review process.
 3. GLUC does require large-scale developers to report on project status.
8. Action Items:
- a. DLM will provide Advisory 9 and 5.
 - b. DLM will provide GIS: land use, parcels, land ownership (federal, GovGuam (including GALC and CLTC), private), and official zoning- if available. (We are not interested in the names of individual land owners.)
 - c. NAVFAC PAC will ask if the GIS for the live fire training ranges can be shared with DLM.
 - d. DLM will provide estimates of annual revenue from existing residential, agricultural and commercial leases.
9. Attachments:
- a. DLM organizational chart

Guam Department of Mental Health and Substance Abuse

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Agency Name: Guam Department of Mental Health and Substance Abuse

Date: January 24, 2013 at Adelup Conference Room, 1200-1330

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Rey Vega	DMHSA	Director	rey.vega@mail.dmhsa.guam.gov	671.647.1946
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Patricia Taimanglo, PhD	DMHSA	Clinical Administrator	patricia.taimanglo@mail.dmh.sa.guam.gov	671.647.5336
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Celeste Boccieri-Warner	Matrix Design, representing the Governor's Office	Vice President	celeste_werner@matrixdesigngroup.com	671.777.1676
Mike Hrapla	Matrix Design, representing the Governor's Office	Vice President	mike_hrapla@matrixdesigngroup.com	671.777.1675

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Please describe how the Federal Management Team has influenced the administration and practice of the DMHSA.
 - a. The Federal Management Team (FMT) was the result of the Permanent Injunction (PI) issued by the U.S. District Court Judge in 2010. The purpose of the PI is to change DMHSA operations from a medical/institutional approach to a recovery/community approach. The Judge appointed Dr. James Kiffer as head of the FMT and ordered GovGuam to fund DMHSA.
 - b. API (Amended Permanent Injunction) is only for the adult consumers for the clinical side of DMHSA. Children Adolescent Services Department, Drug & Alcohol, Prevention & Training and Healing Hearts Center are not part of the API.
 - c. The FMT files quarterly reports to the court. Some of these are posted to the website.
 - d. Next week the Judge will hear a review of FMT's report and decide whether to return authority to the department. If the outcome is positive, the Judge could transfer authority by February 4, 2013.
 - e. The FMT has brought about the following changes:
 - i. Focus on how consumers were receiving services;

- ii. Staffing hard to fill positions because the staffing levels for psychiatrists, psychologists, counselors, were extremely low;
 - iii. Using evidence-based practice; and
 - iv. More training and follow-up on training.
 - f. Expected challenges after exiting receivership:
 - i. Maintaining training for new and current staff,
 - ii. Bring staffing up to needed levels for certification, and
 - iii. Funding sources over the next 15-30 years.
 - g. There is a \$15 million drawdown of funds scheduled over time; the money to FMT is through the court order, the judge would decide if that money would continue or keep that as a trust fund. FMT has requested that the funding be transferred or be used to fund projects and activities to sustain established programs
 - h. If service is not maintained, DMHSA could fall back into receivership
5. If available, please provide staffing data for FY 2010 and FY 2011.
 - a. DMHSA will send staffing data for FY 2010 and FY 2011.
 - b. Professional staff is small, with only a few professional staff in each specialty – 3 psychiatrists (2 are half time), 7 psychologists (need at least one more), 7 counselors, 20 social workers (across the disciplines), care coordinators for children, chemical treatment specialists, substance abuse program supervisor, and social service supervisor.
 6. Please describe your contractual arrangements with non-profit providers, e.g., Sanctuary Inc. for youth treatment services. What services do you contract out and which retain in-house and why?
 - a. There has been a movement in the U.S. to deinstitutionalize mental health care because of the Olmstead Act, the goal for which is to bring people back into the community under a recovery model and de-emphasize the medical treatment model. The overall desire is to have DMHSA not be a huge institution providing all mental health care. Agencies and programs specialize in certain forms of health care; e.g., Catholic social services. People have so much need that there is enough work for everyone. We encourage organizations to develop their expertise.
 - b. DMHSA has insufficient administrative staffing to manage all the contracts and provide all of the services.
 - c. Programs that are contracted: residential group homes, substance abuse, children's homes, community habilitation program, respite and personal care, and healing hearts.
 7. How many patients do contracted providers service and do you include them in your total service population and provision of services?
 - a. Yes, they are included. (Numbers were not discussed).
 8. In general, please describe the population you serve. Are your services available to anybody who comes to your door?
 - a. Yes, DMHSA serves the entire island of Guam.
 9. Please describe the effect that the Permanent Injunction has had on staffing and funds.

- a. See above.
10. Please provide some detail on the cloud-based Electronic Behavioral Health Record system.
- a. DMHSA is currently selecting the vendor. The system is a cloud/web based system to provide mobility to access anywhere anytime and includes billing, fee schedules, and case management.
 - b. DHMSA has to cover everyone who comes through the door and would like to recover some of the cost through this record system.
 - c. DHMSA gives medication for free, which is one of its largest expenses. Sometimes private providers refer patients with health insurance to DMHSA to get free medicine to avoid the copay.
11. Please describe the implementation of the fee schedule and how the focus on being financially self-sustaining is reshaping provision of services. Are there waiver provisions to fees or some services subsidized?
- a. Fee schedule relies on the financial class of the community served. About 90% of the population comes from the Medicare/Medicaid/Medically Indigent Program (MIP) (3Ms) population. Disability disorders are covered until age 26, after that they become self-paying. The fees would provide discounts to those who qualify.
12. Open Topic
- a. DMHSA is concerned that additional individuals needing service could push mental health back into receivership. Military and dependents may be reluctant to inform their superiors about family members with mental health problems because it may impact their careers. DHMSA has concerns about whether the federal government taking action to care for the mental health of military and dependents coming to Guam.
 - b. DMHSA works with the VA center and mental health courts.
 - c. DMHSA has identified 39 positions that need to be filled to adequately manage all of its responsibilities.
13. Conclusion & Action Items
- a. DMHSA will send the FMT quarterly report and staffing data for FY 2010 and FY 2011 to Cardno TEC.
14. DMHSA has send to Cardno TEC the staffing patterns for FY2009, FY2010, FY2011 and FY2012. We also have sent them the FMT Quarterly reports as of 2/15/2013.

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**Guam Department of Parks and Recreation,
State Historic Preservation Office**

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Agency Name: Department of Parks and Recreation - State Historic Preservation Office

Date: January 23, 2013 at DPR Conference Room; 1000-1100

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Lynda Aguon	SHPO	SHPO	lynda.aguon@dpr.guam.gov	671-475-6294
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John Mark Joseph	SHPO	State Archaeologist	johnmark.joseph@dpr.guam.gov	671-465-6294
Faith Caplan	Cardno TEC, Inc.	SIAS Team	faith.caplan@cardnotec.com	808-528-1445
Scott Glenn	Cardno TEC, Inc.	SIAS Team	scott.glenn@cardnotec.com	808-528-1445
Rick Rust	Matrix Design, representing the Governor's Office	Senior Associate	rick_rust@matrixdesigngroup.com	671-777-1674

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Is there a strategy to staff-up for the possible military buildup? How can SHPO meet its staffing needs?
 - a. SHPO has staffing vacancies. Recruiting is a challenge due to pay scale and experience requirements. Retaining staff is also a challenge. Some staff members have left for the private sector or federal positions after being here several years.
 - b. DPR is working with the Federal Highways Administration (FHWA) to streamline the review process for FHWA projects and to fund an additional archaeologist through an existing Programmatic Agreement (PA). The Navy signed a PA that includes funding for a liaison position to expedite processing Section 106 submittals. The funding and position never came through.
 - c. DPR needs experienced field archaeologists to take on project management.
 - d. The SHPO reviews about 1,500 permits, work plans, and scopes of work annually.
5. What has led to the increases in Section 106 requests? Do you expect this trend to continue?
 - a. Land use and residential development speculation due to military buildup since the 2010 FEIS was published has increased Section 106 reviews.
 - b. The trend seems to have slowed down and other agencies have had a decrease in work, though SHPO still receives a lot of requests. There was a decrease in Section 106 reviews because of the Final EIS lawsuit, which stopped everything.
6. Has the Section 106 process become more complicated in recent years? If so, in what ways?
 - a. The deadlines for Section 106 are mandated. This means we have to prioritize federal projects, which delays local projects. Then, we are asked to do timelines for the local projects, which takes more time.

7. Review Questionnaire (Department of Parks and Recreation – Non-SHPO)
 - a. Most information in the 2010 questionnaire has not changed. The only changes are that the archaeologists and administrator positions were filled and the staffing pattern went down to 50.
8. Open Topic
 - a. Almost every project affects cultural resources. There is a history of cultural resources being disturbed by construction of roads and bridges, for example, and then when the facilities are improved or maintained, further damage to resources at the site occurs. Construction projects should be redesigned to minimize impacts to cultural resources during construction and during renovation.
 - b. The 2006 Navy PA uses probability maps for the presence of cultural resources. These maps are outdated and the time allowed in the PA to review work plans is too short. Probability maps were done by the military during WWII, especially by Navy Base. The PA does not have a work stopping provision or require an archaeologist in low probability areas. However, those low probability maps are not accurate. Burials are being found in “low probability” areas.
 - c. SHPO is trying to streamline its reporting and reviewing process by standardizing the presentation of information in reports and forms. Staff has been working on guidelines which set the format of documents to facilitate review. This new guidance is not popular, but it will increase the efficiency of package review. It will be easier to identify data gaps if everyone uses same format. SHPO would like to revisit its existing PAs after it adopts the guidance.
 - d. DPR requested the Navy clarify how many support staff are needed per one marine. Does the 5,000 number of marines include the support staff?
 - e. DPR-SHPO has a big backlog. One project can have multiple reviews of different documents based on the degree of complexity of the project and the significance of uncovered material.
 - f. SHPO would like to copies of the GIS shapefiles from Navy.
 - g. SHPO does outreach and education about the process repeatedly with private sector and other agencies. Often, multiples rounds of outreach is needed.
9. Conclusion & Action Items
 - a. SHPO will send Cardno TEC an example project of how many person-hours a typical project requires through each review phase.
 - b. SHPO would like to receive copies of the GIS shapefiles from Navy.

**Guam Department of Public Health and Social Services,
Division of Environmental Health**

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Agency Name: Guam Department of Public Health and Social Services - Division of Environmental Health (DEH)

Date: January 24, 2013, DPHSS Conference Room 2, 0800-0930

Attendees:

Attendee Name	Title/Organization	Title	Email	Telephone
Cynthia Naval	DPHSS - DEH	Planner IV	cynthia.naval@dphss.guam.gov	671.735.7204
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Aaron Unpingco	Governor's Office	Staff Assistant - Public Health	aaron.unpingco@guam.gov	671.475.9384
Faith Caplan	Cardno TEC, Inc.	SIAS Team	faith.caplan@cardnotec.com	808.528.1445
David Kiernan	Cardno TEC, Inc.	Project Manager - SIAS	david.kiernan@cardnotec.com	805.564.4940

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Permitting:
 - a. The questionnaire noted that permit inspection waiting time is currently 15 days. Do you consider this a short, normal, or long wait time?
 - i. Challenges: currently one Engineer is tasked to take care of One-Stop Center, which is the starting place for getting a permit. It is now open 8-5 Wednesday and Friday; these are the times when the office is staffed by the engineer. The remainder of the engineer's time is spent doing inspections.
 - ii. It takes 15 days after scheduling to get pre-operational inspection. Due to job requirements only the one engineer is authorized to do this job. Sometimes allow another experienced employee to conduct inspections when it is an emergency.
 - iii. The one engineer went on extended absence (about 2 months) and then was ill for an additional 2 months. DEH had to reduce hours and inspections the number of inspections we were able to do. Pushed inspections back and everything got delayed – went from 15 days to a month.
 - iv. EH Modernization Act – allowed for creation of a new position to consolidate field staff. Allows DEH staff to do all roles. Not yet officially implemented but DEH took initiative and started cross-training to let non-engineers do engineer assignments. When law goes into effect, DEH will be able to better implement. But doing this would come at sacrifice of other programs. Overall the Act will provide flexibility. Currently non-engineers mirroring experienced employees to learn on the job.
 - v. 15 days is normal though. Can do 3 or 4 inspections per day.
 - b. Do permit applicants consider this an overly extensive wait time?
 - i. Yes, a lot. Some applicants are not familiar with the process and do not plan for the time it takes to get a permit. They are often surprised, and perturbed, at the wait.

- ii. DEH can do expedited inspection if staff/time available. Usually accept request for expedited permit. DEH charges for expedited inspection (greater than regular permitting fee).
 - iii. Bars are often particularly aggrieved because also need to get their liquor license and there is a timing window for that.
- c. General information -
 - i. Proposing to adopt Guam food code.
 - ii. Waste disposal monitored during operations...not pre-operational.
 - iii. About 3k permits, 75% food related (including distributors, grocery stores). 25% hotels motels, cosmetic (tattoo, massage), childcare, schools – look for healthy, sanitation conditions.
 - iv. 1,063 total inspections in 2012.
 - v. Most facilities get an “A” grade. A “D” grade is closure. 1-10 demerits is an “A,” 11-20 B...40 or more is “D” (closure).
 - vi. Always review violations and what the law says needs to be addressed but don’t give recommendations due to liability.
 - vii. Inspections 4 times per year and nearly all inspections have follow-up cause at least one violation...mandated to inspect once per quarter but cannot do them all due to lack of resources.
 - viii. Were only able to carry out 1% of total inspections they were supposed to (not including childcare facilities).
 - ix. Went down to one staff and more restaurant workers went without health certifications and it seems like more people got sick.
 - x. DEH does try to prioritize establishments with historical problems. Spend time prioritizing.
 - xi. Public (consumers) are eyes and ears for DEH. When they complain DEH will inspect.
 - xii. Some facilities have not been inspected in years.
- 5. Workforce Housing:
 - a. Inspections are flexible – if few compliance problems then fewer inspections.
 - b. What is the status of workforce housing projects that were identified in 2010 FEIS?
 - i. Only permitted one small section of Ukudu. Only 10-12 additional permits related to workforce housing (mostly smaller units).
 - ii. Core Tech has a large facility that gets inspected.
 - iii. DEH work more related to larger scale workforce housing projects.
 - iv. Workforce housing inspections quarterly for 1st year.
 - v. Tiered (better history fewer inspections).
- 6. Data:
 - a. What is the number of health certificates that the Division generated in 2012
 - b. What is the number of facility inspections that were conducted in 2012.
 - i. DEH provided FY 2011 Annual Report (on website:
<http://www.dphss.guam.gov/sites/default/files/pdf/forms/2011%20DEH%20web.pdf>)

7. Fees and Funds

- a. DEH fund revenue is generated through issuance of health permits...fee increase in 06 and 12.
- b. Funding comes from - Environmental Health Fund 54% and General fund 46%.
- c. DPHSS sanitary revolving fund – \$300k gone into fund over past 3 yrs. Receive \$91 per worker for every temp worker that is registered a certain amount goes for inspection of workforce facilities. (Money supposed to go for staff to do this – but money has never gotten to DEH).

8. Conclusion & Action Items - None

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**Guam Department of Public Health and Social Services,
Division of Public Health**

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Agency Name: Guam Department of Public Health and Social Services - Division of Public Health

Date: January 22, 2013 at Adelup Conference Room, 1600-1730

Attendees:

Attendee Name	Organization	Title	Email	Telephone
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Josephine O'Mallan	DPHSS-DPH, Bureau of Communicable Disease Control	CDC Program Administrator	josephine.omallan@dphss.guam.gov	671-735-7142
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Randy Sablan	JGPO Forward ASN (EI&E)	Assistant Environmental Director	randel.sablan@fe.navy.mil	671-339-5440

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. What are some of the leading health challenges experienced on Guam (previously cited were fertility rates, communicable and infectious diseases, and obesity)?
 - a. The Uniform Data System (UDS) Report is an excellent source. It provides very specific demographic information and performance measures. The UDS Report is a standardized reporting system that provides consistent information about Bureau of Primary Health Care (BPHC) funded programs.

- i. The UDS is used to: document the effectiveness of BPHC funded programs; guide BPHC as decisions are made; document program effectiveness; support program development and improvement at the grantee level; and document performance in the Service Area Competition and Budget Period Renewal application grants.
 - ii. The UDS provides information on: patients served; the number and socio-demographic characteristics of people served; types and quantities of services provided; counts of staff who provide these services; information about the quality of care provided to patients; cost to provide services; cost and efficiency data relating to the delivery services; and revenue sources and amounts of income.
 - b. There are also the non-communicable disease plan and annual morbidity report for 2011.
 - c. For communicable diseases, there has been a reduction in TB, but it is still higher than the mainland and Hawaii. An influx of H2B workers may trigger active TB disease in the foreign-born population because H2B workers tend to come from countries where TB and multi-drug resistant TB are endemic. STDs have increased, particularly for chlamydia and gonorrhea. In some cases patients are dual infected. HIV infections have increased slightly, though it had been on a downward trend of less than one case per month for the past couple of years. The HIV infection rate is much lower than the mainland. Interventions are an important component in reducing infection rates.
 - d. For non-communicable diseases, diabetes and hypertension are very serious, along with cancer and stroke.
 - e. Other challenges are the high birth rate, especially among teenagers, and lack of access to and education about pre-natal care. Guam has nine OB/GYNs, with a critical shortage of specialists. There is a higher incidence of infant mortality and more infants with low birth weights than in the U.S., particularly among the FAS population. DPHSS is taking steps to do more education, such as family planning, and monitoring for pre-natal care and teenage pregnancies. Another challenge is youth and early adult suicide is an issue. These trends can be researched in the online Behavioral Risk Factor Surveillance System (BRFSS) from the CDC.
5. What is the Medically Underserved Area (MUA) status of Guam?
- a. A MUA is a term from the U.S. Department of Health and Human Services (DHHS) Health Resources and Services Administration (HRSA). MUAs are areas designated by HRSA as having too few primary care providers, high infant mortality, high poverty, and/or high elderly population. HRSA provides additional federal funds to such designated places.
 - b. The federal Medically Underserved Area/Population (MUA/P) designation identifies areas or populations as having a need for medical services on the basis of demographic data. These designations are important when seeking Migrant Health Center, Federally Qualified Health Center (FQHC), FQHC Look-Alike or Health Care for the homeless status.
 - c. Designation is based on an area having an [Index of Medical Underservice \(IMU\)](#) score less than or equal to 62.0 points. The IMU is a weighted score derived from four criteria: ratio of primary medical care physicians per 1,000 population; infant mortality rate; percentage of population below the [federal poverty level](#); and percentage of the population 65 years and older.

- d. Geographic areas that are rational areas for the delivery of services and meet the IMU score requirement are eligible for a federal MUA/P designation. Designation is not a competitive process. Any person or organization may apply on behalf of an area. Benefits include: enhanced federal grant eligibility; eligibility to apply for federal funding to develop and operate Community Health Centers, Migrant Health Centers, health care for the homeless, Federally Qualified Health Centers (FQHCs) and FQHC Look-Alikes; and eligibility for enhanced reimbursement for Rural Health Clinics
 - e. Guam also qualifies as a Health Professional Shortage Area (HPSA), so certain medical professionals (e.g., nurses, mid-level providers, chiropractors, health dentists, psychologists) can work at Guam medical facilities and have the federal government pay for relocation costs and school loans. Generally, it is a four-year program and people will stay for the length of the term but then move away. The turnover makes it difficult to provide stable care. DPHSS is encouraging locals to apply for the program so that they can get an education and then come back home to work and have their school loans paid off. Otherwise, Guam Community College and University of Guam graduates go to the mainland.
 - f. Health Professional Shortage Areas (HPSAs) are designated by HRSA as having shortages of primary medical care, dental or mental health providers, and may be geographic (a county or service area), demographic (low income population) or institutional (comprehensive health center, federally qualified health center or other public facility).
 - g. With Guam having two Federally Qualified Health Centers, the CHCs can benefit from federal programs such as the National Health Service Corp (NHSC). Providers can apply for this program and, if they are eligible to enroll in this program, they can qualify to be a NHSC Scholar or NHSC Loan Repayor. The provider can be on the NHSC program as long as they want even until they pay off their medical school loan debt. The Guam CHCs have had several NHSC Scholars and Loan Repayors work at the Guam CHCs, but most of them relocate to the U.S. mainland so they do not make Guam their permanent place of residence. There are providers who are indigenous to Guam so the Guam CHCs are encouraging local providers who are “home grown” to apply for the NHSC. This year, the Guam CHCs have been successful in having 2 “home grown” providers enrolled in the NHSC (one pediatrician and one nurse practitioner) so this is a great incentive for these providers to work at the Guam CHCs and at the same time have their medical school debt paid through this program. More importantly, these providers can remain in their homeland in lieu of not returning to Guam upon the completion of their education in the U.S. mainland.
6. Please verify this statement: “there are no non-profit groups on Guam providing health care and no academic medical centers.”
 - a. The statement is still true. No academic research center exists on the Guam. There have been discussions that Guam Regional Medical City (construction underway) may provide one, but it is still theoretical. Non-profit groups do offer limited, targeted health care such as health fairs that screen for chronic diseases; Guam Cancer Care, which does cancer screening, referrals, co-pays, and patient advocacy; and missionary healthcare groups.
 7. Please describe how the following effect your ability to provide services:

- a. Medicaid funding is changing drastically because of the health information systems incentive, which provides additional funding to health providers who switch to electronic health records and meet other criteria. Providers are responding to the increased incentive by offering more services and taking more patients. Also, DPHSS and University of Hawaii are applying for a grant to help small providers who cannot afford the cost to switch over.
 - b. The Department of Public Health and Social Services-Bureau of Primary Care Services (Northern Region Community Health Center and Southern Region Community Health Center) partnered with University of Hawaii in applying for the Rural Health Network Planning grant. The grant was awarded in the amount of \$85,000 and the purpose of the grant is to develop a plan to extend the use of the Resource Patient Management System (RPMS) Electronic Health Record System to other public and private health care providers on Guam. Realizing that the “Meaningful Use Act” must be met in order to receive Medicaid or Medicare incentives, it is crucial for providers to now take a “proactive approach” in planning for the implementation of an electronic health record system. Subsequent to the establishment of a plan involving the development of an RPMS network, the Department of Public Health and Social Services would like to take the next step in applying for a “Network Development” grant which provides \$300,000 in federal funding each year for a period of three years. If the grant is successfully awarded, funds would be available for equipment upgrades and software interfaces that can be shared among the “public-private” networks so that all parties can achieve Meaningful Use and be given provider monetary incentives.
 - i. The poverty level is also going up from 100% to 133%, which will cause a shift in eligibility to increase the number of qualifiers, especially from the Medically Indigent Program (MIP), to Medicaid.
 - c. Federal matching funds
 - d. The Fiscal Responsibility Act of 1982
 - i. These items were not considered relevant to the discussion.
8. Please describe the Community Health Clinics’ (CHCs) Sliding Fee Program. How are fees and the scale determined?
- a. Sliding Fee is a special program that assists those who have difficulty paying for medical care by establishing fees that are affordable to patients and in accordance with federal regulation. The Sliding Fee program is available and accessible to uninsured and underinsured patients on the basis of their ability to pay. Only individuals living in households with income below 200% of Federal Poverty level will qualify for the program. Qualification is based on family size and proper documentation of all household income. The Guam CHCs charge fees in accordance to its fee schedule. Patients eligible for the Sliding Fee program are offered a discount of 100%, 75%, 50%, or 25% and the percentage of discount is based on the patient’s family size and household income. If a patient qualifies for 100% discount, a nominal fee of \$10 is collected from the patient. The Sliding Fee Discount only applies to Northern and Southern Region Community Health services so no discount is given to patients receiving services from private clinics, private laboratories, private pharmacies, specialty care clinics, and/or Guam Memorial Hospital.
 - b. The sliding fee is mandated by HRSA and is a function of federal poverty income criteria. A discount is offered based on a set table prescribing the percentage discount. If someone is

100% qualified for a discount, then only a nominal fee is charged. The discount only applies to health centers, not to specialty care providers or hospitals.

9. Please provide updated information on the Bureau of Family Health and Nursing Services:
 - a. A list of all provided services.
 - i. The BFHNS did a needs assessment study recently. Types of services provided have not changed since what was described in the 2010 FEIS. Two new programs started this year – early childhood mental health and child home visitation. The abstinence education program is ending at the end of CY 2013.
10. Please describe what free services the MOU with Bureau of Communicable Disease Control covers.
 - a. The MOU with the BCDC is to co-locate STD treatment services in the community health centers. Because of certain federal medication restrictions and grant requirements, an MOU was created.
 - b. An Oct 2011 change in the CDC's immunization policy prohibits giving vaccines purchased under the grant program to people who have insurance, because the intent of the grant is to treat under/uninsured, MIP, and Medicaid clients.
11. Has any action been taken in response to the U.S. Department of Health and Human Services – Guam Issues Inventory?
 - a. This issue is no longer applicable.
12. What has been the effect of Allied Health Building and increase in nursing students at GCC?
 - a. The GCC program has been very helpful. There has been one nurse practitioner who has gone through the program and enrolled in the HPSA program.
 - b. The Guam Community College offers the Licensed Practical Nurse and Medical Assistant programs so this program has had a positive impact on the allied health professional workforce on Guam. Many graduates have passed either the nurse aide or licensed practical nurse exam so several of them have applied for employment at the Department of Public Health and Social Services. In the past year, the Northern and Southern Region Community Health Centers have recruited three licensed practical nurses. The Northern and Southern Region Community Health Centers also serve as preceptors for nursing students attending the University of Guam School of Nursing. Additionally, the NRCHC and SRCHC have recruited UoG graduates who have passed the NCLEX and with the newly recruited nurses, it has been a contributing force in the CHCs' mission of increasing access to primary health care services and reducing health disparities among the medically underserved population.
13. Open Topic
 - a. The military takes care of its own. There may be an increase in STD patients from the military because they do not want to have it on their personnel record, so they come to the community health clinic for anonymous treatment.
 - b. Military dependents who are medical professionals may look for work on Guam. This would be a great additional, though likely temporary because the military spouse would move on.

- c. DPHSS would like to collaborate with the military on preventative medicine. DPHSS has been trying to work with Naval Hospital and AAFB about laboratory capacity. They would like to collaborate on building a Level II laboratory capability that includes PCR and molecular testing (influenza, dengue, leptospirosis, etc.) to benefit or complement planning military health care capabilities.
- d. The military has been excellent with disaster planning and emergency response. The drills have been helpful.
- e. DPHSS would like to promote a joint effort with the military on vital statistics and birth certificates, which must be recorded through the territorial government to be official.

14. Conclusion & Action Items

- a. L. DeNorcey will send the 2011 UDS Report. J. O'Mallan will send the non-communicable disease plan.

**Guam Department of Public Works,
Building Permits and Inspection**

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Agency Name: Guam Department of Public Works - Building Permits and Inspection

Date: January 23, 2013 at Adelup Conference Room; 1200 to 1330

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Joseph Guerara	DPW, Building Permit	Chief Building Inspector	joseph.guerara@dpw.guam.gov	671-646-3134
Maryrose Wilson	DPW, Building Permit	Engineer III	mrw_arcln@yahoo.com	671-646-3108
Rick Rust	Matrix Design, representing the Governor's Office	Senior Associate	rick_rust@matrixdesigngroup.com	671-777-1674
Faith Caplan	Cardno TEC, Inc.	SIAS Team	Faith.caplan@cardnotec.com	808-528-1445
Caroleen Toyama	NAVFAC Pacific	Naval Technical Representative - SIAS	caroleen.toyama@navy.mil	808-472-1088

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Staffing:
 - a. Office has downsized 20 positions due to lack of funding approval.
 - b. As described in the questionnaire response, there was a decrease in total number of positions and they continue to lose positions every year.
 - c. Some services like sign enforcement have been discontinued. Others are listed in the questionnaire response.
5. Process:
 - a. How are projects prioritized? In the order of permit approval date.
 - b. There is a backlog of permit reviews.
 - c. Project must commence within 90 days of permit approval.
 - d. One Stop:
 - i. Applicant meets with One Stop personnel to review application requirements including drawings and reviews and approvals that the application requires from other GovGuam agencies. This educates the applicant on requirements.
 - ii. Applicant submits application package for review. If other permits are required, the burden is on the applicant to get the other approvals,
 - iii. After other GovGuam agencies provide approval, DPW reviews application for completeness, approves for processing, and collects a fee.
 - iv. The Application Review Committee (ARC) reviews and comments on the application. The ARC recommendations and suggested conditions are forwarded to the GLUC for consideration. This requires staff time to prepares the report and attend public hearings, as necessary.
 - v. GLUC makes the final decision within 180 days.

- vi. Currently, all applications and reviews are tracked manually. About five years ago they did have an electronic system for applications,
 - vii. There was an electronic system in 2002 but that was discontinued when they moved offices; it will be replaced by a new system that is undergoing final testing. This coincides with the agency's relocation to temporary facilities while their facilities are being renovated. This was a set-back in progress. The manual system has been an extra burden on staffing.
 - viii. Under the new system the database will be user-friendly, searchable. DPW may not be able to import the old data into the new system.
 - ix. If the GLUC approves the permit, the building permit is issued by DPW. Construction must occur within 90 days.
6. Fees:
- a. There is an upfront "plan check fee" and a final fee "building permit fee." The building permit fee fluctuates with the size and type of project. The applicant estimates the fee on the first page of the application and DPW verifies it.
 - b. Prior to 2009, the fees went to the general fund. In 2009 a new law passed where DPW can retain the plan check fee. It is anticipated that the fee would be sufficient to provide DPW money for the services it provides.
7. Workforce Housing:
- a. Ukudo:
 - i. Current use is not H-2B workers.
 - ii. There were some Micronesian students housed there (temporary).
 - iii. Current capacity is 500, which is much fewer than original plan.
 - iv. The Guam Waterworks Authority placed a condition on subsequent phases of development, requiring infrastructure improvements.
 - b. Core-Tech:
 - i. Located in Tamuning, the Soo family purchased the apartments and sold them to Core Tech for reuse as workforce housing and they are currently reverted back to apartments. "Summer Garden Building" with 114 apartments.
 - ii. Another project is El Dorado (aka Summerville) in Upper Tumon, which also started as apartments, was planned for worker housing and is reverting back to apartments.
 - iii. There was another project in Tiyan that is being used by GovGuam.
8. Residential Housing Development:
- a. Tower 70. Just started construction. They were issued a foundation permit. The project was issued low income tax credits by GHURA.
 - b. Emerald Oceanview Park. Four apartment towers with 280 units near the Guam Memorial Hospital. Work was halted in 2010 due to the delay of the 2010 buildup and South Korean economic reasons and a lawsuit by a local resident. The cranes are a liability. If project is not completed, there are no legal requirements to demolish it. If work stops and is delayed more than 90 days, the applicant must reapply for a Building Permit.

- c. Paradise Estates in Dededo. High-end rentals with a high percentage of military use, especially while there were renovations of housing at AAFB. Approximately 400 units and there are plans to add 100 more.
 - d. Sigua near LeoPalace is proposed for 5,000 units on Texas A&M land. To be phased in over 20 years. It is supposed to include elderly and affordable housing.
9. Suggestions for obtaining information on approved and pending permit approvals since 2008:
- a. BSP (Bureau of Statistics and Plans).
 - b. Guam Department of Revenue and Taxation.
 - c. DPW can't assist until they are back online.
 - d. DLM.
10. Action Items: None

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Guam Department of Youth Affairs

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Agency Name: Guam Department of Youth Affairs

Date: January 25, 2013 at Department of Youth Affairs Headquarters; 0800 to 0930

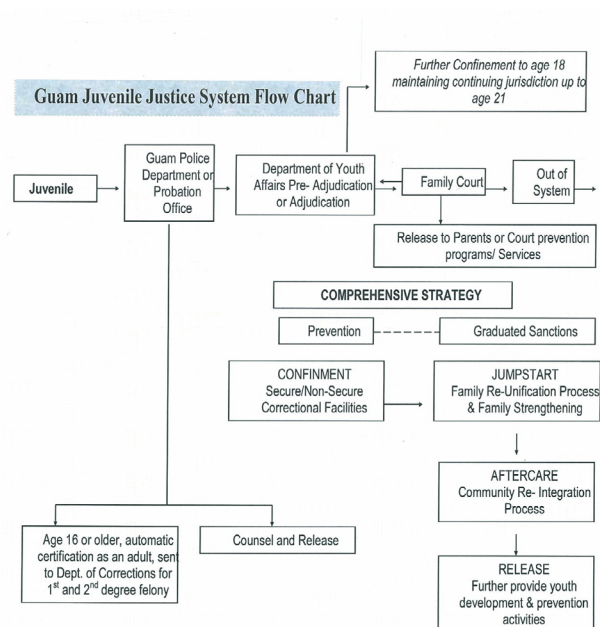
Attendees:

Attendee Name	Org	Title	Email	Telephone
Jeannette Toves	DYA	Administrative Service Officer	jeannette.toves@dya.guam.gov	671-735-5007
Juan Rapadas	DYA	Psychologist	djrapalas@guam.net	671-735-5034
Rebecca Respicio	DYA	Program Coordinator	rebecca.respicio@dya.guam.gov	671-735-5032
Adonis Mendiola	DYA	DYA Director	adonis.mendiola@dya.guam.gov	671-735-5010
Gregory San Miguel	DYA	Superintendent	greg.sanmiguel@dya.guam.gov	671-735-5007
Grace Taitano	DYA	Youth Development Administrator	grace.taitano@dya.guam.gov	671-735-5035
David Kiernan	Cardno TEC, Inc.	Project Manager - SIAS	david.kiernan@cardnotec.com	805-564-4940
Scott Glenn	Cardno TEC, Inc.	SIAS Team	scott.glenn@cardnotec.com	808-528-1445

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Background –
 - a. The Department of Youth Affairs (DYA) is a government agency under the Government of Guam created through the enactment of Public Law 14-110 on March 2, 1978. Its purpose is to plan, coordinate, and implement programs, services, and activities geared toward youth development, rehabilitation and involvement in the community. The mission of the department is to improve the quality of life on Guam for all people by the development and implementation of programs and services that promote youth development, decrease juvenile delinquency and status offenses, strengthen the family unit and communities of these juvenile offenders, protect the public from juvenile delinquents, ensure offenders are held accountable for their actions with appropriate treatment, and restitution to the victims.
 - b. DYA is part of the Executive Branch. It provides services within the correctional facilities, schools, and community. There are currently three (3) divisions within the department: the Division of Special Services (Youth Correctional Facility and Cottage Homes); Youth Development (Community Social Development Unit – Youth Resource Centers and Counseling Case Management Unit); and Vocational Rehabilitation and Support Services (Administrative Services Unit, Culinary, and Maintenance). Although all three divisions, including the Director’s Office have instrumental and vital roles toward maintaining the high standard of care, custody, and supervision provided to Guam’s troubled youths, a great majority of employees that provide direct contact and/or frontline services are assigned to the Divisions of Special Services (DSS) and Youth Development (YD). DSS is responsible for

the 24-hour care and custody of juvenile offenders, status offenders, and non-offenders (PINS), to include certified youth and youth who are continuing jurisdiction of the court (age 18 – 21), via the court/ remand order, the Guam Police Department, Juvenile Probation Office, Child Protective Services, or the Department of Education. In the community, DYA established three (3) Youth Resource Centers in the northern, central and southern regions of Guam to promote youth development, strengthen family units as well as the communities of these families. YD manages these centers that consist of social workers, clinicians, community program aides, volunteers, and college student interns. Programs and services for children, youths, and their families, including at-risk youth and youth in the juvenile justice system include but are not limited to after-school and weekend activities, mentoring and tutoring, computer labs, community service, job training, case management and counseling services, 24-hour crisis intervention, individual and family counseling, adolescent and parent support groups, educational awareness presentations, sports and recreational activities, and other skills- building activities and workshops.



- c. DYA currently houses all local, military youth status and non-status offenders, including those immigrant family members. The Department's mandate to house all youth offenders (status and non-status), non-offenders/ PINS, continuing jurisdiction of court (up to age 21), and certified youth are those youth who have been remanded or committed to it by the local and federal courts (underage illegal aliens awaiting trial and those serving sentences prior to deportation).
- d. Juveniles are seen by a clinical psychologist and family therapist for mental health and drug use. They are assessed and diagnosed with the aid of the tools (e.g., Child Depression Inventory, Bar-On EQ test, WRAT-4 - achievement test, Mental status exam, Conner's scales,

and Self Esteem Scale), to include other instruments for academic and personality testing for treatment, referrals for services, court reports and recommendations, etc. DYA collaborates with Department of Mental Health and Substance Abuse and other child serving agencies such as CPS, DOE, and the AG.

- e. Once juveniles are adjudicated, they go through a Step Plan (Behavioral) Program that can qualify them for quality time, furloughs/ extended furloughs, and the Jumpstart Program. The Step Plan Program time frame is based on the adjudication status as determined either by the court or the number of admitted offenses to different charges (first adjudicated, second adjudicated, third adjudicated, etc.) The term "adjudication" means that their case has been heard and decided upon by the court, after they have admitted to, or found in violation of an offense as illustrated in the following chart.

Adjudication Timeframe

Adjudication	Step 1	Step 2	Step 3	Step 4
1 st Adjudication	5 days	15 days	30 days	Release
2 nd Adjudication	10 days	30 days	60 days	Release
3 rd Adjudication	15 days	45 days	90 days	Release

- 5. Service population –
 - a. Service population includes up to age 21 (continuing jurisdiction of the court) and certified youth (criminal felons) between 16 and 21. The Cottage Homes receives abused children as young as 8 years who have committed some kind of status/ non-criminal offense (though separate from Child Protective Service which is part of public health).
 - b. DYA works with other child service agencies.
 - c. In the community-based DYA Resource Centers, the service population beings at age 5 up to 18.
 - d. DYA was recently approached by the U.S. Attorney General to detain dependents of active duty military dependents.
- 6. DYA Functions
 - a. The goals of DYA are to get juveniles who can be rehabilitated, back into the community and continue serves through the Resource Centers and other agencies/ organizations.
 - b. The mentality of DYA is when a juvenile is admitted, the discharge process begins – research shows that extended incarceration is harmful to juveniles, but court orders to detain them are binding. DYA does its best to address this conflict work in the best interests of the juveniles by constantly communicating with the courts and other agencies involved in the cases.
 - c. Through court order, juveniles may qualify for the Jumpstart (family reunification) Program. It is intended to help meet the needs of juveniles incarcerated at YCF or Cottage Homes by abbreviating the length of stay and allowing them to prove that they can alter their negative behaviors within the school, home, and community. Through close monitoring, parents/ legal guardians can also prove to the court that they can assume this responsibility in providing appropriate care and supervision to their child.
 - d. After juveniles spend time at DYA, they can be referred to or continue in the Aftercare (community reintegration) Program via the Resource Centers. DYA will work with juveniles, parents, schools, and courts to monitor progress and other services (24-hour crisis intervention, individual and family counseling, tutoring and mentoring, etc.)

- e. Short term stay is appropriate punishment and rehabilitation. DYA is beneficial for juveniles who get in trouble and choose to break the law, not follow parents' and school rules. They have to want to be helped and those who choose not to will not improve or get better.
7. Facilities
- a. The YCF (non status offenders, continuing jurisdiction of the court, and certified youth) has a total of 68 beds and Cottage Homes (status offenders and non offenders) has a total of 16 beds.
 - b. DYA's Resource Centers are located in the villages of Dededo (northern region), Toto Gardens (central region), and Agat (southern region) and offer after school activities, tutoring and mentoring, case management, 24-hour crisis intervention, individual and family counseling, sports/ recreation, community beautification, etc. These centers are for prevention, early intervention, rehabilitation/ treatment, and aftercare.
8. Please further describe collaboration programs with the following for academic tutoring and technical education entities:
- a. Guam Department of Education
 - i. Working with GDOE to provide the *Community Reintegration Program* (funded by the US DOE Title V Consolidated Grant, second cycle) to promote and empower students who are placed at the Youth Correctional Facility, to modify negative behaviors into positive behaviors, re-integrate them back to their schools, homes and community and receive services from various resources (e.g. University of Guam's 4H Program) that will enhance their existing academic program under the GDOE *Liheng Famagu'on* (Children's Shelter) School.
 - ii. DYA also works with GDOE's *Parent, Family, Community Outreach Program* designed to increase the academic performance of at-risk students and to provide supportive services to those students and their families.
 - b. Guam Community College
 - i. The *Career Technical Education Program*, through GDOE's Title V Consolidated Grant will provides technology-based education curriculum and applied academics that help students learn more about specific careers in addition to providing them with technical skills to grow personally and professionally. Upon a student's return to his/her homebase school, he/she may transition into the CTE Program available at the school.
 - ii. The College Access Challenge Grant Program, through is a formula grant from the U.S. Department of Education, provides tutorial services at the Resource Centers.
 - c. University of Guam
 - i. Undergraduate students conduct practicum hours at DYA under the social work and psychology programs including graduate students under the clinical psychology and counseling programs.
 - d. DDESS
 - i. No relationship with DDESS. If crimes are committed on base, then they are handled on base. If crimes are committed outside, then it will go through DYA. But since they are military dependents, they would be in and out quickly.

e. DMHSA

- i. DYA's relationship with DMHSA has improved due to ongoing collaborative meetings, whereas working with Sanctuary, Inc. has been a challenge for us since they are a non-government organization and their programs are voluntary. In addition, their programs have not been shown to be effective yet through quality control. It is DYA's experience that many clients decide to drop out of Sanctuary's programs and would rather serve their remand time in DYA. Suicidal kids or those with severe disorders may be sent to another facility. Most likely the DMHSA, Latte Treatment Center, or other residential treatment centers.

9. Please provide further comment on trends in the following:

a. Micronesian gang activity

- i. Has not been a terrible problem. Some gangs but not organized crime.
- ii. It might only take one gang veteran leader from the US Mainland to turn them into a crime syndicate.
- iii. Area at George Washington High School where FSM hang out separate from everyone. No mingling of cultures is conducive to cultural tension.

b. MMA fighting

- i. Not serious at this time.

c. Youth alcohol and drug use

- i. Chamorros use marijuana and spice, a dangerous rate at this time. These kids go through drug court.
- ii. Chuukese inhale butane and gasoline for a cheap high.

d. Chuukese Youth

- i. a. An example in PDN today where there was a police chase that involved a Chuukese youth. These types of incidents happen and continue to happen and promote an anti-FSM attitude in the community.
- ii. b. Chuukese is now 10% of Guam's population but 40% of DYA's population.
- iii. c. FSM youth makes up 50 to 70% of male youth criminals.
- iv. Coming to Guam is culture shock for FSM kids.
- v. Parenting is the biggest problem – culturally the men are higher than women so in cases where there is no father, the boys will ignore their mothers and do as they please. They get drunk and and commit crime. When sober, the kids are not bad kids.
- vi. Alcohol is not really part of FSM culture but when they get to Guam there is cheap alcohol everywhere. It creates a carnival atmosphere. "They drink a lot."
- vii. There is also culture shock that kids are mandated to go to school. Many of their parents have not completed a high school diploma from their home island so there is no urgency or example coming from the parents to get a diploma.
- viii. It is very difficult to reintegrate Chuukese juveniles into the community. DYA can only recall of 3 total Chuukese clients who left DYA and graduated from high school. The rest are not getting an education and there is no upward mobility. They get exploited by local and foreign owned construction companies.
- ix. They feel they are being discriminated against (many actually do experience discrimination and stereotyping) so some retaliate and some react internally and feel

depressed or withdrawn. Some will not admit they are Chuukese. There is self-loathing, similar to American Indians.

- x. Cycle of poverty: they feel bad, drink, commit crime, jailed, poor
- xi. They are tracked after leaving DYA but challenging to do because they often relocate. DYA does its best to get these kids to stay in school. Communication is important and so is transportation – these issues make it hard to track them as well as reaching their parents.

10. Open Topics

- a. Truancy rates have fallen. DOE is working hard on truancy issue. Example – a 12 year old kid's initial crime is burglary and placed probation. He later causes trouble at school and he will end up again at DYA. DYA prefers the case be handled at the school's level and that the kid not automatically be sent back to DYA since he has not reoffended or has stopped the original negative/ criminal behavior of burglary.
- b. The Lagu (Northern) Youth Resource Center in Dededo is one place where DYA and DOE work together to figure out whether a kid needs to go back to DYA.
- c. Reasons for burglary – father is in jail, no job, and no money. Government has restricted food stamps and then they commit property crime.
- d. DYA staffing - Staffing needs are largely driven by (FSM) immigration and this population keeps coming in.
- e. The local kids - Chamorro population is declining while the FSM population is increasing.
- f. The island is the worst it has been in 28 years. Immigrants are turning Guam into a third world type social conditions as they are just are not making it. It is costly for the care and custody of juveniles as health and dental cost in FY 2013 is more than \$24,000 (over the past 3 months). Almost all for FSM detainees. Parents tell kids to complain while at DYA so they can get healthcare and FSM parents cannot be reached or found therefore, DYA is billed by the GMH. See following list.

Open Topic

-FSM issues

-Medical expenses of Youth Corrections and Cottage Homes' clientele from 2009 to 2012:

Auxiliary Fund:

2009

Doctor: \$4,093.36

Medicine: \$9,679.55

Other Medical (i.e. exams: Lab, eye, dental; nursing svcs.): \$145

2010

Doctor: \$9110.01

Medicine: \$8722.60

Other Medical: \$395.86

2011

Doctor: \$13,477.82

Medicine: \$3,841.32

Other Medical: \$5,524.80

2012

Doctor: \$23,303.59

Medicine: \$1,798.60

Other Medical: \$551.41

11. Conclusion & Action Items

- a. Were not addressed/ discussed at the time.

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**Guam Fire Department,
Fire Prevention and Fire Suppression**

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Agency Name: Guam Fire Department - Fire Prevention and Fire Suppression

Date: **1st Meeting:** January 25, 2013 at DNA Building, 10th Floor, 1000 to 1100
2nd Meeting: January 28, 2013 at DNA Building, 10th Floor, 0800-0930

Attendees:

Attendee Name	Organization	Title	Email	Telephone
First Interview:				
Edward Artero	GFD	Fire Lt.	edward.artero@gfd.guam.gov	671.642.3454
Michael Uncangco	GFD	Assistant Fire Chief	michael.uncangco@hotmail.com	671.649.8805
John Wusstig	GFD	Fire Chief-Acting	john.wusstig@gfd.guam.gov	671.688.1111
Celeste Werner	Matrix Design, representing the Governor's Office	Vice President	celeste_werner@matrixdesigngroup.com	671.777.1676
Mike Hrapla	Matrix Design, representing the Governor's Office	Vice President	mike_hrapla@matrixdesigngroup.com	671.777.1675
Faith Caplan	Cardno TEC, Inc.	SIAS team	faith.caplan@cardnotec.com	808.528.1445
Caroleen Toyama	NAVFAC Pacific	Navy Technical Representative for SIAS	caroleen.toyama@navy.mil	808.472.1088
Second Interview (Fire Marshall inspections):				
Joey Manibusan	GFD	Fire Captain - Fire Code Official	guamfireinspector@gmail.com	671.646.8810
Caroleen Toyama	NAVFAC Pacific	Navy Technical Representative - SIAS	caroleen.toyama@navy.mil	808.472.1088
David Kiernan	Cardno Tec, Inc.	Project Manager - SIAS	david.kiernan@cardnotec.com	805.564.4940

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Note: Guam Fire Department provided a separate questionnaire response for Fire Prevention and Fire Suppression. The SIAS team arranged for separate interviews but the responses overlapped both prevention and suppression. The notes presented herein are a summary of both interviews.
5. Fire Prevention
 - a. What sorts of things are inspected by the Fire Prevention Bureau?:
 - i. Inspections are related to enforcement of the fire code.
 - ii. Review permit application and design plans.
 - iii. Work with the applicants on deficiencies.
 - iv. Inspection of work site during various phases of construction including a final inspection.
 - v. Look at electrical systems, egress (exit), Fire Department accessibility, sprinkler systems, coolant and duct systems.

- vi. Water pressure is critical. GWA is responsible for installing hydrants.
 - vii. Inspection fee is \$30 if inspection is failed. Free if inspection is passed.
 - b. GFD is responsible for everything but federal buildings. GFD is sometimes invited to inspect federal buildings because GFD would be fighting fires there.
 - c. In 2009, GFD switched from using the Uniform Fire Code to the International Fire Code
 - i. There was a 2 year transition period ending in 2012.
 - ii. Contractors were in favor of the switch.
 - d. H-2B Worker Housing:
 - i. These housing units are outside DoD responsibility.
 - ii. They are subject to annual inspection.
 - iii. With the large military population anticipated in 2010, there were conditions that the workforce housing provide their own emergency services on site. With the decrease in military population those conditions on workforce housing may not be applied.
6. Fire Suppression
- a. Impact of military build-up:
 - i. Increases in the number of alarms are based on an increase in population, regardless of the demographics or reason behind the population increase.
 - ii. Prefer that the military relocation main cantonment NOT be in Yigo or Dededo. It is the indirect population growth that is the concern in these populated areas. These are already high response areas.
 - b. Relationship with DoD:
 - i. There is an MOU with DoD that outlines cooperation and mutual aid agreement.
 - ii. The relationship with DoD Forces on island is very good. They assist in all aspects of GFD's mandates such as Fire, Medical, and Rescue, excepting local code Fire Prevention duties.
 - iii. Navy assists in selling GFD used trucks and equipment that tend to be in relatively good condition due to the DoD policy of replacing vehicles within a certain time period – GFD is able to obtain equipment at minimum cost through the US General Services Administration.
 - iv. Ocean rescue is provided by the U.S. Coast Guard with airlift support from the Air Force at Andersen Air Force Base.
 - v. National Incident Management System- not covered.
 - vi. Federal Public Safety- not covered.
 - c. Thresholds/standards of fire suppression service
 - i. The standard is one station per 10,000 persons.
 - ii. The real driver for fire suppression is response time: 4-8 minutes
 - iii. BSP can provide maps of fire stations. A 2-mile radius around each station is assumed to represent the acceptable response time.
 - iv. There are shortfalls in staffing and equipment. Matrix Design says there is a report that was prepared for GFD.
 - v. There is Compact Impact funding that is used for vehicles.

- vi. HUD Community Development Block Grants also provide funding for equipment. The needs are tied to population and income of that population. GHURA applies for these grants, but GFD also does a lot of the grant writing.
- vii. New fire stations are tied to the demonstrated ability to staff and equip them. When fire stations are built, the Legislature includes equipment and personnel needed for the new fire station

7. Staffing

- a. Volunteers:
 - i. A volunteer force is authorized, but the policy has not been drafted.
 - ii. There is little incentive to be a volunteer.
 - iii. In California, all fire fighters are required to volunteer before being accepted to the force. Therefore, there are always volunteers.
- b. There is never a shortage of people who want to be firefighters in Guam.
- c. There is a shortfall of about 90 positions. There were 394 uniformed personnel; now there are 250. The Fire Prevention staffing numbers are included in the Fire Suppression staffing numbers provided in the questionnaire responses.
- d. 15 new fire fighters starting on January 28.
- e. The EMT numbers are included in Fire Suppression staffing numbers in the questionnaire response.
- f. The shortfall is due to lack of funding for the positions.
- g. 30 new recruits are entering the Fire Academy in 2013.
- h. There is attrition. 8 people leave the GFD every 5 years.
- i. There is a lack of promotional opportunity within staff due to budget restrictions. This is not good for morale.

8. Action Items

- a. Requested the Matrix Design report from GFD.

9. Additional Comments following the interview

- a. GFD handle the EMS system with 7-8 Ambulances located throughout the island housed at strategic Fire houses. We also have two Advance Life Support units who at this time work as intercept units for any patient with life threatening issues being transported by our Ambulances.
- b. GFD has three Land and Sea Rescue Units. They are the first responders to any call of emergencies dealing with Land rescues and Sea rescues.
- c. GFD is still seeking land and funding to upgrade 5 of our twelve Fire Houses to NFPA level. These five were built between 1950 and 1976. Some were just buildings acquired from the Government that were converted for Fire use.

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Guam Housing and Urban Renewal Authority

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Agency Name: Guam Housing and Urban Renewal Authority (GHURA)

Date: January 22, 2013, at Adelup Conference Room, 1600-1700

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Kathy Taitano	GHURA	Acting Chief Planner	katherine@ghura.org	671.475.1322
Michael J. Duenas	GHURA	Executive Director	mjduenas@ghura.org	671.475.1378
Faith Caplan	Cardno TEC, Inc.	SIAS Team	faith.caplan@cardnotec.com	808.528.1445
David Kiernan	Cardno TEC, Inc.	Project Manager - SIAS	david.kiernan@cardnotec.com	805.564.4940

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. General Discussion
 - a. GHURA administers 2,500 housing vouchers under Section 8.
 - b. GHURA is landlord to another 750 units of public housing under HUD.
 - c. Provide \$33M annual in housing assistance. Subsidy of \$4m to operate and maintain housing units.
 - d. Units are fully booked. Due to state of economy and inability of clientele to find employment.
 - e. Qualify for support from GHURA if income is 30% of area median income, as derived by HUD; HUD tries to get good numbers but it is difficult. Median income has been slowly rising.
 - f. Biggest issue for landlords and families is rising cost of utilities. Families get a utilities allowance based on income and size of unit between \$25 and \$250/month.
 - g. A contractor conducts surveys of (non-low-income households); survey provides data on utilities costs. Subsidy must be used to pay utilities or the family gets terminated from Section 8. HUD enforces utilities subsidies. The survey is support data for the Utility Reimbursement calculation. Utilities to the unit (power and water) are a requirement for program participation as a condition of health and safety.
 - h. HUD is moving in several directions made a concerted effort to keep cost of Section 8 in check. Previously funded increases every year. Now have a dollar limit instead of a voucher limit.
 - i. Over last 3 to 4 years has been a tense relationship between landlords and GHURA. GHURA wants low rents and landlords want high rents. Landlords look to the MLS to support an argument for the highest and best rents according to market norms.
 - j. From time to time on-base construction of housing puts military folks into market and creates short-term booms....now about 20% of military folks are in the market.
 - k. More families in need of housing assistance than GHURA can handle. Wait list of 4,000 families. Families that are on the wait list have crowding and poverty. The 4,000 represents the HCV/S8 wait list. There is another estimated 1,400 household (or, families) on the Public Housing wait list.

- l. New admissions of about 150 families per year...used to be about 22% turnover, now less than 5% turnover...families are staying on the wait list for years. Those 'new admissions' are the turnover of the same 150 vouchers each year (estimated).
- m. GHURA has stopped adding new families to the wait list because they don't want to instill false hope. (The HCVP/S8 wait list was closed in January 2013).
- n. Admission into GHURA programs is on a first come first serve basis.
- o. GHURA works with landlords, HAP contract is three way. GHURA might terminate housing assistance if program rules are violated (landlord may not necessarily evict).
- p. Clientele are growing independent of buildup.
- q. Buildup bring jobs could help but could hurt due to rising rents.
- r. Used to be laughable to rent to Section 8, now landlords ok with it because lots of vacancy.
- s. Landlords don't report (problems with) tenants as much as outside folks (neighbors) do.
- t. Nimitz towers now advertising used to be full (military and young pros)...military families not going there.
- u. Timeline to develop housing is long, takes 2.5 years to get permitting.
- v. Funds are maxed out; even if units came available then GHURA could not match families. GHURA has the authority for the issuance of 2,545 vouchers. GHURA received an annual budget for housing assistance. The challenge is to maximize the real dollars received in order to fund as many vouchers as possible.
- w. Little change in vacancy rate from 2000 to 2010. Affordability is the problem.
- x. Workforce housing units need to be re-purposed.
- y. Staffing – GHURA is not understaffed. Have the resources to address the program but not the families in need.
- z. GHURA is an autonomous agency.
- aa. Has been an out-migration, people being born but population is flat. It is noticeable that people are leaving. DoE may have to close another school in the south.
- bb. Age pyramid is showing that Guam is losing population around age 35. Lots of folks joining military. Started with base closures in 1995, ship repair closure....Economy is important factor in population growth.
- cc. "Elderly" defined to start at 55, but that definition does not make much sense anymore. 55 is not old. Age to be defined as elderly was 60 but dropped to 55 because not enough people at 60. Might want to raise back due to baby boomers.
- dd. Homeless tend to be singles. Some camps in the jungle. Sometimes see extension cords leaving houses reaching into the jungle.
- ee. Doing point in time homeless count on Friday, last year the number of homeless was 1,100. Media said that estimate was too low. Homeless are more visible lately.
- ff. Public health has channeled applicants for all programs...apply for food stamps and that determines eligibility for all programs.
- gg. Governor has pushed to increase the number of affordable housing units. Guam does not seem to need more units now but it takes a while to develop units and need to plan for future.
- hh. With sequestration, there would be an 8% cut for HUD across the board. More of a factor for Section 8. Would be one year to adjust. The latest information now puts the sequestration impacts at 5%.
- ii. HOME program cut 38% last year.

- jj. Low Income Housing Tax Credit - Identify priorities and award credits to developers. Developers take the credit and sell it for 0.80-0.85 cents on the dollar. Use money to finance low income rental properties. May be fewer purchasers of credits due to losses by banks and insurance co.'s so there may be fewer rental units developed. Number of units being able to be developed is declining.
 - kk. Biggest concern is getting a good handle on population projections. And projections on the economy. Tourism is looking promising. Would be great to see that maintained. Tourism tax money goes to paying bonds and Guam Visitors Bureau.
 - ll. The elderly population is growing fast but the base is low.
5. Conclusion & Action Items - None

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Guam Memorial Hospital Authority

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Agency Name: Guam Memorial Hospital Authority

Date: January 22, 2013 at Adelup Conference Room; 1200-1300

Attendees:

Attendee Name	Organization	Title	Email	Telephone
William Kando	GMHA	Hospital Chief Planner	william.kando@gmha.org	671-647-2316
Faith Caplan	Cardno TEC, Inc.	SIAS Team	faith.caplan@cardnotec.com	808.528.1445
Scott Glenn	Cardno TEC, Inc.	SIAS Team	scott.glenn@cardnotec.com	808.528-1445

Meeting Record

1. Introductions
2. Overview of SIAS
3. Interview Method
4. Finances
 - a. GMHA is carrying in excess of \$20M in debt.
 - b. There is local legislation that is going to enable GMHA to reap the benefits from a new 4% tax on insurance premiums.
 - c. Congressional budget could result in cuts to Medicare and Medicaid. Hopefully, this will not impact GMHA's service, although the Government of Guam's and GMHA's funding depend on funding for Medicare and Medicaid. GMHA receipts from federal and Guam reimbursement are below the cost of providing these services.
 - d. GovGuam receives about \$16M annually in Compact Impact Funds, but GMHA may get approximately \$6M each year. The received funds are a fraction of the cost from Compact immigrants to GMHA, which has experienced an average of about \$18M/year in costs from Compact Impact Immigrants from FY08-FY12.
 - e. The latest information that GMHA has from the Bureau of Planning and Statistics on FAS population is an estimate of 18,305 from a 2008 Survey of Compact of Free Association (COFA) Migrants. More important to GMHA is our FAS patients served in the Hospital during the last five (5) years. Those numbers have gone up dramatically as follows:
 - FY12: 8,008 FAS citizens seen at a GMHA cost of \$21,340,493.
 - FY11: 7,005 FAS citizens seen at a GMHA cost of \$21,740,004.
 - FY10: 5,709 FAS citizens seen at a GMHA cost of \$16,230,423.
 - FY09: 7,138 FAS citizens seen at a GMHA cost of \$17,235,745.
 - FY08: 6,030 FAS citizens seen at a GMHA cost of \$11,470,618.
5. Military impact
 - a. There is very little medical service provided to military. GMHA's Emergency Department is available to military personnel. Military personnel might seek services at GMHA if the individual does not want to have the visit in their military medical records. They would likely pay cash for these services.
 - b. Also, in the event of emergency, the individual will be provided care at GMHA and transferred to Naval Hospital after they are stable and ready for transfer as necessary. Tricare insurance would be accepted like any other insurance provider.
 - c. Unknown who would pay if a civilian were to go to Naval Hospital.

6. Renovations
 - a. The plans for renovations were de-scoped in GMHA's Hospital Expansion Feasibility Study, as the Governor's 5-Year Strategic Plan is addressing Guam's Master Plan for establishing a future public Medical Center to include GMHA, DPHSS, DMHSA and Healthcare Clinics. The new medical campus is Guam's vision for meeting the needs of the Guam Community.
 - b. DPHSS has upgraded the Southern Clinic.
 - c. There was a DOI Technical Assistance Grant to study existing conditions.
 - d. There are continuous renovations at GMHA. Almost every room has been renovated when we completed our Exterior Wall Hardening Hazard Mitigation Projects. Providing Urgent Care by GMHA will be a priority and a challenge in the near future.
 - e. The current location of the hospital could accommodate a significant expansion; however, such expansion projects are always a big challenge when you have to maintain existing operations without interrupting ongoing acute inpatient and non-acute outpatient services.
 - f. Currently, there are 158 acute care beds. The Critical Care unit and the Emergency Department are being expanded to meet current standards and to expand capacities as well.
 - g. Parking is a big issue and is a limiting factor on hospital expansion. However, we still manage to complete our expansion projects in a professional manner.
 - h. How long can the GMHA be maintained before it is replaced? A strategic plan is being completed that shall address this issue in detail.
 - i. Urgent Care must be provided. Currently, urgent care is provided at the Emergency Room at ER rates.
7. Guam Community College and UOG provide new nurses, nurse assistants and other allied health professionals. The ongoing challenge is finding specialty nurses and doctors.
8. Medical City
 - a. The private development is under construction and competition is welcome.
 - b. It will provide services for those who can afford it.
 - c. Is planning to have 100-200 acute care beds and completion is scheduled for early 2014.
9. Records
 - a. Revenue cycle software is used by multiple health services but the systems are not yet linked across agencies.
 - b. The goal is to link the hospital, public health and mental health records.
 - c. This software may not link to military population records.
10. Service
 - a. The national average is approximately 2.5 beds/1,000 population. Based upon Guam's 2010 Census data (as provided by the Guam Bureau of Planning and Statistics) which reflects Guam's 2013 population estimate at 160,750, GMHA provides Guam with 1 acute care bed / 1,000 population. The new Medical City will certainly help to meet the Guam Community's acute care bed needs.

11. Action Items

- a. Mr. Kando will provide: breakdown of service population demographics, including Compact impact data.

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Guam Police Department

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Agency: Guam Police Department

Date: January 23, 2013 at Adelup Conference room, 1200-1300

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Maurice Sayama	GPD	Police Colonel	maurice.sayama@gpd.guam.gov	
Andrew Quitugua	GPD	Police Lieutenant	andrew.quitugua@gpd.guam.gov	671.472.8911
Mike Hrapla	Matrix Design, representing Governor's Office	Vice President	mike_hrapla@matrixdesigngroup.com	443.274.6111
Scott Glenn	Cardno TEC, Inc.	SIAS Team	scott.glenn@cardnotec.com	808.528.1445
David Kiernan	Cardno TEC, Inc.	Project Manager - SIAS	david.kiernan@cardnotec.com	805.564.4940

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Comment on Trends in:
 - a. Staffing/equipment (resources)
 - i. Require more officers to effectively cover the populated areas.
 - ii. Currently deputizing civilians – civilian volunteers – trying to make it like military reserves. Get volunteers up to speed so they can replace officers who leave. Volunteers have other jobs and it is tough to commit to shifts.
 - iii. There are people interested in becoming police officers but difficult to fund and training criteria are very high (2,000 hours of training, want it reduced to 400 hours if possible).
 - iv. All funding (since 2000) for new officers, has come from U.S. federal government.
 - v. Attrition is high due to stress and low-pay...lots of people being deployed or volunteering for foreign military service.
 - vi. LERMS – Law Enforcement Reporting Management System. Have portable laptops (tough laptops) in cars. Can do reports from the field. Supposed to keep officers out in the field.
 - vii. Last cars bought in 2005; 1 car in Agana, 2 in Tamuning, 2 in Dededo. Need Compact Aid payments to buy new cars. Will take at least 8 months to get payments. To a year to get cars on the street.
 - b. Violent crime
 - i. On the rise. Things previously just seen on TV, in other places, are starting to happen here. Crimes against women on the increase. Not a great enough presence to show force that can work to deter violent crime. Also need training, some officers have left.
 - ii. Deterring violent crime is a matter of getting quality officers and quality training.
 - c. Property crime
 - i. Greater police presence would help deter property crime.
 - d. Micronesian gang activity
 - i. Ties in with drug use but not drug-driven. Some distribute drugs but gangs don't exist for drug sales, they are primarily so people have a group to identify with.

- e. Strip clubs / Gambling and correlation with prostitution
 - i. Video parlors (like Pachinko) are not illegal. Gambling related crime is lower than when gambling was legal in the 1980s.
 - ii. Cock fighting is a cultural thing so it is not easy to get rid of. Government won't fight those battles.
 - iii. Slavery has always been an issue, but just recently calling it slavery now. Big case recently is sending people to jail for a long time. Additional awareness training is needed. Even some of the strip clubs seem like human trafficking (groups of women travel from club to club then to mainland etc. and are controlled to an extent).
 - f. Drug use – is methamphetamine still the most abused illegal drug on Guam?
 - i. Yes, amphetamine. Also - MDMA, Salvia (Spice, newly illegal).
 - ii. Military use mostly marijuana (if they use drugs). Head shop (Gallops) is on the military no-go list. If police find military folks there they will call shore patrol.
 - g. Military – civilian fights
 - i. There are fights; gangs will fight innocent people...not necessarily military.
 - ii. Military do get in fights (drunks, ragers), but don't go around picking fights.
5. Cooperation with military
- a. GPD works with military shore patrol, Shore patrol does a good job of patrolling. They know the hotspots.
 - b. GPD cooperates with feds. Situation is positive. Work with ICE, FBI etc.
 - c. Some trouble sometimes with base commanders not letting police on base. GPD officials never put restrictions on military police.
 - d. Naval Criminal Investigative Service and Air Force Office of Special Investigations task force
 - i. Responsibilities (roles) are generally understood. Never been much of an issue who has jurisdiction.
 - e. Concurrent jurisdiction allowing civilian law enforcement access to base in the case of on-base crime.
6. Available data (2012)
- a. Violent and property crimes (Part I and Part II crimes) per 100,000 residents 2007-2012
 - b. Ethnic breakdown of those involved in Part I and Part II crimes
 - c. Arrest numbers:
 - i. Prostitution arrests
 - ii. Forcible rape
 - iii. Sex offenses
 - iv. Offenses against the family
7. Open Topics
- a. FAS/FSM – 6 nations included. GovGuam receives (compact impact) money but that money has not been coming in as it should. GPD does receive some of that money. FY 10 compact impact report – Online (SIAS Team found website:
<http://www.doi.gov/oia/reports/upload/FY2010-Guam-Compact-Impact-Report.pdf>)

- b. Substance abuse and migrants: Number of DUI arrests for Chuukese outweighs all other ethnicity even though Chuukese make up only 4% of Guam population (as of 2000 Census). Studied this issue because people dying on highways and GPD needed to understand why.
- c. Relationship with media – relationship with media is mediocre. Sometimes media is critical to police and that criticism does not help public confidence in Police; often stories relate to one or two bad cops but the media message makes it seem like all GPD.
- d. If police are able to keep communities safe then teachers are better able to teach and education is improved (safety helps all social services).

8. Conclusion & Action Items

Ethnic breakdown data needs to be extracted. Not available on a routine basis. Can extract for 2009-2012. GPD will provide crime and arrest trends for 2007-2012 (attached).

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**Guam Power Authority,
Consolidated Utility Services**

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Agency Name: Guam Power Authority - Consolidated Utility Services

Date: January 23, 2013 at Adelup Conference Room; 1400-1500

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Vincent Sablan, P.E.	GPA	Engineering Supervisor, Distribution	vsablan@gpagwa.com	671-648-3225
Rick Rust	Matrix Design, representing the Governor's Office	Senior Associate	rick_rust@matrixdesigngroup.com	671-777-1674
Faith Caplan	Cardno TEC, Inc.	SIAS Team	faith.caplan@cardnotec.com	808-528-1445
Caroleen Toyama	NAVFAC Pacific	Naval Technical Representative - SIAS	caroleen.toyama@navy.mil	808-472-1088

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Note: GPA's questionnaire response was very detailed. There were very few follow-on questions.
5. Workforce Housing. Reviewed 2010 FEIS Table 4.3-26:
 - a. Mai'ana Housing (#6 on the FEIS list) is operated by Chugach World Services. Formerly a hotel but now a 78-unit apartment complex. Units are not just for workforce housing.
 - b. Royal Hawaiian Gardens (#7 on the FEIS list) is a Core-tech project being used as apartments.
 - c. Younex (#1 on the FEIS list) would require upgrades to Harmon Substation if subsequent phases were to commence.
6. Other Projects:
 - a. Sigua Highlands. No issues or concerns. This project was not a result of military build-up speculation.
7. Permitting Services:
 - a. Listed in questionnaire response.
 - b. They are a member of the Application Review Committee.
8. DoD work:
 - a. GPA provides planning and assessment services to DoD on a Time and Materials basis. They assess in generating capacity and line capacity outside the DoD property boundaries.
 - b. Although they get paid for the DoD services, the permit review time and planning do add pressure to staff time. For example, the DoD projects tend to be complex and require more time than a simple residential application.
9. Rates:
 - a. There was a base rate increase last year.
 - b. Residential electricity rates on Guam \$0.27 per Kw/h.

- c. The rates vary by customer class and can be found at:
http://guampowerauthority.com/gpa_authority/rates/gpa_rate_schedules.php
- d. Military buildup would not impact rates.
- e. Major factor in power costs is diesel fuel costs.

10. Renewables:

- a. GPA just signed a power purchase agreement for a solar power project.
- b. There will be others.

11. Action Items: None

Guam Public Library System

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Agency Name: Guam Public Library System

Date: January 25, 2013 at Guam Public Library Main Branch; 1000-1100

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Teresita (Terry) Kennimer	GPLS	Library Technician Supervisor	teresita.kennimer@gpls.guam.gov	671.475.4754
Florence	GPLS			
June	GPLS			
Sandra Stanley	GPLS	Administrative Officer		
David Kiernan	Cardno TEC, Inc.	Project Manager - SIAS	david.kiernan@cardnotec.com	805.564.4940
Scott Glenn	Cardno TEC, Inc.	SIAS member	scott.glenn@cardnotec.com	808.528.1445

Meeting Notes

1. Introduction
2. Overview of SIAS
3. Interview Method
4. What are the Library System's main mission and goals?
 - a. GPLS provided a handout with the GPLS mission statement and goals.
5. Has there been an update to the Five-Year Plan (2008-2012)?
 - a. GPLS provided a copy of their recently received 5-year grant, which will help meet the needs spelled out in the 5-year plan.
6. Please describe the merger with the Department of Chamorro Affairs and what assistance staff from GPLS provides to the other divisions.
 - a. As noted in the questionnaire response, GPLS staff members have received additional duties from DCA as a result of the merger.
7. Please describe progress on electronic archiving and availability of digital resources.
 - a. The library is mandated to store legislative documents, usually put in Special Collections, and to archive historical newspapers, genealogical books, and books by local authors for not only Guam but also CNMI. GPLS is beginning to scan these documents into a digital archive using Alchemy (a propriety software system). The digital documents will be made available to the public. The historical artifacts being scanned will be transferred to Guam Museum.
 - b. GPLS has two concerns about the transfer of these items to Guam Museum:
 - i. Having to redirect patrons to another location to access the materials they need, which is less convenient for them than having a central depository.
 - ii. Shifting the paradigm of the material from one that is to be used and interacted with as a part of living culture to one where the material is part of a museum, which has a perception of being of the past.
 - c. GPLS plans to start offering e-books and online magazines in June 2013. It will continue to offer hardcopies of some materials that patrons tend to request, such as National Geographic.

8. Open Topic

- a. GPLS continues to have difficulty finding librarians and support staff. There is a shortage of qualified individuals for available positions and shortage of funds for positions. Staff members already do more than their job descriptions require. They have conducted self-training to improve their ability to provide services. Staff has to prioritize their effort, so the desk and patron services come first before processing and other tasks. GLPS uses volunteers, but often needs volunteers to be present for 6 hours to make the time investment worthwhile.
- b. There is no restriction on who can access public library resources. Everyone is welcome regardless of citizenship or residency status. Tourists can borrow books. GPLS asks that they provide the hotel address and permanent address. International students attending programs at UOG participate in GPLS programs. Military and their dependents are welcome to use the library. One military patron who had to be deployed wanted to renew his book so GPLS kept renewing the book until he returned. Naval Hospital is nearby but GLPS is not sure if their staff members use the library. H2B workers can also use the library, even if they live at a work camp.
- c. GPLS does not interact with DDESS.
- d. The most in-demand resource is children's books.
- e. Some private schools do not let their students use online resources for reports; instead, they require their students to only use resources physically at the libraries for their bibliographies.

9. Conclusion & Action Items – Terry gave Scott and David a tour of the library.

Guam Veteran's Affairs Office

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Agency Name: Guam Veterans Affairs Office

Date: January 29, 2013, at Veterans Affairs Office, 0830-0930

Attendees:

Attendee Name	Title/Organization	Title	Email	Telephone
John Unpingco	Office of Veterans Affairs	Administrator	john.unpingco@gvao.guam.gov	671.475.8392
David Kiernan	Cardno TEC, Inc.	Project Manager - SIAS	david.kiernan@cardnotec.com	805.564.4940

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. We understand that you provide the following services to veterans and active-duty personnel on Guam – please confirm that this remains so:
 - a. Drivers Licenses and license plates
 - i. Yes
 - b. Information on and applications for benefits and claims
 - i. Yes
 - c. Health Services
 - i. No. We do conduct home visits for homebound and hospitalized vets. If they can't file claims themselves, vet affairs will make home and hospital visits and help fill out the necessary paperwork and file the claims for them. We will also make referrals to CBOC (community based outreach clinic). Example – a Vet was in intensive care only lived on \$200/month, vet affairs helped him reapply for benefits.
 - d. Mental Health Services
 - i. Take claims, PTSD, military sexual trauma, and help file with Department of Veterans Affairs in Honolulu, Hi.
 - e. Homeless services (still contracted to Salvation Army? How many beds provided?)
 - i. Yes, work with programs concerning homeless. Have nothing to do with the Salvation Army. Work with CBOC who provides counseling services. Engage in grants for homeless to assist in any way they can.
 - f. Education and Training
 - i. People come in for counseling. Refer to right entity for counseling or counsel them ourselves.
 - g. Pensions
 - i. Covered as part of claims counseling
 - h. Vocational Rehabilitation and Employment Services
 - i. Not really. Occasional referral from business (business wants a vet for a slot). Difficult to find jobs for vets because they want brightly trained professionals such as an engineer or environmental engineer and the training has to be current.
 - i. Home Loan Services

- i. Help vets by reaching out. Recently held seminars sponsored by Bank Pacific. This collaboration was initially successful but has tapered off more recently. One more scheduled for March with Coast 360.
 - j. Life Insurance
 - i. Nothing with life insurance. VA information goes directly to the veteran. If veteran needs help with forms that can be done here.
 - k. Dependency and Indemnity Compensation
 - i. Yes. Help next of kin get benefits.
 - l. Burial Services (still managing two veterans' cemeteries?)
 - i. Make arrangements based in information from funeral homes. Still responsible for two (2) cemeteries but U.S. Navy volunteers responsible for maintenance of small one.
 - m. Still providing services to veterans from Micronesia (services do not exist in outer islands?)
 - i. Yes. Burial services. Not many clients are Micronesian; usually Micronesian clients are those who are killed in action.
 - n. Other?
 - i. Transportation for vets. Developing routes, pick up with 24 or 48 hours of notice. Computerized routing system. Just in planning stages, got a \$1.3M loan, trying to accommodate all disabled people. In beginning stages but hopeful for success.
 - ii. Also a \$4M grant from the National Cemetery Administration. To renovate and expand cemetery. Presently, the VA cemetery will be filled in 2 years. Going to be out of space soon. Grant to expand the Guam Veterans Cemetery. Oversized people buried in ground.
5. Agency Capacity: is your agency able to adequately support your service population? Describe your capacity in the following areas:
- a. Understaffed right now. Have had to fight for staff, supplemented by volunteers. Under budgeted by the GovGuam. Things starting to loosen up. Getting better in near term (it has to).
 - b. Processing benefits (are most forms/claims still sent to Honolulu for processing?) Yes
 - c. Administrative Staffing (How many FTE do you currently employ?)
 - i. 5 here in admin, 3 at cemetery.
6. Facilities and Technology (current capabilities and condition)
- a. Primitive technology. Computers are inadequate; system does not allow us to locate vet grave sites – thus helping visiting relatives and friends.
 - i. Facilities working out. Had problems with A/C but that has improved. We have replaced seven (7) of them.
 - b. What is your average daily phone call and in-person visit count?
 - i. Keep a log for incoming visitors. About 400 a month. Not including increase for burial (been picking up because Vietnam vets have been dying at high rates).
7. Confirm that you still run the Community Based Outpatient Clinic in Naval Hospital Guam.
- a. Do not run it. Never did.

- b. Do you run any other clinics/facilities? - No.
8. Any reports / documents you would like to provide us for review?
- a. No, it's a struggle just to keep head above water, very little time for reports.
9. Open Topic
- a. Veterans affairs does not bill patients.
 - b. Only serve vets and dependents of vets.
 - c. Would appreciate it if office could get more people. Another service counselor and need an administrative assistant because the current one is overburdened. Another at cemetery (vet affairs run the cemetery, 2 cemeteries) Navy does help at cemetery picking up flowers which is tougher than it sounds.
 - d. Visitors from National Cemetery Association will come soon and suggest improvements on how to use grant money. When cemetery expands, it will need more people to staff it.
 - e. Guam Veterans Affairs does basically same work as Federal VA (also located in Guam). People gravitate to Guam Vet affairs. Vets know where we are at, been here for years, GHURA leases building to vet affairs for \$1 year.
10. Conclusion & Action Items
- a. J. Unpingco took D. Kiernan on a driving tour of the Veterans Cemetery

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Guam Visitors Bureau

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Agency Name: Guam Visitors Bureau

Date: January 24, 2013 at Adelup Conference Room; 1200 to 1000

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Jon Nathan Denight	Guam Visitor's Bureau	Deputy General Manager	ndenight@visitguam.org	671-646-5278
Rick Rust	Matrix Design, representing the Governor's Office	Senior Associate	rick_rust@matrixdesigngroup.com	671-777-1674
Faith Caplan	Cardno TEC, Inc.	SIAS Team	faith.caplan@cardnotec.com	808-528-1445
David Kiernan	Cardno TEC, Inc.	Project Manager - SIAS	david.kiernan@cardnotec.com	805-564-4940

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. GVB guides tourism strategies for Guam:
 - a. It is the largest sector employing 20,000 and generating \$1.4B in tourism related sales (in 2010).
 - b. There were 1.3 M visitors in 2012.
 - c. GVB is a semi-autonomous, non-profit organization with 400 members.
 - d. 80% of GVB support comes from the GovGuam and the remainder is from members.
 - e. Hotel room taxes (11%) are deposited in the Tourist Attraction Fund. The fund is used to issue bonds for large improvement projects, such as flood control and the museum (\$27M) that is under construction and will be completed in 2014. Plaza de Espana was recently renovated.
5. General overview of the tourism market:
 - a. Japan continues to be the strongest market for short stays (2-3 days). There was a dip after the Great East Japan Earthquake and Tsunami on March 11, 2011. Japanese visits still represent about 72 % of tourism market.
 - b. South Korea was strong in the early 1990's but there was a Korean airline crash in 1997 that discouraged visitors.
 - c. There is a new budget airline associated with Korean Air called Jen-Air. In addition, there is a third airline with flights to Guam called Jeju Air. Guam is seeing a resurgence of Korean travelers. Koreans represent about 18% of the tourists.
 - d. Taiwanese and Korean visitors increased during the Japanese downturn.
 - e. There has been an increase in Russian tourists during the winter months. Make up a small portion of tourists but tend to stay longer because they have travelled further.
 - f. Most tourists are not free independent travelers (FIT). GVB likes to encourage small businesses to get involved and open bread and breakfasts or other small businesses.
 - g. Guam is considered the more casual younger brother of Hawaii.
 - h. Future efforts:

- i. Diversification into Meetings, Incentives, Convention, Exhibitions (MICE)
 - ii. There is a new hotel being built, Dusit Thani, that will provide the largest conference center in Guam, which allows GVB to market the MICE opportunities. It will accommodate a meeting space for 2,000-2,500.
- i. Challenges:
 - i. Seasonality: the current tourist markets overlap in their peak travel times. GVB is focusing on promoting the non-peak travel times (April, May, June). One target audience is senior travelers.
 - ii. October, November and beginning of December are usually slow, except for 2012. This is attributed in part to the additional flights to Guam.
 - iii. Continue to support cultural education destinations like the new museum.
 - iv. Would like to attract a higher end market.
- 6. Military Impact:
 - a. Training exercises result in increased use of hotel rooms. GVB would prefer that exercises did not coincide with peak tourist seasons.
 - b. They recognize that training is not planned far enough in advance to help them plan.
 - c. They have seen the proposed locations for the SEIS and do not have concerns – so far.
- 7. Labor:
 - a. 1 out of 3 that are employed works in the tourism industry.
 - b. Working with Guam Hotel & Restaurant Association to increase the management opportunities for Guam's population.
- 8. Is utilities infrastructure still a concern for the industry?
 - i. There was a moratorium on hotel construction due to water supply concerns. But new construction has resumed.
 - ii. Power is the biggest operating cost for hotels.
 - iii. Prices are based on demand.
- 9. Natural environment is the primary reason visitors come to Guam. GVB promotes ecotourism, beach clean-up and other activities.
- 10. Can you discuss the Guam Raceway and any recent developments towards bringing a road race to Guam? The proposed site had geotechnical issues and is stalled.
- 11. Action Items: none

**Guam Waterworks Authority,
Engineering Division**

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Agency Name: Guam Waterworks Authority - Engineering Division

Date: January 25, 2013 at Adelup Conference Room; 1400-1500

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Menglou Wang, P.E.	GWA	Assistant Chief Engineer	menglou@guamwaterworks.org	671-647-0492
Julio Morais	GWA	Senior Engineer	jmoraise@guamwaterworks.com	671-647-7849
Thomas Cruz, P.E.	GWA	Chief Engineer	thomas@guamwaterworks.org	671-647-0492
Gerardo Gambirazzio	Marine Corps Activity Guam	CPLO	gerardo.gambirazzio@fe.navy.mil	671-355-2336
Randy Sablan (arrived for latter portion)	JGPO Fwd ASN (EI&E)	Assistant Environmental Director	randel.sablan@fe.navy.mil	671-339-5440
Celeste Werner	Matrix Design, representing the Governor's Office	Vice President	celeste_werner@matrixdesigngroup.com	671-777-1676
Mike Hrapla	Matrix Design, representing the Governor's Office	Vice President	mike_hrapla@matrixdesigngroup.com	671-777-1675
Faith Caplan	Cardno TEC, Inc.	SIAS Team	faith.caplan@cardnotec.com	808-528-1445

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. GWA reorganization
 - a. As of 2012, the GWA planning section is no longer under the Engineering Division. A reorganization chart has not been developed yet.
 - b. The change was more of a reallocation of services than it was reorganization.
 - c. The planners are part of the Area Development Group. They have a representative on the Application Review Committee (ARC). The representative will ask engineers for input on proposals as necessary. Most of the ARC applications are minor setback variances and engineering input is not required.
5. Staffing
 - a. The staffing numbers provided in the questionnaire include planners for FY 2010 and 2011, but the 2012 numbers reflect engineers only.
 - b. Is there updated information on workforce housing permits? Which projects were constructed and which were shelved until further action is taken by the contractor.
6. Workforce Housing
 - a. Younex: 500 units were approved for Phase 1 and future phases must meet GWA conditions for infrastructure improvements. 500 units were determined to be the number that could be accommodated on current infrastructure.

- b. The other projects generally involved re-purposing existing apartments into workforce housing. They were already using water and wastewater infrastructure.
- 7. EPA mandated (\$10M) infrastructure improvements were completed in December 2012 to bring Northern District Wastewater Treatment Plant into compliance.
 - a. There is a 3-month period to ensure the system is working as planned.
 - b. The next steps: request to ask EPA to increase the capacity from 6 MGD to 7.5 MGD and upgrade to secondary treatment.
 - c. The recent improvements will likely alter the view of the Younex workforce housing project Phase 2.
- 8. Military Build-up
 - a. In general, GWA is in favor of the military build-up.
 - b. There are existing infrastructure shortfalls that need to be addressed before Guam population increases. There is a MOU with DoD to work cooperatively. GWA participated in the Adaptive Program Management meetings.
 - c. Indirect impacts due to induced growth are a serious concern and it is hard to get an understanding of what those numbers are going to be. The rSIAS will estimate those induced population numbers based on a list of assumptions. They are being developed now and will not be released to the public until the Draft SEIS.
- 9. Clarification of GLUC process
 - a. Prefer that developers approach GWA with project drawings before the building permit application is submitted to DPW. GWA can advise developers on what will be required for GWA approval.
 - b. ARC (includes GWA participation) reviews permit application provides recommendations/conditions to GLUC who may or may not concur with recommendations.
 - c. GLUC issues notice of action.
 - d. Applicant is responsible for obtaining all the other permits and approvals from individual agencies, including GWA. 60-90% design drawings are required for subsequent approvals after GLUC notice.
- 10. Action Items: none

Joseph Bradley, Chief Economist for the Bank of Guam

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Agency Name: Joseph Bradley, Chief Economist for the Bank of Guam

Date: January 23, 2013 at Bank of Guam Building, 1400-1500

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Joseph Bradley	Bank of Guam	Senior Vice President/ Chief Economist	jbradley@bankofguam.com	671.472.5269
David Kiernan	Cardno TEC, Inc.	Project Manager - SIAS	david.kiernan@cardnotec.com	805.564.4940
Scott Glenn	Cardno TEC, Inc.	SIAS Team	scott.glenn@cardnotec.com	808.528.1445

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. General Discussion
 - a. This discussion is the personal opinion of Mr. Bradley. It does not reflect the official position of the Bank of Guam.
 - b. For about 15 years, the economy has been flat in terms of job growth and prices (modest amounts of inflation and deflation from time to time).
 - c. The difference in the economy between now and 3 years ago is that the tourism sector has expanded. Following the March 11, 2011 Japanese tsunami, Guam had a large decline in tourists from Japan. The Guam Visitors Bureau pursued the secondary and tertiary tourism markets in Russia, South Korea, and China, Taiwan; this worked well. When the Japanese market started to recover after about 10 months, the secondary and tertiary markets continued to prosper. The combination of strong tourism from all those markets allowed for 2012 to have the highest number of visitor arrivals to Guam since 1997.
 - d. The business cycle on Guam is driven by construction (like most western economies). One informal indicator of economic activity is how many flatbed trucks of rebar are driving north on Marine Corps Drive. Air Force and Navy are still moving forward on their construction activities, even though the Marines are on hold. More active duty and personnel are around. Navy housing seems to be filling up at Apra Palms but not so much at Apra View.
 - e. The Japanese government has devalued its currency. There is concern that with the lower yen, Guam will appear more expensive. However, as the yen falls, Japan's exports will pick and may engender a sudden feeling of wealth, prompting more Japanese to come to Guam.
 - f. The Russia visa-waiver program has had a greater impact in Saipan than Guam. Russians tend to be high rollers, but are disappointed with Guam because the accommodations are not high class enough. There is no Chinese visa waiver program, but Guam still had more visitors from China than from Russia last year.
 - g. The Jonestown towers (near GMH) were initially aimed at Korean buyers as condos, not hotels. Korean investors were funding construction, but were affected by the housing bubble bursting in Korea, so the Jonestown towers construction was slowed down. Also, a woman lost her ocean view because of the towers and was, allegedly, not properly noticed about a public hearing on the proposed project, so she sued. Overall, the owners decided to stop until market economy improved; construction stopping was unrelated to the pause in the military

- buildup. However, workforce housing construction was delayed because the delayed military buildup.
- h. In 2006, Guam experienced land speculation. There was a spike in real estate prices after the 2003-2004 drop in prices from multiple typhoons and out-migration. Since the 2006, real estate prices have leveled off and foreclosures have been few.
 - i. Financing is available on Guam. GovGuam has issued substantial bonds to pay income tax refunds, for a landfill, and a Hotel Occupancy Tax (HOT) bond. Bank of Guam has a high deposit ratio currently and is looking to make loans. Increased economic activity will prompt some people to expand their business and incomes will be higher, generating more demand for loans. Loans not currently being made due to lack of creditworthiness.
 - j. Hotels are full. Different nationalities tend to cluster at certain hotels. Many hotels are being converted to condo-hotels.
 - k. Hotels are not strict resource users, not restricting occupants use of water or electricity.
 - l. Shipping drives up food and construction costs – those prices are high.
 - m. Inflation on Guam is driven by exogenous factors. There is occasional cost-push inflation but mostly exogenous factors. Guam is basically a price-taker, so it is at the mercy of the value of the national and international dollar. Strong economic growth would not likely increase inflation, unless there are resource bottlenecks, such as an inelastic labor supply. Guam is able to benefit by importing H2B workers and then export them when work is completed.
 - n. Guam currently has over 10% unemployment.
 - o. Guam is using a lot of water, but is probably not in danger of over-extracting water, unlike in the CNMI where hotels have desalinization plants. The Northern water lens was recently re-estimated from 60 MGD to 100 MGD. Recently, there have been efforts to extract fresh water from the southern rivers, but it is difficult because of silting. The Fena reservoir is also decreasing in volume. A couple of years ago the water levels fell so far that water had to be restricted for civilians.
 - p. A tropical Storm has not hit since 2002. Usually there is an annual typhoon and a super-typhoon every decade. Lately, typhoons have been moving west and then turning north instead of going N/NW.
 - q. Electricity generation is from plants that run on bunker fuel or diesel. Bunker fuel is a legacy of past DoD purchasing practices favoring small refineries. Solar prices have fallen because of Chinese subsidizing production. The Guam Power Authority is signing contracts for wind and solar farms. There is concern about how they will fare during typhoons. There is discussion about importing LNG and converting power plants to burning it.
 - r. The Jones Act increases prices for shipping to Guam. Shipping from Asia doesn't happen too much because it is going against the current.
 - s. GovGuam has a debt ceiling that is based on the assessed value of property. The debt ceiling is based on the Organic Act and a court decision. Property was assessed at 35% of appraised value, but it was changed to 90% of appraised value and the property tax was lowered. Guam has very low property taxes.
 - t. Some quasi-governmental agencies carry a lot of debt. The U.S. EPA is fining the Guam Waterworks Authority over the North Wastewater Treatment Plant and Agana WWTP to make them add secondary treatment. The Guam Power Authority has a 125% debt service. The USEPA is threatening to pull waivers for some of the older power plants.

- u. International tensions affect Guam because the U.S. has so many relationships in the area. Japan does not have a military, but has been discussing building up its self-defense force. China's economy is softening because of the bad global economy, which is leading to increased tensions in rural and urban areas, and so China is becoming more aggressive militarily to distract its citizens from internal issues. It has disputed islands in the South China Sea.

5. Conclusion & Action Items - None

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Judiciary of Guam

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Agency Name: Judiciary of Guam

Date: January 28, 2013 at Judiciary of Guam Conference Room, 1000-1130

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Perry Taitano	JoG	Administrator of the Courts	ptaitano@guamcourts.net	671.0475.3544
Robert Cruz	JoG	Deputy Administrator of the Courts	rcruz@guamcourts.org	671.475.3128
Josh Tenorio	JoG	Directory of Policy, Planning, and Community Relations	jtenorio@guamcourts.org	671.475.3278
Virginia Yasuhiro	JoG	Client Services and Family Counseling Division	vyashuhiro@guamcourts.org	671.475.3101
William Brandshagen	JoG	Mental Health Court	wbrandshagen@guamcourts.org	671.475.3314
Samantha Brennar	JoG	Adult Drug Court	sbrennan@guamcourts.org	671.475.3386
John Lizama	JoG	Probation Services Division	jplizama@guamcourts.org	671.475.3448
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Richard Martinez	JoG	Courts and Ministerial Division	rmartinez@guamcourts.org	671.475.3420
Jackie Cruz	JoG	Court Programs Administrator	jzcruz@guamcourts.org	671.475.3270
Galo Perez, Jr.	JoG	Courts and Ministerial Division TVB/SA	gperezjr@guamcourts.org	671.475.3326
Valerie Tenorio	JoG	Courts and Ministerial Division TVB	vtenorio@guamcourts.org	671.475.3166
Ray Taimanglo	JoG	Procurement and Facilities	rtaimanglo@guamcourts.org	671.475.3175
Scott Glenn	Cardno TEC, Inc.	SIAS member	scott.glenn@cardnotec.com	808.528.1445

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Since the Facility Master Plan's completion in 2010, what has been the progress on the developing facilities?
 - a. JoG actually invested money based on the FEIS by developing a Facilities Master Plan that provided the military real information on JoG's needs.
5. The questionnaire stated that the Master Plan requirements are scalable. Given the scale of the buildup may be smaller (5,000 Marines and 1,300 dependents), is a revision of the Facility Master Plan necessary?
 - a. The Master Plan is designed to be scalable to the number of population growth. It still needs finer detail for architecture and design, but the site location in the north has not been decided, however, the JoG has some ideas where a new northern facility could be constructed. JoG put a presence in the north ahead of the military buildup as an act of foresight. That facility already handles more than 11,000 cases in 12,000 hearings annually.

- b. If the military alternative causes population growth in the south, then JoG's facilities can accommodate the growth with some expansion to the existing Agana facility, but there is concern about the alternative being in the north because it would put a strain on JoG facilities in the north. If more of the military buildup occurs in the North, then more staff will be needed at the Northern court to handle the additional caseload since current staffing at the northern court is currently being supported from existing court staff.
- 6. Number of cases filed, hearings scheduled, hearings held, decisions made
 - a. Mental Health and Drug court
 - i. The Mental Health Court (MHC) holds approximately 276 hearings per year.
- 7. Please describe the effect of the satellite court on caseloads, operations, efficiency, and personnel.
 - a. The northern court is a release valve for the main complex. The main complex can do videoconferencing with the northern court so it establishes a continuity of service. A high percentage of future cases will be in the North. Note, the northern facility expands working space, but JoG did not increase staffing.
 - b. The main complex has already exceeded its designed use.
- 8. Please describe the effect of the Permanent Injunction, if any, on the Judiciary.
 - a. See below.
- 9. Open Topic
 - a. The Judiciary of Guam is a co-equal branch of government with the Governor and the Legislature. It should be treated as such when discussing the government of Guam.
 - b. The most frequent interaction military and dependents have with the courts is through the assault/fighting and traffic court, particularly DWI arrests. There are about 800-900 DWI cases (overall, including military) that are split between two judges. Follow up DWI arrests require administering weekly drug tests that the court pays for. The court does not have the staff or an increase in funds to purchase and administer drug tests. An increase in military or dependents would likely lead to increased impacts on the Probation Services Division to do its job. An increase in DWIs would also increase the workload for the two judges.
 - i. Alcoholic treatment programs required by the court can last for 6 weeks and be received through Naval Hospital or AAFB.
 - c. Deployed military can cause stress among dependents, which can involve the courts. Cases can be juvenile, child custody, child abuse, family violence, and divorce – they have all occurred. The increased number of deployed military families raises the possibility of this happening. JoG and the military cooperate to help these families, with sometimes the Navy Family Services Center requesting the Court to incorporate military dependents into court programs.
 - d. The amount of oversight needed for mental health is dramatically higher than over types of cases. Insurance covers medical procedures ordered by a doctor but not necessarily ordered by a judge. Also, sometimes medical professionals know that a defendant charged with a crime will be guaranteed medical care and oversight, so we will diagnose the patient to obtain

- that care. JoG wants to work with medical practitioners at the point of evaluation to discuss how to channel the person through the court system.
- e. The Permanent Injunction was a prompt for expanding the Mental Health Court, which initially started as a pilot project in response to a national trend for such at the time (early 2009).
 - f. JoG is considering creating a Veterans Court. The MHC currently has about 4 individuals who are known veterans. The Veterans Court may or may not include active duty soldiers diagnosed with PTSD. A major difference between MHC and Veterans Court would be the inclusion of a mentor, preferably a retired person with active duty combat experience to help the veteran.
 - g. An increase in H2B workers in response to construction activity would involve the courts. H2B workers need interpretative services, which the court has to make sure there are enough appropriate language speakers available.
 - h. The military and JoG have concurrent jurisdiction on some crimes. If a rotational troop gets into trouble, he or she may be here longer because of trial conditions. JoG coordinates with the JAG to make sure rotational troops complete court-ordered requirements. For violent offenders, rotational troops stay on Guam in custody and may not be released to commands or held in a brig.
 - i. Another impact on JoG is that civilian contractors and employees for the military have to get criminal, traffic, and civil court clearances every 90 days. JoG maintains the database without any federal support, even though the bulk of the activity is from the military. Contractors pay \$10 for the clearance application, but that is not enough to cover the cost. Increased civilian contractors and employees will increase the cost of the database and clearances. JoG does not have the capacity to put toward expanding or increasing staffing for clearances.
 - j. JoG is concerned whether the military will follow through with its mitigation commitments. Funding did not come through for the Northern Wastewater Treatment Plant. It is good that Port Authority Guam did not commit funds because the military did not follow through on its end.
 - k. If anyone is going to get funds for social impacts, then JoG believes they should be a high priority because all induced growth results in increased workloads for the courts.

10. Conclusion & Action Items - None

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Port Authority of Guam

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Agency Name: Port Authority Guam

Date: January 25, 2013 at Adelup Conference Room, 1200 to 1330

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Alma Javier	Port Authority Guam	Procurement & Supply Manager	abjavier@portguam.com	671-477-5931
John B. Santos	Port Authority Guam	Operations Manager	jb_santos@portguam.com	671-477-5931
Simon Delos Santos	Port Authority Guam	Engineer Manager	ssdls@portguam.com	671-477-5931
Dorothy (Dot) Harris	Port Authority Guam	Chief Planner	dpharris@portguam.com	671-477-5931
Joe Javellana	Port Authority Guam	Planner IV	jjavellana@portguam.com	671-477-5931
Felix Pangelinan	Port Authority Guam	Acting Deputy General Manager Harbor Master	fvangelinan@portguam.com	671-477-5931
Carol Perez	Guam Military Buildup Office, Governor's Office		carol.perez@guam.gov	671-477-5931
Mike Hrapla	Matrix Design, representing the Governor's Office	Vice President	mike_hrapla@matrixdesigngroup.com	443-274-6111
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Gerardo Gambirazzio	Marine Corps Activity Guam	Community Plans and Liaisons Officer	gerardo.gambirazzio@fe.navy.mil	671-355-2336
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David Kiernan	Cardno TEC, Inc.	Project Manager - SIAS	david.kiernan@cardnotec.com	805-564-4940

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Can you describe any recent developments at the port and what these developments may mean to the buildup?
 - a. PAG provided the following written response:
 - b. The Port Authority of Guam (PAG), in coordination with MARAD and its PMC EA Engineering has embarked on moving forward with initial capital improvement projects that will essentially move the Port towards its modernization initiatives. This development is called the Guam Commercial Port Improvement (GCPI) Program. It involves the following:
 - i. Container Freight Station Building Renovation,
 - ii. Breakbulk yard expansion and Warehouse 2 demolition, and
 - iii. Facility expansion.
 - c. In addition, the PAG was awarded several US DHS/FEMA Port Security Grant Program (PSGP) grants that will enhance the Port's maritime and port security capabilities. These projects include:

- i. Completion of the container yard lighting upgrade project;
 - ii. Acquisition of Interoperable Communications equipment;
 - iii. Awarding of the Port Security Enhancements Project – Command and Control/Secured Credentialing, TWIC Readers, and Security/Communications Ductbank backbone into the soon to be built Maritime and Port Security Operations Center;
 - iv. Procurement of a mobile container/vehicle screening system; and
 - v. Procurement of 2 new generators to ensure continuity of maritime and port operations in times when island power may be disabled.
- d. These developments are critical components in the Port's effort to support the military buildup. As the United States' "Tip of the Spear" in the Pacific region, Guam must be ready to mitigate, prevent, prepare for, respond to, and recover from any natural or man-made incidents that may be a detriment to its civilian and military population.
- e. Enhancing the Port's capabilities NOW will ensure that Guam's only seaport will be ready to support the buildup by providing the necessary maritime security and operational support to the anticipated increase in not only volume of traffic but also in the increase of exposure to regional and global forces that may negatively impact Guam.

Also, at the start of the interview, a presentation made earlier in the day was provided to the SIAS team for information. This presentation is attached.

5. What is the current capacity of the Port to handle shipments?
 - a. Current capacity includes 62 total acres including space for both loose and containerized freight. Container yard is 26.5 acres. (Note, this implies loose freight space = 35.5 acres).
 - b. With the modernization (which starts next week and will take place in 3 phases), there will be more space for loose cargo (32,000 sq. ft. added to laydown). Container yard extended 4 acres. New gate complex. New runway for transit.
 - c. Three cranes were brought in recently. There are now a total of four cranes. Current crane capacity exceeds current crane usage (excess crane capacity). At present containers are stacked four high, the Port has the ability to stack containers seven high.
 - d. Remaining bottleneck is logistics within the yard, establishing the ability to conduct more efficient practices.
 - e. Modernization expected to be completed in Q1 of 2015.
6. What are current concerns about the Port's infrastructure (in terms of ability to handle cargo)?
 - a. There may be congestion in the water but it would not be a traffic problem. The current number of tugboats is too low; this would be the bottleneck leading to congestion in the water. If a military boat is using a tug then commercial boat can't use the tug - this causes delay in commercial traffic. PAG coordinates with military over use of the tug – military generally has priority use.
 - b. A bottleneck is getting clearances for shipping trucks to get on bases. Delays at base gates create a backup all the way to the port. Causes truck traffic and inefficient shipment.
 - c. The further the project moves along, the more delays will occur because more trucks will be needed and delays at gates will be longer. This will prove to be an expensive problem.

- d. About 10-15% of trucks are being inspected (biosecurity) by customs; inspections are not done at the Port but at secured areas in Guam.
 - e. Another bottleneck possibility, only so much feet of dock space, can handle about two ships at a time. If more than 3-5 ships per day then somebody needs to wait. And especially is there is a passenger ship (they get first priority).
 - f. Port would also need the return of the containers that the cargo is shipped in. If the trucks return without the containers, that would hold up the ships. This could happen if the containerized cargo is kept on the bases/construction sites as storage rather than being unloaded and returned to the Port.
7. Are there remaining concerns about the capacity of the Port to handle demands that the buildup might bring?
- a. There has been a joint effort to modernize the Port for the buildup so PAG feels ready for buildup.
 - b. PAG will be updating its master plan. New Master Plan will reevaluate/adjust the goals of PAG given the parameters of the revised buildup. Reset of master plan will likely use the same methodology.
 - c. PAG will plan for organic growth and add parameters for construction growth.
8. Open Topic
- a. Flow through - Last year there were 85,000 containers handled. Prior year 90,000, this year about 74,000. Number of containers has fallen from 90,000 to 74,000 over past three years but this is deceiving because one shipping company (Horizon) pulled out of Guam. With only one carrier remaining (Matson), the number of containers is lower but tonnage about the same - containers are each more full than before.
 - b. Port needs to know information on the proposed build-up in order to adjust their Master Plan. This information includes:
 - i. Type of construction related to the buildup – prefab, rebar needed? Need specific materials classifications. Prefab and bulk materials not containerized would be more difficult to handle and process.
 - ii. How much construction (in dollars) would be related to the build-up over what time period/years?
9. The Port needs the information in order to estimate how much cargo would come through the Port. They are in the process of putting these questions together and hope JGPO/NFM would provide a response.
- a. Project alternatives – The Port anticipated that none of the training range alternatives (locations) would affect the existing shipping lanes.
10. Conclusion & Action Items – C. Toyama indicated that the appropriate protocol to get responses to the Port's questions is to send the questions to the Governor's Build-up Office who could have questions from other GovGuam agencies. Then the Build-up Office would provide them to JGPO and NFM for response.

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Salvation Army

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Agency Name: Salvation Army

Date: January 28, 2013 at Salvation Army Office, 1600-1730

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Michael Luther	Salvation Army	Captain	michael.lutcher@salvationarmy-guam.org	671.486.3032
Lou Hongyee	Salvation Army	Lighthouse Recovery Center Program	lou.hongyee@salvationarmy-guam.org	671.477.9801
Patrick Camacho	Salvation Army	Family Services Center Program	patrick.camacho@salvationarmy-guam.org	671.477.9819
Scott Glenn	Cardno TEC, Inc.	SIAS member	scott_glenn@cardnotec.com	808.528.1445

Meeting Record

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Use questionnaire as basis for discussion.
 - a. See attached questionnaire for responses.
5. Open Topic
 - a. Services and Programs
 - i. Lighthouse Recovery Center (LRC)
 1. Residential recovery program for up to 28 men. The program is about six months, though there are shorter, 14-day terms. Some participants are homeless or come from prison. There is also an outpatient component. 1-2 military personnel have participated in it but do not want it on their record.
 2. Veteran program – LRC receives a grant from VAO. 4 beds are for veterans and the VA pays the expense.
 3. Aftercare housing program – HUD funds providing housing to people who are trying to become self-sufficient while they go to school or seek work.
 4. The program has 13 employees doing the work of 16. There are 3-4 counselors, a program coordinator, a director, a recovery technician, and resident managers who provide 24-hour coverage at the residence.
 - ii. Family Services Center (FRC)
 1. Provides food, clothing, and rental utilities to help qualifying families.
 2. Emergency Solutions grant and Homeless Prevention and Rapid Rehousing program
 3. Families making 30% of the annual median income are eligible. Majority of families are extremely low income or unstable employment.
 4. The program averages about 100 households a year. Families may be in the program for a month or multiple months. There are more families in need but do

not qualify for the program because they cannot produce evidence of their situation or choose not to do the program out of pride/stigma.

5. Foodbank
6. SA operates the largest food assistance program on Guam. Anyone can come and take food.
7. SA provides food to homeless during the annual homeless count.
8. There are 2-3 staff members.
- iii. Tutoring and outreach – SA staff will contact street homeless to inform them about SA services, refer them to other organizations, and give care packages.
- iv. Church – The SA holds regular Sunday service, youth programs, character building programs, and beginning reading program for adults.
- v. Thrift Store – Fully funded through selling donations. It coordinates with the other programs to provide clothes and household goods to the SA service populations.
- vi. Emergency first responders for disaster – SA assists the territory and federal government with food distribution logistics to responders/volunteers and victims.
- b. SA in Guam is the headquarters for SA in Micronesia.
- c. Federal funding for Micronesia is set to decrease. That combined with increased economic activity on Guam will attract more FAS immigrants to come to Guam. SA sometimes tells people thinking of coming to Guam that it's not worth it because \$10/hour employment is not enough to cover the cost of living here, even though the pay is higher than in Micronesia. SA supports the Micronesian islands to become more self-sufficient based on their traditional lifestyles.
- d. More than half of the people in SA's programs have a criminal background or never graduated high school. Guam is a small community. Many times these people are stigmatized and are not able to get a second chance.
- e. During the last buildup, landlord speculation on housing raised rents. This pushed marginal lower-income families into poverty and needing our programs. This could happen again.

6. Conclusion & Action Items

University of Guam

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Agency Name: University of Guam (UOG)

Date: January 24, 2013 at University of Guam, 0800-0930

Attendees:

Attendee Name	Organization	Title	Email	Telephone
Helen Whippy	University of Guam	Senior Vice President/ Acting President	hwhippy@uguam.uog.edu	671.735.2994
David Okada	University of Guam	Chief Planning Officer	dsokada@uguam.uog.edu	671.735.2902
Deborah Leon Guerrero	University of Guam	Director – Academic Assessment/Institutional Research	Deborah@uguam.uog.edu	671.735.2585
Caroleen Toyama	NAVFAC Pacific	Naval Technical Representative - SIAS	caroleen.toyama@navy.mil	808.472.1088
Scott Glenn	Cardno TEC, Inc.	SIAS Team	scott.glenn@cardnotec.com	808.528.1445
George Franquez	Guam Military Buildup Office,	Governor's Office Staff	george.franquez@guam.gov	671.727.2279

Meeting Notes

1. Introduction
2. Overview of SIAS
3. Interview Method
4. Please comment of the ability of UOG to attract of adjunct faculty.
 - a. Adjunct faculty is especially useful for specialized curricula. They are especially used in the nursing program and business school's various programs. UOG cannot compete with mainland to attract adjunct faculty by virtue of the temporary nature of employment.
 - b. UOG advertises for adjunct faculty in the newspaper and military publications. It also finds adjunct faculty through military education officers and word of mouth.
 - c. UOG actively engages military education officers, who will recommend people to UOG because of personal relations. This is an ad hoc procedure, but UOG would like to institutionalize it.
 - d. Other activities on Guam such as the military or the DPHSS program to bring in doctors to pay off their loans may be bringing in spouses who could be adjunct faculty.
5. How has the shift towards utilizing more adjunct faculty affected the availability of classes and graduation rates? Are there specific degree programs more or less affected by this?
 - a. UOG always needs more adjunct faculty and has pressure to open more classes. In specialized programs, such as environmental studies, sciences, and nursing, they are always in demand, even in math, chemistry, and physics. No program has been negatively affected by a shift to more adjunct faculty.
6. The questionnaire described shortages in administrative and support staff. Please describe what kinds of positions in support and administration are not being filled.
 - a. UOG seeks contracts and grants. Faculty members do the work and are supported by additional staff that does project management. Those faculty members with administrative support are more efficient; administrators can manage multiple projects for multiple faculty members.

- b. In terms of administration and support personnel, UOG is at full capacity. It is a “lean staff and faculty” – 30 administrative positions for a \$106 million operation. Any additional costs would require additional hiring.
- 7. Are H2B workers or their dependents eligible to attend UOG? If so, are there metrics or assumptions that can estimate the number of H2B attendees?
 - a. There are zero H2B workers attending UOG. H2B workers are in Guam for a specific reason, usually that is not to go to school. Also, they often do not have a car, so are not able to get to UOG.
- 8. Please describe the how UOG balances research and teaching responsibilities for faculty.
 - a. UOG uses the CFES (Comprehensive Faculty Evaluation System).
 - b. UOG employs 187 full time faculty. Each faculty member has a primary role – teaching or researching. Most faculty are teaching 9 months, 12 credits a semester, with summers free to do research and get grants. Research faculty members are either 9 or 12 months and are hired to get grants and contracts and to do research. Their research is focused on the larger goal of their center, the University, and/or overall community/policy goals. All faculty members have a third requirement to give service to the community and university, because UOG is a land-grant institution. If a grant or contract has to push its schedule, then adjunct faculty pick up the logistics for a faculty member who has a contract and teaching duty.
- 9. Please describe any collaboration programs with the Guam Department of Education or Department of Youth Affairs.
 - a. UOG works very closely with GDOE to develop common course standards and prepare teachers and principals.
 - b. UOG works with DYA through its criminal justice and social work programs. Students are interns and case workers.
- 10. If available, please provide a copy of the Physical Master Plan Update. The Physical Master Plan Update was determined to be not necessary to be provided.
- 11. Open Topic
 - a. UOG has over 14,000 graduates, of which about 70% stay on island or in the region. More teachers and nurses are staying because of federal programs, the military buildup, and new facilities.
 - b. UOG would like to collaborate with the military to create a communications hub for Guam. UOG would like a set aside of the bandwidth for education and research for the fiber optics the military will use. UOG and University of Hawaii are exploring opportunities for collaborating on connectivity with the military.
 - c. Generally speaking, UOG would like more collaboration with the military. UOG would like the military to look at UOG as a resource and a broker; to not just be part of a team, but also ask UOG to put together a team to do the work.
 - d. UOG would like the Naval Hospital to better share medical information on cancer rates and disabilities (mental and physical). UOG operates the Center for Excellence in Developmental

Disabilities Education, Research, and Service (CEDDERS). It would be helpful to know how many dependents may come to Guam and impact public health provisioning for individuals with disabilities.

- e. The Marine Lab does environmental research on marine impacts and is contracted by the military to do marine studies. It would like earlier notice from the military on what kind/how many people might be needed to do marine studies.
- f. UOG tuition will remain the same until 2014. Active military assigned to Guam and their dependents receive resident tuition rates.
- g. Compact immigrants have an impact on UOG because students come to Guam for an education. UOG has articulation agreements with each of the community colleges in the region.
- h. UOG is creating an engineering school. The military buildup is a factor in setting it up, but UOG would do it anyway. The school should promote STEM careers in Guam.
- i. UOG would like to be able to provide education on military bases on Guam. It cannot currently because it is treated as an overseas base. Therefore, it falls under the military regional contract for overseas education, which includes Japan, Korea, and other countries. That is, if one wants to teach on a Guam base, a course or program cannot be one that conflicts with the offerings of the contracted university/college servicing on base. Guam is a U.S. territory, not a foreign country. UOG has approached the education offices of the Navy and Air Force. They are receptive, but are not the approving authority; the decision is made in D.C. Also, commanders keep rotating out so the issue never moves forward. Whenever the contract comes up for renewal, it is just put out for rebid, but the terms of the contract are never revised or updated. UOG would like to serve as a capstone program for service members rotating to Guam. It is also offering online courses that would help with rotation troops.
- j. UOG and GCC have different objectives but work together. GCC tends to be more technical, while UOG generates middle class professionals. The liberal arts program is completely articulated.

12. Conclusion & Action Items – None

SIAS team was provided with a copy of the UOG Academic Year 2011-2012 Fact Book by Ms. Leon Guerrero.

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