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Socioeconomic Impacts: How Will the DOD Actions Affect Guam?

In this Fact Sheet:

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



For more detailed information on the topics presented here, please refer to the 2014 Draft SEIS, which is available for review at the Robert F. Kennedy Memorial

Library, located in the University of Guam, and the Nieves M. Flores Memorial Library in Hagåtña. The 2014 Draft SEIS can also be viewed online and downloaded at the websites listed below.



SHAPING THE FUTURE ... TOGETHER

SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT (SEIS) FOR A
**LIVE-FIRE TRAINING RANGE COMPLEX (LFTRC) AND MAIN CANTONMENT
AND FAMILY HOUSING LOCATION ON GUAM**

2014 Draft SEIS Socioeconomic Impact Assessment Study (SIAS)

The SIAS included in the 2014 Draft SEIS explores the socioeconomic impacts projected as a result of the proposed Marine Corps relocation from Okinawa, Japan to Guam. The analysis is focused on the five following categories:

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

Particular attention is given to the years:

- **2021**, the peak year of net direct, indirect, and induced population increase from off-island (as influenced by a cumulative peak in project-related construction activity and military personnel relocation); and
- **2028**, when peak population effects have subsided to a steady-state population increase attributable to the post-construction, operational phase of the proposed military relocation.

Land Acquisition Issues

Land acquisition proposed for the main cantonment mostly entails land that is already in federal ownership and is therefore not discussed in the SIAS. The SIAS focuses on five live-fire training range complex (LFTRC) alternative sites:

- Alternative 1: Route 15
- Alternative 2: NAVMAG East / West
- Alternative 3: NAVMAG North / South
- Alternative 4: NAVMAG L-Shaped
- Alternative 5: Northwest Field

Northwest Field is currently under federal custody and control by the Department of the Interior (DOI). Route 15 is currently owned by GovGuam. Naval Magazine (NAVMAG) alternatives are all under private ownership.

Land acquisition impacts for Alternatives 2, 3, and 4 focus on the federal appropriation of private land that is no longer taxable to the government of Guam. GovGuam's debt issuance ceiling is calculated as 10% of the assessed valuation of property on Guam. Therefore federal appropriation of land reduces GovGuam's ability to borrow money. GovGuam's has nearly reached its debt ceiling limit of \$1.139 billion, leaving only \$7.2 million available for future debt.

The Department of the Navy has made a commitment to the concept of "net negative". This means that 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. The DOD plans to better utilize existing lands under their control in order to return underutilized lands to GovGuam. Currently, lands which are underutilized have not been determined.

Download the complete Draft SEIS and related documents at these websites:

JGPO: www.guambuildupeis.us

GovGuam: www.one.guam.gov



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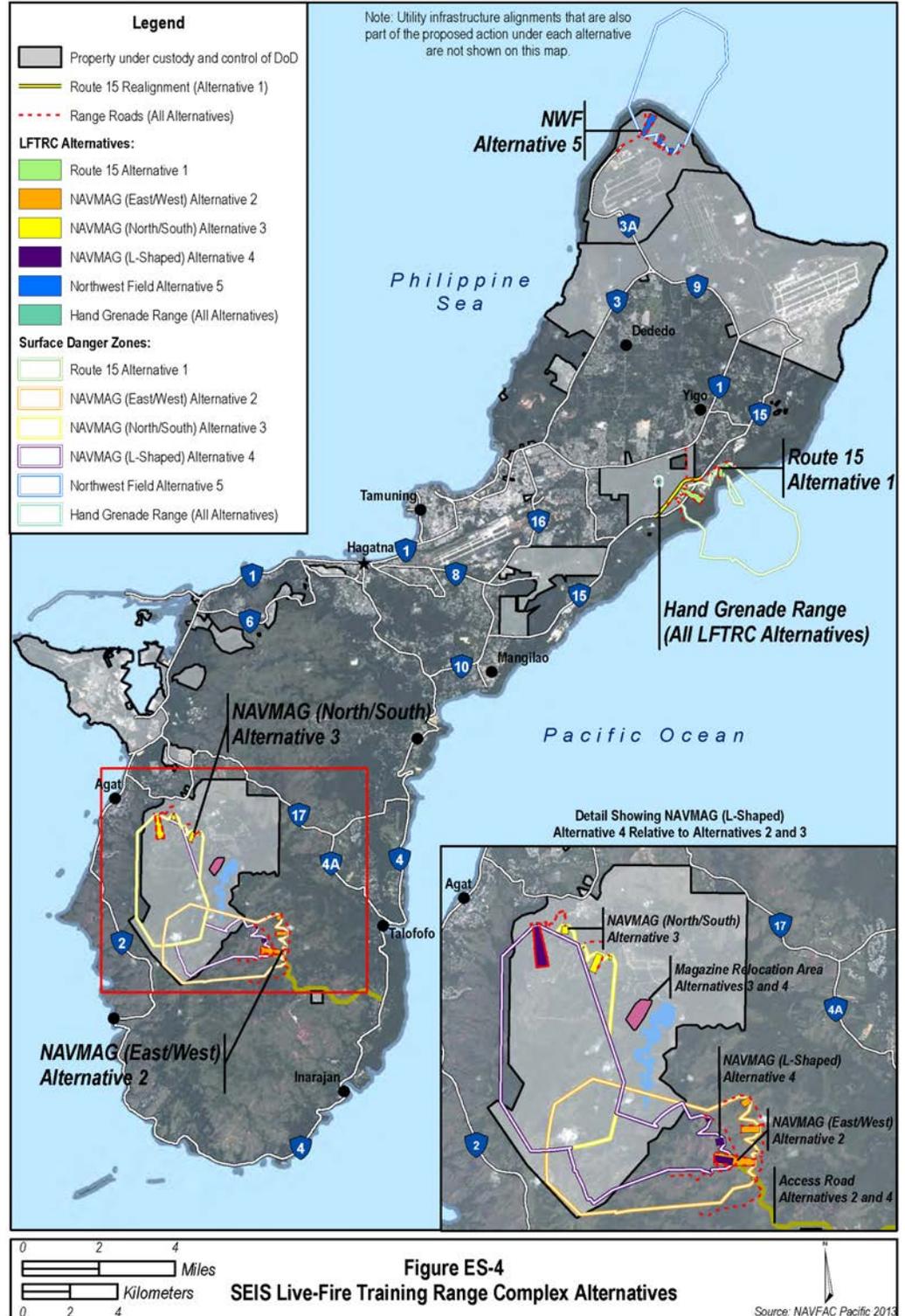
Land Acquisition Issues

Alternative 5: Northwest Field – Preferred

- None of the potentially acquired lots in the Northwest Field alternative are privately owned; land is under the custody and control of the DOI.
- Alternative lands are described as agricultural but contain no prime farmlands.
- New restrictions on public access to the land and submerged lands could have adverse sociocultural impacts due to the potential that access restrictions will deteriorate social networks.

Alternative 1: Route 15

- None of the potentially acquired lots in the Route 15 alternative are privately owned.
- Loss of Guam International Raceway and coral quarry.
- Acquisition designed to reduce avoid impacting Pagat Village, Cave, and Trail.
- GovGuam would lose no revenue by releasing this site.



Land Acquisition Issues

Privately Owned Land

- The Uniform Act requires the federal government to reimburse the property owner at the fair market value. Therefore, the land acquisition would not cause an adverse economic impact to individual land owners.
- 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.

NAVMAG Alternative 2: East / West

- Currently East/West alternative lands represent conservation lands and have no agricultural or economically productive land uses. Therefore, fair market value would account for the highest and best use and there would be no adverse economic impact on the community.
- Talofofo Falls Park and Hiking Trail are publically accessible recreational sites in the vicinity of East/West alternative lands. Although access to the park and trail may be affected during construction activities, the duration would be short-term and associated sociocultural impacts would not be substantial.
- 1,498 acres of East/West alternative land is privately owned and subject to GovGuam property tax. This equates to \$310 million in property taxes. 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 East/West alternative lands were acquired. The reduction would equal 2.4% of GovGuam’s total debt ceiling and would hamper GovGuam’s ability to incur additional debt.

NAVMAG Alternative 3: North / South

- Currently North/South alternative lands represent conservation lands and have no agricultural or economically productive land uses. Therefore, fair market value would account for the highest and best use and there would be no adverse economic impact on the community.
- Talofofo Falls Park and Hiking Trail are publically accessible recreational sites in the vicinity of North/South alternative lands. Although access to the park and trail may be affected during construction activities, the duration would be short-term and associated sociocultural impacts would not be substantial.
- 156 acres of North/South alternative land is privately owned and subject to GovGuam property tax. This equates to \$32.3 million in property taxes. 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 North/South alternative lands were acquired. The reduction would equal 0.3% of GovGuam’s total debt ceiling and would marginally hamper GovGuam’s ability to incur additional debt.

NAVMAG Alternative 4: L-Shaped

- Currently L-Shaped alternative lands represent conservation lands and have no agricultural or economically productive land uses. Therefore, fair market value would account for the highest and best use and there would be no adverse economic impact on the community.
- Talofofo Falls Park and Hiking Trail are publically accessible recreational sites in the vicinity of L-Shaped alternative lands. Although access to the park and trail may be affected during construction activities, the duration would be short-term and associated sociocultural impacts would not be substantial.
- 695 acres of L-Shaped alternative land is privately owned and subject to GovGuam property tax. This equates to \$14.83 million in property taxes. 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 L-Shaped alternative lands were acquired. The reduction would equal 1.1% of GovGuam’s total debt ceiling and would hamper GovGuam’s ability to incur additional debt.

Population Change

Population Growth

- In approximately 2023, the peak-year total impact would result in a population increase of roughly 9,721, falling to roughly 7,412 after construction ends in 2028.
- The employment component of the proposed action would increase the percentage male population on Guam and increase the average age of the Guam population.
- The military component incoming population would increase the male proportion of the population on Guam and slightly decrease the average age of the Guam population.
- This component of the proposed action would result in the population of Guam being made up of relatively smaller population of Chamorros and Guam-born individuals, and a relatively higher population of Caucasians from the U.S. Mainland.

Economic Activity

Employment & Income

- The proposed action would support a maximum of 7,031 full time equivalent (FTE) jobs at 2021 peak, dropping to a steady-state level of 1,438 jobs by 2028.
- Current Guam residents would be expected to capture a maximum of 1,842 non-direct construction jobs at the 2021-2022 construction peak and 762 steady-state jobs in 2028.
- Labor income on Guam would reach a maximum of \$296 million in 2021 and decline to a steady-state value of \$67 million by 2028.
- Income would be expected to rise for jobs related to the construction phase (\$38,600) and operational phase (\$46,000) from the 2012 Guam average median FTE salary of \$25,330.
- Standard of living on Guam has decreased by 33% between 2000-2012 due to worldwide sluggish economic growth and rising prices. There is little reason to expect that the military relocation would reverse this trend. 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.
- The unemployment rate during the construction component will be lower than current levels. There may be times when full employment is reached, but it is not likely to occur as a result of the proposed action alone. The operational component would make more jobs available than exist on Guam at present, which should positively affect the employment situation.

Housing



- Marines will be fully housed on base. Off-base housing demand will be generated by:
 - civilian military workers
 - in-migrating direct and indirect workers
- The stock of available housing units is estimated at 2,831 units. By limiting the inventory to those units in sound condition, the available housing drops to 1,295.
- Peak housing unit demand is projected in 2021 with 770 units, which is substantially less than total available units in sound condition.
- Temporary workforce housing is not included in the 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.

Revenue

- At the 2021 peak, tax revenues with the proposed action are 9.5% higher than they otherwise would have been without the project. At 2028, the difference declines to 3%.
- The combined total impact on Gross Island Product (GIP) would be \$635 million in 2021, declining to \$75 million beginning in 2028 during the steady-state operational phase.

Utility

Power

- The estimated power demand increase from the proposed project could be handled by current Guam Power Authority (GPA) generating capacity.

Water

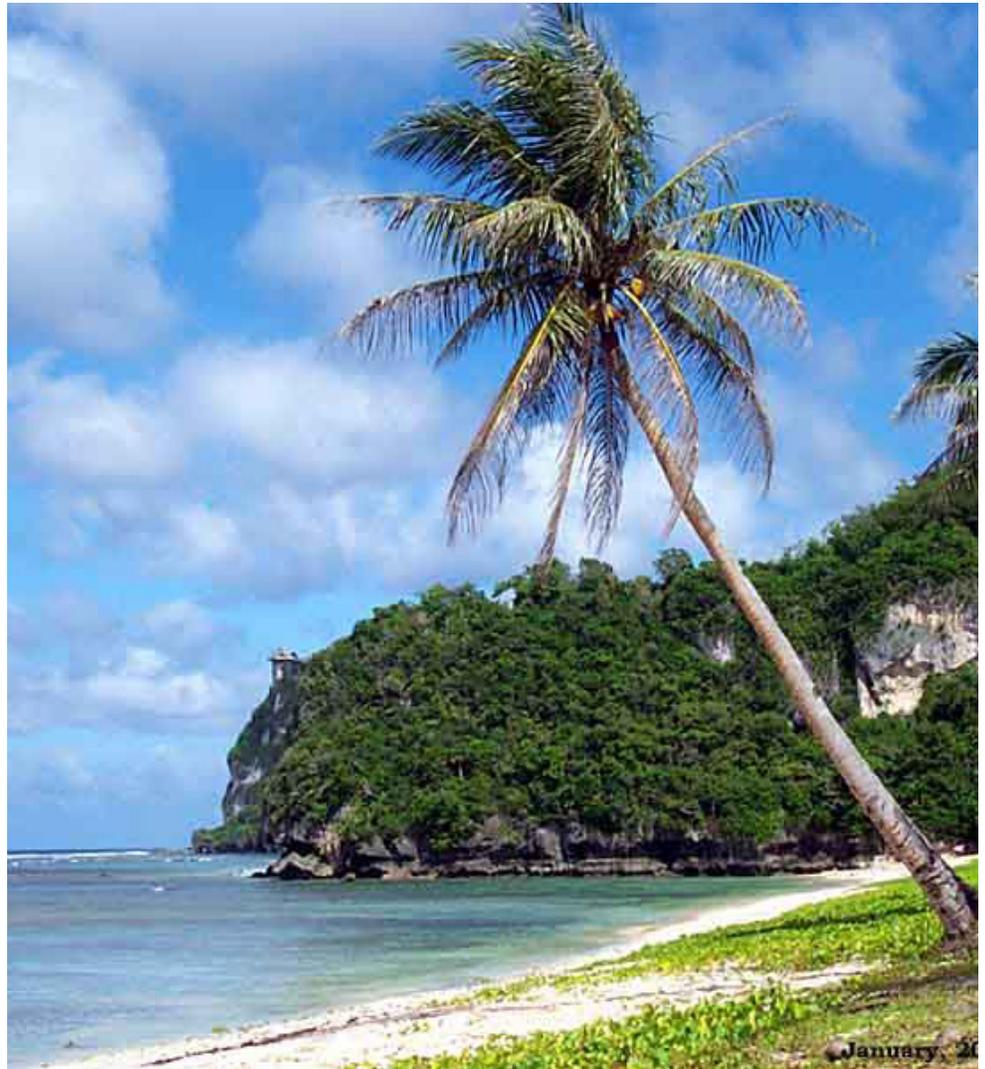
- New DOD water facilities are likely to be operated separately from the system operated by Guam Water Authority (GWA). No impacts to Guam rate payers are expected.

Wastewater

- As of April, 2013, permits for the Agana and Northern District Wastewater Treatment Plants (WWTP) were reissued requiring the upgrade of existing facilities to conduct secondary treatment. Upgrading the facilities will allow both WWTPs to meet capacities for expected growth.
- \$106,400,000 has been appropriated for civilian water and wastewater improvements on Guam.

Solid Waste

- Population increases will increase the need for solid waste services along with the total cost of providing services. However, because increased costs will be spread over a larger group of ratepayers, rates will be little changed as a result of the proposed action.



Tourism

Construction Component

- Some increase in construction related business travel would be expected.
- Infrastructure improvement is an over-arching consideration that would result in positive impacts for all business on Guam.
- The possibility of wage increases or loss of labor to higher-paying construction jobs is a possible outcome. Impacts on the tourism industry from loss of workforce and/or wage increases are not expected to be as drastic as presented in Section 4.3.8 of the 2010 Final SIAS.

Operational Component

- It is likely an increase in military personnel would generate more visits from friends and family, as well as more business travel.
- Population increases are likely to provide expanded markets for support businesses for ocean-related tourism.

There is potential for the increased military branding to decrease desired tourism branding. However, a maximum potential adverse outcome is not inevitable and is based on overall military-civilian relations and communication efforts.

Public Services

Public Safety

Peak year percentage increase in public safety staff:

- Guam Police Department (GPD): 6.2%
- Guam Fire Department (GFD): 3.6%
- Guam Department of Corrections (GDOC): 5.3%
- Guam Department of Youth Affairs (GDYA): 2.5%

All incoming population is considered part of the GPD service population. GPD's service population is defined in this analysis as Guam's total population, including active-duty military.

General Services Agencies

These agencies service 100% of the Guam population.

- Guam Department of Parks and Recreation (GDPR)
- Guam Public Library System (GPLS)
- Guam Judiciary

Peak year percentage increase in staffing requirements:

- GDPR 6%
- GPLS 6%
- Guam Judiciary 5.6%



Public Services

Various GovGuam agencies have different staffing needs. Interviews indicate the need is not severe.



Public Education

- 75% of civilian DOD workers dependents would be attending Domestic Dependents Elementary and Secondary (DDESS) schools.
- At the peak in 2021, 24 elementary school teachers, 9 middle school teachers, and 10 high school teachers will be needed. At steady-state in 2028, 11 additional elementary school teachers, 4 middle school teachers, and 5 high school teachers would be needed.
- Guam Community College (GCC) and University of Guam (UoG) could experience a 1.5 and 2.5% increase in demand for new faculty during peak year and 1.1 and 2.0% increase in demand for new faculty in steady-state year, respectively.

Public Health and Human Services

Estimated peak percentage increases in demand:

- Guam Memorial Hospital Authority (GMHA): 3.2%
- Guam Department of Public Health and Social Services (GDPHSS): 3.2%
- Guam Department of Mental Health and Substance Abuse (GDMHSS): 3.2%
- Guam Department of Integrated Services for Individuals with Disabilities (GDISID): 3.2%.

0% of active duty military and military dependent population are expected to be supported by GMHA, 25% of civilian DOD workers are expected to be supported by GMHA.

Growth Permitting and Regulatory Agency Impacts

- Guam Department of Public Works (GDPW)** would experience peak year in 2019 with an additional 152 permit applications, which would require 0.8 FTE. Steady-state year impacts drop to an additional 14 permit applications, requiring 0.1 additional FTE by 2028.
- Guam Department of Land Management (GDLM)** would experience peak year in 2019 with an additional 113 permit applications, which would require 1.7 FTE. Steady-state year impacts drop to an additional 14 permit applications, requiring 1.4 FTE by 2028. New staff would primarily be related to increased demands from land use commission hearings.
- Guam Environmental Protection Agency (GEPA)** would experience peak year in 2019 with an additional 271 GEPA permit applications, requiring an additional 9.7 FTEs. Steady-state year impacts drop to an additional 14 permit applications, which would require 0.7 FTE by 2028.
- Guam Coastal Management Program (GCMP)** would experience peak year at 2021 with an additional 16 permit applications, requiring 0.9 FTEs. Steady-state year impacts drop to an additional 5 permit applications, which would require 0.6 FTEs by 2028.
- Guam Power Authority (GPA)** would experience peak year in 2019 with an additional 108 permit applications, which would require an additional 1.1 FTE. Steady-state year impacts drop to an additional 8 permits, requiring 0.1 additional FTE by 2027.
- Guam Water Authority (GWA)** would experience peak year in 2019 and 2020 with an additional 55 permit applications, requiring an additional 0.9 FTE. Steady-state year impacts drop to an additional 6 permit applications, requiring 0.1 FTE by 2027.
- Guam Fire Department (GFD)** would experience peak year in 2019 with an additional 69 permit applications, requiring an additional 0.7 FTEs. Steady-state year impacts drop to 8 permit applications, requiring 0.3 FTE by 2027.
- Guam Department of Public Health and Social Services – Department of Environmental Health (GDPHSS)** would experience peak year in 2019 with an additional 45 permit applications, requiring an additional 0.8 FTEs. Steady-state year impacts drop to 5 permit applications, requiring 0.5 FTEs by 2026.
- Guam Department of Parks and Recreation (GDPR) – Historic Preservation Office** would experience peak year in 2019 with an additional 140 permit applications, requiring an additional 0.6 FTEs. Steady-state year impacts drop to 11 permit applications, requiring .1 FTE by 2028.
- Guam Department of Labor (GDOL) – Alien Labor Processing and Certification Division** would experience peak year in 2018 with an additional 2,291 permit applications, requiring an additional 11 FTEs. Steady-state year impacts drop to no permit applications, requiring no FTE by 2026.



Sociocultural Issues

Crime and Social Disorder

- It is expected that an increase in the number of offenses and arrests would accompany the population increase during construction.
- It appears that the military operational component would have little impact on overall crime rates.
- The overall volume of prostitution may be assumed to grow consistent with the significant increase in both military and civilian population stemming from the buildup, but it cannot be conclusively determined whether the rate of prostitution would increase.
- The drinking age on the Island of Guam has recently been raised to 21. This should decrease the chance of alcohol related violence in public places.

Chamorro Issues

- The biggest impact drivers on Chamorro cultural issues for both the construction and operational phases may be the introduction of military and DOD civilian workers into the population and the feeling of respect by the military for the Chamorro population on Guam.
- Reduction in Chamorro voting power would impact certain political issues important to the Chamorro population.

Community Cohesion

- Temporary foreign workers are generally regarded as law-abiding, causing few disruptions to the community. However, some foreign construction workers, unfamiliar with local customs, have the potential to upset local residents.

- For decades, a 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.



Summary

No substantial impacts were projected for four of the five categories analyzed in the SIAS (Population Change, Economic Activity, Public Services, and Sociocultural Issues). Potential adverse impacts were found regarding land acquisition.

Population Change: The population change associated with the proposed action would reach a maximum of 9,721 in 2023 and decline to a steady-state population increase of 7,412 by 2028. These changes in population are of a far less magnitude than what was project in the 2010 Final EIS which showed a peak population increase of 79,178 and a steady-state population increase of 33,608.

Economic Activity: The economic activities from the proposed action will be beneficial to Guam and lead to increased employment and standards of living as compared to baseline conditions. It is not likely that there would be an increase in housing development.

Public Services: Guam's public services and permitting agencies would not be unduly affected in terms of adding additional

staff. Estimated increases in GovGuam taxes would likely compensate for any increased demand on these services.

Sociocultural Issues: There is potential for sociocultural impacts to occur, but the magnitude of the impacts is difficult to predict and depends on policy choices made on how to address such issues. Due to the decrease in size of the proposed action, any sociocultural issues will be of a lesser magnitude than originally forecasted in the 2010 FEIS.

Land Acquisition: Land acquisition will have economic and sociocultural impacts. Economic impacts will be less problematic because existing legislation provides compensation for economic impacts experienced by land owners. Sociocultural impacts may be more adverse. There is also a widely held viewpoint on Guam that the federal government already has control of too much land on Guam and should be releasing lands, not acquiring them. It is likely that some individuals would perceive the acquisition of their land as a disruption of their ties to community and connection with the land.

Get more information on the Draft SEIS at these websites:

JGPO: www.guambuildupeis.us
GovGuam: www.one.guam.gov



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Definitions for terms and acronyms used in this and other related reports can be found in the *Acronym Guide and Glossary* at www.one.guam.gov.