



# Guam Construction Overview Brief

As of 1 Oct 2015



# Agenda



- **Guam Overview**
- **Marine Relocation**
- **Investment Programs**
- **Challenges**



**Naval Hospital**



# Guam History



- ~4000 yrs ago – seafaring peoples settle Guam
- 1521 – Magellan arrives in Guam
- 1672 – Jesuit missionaries establish a settlement
- 1898 – Guam ceded to US by Spain after Spanish-American War
- 1941 – Japan occupies Guam during WWII
- 1944 – U.S. Military liberates Guam



# Guam at a Glance



- **Guam is a US Territory**
  - People of Guam are US citizens, but don't vote in Presidential elections
- **Total Land Area: 212 square miles**
  - 3x the size of Washington DC; 1/7 the size of Rhode Island
- **Climate is tropical marine**
  - Temps range between 77 and 86 °F year-round
- **Defense spending and tourism are the major drivers of Guam's economy**
  - \$2B of federal spending (defense & non-defense) in 2014 (40% of GDP)





# Joint Region Marianas Locations





# NAVFAC Marianas

## Military Facility Management



- **Infrastructure and services supporting operational units, service members, and families assigned to military installations, e.g:**
  - Public works (utilities, services, maintenance, repairs)
  - Construction/Engineering
  - Environmental
  - Transportation
- **Not the ships, subs, and aircraft**
- **Big business:**
  - 500 Gov't Civilians (+/-)
  - 170 Navy & USAF Military (+/-)
  - Hundreds of contractors





# Defense Policy Review Initiative (DPRI) Overview



## Intent - Relocate Marines from Okinawa to Guam

- 2006 Roadmap:  
Approx. 8,600 Marines plus 9,000 dependents
- 2012 Adjustment:  
Approx. 5,000 Marines plus 1,300 dependents

## Today's Plan

- Fewer Marines stationed on Guam, more Marines deployed on a temporary rotation
- Reduced number of Marines and dependents opened up more options





# DPRI Marine Relocation “Four Pillars”



In Feb 2011, Undersecretary of the Navy Robert Work committed to Four Pillars to address GovGuam concerns about the USMC Relocation.

## One Guam

- Improvements to Guam infrastructure impacted by the relocation (port, roads, water, wastewater, power)

## Green Guam

- Develop and secure funding for green programs
- “Net Zero” energy for DoD bases on Guam over time



## 24/7 Unimpeded Access to Pagat Village/Pagat Cave

- LFTRC relocated to Northwest Field to eliminate access concerns

## Net Negative or Net Minus DoD Footprint

- Goal for a reduced DoD footprint of Guam



# Guam DPRI Overview

- **2010 Record of Decision**

- Aviation Mobility Command Complex (air embarkation facilities) and development of North Gate / access road at Andersen AFB (AAFB)
- Wharf improvements at Navy Base Guam (NBG)
- Military Operations on Urban Terrain (MOUT) complex and maneuver training ranges at Andersen South

- **2015 Record of Decision**

- 2010 Decision stands for the items mentioned above
- USMC main base cantonment at NCTS Finegayan
- Family housing area at AAFB (replace existing housing)
- Live-fire training range complex at Northwest Field (AAFB)
- Stand-alone hand grenade range at Andersen South
- Construction implemented over 13 years
- Additional investment in community infrastructure by OEA, FHWA, etc

- **Construction cost being shared with the Government of Japan**



# Guam DPRI – USMC Development



## Marine Corps Base Guam – Finegayan



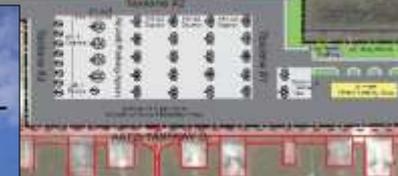
## Live Fire Training Ranges – NWF



## Aviation Combat Element – North Ramp



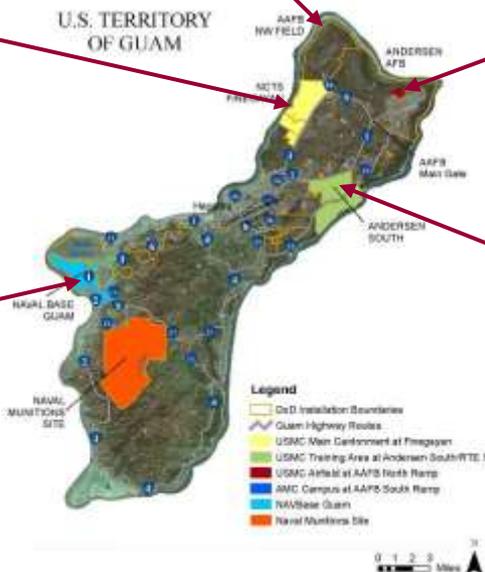
## Family Housing – AAFB



## Sea Embarkation – Apra Harbor



## U.S. TERRITORY OF GUAM



## MOUT Complex – Andy South



Locations Selected in the 2010 & 2015 Records of Decision



# Current DPRI Projects



- **Completed**

- P-204 Apra Wharf I	\$119M
- P-1003 Military Working Dog Relocation	\$ 13M
- P-100 North Ramp Utilities Phase I	\$ 20M
- P-101 North Ramp Parking Phase I	\$ 82M
- P-204A Apra Wharf II	\$ 38M
- J-001 Apra Harbor Infrastructure	\$ 96M
- J-001A AAFB Gate and Fac	\$ 32M

} **\$400M**

- **Awarded / Under Construction**

- P-101A North Ramp Parking Phase II	\$ 24M
- P-109 Aircraft Hangar #1	\$ 86M
- J-200 North Ramp Utilities Phase II	\$112M
- P-240 Marine Wing Support Squadron Fac	\$ 29M

} **\$251M**

- **Solicitation / Pending Award**

- J-001B Cantonment Utilities & Site Imp
- P-230 Ground Support Equipment Shops

Programmed Amounts Listed



# Environmental & Cultural Mitigation



- **Conservation of natural resources and cultural resources**
- **Establish a refuge agreement with FWS to maintain purpose and mission of Guam National Wildlife Refuge Ritidian Unit**
- **Outside the fence infrastructure / community support\***
  - Construct full secondary treatment upgrade to Northern District Wastewater Treatment Plant (NDWWTP)
  - Construct replacement sewer lines to NDWWTP
  - Construct Defense Access Road (DAR) improvements
  - Construct a cultural resources repository facility
  - Construct a public health laboratory
- **Kingfisher Conservation – designating 5,234 acres of durable conservation land on DoD lands in northern Guam**

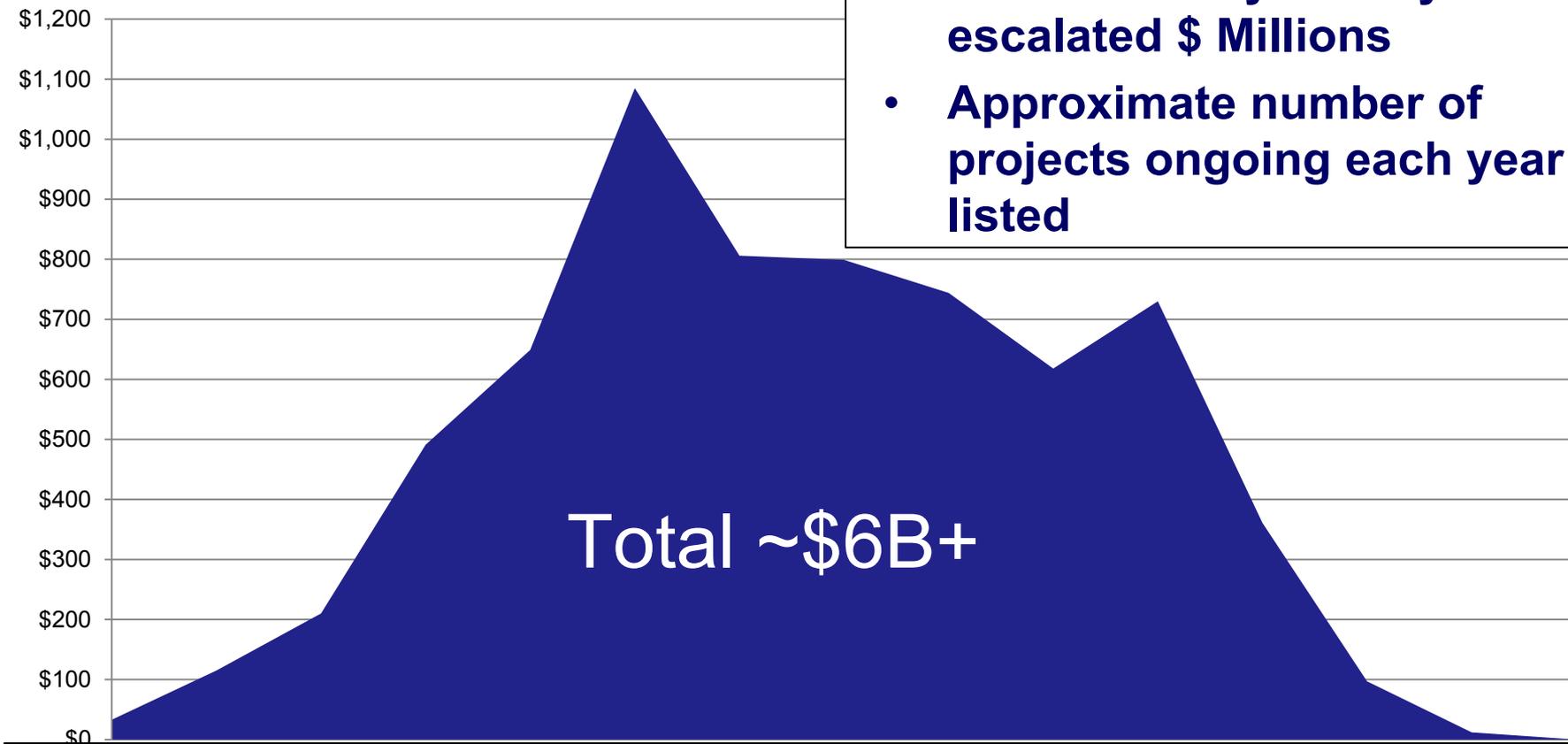
\*subject to availability of funding



# Estimated Construction Workload by Year (DPRI Program Only)



- Work listed by fiscal year in escalated \$ Millions
- Approximate number of projects ongoing each year listed



	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29
Proj.	3	8	13	17	36	39	42	33	33	28	18	13	3	1	0



# Anticipated Economic Impact



- **“Economic impacts from the Military Relocation would be beneficial, leading to increased employment and standards of living.”**
- **Civilian labor force demand is expected to increase by a maximum of 7,031 jobs in 2021.**
- **Estimated average salaries for jobs related to the construction phase and military operation phase are expected to be considerably higher than the 2012 Guam median salary.**
- **GovGuam tax revenues are expected to increase by a maximum of \$86.4M in 2021 and reach a steady-state level of \$40M in 2028. (Personal income tax revenues & anticipated Section 30 funds are expected to be the major contributors.)**



# FY16 Military Construction Awards



Proj #	Project Title	PA \$	Projected RFP
J-001B	Utilities And Site Improvements, Ph 1 - Finegayan	> \$10,000,000	FY16Q1
P-3004	Apr - Dispersed Maintenance Spares And SE Storage Facility – AAFB	19,000,000	FY16Q1
P-3028	Low Observable/Corrosion Cntrl/Composite Repr Shop - AAFB	34,400,000	FY16Q1
P-3030	Par South Ramp Utilities Phase 2 - AAFB	7,100,000	FY16Q1
P-535	Sanitary Sewer System Recapitalization- AAFB	45,314,000	FY16Q2
P-635	Municipal Solid Waste Landfill Closure - AAFB	10,777,000	FY16Q2
P-715	Live-fire Training Range Complex (NW Field) - AAFB	125,677,000	FY16Q2
P-600	Apr Installation Control Center - AAFB	22,200,000	FY16Q2
P-3046	PRTC Roads- AAFB	2,500,000	FY16Q3



# FY16 Minor Maintenance Repair Program



Project Title	Cost Range	Projected RFP
Replace Air Switches and PILC Cable, Chapel Road, NBG	\$1M - \$5M	FY16Q1
Major Maintenance on Orote Power Plant Generator 1, B307 NBG	\$500K - \$1M	FY16Q1
Replace/Reroute Existing Navy 16" CIP Waterline At Cabras Bridge, Route 11 and Replace Steel Piping Water Line Near B6003 at Victor Wharf, NBG.	\$500K - \$1M	FY16Q2
Replace Orote Power Plant Radiators for Three (3) 6.6 MW Units - NBG	\$1M - \$5M	FY16Q2
Replace Switchgears Various Locations Ph1 Options	\$1M-\$5M	FY16Q2
Repair - Replace Three (3) Orote Power Plant Generator Exhaust System	\$1M - \$5M	FY16Q2
Replace N. Fin and S. Fin Elevated Water Tank NCTS, Phase 3	\$1M-\$5M	FY16Q2
Replace Almagosa Springs Intake Screens, Catwalks and Ladders, NAVMAG.	\$250K - \$500K	FY16Q3
Repair Water Distribution Lines along Arnold Ave. AAFB	\$500K - \$1M	FY16Q3
Replace Transmission Line from Tumon Maui Well to Harmon BPS	\$1M - \$5M	FY16Q3
Replace Existing 4.16KV Overhead Power Lines / Pole Mounted Transformer Banks, SRF	\$500K - \$1M	FY16Q3
Replace Transmission line Harmon Booster Pump Station to Barrigada Reservoir Phase 1	\$1M - \$5M	FY16Q4



# FY16 Facility Sustainment Restoration & Modernization



Project Title	Cost Range	Projected RFP
eSRM - Retrocommission & Install Solar Water Heater, Various Loc - 1, RM 14-0147	\$500K - \$1M	FY16Q1
eSRM - Retrocommission Various Buildings, Various Locations - 2, RM14-0150	\$500K - \$1M	FY16Q1
eSRM - Retrocommission Various Buildings, Various Locations - 3, RM 14-0166	\$500K - \$1M	FY16Q1
eSRM - Retrocommission Various Buildings, Various Locations - 4, RM 14-0167	\$500K - \$1M	FY16Q1
eSRM - Retrocommission Various Buildings, Various Locations - 5, RM 14-0168	\$500K - \$1M	FY16Q1
eSRM - Retrocommission Various Buildings, Various Locations - 6, RM 14-0169	\$500K - \$1M	FY16Q1
eSRM - Retrocommission Various Buildings, Various Locations - 6, RM 14-0170	\$500K - \$1M	FY16Q2
eSRM - Energy Efficient Lighting At Various Buildings, Various Locations RM14-0215	\$100K - \$250K	FY16Q2
AAFB; Energy Efficient Lighting And BIPV, B26051	\$1M- \$5M	FY16Q2
Demolish Building 21000	\$5M - \$10M	FY16Q2
DDC AND EMCS Upgrades 35 BLDGS, AAFB	\$5M - \$10M	FY16Q2
AAFB; Energy Efficient Hvac and Plumbing Fixtures, B26051 AND B61202	\$100K - \$250K	FY16Q2
AAFB; Energy Efficient Lighting and BIPV, B26101 & B26104	\$5M - \$10M	FY16Q3
AAFB; Energy Efficient HVAC and Plumbing Fixtures, B26104	\$100K - \$250K	FY16Q3
Maintenance Dredge Victor & X-Ray Wharves	\$1M- \$5M	FY16Q3
AAFB; Energy Efficient Lighting and BIPV, B61202	\$5M - \$10M	FY16Q4
Repair HSC-25 Hangar	\$1M- \$5M	FY16Q4*
Repair/Modernize UH B7, NBG	\$5M - \$10M	FY16Q4*
Lima Wharf Repair, NBG Apra Harbor	>\$10M	FY16Q4*
Repair Taxiway T1-T4 & T6-T8 CIRCUITS, AAFB	\$5M - \$10M	FY16Q4*



# FY16 New Construction MACCs & IDIQs



Contract Vehicle	Type	Capacity	Projected RFP Release
NAVFAC PAC Guam DBMACC (Unrestricted)	MACC	\$990M	FY16Q1
SDVOSB MACC (Minor construction)	MACC	\$30M	FY16Q1
SBMACC (non-DPRI)	MACC	\$240M	FY16Q1
SB Construction Management Services IDIQ	Construction IDIQ	\$40M	FY16Q1
DPRI SBMACC (DPRI WFHL&MM)	MACC	\$240M	FY17Q1



# FY15 Small Business Goals



Program	Statutory	NAVFAC	NFM	Subcontracting
Small Business (SB)	23%	46%	46%	66.67%
Small Disadvantaged Business (SDB)	5%	24%	30%	17.10%
Historically Underutilized Business Zone (HUBZone)	3%	9%	19%	8.85%
Woman-Owned Small Business (WOSB)	5%	7%	5%	15%
Service-Disabled Veteran-Owned Small Business (SDVOSB)	3%	4%	0.5%	3%



# Guam Construction Considerations



- Construction considerations due to Guam's remote location and tropical climate; limited resources and manpower
  - **Tropical Climate:** 7-month rainy season; Averages—102" Rainfall, 83F Temp, 72% Humidity
  - **Equipment Shortages Require Longer Lead-Time and Planning:** historical shortages in cranes, aerial work platforms, excavators, trenchers, dredging and pile driving equipment
  - **Material Shortages Require Longer Lead-Time and Additional Planning:** historical shortages in cement & asphalt; basalt not available; typical long-lead items such as fire doors, transformers, switch gear, air handlers, fire sprinkler piping & stainless steel products; special products to handle the corrosive, high-seismic & typhoon-prone environment require higher costs and longer procurement lead time
  - **Coastal Shipping Must Adhere to Jones Act:** almost all goods require containerization; shipping restricted to US-built and flagged vessels (Jones Act)
  - **Buy American Act Compliance:** close proximity to Asia coupled w/ non-DoD construction demands to minimize cost, results in abundance of available foreign materials/products
  - **Explosive Safety Compliance:** Guam considered former battlefield; munition response required on virtually all projects; evacuation areas extend to civilian community
  - **Foreign H2B Laborers:** 1/4 of workforce are foreign H2B workers; language barriers exist; cumbersome processing; relatively low skill levels
  - **Contractor Proficiency and Capabilities:** Key personnel (PM, QCM, and SSHO) possess varying levels of qualifications and experience often times not comparable to those working U.S. Mainland projects
  - **Constrained Coordination:** contractor coordination w/ U.S. manufacturers in different time zones/work days difficult



# Addition Information



- **Federal Business Opportunities:** <https://www.fbo.gov/>
- **Navy Electronic Commerce Online:** <https://www.neco.navy.mil/>