

Advanced Management Program 30

26 March 2010

Generating Revenue for DOD Operations

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Executive Summary

Problem

The Department of Defense (DOD) faces an unprecedented shortfall in operational funding. Given the current political, social and economic conditions and the engagement in two wars, today's funding shortfalls will continue through the next decade. To maintain the strongest military in the world and reduce taxpayer's burden, DOD leadership must explore new "out of the box" ideas to generate revenue. This proposal recommends utilizing DOD's largest untapped revenue generating asset, high-valued, well-located real estate throughout the United States.

Background

DOD manages over 28.5 million acres of land worldwide. More than 97% is located in the United States or U.S. Territories. The real property inventory includes 539,000 facilities on over 50,000 acres. Only 10% of this space has been privatized or is operated by private entities (ex: Housing). Executive Order 13327, "Federal Real Property Asset Management", promotes efficient and economical use of real property assets, but the 2007 Defense Installation Strategic Plan addresses only implementation of the 2005 BRAC recommendations rather than innovative uses of land and facilities.

Recommendation

This paper presents four DOD land-lease recommendations (alternative energy, Navy public private venture functions, privatized prisons, and sports stadiums) that can generate profitable, repeatable leasing opportunities that will not impact DOD mission requirements. The Office of Economic Adjustment (OEA), DOD's primary reutilization source for DOD property affected by base closures and mission changes, should assume the lead and explore these recommendations as well as other fund generating land-lease options.

Examples:

1. Camp Pendleton. Leasing 64 acres (1/2 percent of 125,000 acres at Camp Pendleton) can generate **\$1.6M annually** through commercially operated solar power.
2. Where MWR business models are failing or require subsidizing, commercially run ventures can provide the military member better services (bowling alleys, food courts, etc) while avoiding sustainment cost of **\$100K/facility/year** and generate an income source. FT Jackson's "SGT Suds" Car Wash has provided **\$900K** to MWR.
3. Commercially run prisons that charge the state \$20,000 (\$48,000 state run) per prisoner annually could build a 3,200 bed facility, at their cost, on military leased property. Charging just \$1,000 per prisoner would net the DOD **\$3.2M annually**.
4. Miramar NAS. NFL Charger's stadium construction will generate **\$6-11M/yr.**



PREFACE

“Large budget reductions can only be met by truly transformational responses. Despite the rhetoric of “transformation,” the history of management reform in the DOD has been a model of incremental continuous changes. A large decline in the defense top line can only be met by transformational changes that take both functions and costs out of the department permanently. Major productivity improvements through consolidations, *divestiture of functions and assets*, canceled programs, and sharply reduced personnel would have to be achieved.” -- *Professor D.A. Brook, Naval Postgraduate School (Public Budgeting and Finance, Fall 2007)*

INTRODUCTION

DOD is facing unprecedented shortfalls in operational funding this fiscal year. Given the current political, social and economic conditions in the United States and its military’s engagement in two different wars, it is widely believed that significant funding shortfalls will worsen over the next decade. The U.S. Navy is facing a \$600M operating shortfall this year impacting its ability to sustain the operational tempo required to ensure trained crews meet emerging missions.

With the U.S. Armed Forces facing extreme fiscal restrictions that may limit its ability to remain the most dominant military in the world, leadership must consider extreme actions to generate revenue that will off-set current and future budgeting shortfalls. The following constraints are assumed:

1. Any courses of action (COA) taken to generate revenue for the U.S. Armed Forces cannot negatively impact its ability to execute the mission.
2. Negative political reactions to COAs should only be considered in the context of mission accomplishment, not popularity.
3. There are no “sacred cows.” We must shift paradigms in order to develop solutions to the revenue challenges.
4. Revenue generated by this proposal will not be used to reduce future year funding.

PROPOSAL

One of the largest potential revenue generating assets of the U.S. Armed Forces is its stewardship of extremely valuable and well-located real estate throughout the United States. Historically, maintaining real estate that was deemed excessive or of limited value was viewed as a fiscal burden for the military. As a result, the Base Relocation and Closure Committee (BRAC) turned installations and large parcels of lands over to municipalities for repurposing. Unfortunately, the military did not reap any long-term or recurring fiscal benefits from these BRAC actions and permanently lost the option to use the land. This proposal leverages remaining real estate under the stewardship of the U.S. Armed Forces to



provide recurring revenue for the military. Specifically, Enhanced Use Leases (EUL) allow for commercial development of military real estate with the contractual understanding that the land always remains the property of the DOD and may be used during a state of emergency. This paper outlines four specific recommendations that are just the “tip of the iceberg” of available options.

ALTERNATIVE ENERGY LAND LEASE OPTION

Background. As discussed at Forbes.com, “Barring a major technology breakthrough, every category of renewable energy will need to grow as rapidly as possible to make a serious dent in the twin challenges of clean energy and climate change. But another, less discussed factor--one familiar to oil companies--is also crucial: developing in the best places.”¹ The world is starving for alternative energy options. There are many commercial enterprises exploring solar, wind, and wave alternatives to fossil fuel (natural gas, crude oil, coal, etc), however solar, wind and wave energy cannot be pursued in just any geographical location. There are optimum locations for each energy alternative. Solar is best in desert climates, wave energy is best in oceans with large periodic waves, and wind energy is best where it is consistent and strong. So, after first identifying military land that can be leased for alternative energy, the optimum type of alternative energy should be identified and the lease option advertised to the appropriate commercial enterprise that pursues that alternative energy.

Recommendation. As one possibility, Camp Pendleton has land that could be leased to commercial entities in such way that there is no impact the USMC mission.

Wave Energy Farms. Offshore wave farms would be located no more than 2 miles off the coast. While the waves off Camp Pendleton are not optimum to alternative energy capture and wave energy devices are still in their infancy, there is potential for profitable long term leases. For example, wave energy research, development, and commercial implementation being pursued in Australia and other countries^{2 3} is expected to bring advances in ocean wave energy technology. To reduce the impact of amphibious landing exercises, these wave farms could be considered to be mines that should be avoided by the landing forces.

Wind Energy Farm. Although a more mature alternative energy option, the winds at Camp Pendleton are not optimum (4-5 m/s) for year round capture as shown on the chart below.

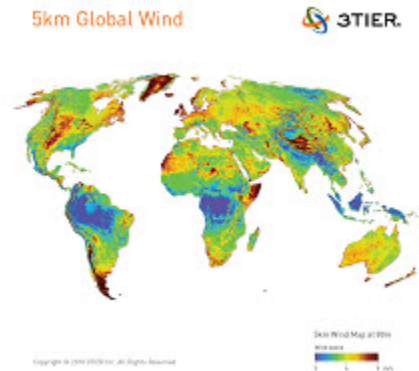
¹ Forbes.com, “Green Power: America’s Best Places For Alternative Energy”, William Pentland, http://www.forbes.com/2008/07/09/energy-solar-green-biz-energy-cx_bp_0709atlas.html

² “**Energy Tech:** Wave Power Tipped As Holy Grail For Australia”, Staff Writers, Sidney (AFP), May 17, 2007, http://www.spacedaily.com/reports/Wave_Power_Tipped_As_Holy_Grail_For_Australia_999.html

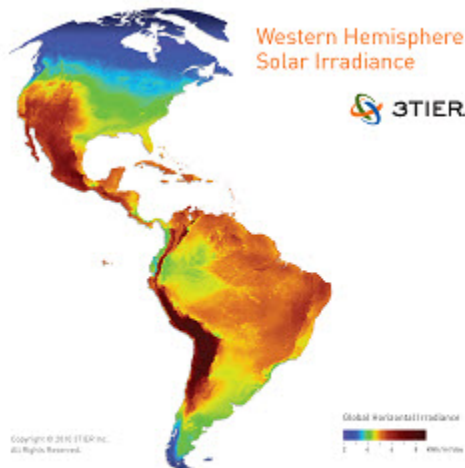
³ “**Wave Power:** News and Information about **Wave Energy** and **Ocean Power Technologies**”, <http://www.alternative-energy-news.info/technology/hydro/wave-power/>



Although wind energy farms show low potential for this location, but DOD owns many other locations that are optimal for wind energy capture, especially Air Force installations just east of the Rockies.



Solar Power. As shown in the chart below, Camp Pendleton has high solar exposure year round (5-6 kW-hr/m² /day) which makes it an optimum location for solar power. There are many other DOD installations in the Southwest that meet these requirements.



Benefits. The solar power farms in Nevada⁴ and San Joaquin Valley, CA both have a solar energy density of 0.125 MW per acre. Energy production is around 7.5 cents per kW-hr, well under the commercially viable production of 9 cents per kW-hr. Land leasing 640 acres of Camp Pendleton to a commercial enterprise, charging 0.5 cents per kW-hr, results in \$1,825 per acre per year. Camp Pendleton has 125,000 acres. Leasing 640 acres (1/2 percent of the available land) results in \$1.6M annually (assuming only 8 hours of sunlight per day – a

⁴ Winston-Salem Journal, "A Green Milestone: Solar-power farm is producing power at rate cheaper than conventional means", <http://www2.journalnow.com/content/2009/jan/07/a-green-milestone-solar-power-farm-is-producing-po/news/>



larger average of sunlight per day increases the bottom line). With continuing advances and expansion in solar energy technology, this should be pursued at all viable DOD facilities.

PUBLIC PRIVATE VENTURE OF DEPARTMENT OF NAVY SUPPORT FUNCTIONS

Background. The Military Housing Privatization Initiative (MHPI) enacted as part of the National Defense Authorization Act for fiscal year 1996 illustrates successful divestiture of a function and associated facilities once considered core to Department of Defense (DOD) operations. MHPI allows DOD to work with the private sector to revitalize military housing through a variety of financial tools including direct loans, loan guarantees, equity investments, conveyance or leasing of property or facilities, and rental guarantees. Public/private venture (PPV) housing is owned by a private entity and governed by a business agreement in which the Navy has limited rights and responsibilities. The private entity is entirely responsible for the construction, renovation, maintenance and day-to-day management of the housing which may be located on or off government property.⁵ This program has proven very successful, with all but 2,100 Navy Sailors scheduled to occupy ashore barracks by the end of 2010.

The Army has also ventured into the PPV sector with Morale, Welfare and Recreation (MWR) facilities. The “SGT Suds” Car Wash held its grand opening in Fort Jackson, SC on March 2, 2005, becoming the eight PPV to open on an Army installation under a program headed by the U. S. Army Community and Family Support Center’s Construction Directorate. To date, the PPV program has saved the Army **\$34.4M** in capital construction costs with over **\$900K** infused back to various MWR programs throughout the eight Army installations partnering with the private sector. The Army is current developing additional car wash, restaurant and hotel options at various installations.

Similarly, the Navy has been making progress with the NEXCOM Vending Program generating approximately \$28K in contributions to the Navy Marine Corps Relief Society in 2008 alone. Over the last eleven years of participating in PPV, NEXCOM has generated over \$380K in revenue for station programs. Similar opportunities exist in the civilian MWR (CMWR) program where cafeterias and other support functions that once provided revenue to installation programs have closed.

Recommendation. This success suggests that a holistic view of other DoN Support functions could yield additional efficiencies. The Navy MWR program offers a variety of services and facilities intended to improve quality of life (QOL) for Sailors and their families. These services include bowling centers, aquatics centers, theaters, ticket and tour offices, auto and wood hobby shops, marinas, billiard halls, clubs, and other amusements. Many category “C” facilities, required to make a profit, are struggling or closing due to low patronage, high

⁵ www.housing.navy.mil



energy costs, or poor management. Many category “B” facilities, also suffering low patronage, remain open only with the support of dwindling sustainment and utility funds which are already resourced at less than 70% of the Commander, Navy Installations Command (CNIC) target as indicated by the facilities sustainment model. Although this cost has been justified in part by the perceived benefit to QOL, continued operation of these facilities assumes that the traditional mix of recreational services is still valuable to young Sailors as an accession and retention incentive.

An alternate approach is to systematically privatize or outsource all installation MWR functions. The CNIC internal needs validation study (INVS) for proposed MWR facilities requires identification of comparable services offered by the local economy, but only for the purpose of identifying potential competitors for the proposed military facility. Further, the required facility size is determined based on the projected patronage, often a percentage of eligible user population, rather than measured interest or actual utilization.⁶ Applied to all existing MWR functions, this same analysis could instead identify partnership opportunities to leverage the local economy to provide a flexible, relevant, tailored, and affordable set of recreational services for Sailors in a particular area. For example, rather than operate expensive wood and auto hobby shops that are of little interest to young Sailors, DoN could partner with competing civilian services and develop discount agreements that would facilitate transfer of a small Navy patronage to the local economy.

Benefits. Enhanced use lease options provide an opportunity to entice local firms to construct recreational facilities on severable Navy property to serve both Navy patrons and the surrounding civilian population. Based on current sustainment costs, each privatized function would save **\$100K per facility per year** and create a revenue stream from the terms of the lease agreement.

PRIVATIZED PRISONS ON DOD LANDS

Background. Prisons on DOD installations are nothing new. Likewise privatized prisons have become an accepted concept in many states over the last 25 years. DOD can actively explore leasing land and facilities to privatized prison operators.

According to 2008 Bureau of Justice (BJS) statistics there are over 2.3 million inmates in America’s prisons with another 5 million on parole or probation. The ACLU estimates that the current number of incarcerated represents at least 25 percent over capacity which directly relates to systemic problems including poor treatment and recidivism.

Last month the Governor of California, faced with a court order to reduce the inmate population or increase bed space by 40,000, announced his desire to increase the use of privatized prisons citing that it costs the state \$20,000 per inmate a year in privatized operations versus \$48,000 in state prisons. The savings on the 40,000 inmates referenced would be \$112M in annual operating costs alone.

⁶ www.mwr.navy.mil/mwrprgms



The idea of using DOD land for civilian prisons was highlighted in the Government Accounting Office report on prison expansion in December 1983 that specifically pointed out the success the Bureau of Prisons (BOP) had in creating a federal corrections facility at Fort Dix. “Military properties can provide BOP expansion capacity faster than site development and construction of new prisons, and the costs are substantially less for renovation.”

Fort Dix was on DOD’s base closure and realignment list in 1991 and BOP began receiving inmates at the facility in the second quarter of 1993, just 2 years after the facility became available. As of September 1993, Fort Dix had a rated capacity of 1,300 and a population of 1,391 inmates. By the end of fiscal year 1993, the rated capacity was expected to be 1,600 beds. BOP plans to develop capacity for an additional 1,600 inmates at Fort Dix within the next year for a total rated capacity of 3,200 inmates. The entire 3,200 bed facility is estimated to cost \$10 million. The cost of renovation for the initial low-security, 1,600-bed capacity at Fort Dix was about \$4.6 million. By contrast, construction of a low-security facility in Yazoo, MS, is estimated to cost about \$64 million for a 1,600-bed capacity. The BOP has identified over 80 military sites that have potential for this program

Proposal. The three leading corporations in the private prison business in the U.S. are the Corrections Corporation of America, the GEO Group and Cornell Companies. All three have a proven record of success and collectively manage of 180 facilities for federal, state and county governments when outsourcing a portion of their corrections system’s inmate population. Texas and California have the largest DOD land holdings and both have significant prison overcrowding problems.

Benefits. Leasing DOD lands to privatized prisons could provide substantial revenue for the DOD, relieve prison overcrowding and cut costs to tax payers. At just \$1,000 per inmate, the program could net as estimated **\$3.2M annually**.

LEASE PROPERTY IN SAN DIEGO FOR A NEW STADIUM

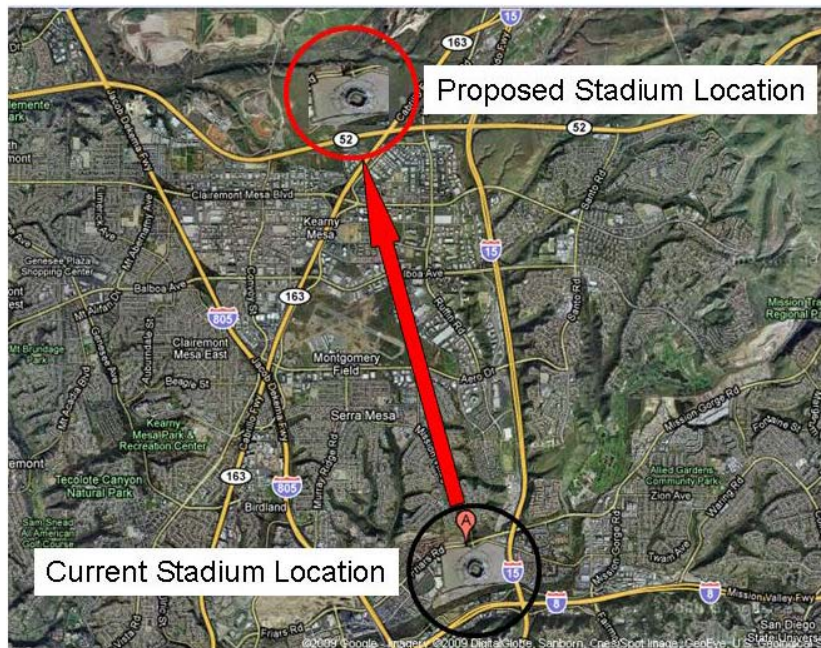
Background. Due to the current material condition of Qualcomm Stadium and its outdated seating arrangements (i.e. minimal luxury boxes), the Chargers and the NFL desire a new stadium be built to house the Chargers football team. The City of San Diego does not want the San Diego taxpayer to bear the fiscal burden to fund the construction of a new stadium that appears to require little improvement to host approximately 12 football games a year. In response to the City’s position, the owner of the Chargers, the Spanos family, have offered to team with the city to share the costs of building a new stadium but with the agreement that the Spanos family will be given a portion of the land around the stadium to develop business and housing properties. At this point, neither the City of San Diego nor the Chargers organization is willing to accept the offers on the table to move forward with a new stadium plan for San Diego. As a result of the stadium’s current material condition, the NFL has removed San Diego from its list of possible Super Bowl sites in the future, until a new



stadium is built to their satisfaction to host arguably the greatest sporting spectacle on the planet.

Recommendation. A new stadium facility will be constructed on MCAS Miramar using a combination of Chargers, NFL and City of San Diego funding. Picture 1 shows a graphic representation of the proposed location. The costs related to the construction of a new stadium are listed below:

- a. Estimated cost for construction of a new stadium: \$400M
- b. Estimated financing available from NFL and Chargers: \$300M
- c. City of San Diego Funding through taxation/bonds: \$100M



Picture 1

As a stipulation to using MCAS Miramar land for the development of a new stadium facility, MCAS Miramar will lease the property to the Chargers organization for a period of 30 years. In addition, MCAS Miramar has the option of allowing privatized development of the land surrounding the new stadium to increase lease payments. Terms and conditions of the lease payments for the stadium land will be similar to the current structure established between the Chargers and the City of San Diego for use of Qualcomm Stadium.

Benefits.

1. Revenue Generation for the U.S. Armed Forces. Terms and conditions of the lease payments will be similar to the current structure established between the Chargers and the City of San Diego to utilize the land currently housing Qualcomm Stadium.
 - a. Current Lease Payments to City of San Diego for use of Qualcomm land: \$54.6M/FY10, \$25.8M/FY11.
 - b. Anticipate MCAS Miramar lease of approximately \$5-10M/yr for 30 years. Lease requirements are less for MCAS Miramar because they will not 'own' the stadium.
 - c. Additional revenue generation due to privatization of land around the new facility could reach approximately \$1M/yr.
 - d. **Total possible revenue generation for stadium construction on MCAS Miramar: \$6-11M/yr.**
2. Humanitarian Assistance/Disaster Relief Facility. This new facility, housed on USMC land, would be designed with a secondary purpose as a HADR safe-haven. As demonstrated during the San Diego wildfires of 2007, a facility like Qualcomm stadium can be used to provide shelter and respite to displaced people during natural disasters. (See pictures 2 & 3)



Picture 2. HADR efforts at Qualcomm Stadium due to wildfires, 2007.



Picture 3. HADR efforts at Qualcomm Stadium due to wildfires, 2007.

3. Positive Teaming and Recruiting Opportunities with the City of San Diego, the NFL and Football Nation. The recruiting benefits of this merger would be priceless. Positive political capital with San Diego will also be significant.
4. The Super Bowl Returns to San Diego. A Super Bowl host city receives approximately \$300M in tourism.
5. Qualcomm Real Estate Returns to the City of San Diego. The City of San Diego is currently in the midst of an extreme financial crisis. The land that currently houses Qualcomm stadium can be return to San Diego for business and housing development. It is estimated that the City of San Diego could generate up to \$500M for the sale of the property currently housing Qualcomm stadium.

Challenges.

1. Any building projects that take place on MCAS Miramar will incur environmental impacts and may require additional funding to support any clean-up costs associated with possible contamination.
2. Due to the proposed location of the new stadium facility, flight paths in and out of MCAS Miramar and possibly Montgomery Airfield may need to be altered to ensure unrestricted flight operations.



RECOMMENDATIONS. The Department of Defense Office of Economic Adjustment (OEA) is experienced in DOD land reutilization and optimization to include base closures, realignments, and expansions.

OEA staff is experienced in a range of economic and community development, land use planning, real estate redevelopment, federal real property programs, military programs, and worker adjustment. OEA project managers bring a working knowledge of other Federal agencies and their respective programs to help communities put together an adjustment program combining Federal, State, local, and private resources.

OEA administers a Joint Land Use Study (JLUS) program encouraging cooperative land use planning between military installations and the surrounding communities where civilian encroachment is likely to impair the operations of an installation. In these instances, OEA may provide technical and financial assistance to State and local governments to achieve compatible land use and development activities near Defense facilities.

The OEA skill set is perfectly suited to explore and expand upon the recommendations in this paper.



Generating Revenue for DOD Operations

AMP Class #30, Team 6 – “Two Men Down”

Chad Brooks, Andrew Gibbons, Ron Rutan, Dan Wolfert

Presented February 12, 2010



Problem Statement

- Current year operating budget shortfall (~\$600M)
- Growth of national entitlement spending
- Unplanned expenses: Haiti, Afghanistan
- No off-budget appropriations (GWOT) expected
- Facilities reductions required to support procurement, personnel, and operating budgets
- BRAC 5 and “easy” demolition nearly completed

Success will require “transformational” thinking...



Proposal

- Generate revenue through enhanced use lease (EUL) of DOD land
- Examples:

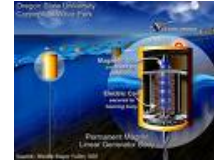
Option	Annual Revenue
Alternative Energy	\$1.6M/64 acres
PPV support facilities	\$100K/facility
Privatized prisons	\$3.2M/prison
Stadium construction	\$6-11M/stadium

DOD maintains over 539,000 facilities on 28.5M acres worldwide

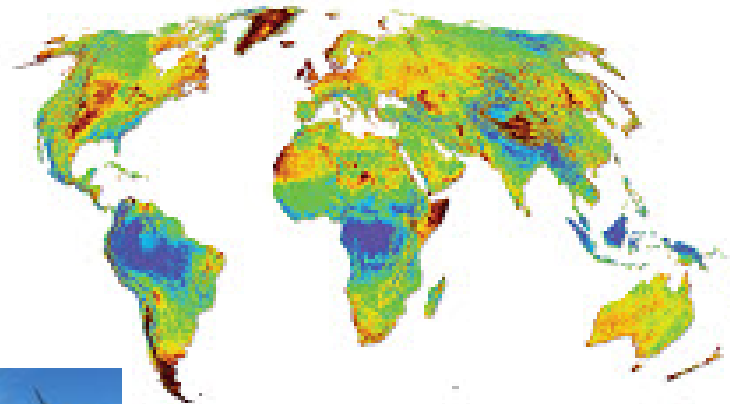


Alternative Energy

- Options include wave, wind, and solar – match technology to conditions



5km Global Wind



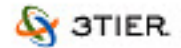
5km Wind Map © 2010 3TIER Inc. All Rights Reserved.



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Western Hemisphere Solar Irradiance



Global Horizontal Irradiance
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Alternative Energy

- Camp Pendleton example:

- Wave
- Wind
- Solar



- » Potential energy density of 0.125MW/acre
- » Production at 7.5 cents per kW-hr
- » Leasing 64 acres (1/2% of total) yields **\$1.6M annually**

Repeatable success for appropriate commodities at all installations

Public Private Ventures

- Roadmap from success in housing PPV and Army family support
- Many MWR/CMWR functions for consideration
 - Provide contemporary mix of services
 - Eliminate sustainment and operating budgets
 - Generate revenue through profit-sharing
- Baseline savings of \$100K sustainment per facility and revenues of \$10K per function possible



Privatized Prisons

- Demand to reduce overcrowding
 - 25% over national capacity
 - California requires 40,000 additional cells at rate of \$48K per inmate
- DOD property is an affordable alternative for prison industry
- Fort Dix example – 3,200 inmate capacity
- Potential revenue of \$3.2M per prison annually



Sports Stadium

- San Diego Chargers Qualcomm replacement
 - New construction: ~\$400M
 - Funding from NFL/Chargers: ~\$300M
 - Funding from San Diego: ~\$100M
 - Develop surrounding real estate – hotels, restaurants
- Lease MCAS Miramar land for new stadium
 - Potential lease payments: \$5M - \$10M annually
 - Revenue from other development: \$1M annually
- Total Revenue Generation: \$6 – 11M annually.



Sports Stadium

- Proposed Location for new stadium.



Sports Stadium

- Joint utilization of new stadium as an HADR site.



Sports Stadium

- Additional benefits of land-use for new stadium.
 - Recruiting / Partnerships with NFL, Chargers, City of San Diego and USMC.
 - Super Bowl returns to San Diego (est. ~\$400M in tourism dollars to San Diego and surrounding cities).
 - Qualcomm Stadium land returned to City of San Diego and is developed for revenue (~est. worth of land is \$300M).



Conclusion

- Four examples of profitable lease options:

Option	Annual Revenue	Scaling	US Troops in Afghanistan
Alternative Energy	\$1.6M/64 acres	100	160
PPV support facilities	\$100K/facility	1000	100
Privatized prisons	\$3.2M/prison	10	32
Stadium construction	\$6-11M/stadium	1	11

- Engage DOD Office of Economic Adjustment and private sector investors

Many other options possible!

