# Defense and Government

#### Plan

- Macro look at the numbers gov and industry report in San Diego area
- Look at some specific industries
- Talk through DOD/Fed PM attributes
- Look at PM opportunities and attributes in local defense market

#### PMI DoD Session

Sources include: EDC, SDMAC EIS, SD Biz Journal, employment surveys temp agency sources, but.....your view may vary so it may be wrong for some market segments.

Also, the same numbers and lists reappear in multiple

sites as they are re-used.



## DOD / Fed Market

#### Here is what DOD self reports.

It includes contracts plus the salaries of military and DOD civilian employees. It probably does not include a contract originating outside SD County but executed here.

#### **Top 10 Defense Spending Locations\***

(Personnel and Contracts)

Fairfax County, Virginia \$19.1 B

San Diego County, California \$15.1 B

Tarrant County, Texas \$13.8 B

Los Angeles County, California \$8.0 B

Santa Clara County, California \$7.4 B

Madison County, Alabama \$7.0 B

Honolulu County, Hawaii \$6.7 B

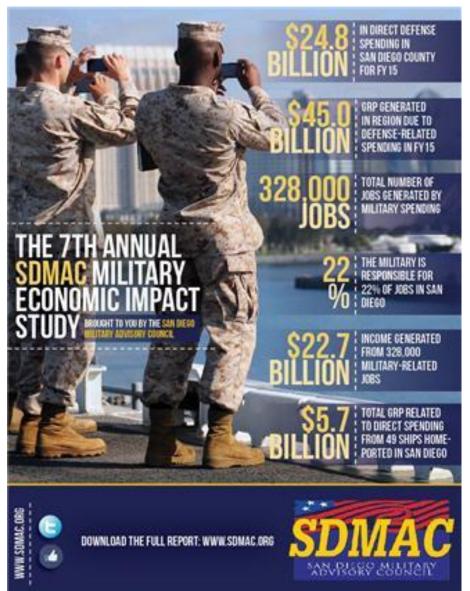
Bexar County, Texas \$6.6 B

District of Columbia \$6.5 B

Newport News City, Virginia \$6.2 B

<sup>\*</sup> Source: 2014 DOD Office of Economic Adjustment Report Defense Spending by State

## Let's pull in some numbers to get a scale Economic Impact Study



In San Diego, the generally cited source for industry, government agencies, and planning considerations is the SDMAC EIS.

Commissioned by the SDMAC, executed by Point Loma Nazarene School of Business.

Data sources US Gov, major corporations and public records.

#### **SDMAC EIS Highlights**

- An estimated total of \$24.8 billion in direct spending related to defense was sent to San Diego County during fiscal year 2015, an amount equal to about \$7,700 for each of the county's residents.
- Defense-related activities and spending will generate an estimated \$45.0 billion of gross regional product (GRP) for San Diego County in fiscal 2015. This represents 21.5 percent of the region's total GRP an increase from last year's totals of \$38.7 billion/20 percent, respectively.
- The military sector is responsible for about 328,000, or 22 percent, of the region's total jobs in 2015 after accounting for all of the ripple effects of defense spending an increase from last year's 317,000 jobs.
- Income generated as a result of all of the direct and multiplier effects of military- linked spending will amount to an estimated \$22.7 billion in fiscal year 2015.
- In fiscal year 2015, the 49 U.S. Navy ships home ported in San Diego will see direct spending of about \$2.6 billion that will equate to a total economic impact of \$5.7 billion in GRP. The two aircraft carriers based here will bring a combined \$1.5 billion to the economy based on updated inputs, multipliers, and models San Diego's home-ported ship count is projected to climb to a total of 84 by calendar year 2023.
- NOTE: DOD's self report is 15B. The EIS has 24B. The difference is ???

#### **Market Slices**

Sector	Employment Avg	<b>Annual Pay</b>	LQ*
Ship Building and Repairing	5,750	\$66,400	5.93
Other Aircraft Parts and Equipment	4,960	\$91,000	4.82
Search, Detection and Navigation Instrumnt	4,910	\$108,200	3.99
Res/Dev Phys, Eng, Life Sciences (ex Biotech)	3,990	\$179,500	4.8
Testing Laboratories	2,690	\$85,300	4.95
Guided Missiles and Space Vehicles	1,930	\$120,300	3.58
Aircraft Manufacturing	1,660	\$100,100	0.72
Freight Transportation Arrangement	1,400	\$52,200	0.77
Other Shared Cluster Industry Sectors	6,190 N/A		N/A
Total AEROSPACE, NAVIGATION, AND MARITIME TECHNOLOGIES	33,400	\$93,300	2.19

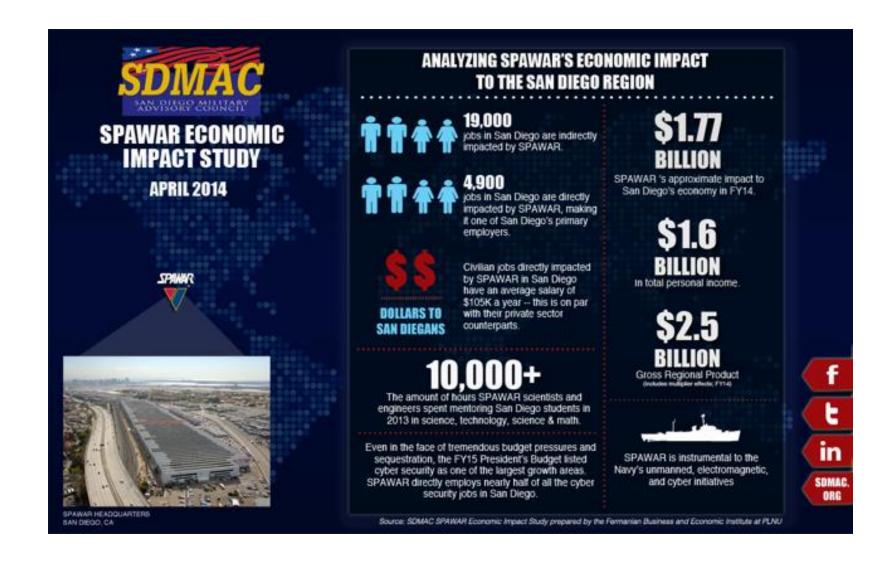
Source: San Diego Regional Economic Development Council

LQ: Location Quotient Comparison of that industry relative to other locations in the US

# 10 of the larger SD footprint defense companies\*...

- BAE Systems
- Cubic Corporation
- General Atomics
- General Dynamics NASSCO
- UTC Aerospace Systems
- •L-3 Communications
- Leidos
- Lockheed Martin
- Northrop Grumman
- Raytheon
- •SAIC
- ViaSat
- ...but...
- there are commercial companies with large Federal customers.
  - HPE does significant work for the Navy networks
  - \* Source: San Diego Economic Development Council

#### Navy IT



#### IT Market

- Product vs Services
- Majority of work in SD market is service based- thousands of contracts and task orders
- Majority of the spending is on the product side- smaller number of high value contracts to build radios, IT systems, etc..
- Generally different company sets.

#### **Cybersecurity Companies**

- Hard to gage the scale---Everyone has reclassified SW work to cyber work to be cutting edge and look for markets.
  - Major defense and SW companies have the capabilities and have done this type of work for decades.
  - Generally built-in to defense products vice called out as a line of work.
  - Employee counts do not seem to make sense
- Some cyber specialized companies that work as part of larger programs as subcontractors or balance commercial services with defense work.
- Places like ESET, iboss, NG & Raytheon (bought Websence)

#### Shipbuilding





- GD / NASSCO
- Huntington Ingalls Industries
- BAE Shipyards
- Niche players as subcontractors or suppliers to the shipyards or Navy directly.
- Hire, lay-off, hire cycle

High pressure, 24 hour per day, hazardous conditions, multivariable work packages with constant need for de-confliction. Fun for the right personality type.

- SDMAC Shipyard study for added info
- CGs, DDG, LPD, Logistics, MCM class ships



Photo: www.BAE.com

## **Unmanned Systems**

- UAV production at GA and NG
- UUV production and testing





#### Hybrid Work Mix of Defense/ Commercial

- Qualcomm. Operates in the gov space and has seen R&D / acquisition of DoD application robotic companies.
- Defense companies who take shift to adjacent commercial spaces
  - San Diego Airport renovation
  - Tsunami Warning Systems
  - San Diego County IT outsourcing





#### Hybrid Work Mix of Defense/ Commercial

- Broadway Pier Complex- Construction
  - Project converts Federal land owned by the Navy to a mixed use downtown waterfront development that meets the Navy's needs while also providing increased commercial economic impact to the San Diego area.



12 Acres located adjacent to the USS Midway Conversion to hotel, commercial and Navy site Subject of multiple plans since 2006

Photo: UT San Diego

#### Defense Medical Delivery

- Naval Healthcare
- VA hospital
- Tri-Care spending

**National**, not local, contracting. Local work is typically a component of a large program administered from the DC area.



#### Corporate Splits and Consolidations

- HP- split in two: HP and HPE
- CSC Split in two: CSC and CSRA
- HPE and CSC merged
- SAIC- Split in two: SAIC and Leidos.
  - SAIC bought Scitor.
  - Leidos bought LMIT
- BAH- Split in two
  - BAH got merged with part of AirInc as it exited the private equity firm
- NG split in two: NG and TASC
  - Engility and TASC merged
- Vencore built out of a collection of companies
- Themes?

#### Defense PM Attributes

News, quals and procedures that affect the defense marketplace for PMs.

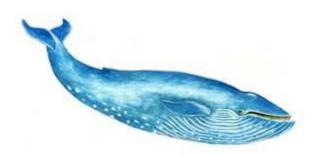
# How Misconduct Elsewhere is Shaping Program Management in San Diego

- Navy takes away NUWC's authority to issue contracts
- Fat Leonard indictments
- Navy Intel procurement scandal

- A series of Navy corruption cases
- Navy imposed rules on top of the FAR
- According to the CNO, we've got another 18 or so to fire/indict



#### Contract timelines



- Contract award timelines are about the same as a whale's gestation period.
- Typically the people bid on the work are long gone and working elsewhere when an award is made.
- More and more blocks to check on the gov's part in response to a series
  of bribery and kick-back schemes uncovered in the last few years.
  - Each new scandal has added things like "tripwires" that distract the contracting staff and gum up the process
- Sometimes, a bidding company has folded before the award is made.
- If you are looking for work in this environment, make sure you ask what you will be doing in the contract gap periods.

#### **Contract Protests**

- With gov contracts, the losers can protest the gov's award based on flaws in the evaluation process, flaws in the RFP, etc...
- Intent is to get the gov to reverse the decision and reconsider the award, start all over, etc...
- Very successful tactic for companies who have analyzed the law, understand the processes, and can identify potential flaws in the contract process.
  - Useless tactic for knee-jerk protests that do not specifically call out flaws approaches.
- As a PM, you should expect a protest, expect a 100-day protest eval period where you will not be able to commence work.
- USMC typically puts it in their critical path for post-award activities.

#### **Contract Protests**

- Gov agencies hate to lose a protest; companies hate to lose a contract.
- GAO administers the protests so it is like getting a bad mark on a report card.
- If the gov agency takes an action to address the issue, then GAO will dismiss the protest. Example:
  - A multi award contract is issued to 4 of the 6 bidders on the RFP.
  - One of the losers protests based on a flawed evaluation criteria.
  - GAO begins an investigation and the 4 awards are placed on hold.
  - Then...the agency decides to award contracts to all 6 of the bidders.
  - GAO dismisses the protest because there is no longer any harm to the loser.
  - The agency keeps its perfect record of not losing a protest.
  - The company gets the award they wanted.

#### PM Job Prospects Internal vs External Hire

- Most companies hire PMs from within their company and industry
  - Evaluated the employee internally.
  - Employee knows company's internal contracting, finance and management systems. Reduces the risk for the company that the PM will have to learn the work being performed and at the same time they learn the company's mechanical processes.
  - Internal reward for employees.
  - Industry knowledge is key- regulatory understanding, techniques, etc...
    - Bio Tech regs, cement curing times, etc...
  - Plenty of local supply of PMs

#### PM Job Prospects Internal vs External Hire

- Where they hire externally
  - New contract where they are looking for a key resume
  - Performing team with no natural successor, but a viable candidate is in the industry and known to the company.

Remo Gaggi: "Look... why take a chance? At least, that's the way I feel about it." --- Casino

So how do you break in?

#### SB shift at IT Navy can open PM prospects

- Consolidation of SB work to fewer SBs as the Navy does more SBSAs.
- Full and Open contracts— Large Business with 5-7 SB quota
- SBSA contracts typically one SB and a LB.
- As the Navy shifts some F&O to SBSA, it is consolidating SB work into fewer SBs. Number of zombie SBs growing.
- Larger SBs doing everything possible to curtail growth so they keep the SB seal.
- So...choose wisely if you are looking to work for a SB in the Navy IT market. Make sure it is one of the ones the Navy is selecting as a survivor.
- Plus side for PMs. As F&O work goes SB, the SBs tend to capture the junior workforce but the LBs keep the PMs and key players. So, as SB work evolves there should be more PM slots locally.

#### DAWIA vs PMP

#### DAWIA

- Open to gov only, but you keep the cert once you have it.
- Combination of training, career progression, and a board evaluation.
- "Successful" completion of a tour of duty.
- DOD / Federal terminology and procedures
- For DOD work, a DAWIA certified person will be a more powerful candidate.
- See a few contracts with DAWIA as a required qual, but almost never see a PMP requirement in contracts. But... it it can be a desired qual.

## How the LPTA Shift Changes Program Management

- The Gov has done a lot of Low Priced Technically Acceptable (LPTA) / virtual LPTA contracting lately.
- Caveat: They seem to be sensitive to thinking LPTA is bad so they tend to downplay the number of LPTAs they do.
- Whether it is formally LPTA or effectively LPTA, it is low price wins.
- Companies have responded by bidding the bare bones minimum, squeezing out checks, and sending work to remote site.
- PMs need to be able to run remote teams, handle large groups of teleworkers, handle much more junior people.
- Must be able to run a remote work force, retain them and find ways to effectively do the work.

#### Other Organizations to Search

- EvoNexus: New Company Incubator PLUS <u>Headliners</u> Nationally and internationally renowned keynote speakers and panelists that features topics on current industry trends and technology road maps. <u>Special Interest Group</u> panel events that are comprised of eight vertical technology sectors. They are in a setting that allows for more intimate interaction and networking.
- San Diego Military Advisory Council (SDMAC): Mix of Defense, Federal and Commercial organizations.
- International Council On Systems Engineering (INCOSE) Primarily Aerospace, defense and health
- Association of Unmanned Vehicle Systems International (AUVSI)