



HEDGEYE  POTOMAC RESEARCH

DEFENSE ENVIRONMENT UNDER TRUMP

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LEGAL

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ELECTION CONSEQUENCES FOR DEFENSE

1

FY17: CR NEGATIVE BUT EXPECT +\$15B IN APRIL

In an effort to give the all-Republican team more impact earlier, Congress passed an extended Continuing Resolution that delays new starts, production increases and multiyear contracts until at least Apr 28. However, we expect ~\$15B in additional DoD spending when budget finally passes.

2

FY18: INCREASES IN READINESS AND “SHOVEL-READY” QUICK WIN INVESTMENTS

Focus will be on fulfilling promises: larger force structure, more maintenance spending and increases to in-production weapons, vehicles, and aircraft with priority to visible wins.

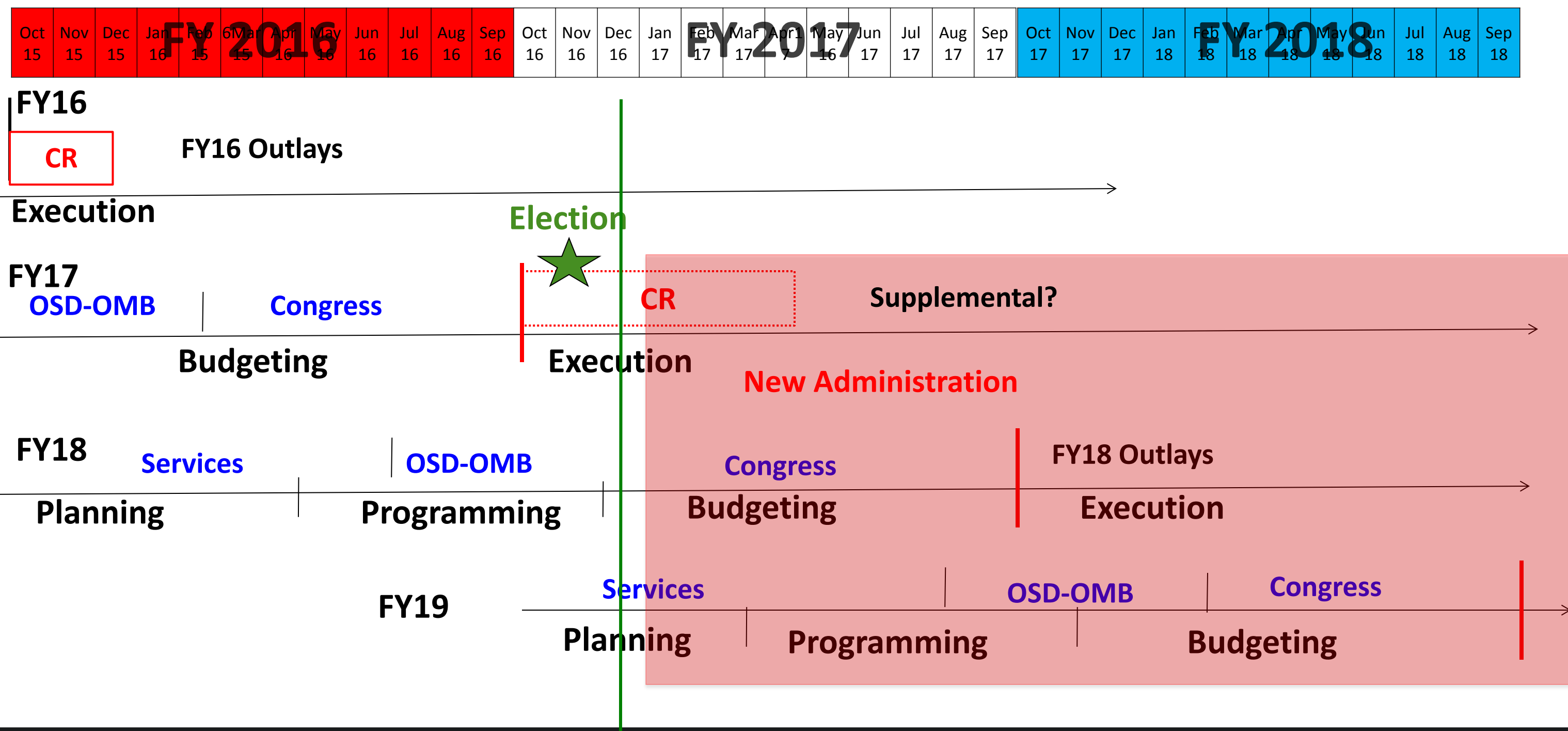
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TRUMP MUST SELL LONG TERM AFFORDABILITY

President-elect has never been afraid to take on debt and deficits will increase along with interest rates. Heavy use of outyear “dynamic scoring” based on growth and repatriation

DEFENSE BUDGET DEVELOPMENT

PLANNING, PROGRAMMING, BUDGETING EXECUTION SYSTEM



2014 BIPARTISAN NAT'L SECURITY PANEL

1

“IMPORTANT TO ERR ON THE SIDE OF HAVING TOO MUCH RATHER THAN TOO LITTLE”

2

SIZE AND SHAPE OF THE US ARMED FORCES

- Deter and defeat large-scale aggression in one theater.
- Simultaneously deter/thwart aggression in multiple other theaters
- Defend the U.S. homeland, maintaining active counterterrorism operations

3

ESTABLISHES PB12 AS BENCHMARK FOR SPENDING

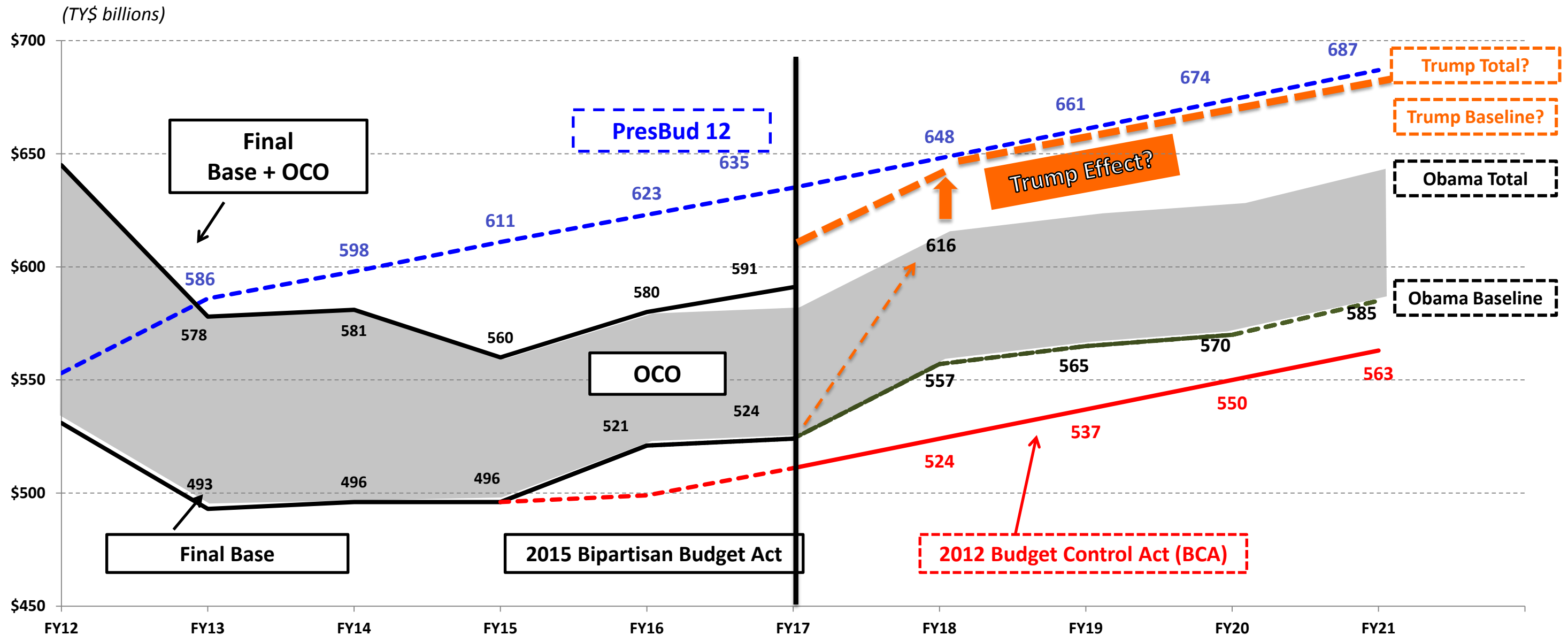
- Secretary Robert Gates' last budget before sequestration

TRUMP'S DEFENSE VISION

SEPT 2016 SPEECH AND 100 DAY "CONTRACT"

- Fully repeal the defense sequester and submit a new budget
- Increase the size of the U.S. Army to 540,000 active duty soldiers (currently 460K)
- Rebuild the U.S. Navy toward a goal of 350 ships (goal had been 308)
- Provide the U.S. Air Force with 1,200 fighters (unclear goal; current law is 1,950)
- Grow the U.S. Marine Corps to 36 battalions (182K force currently has 23 Bns)
- Invest in a serious missile defense system to meet growing threats by modernizing cruisers and procuring additional destroyers to counter the ballistic missile threat from Iran and North Korea.

DOD TOPLINE SCENARIOS COMPARED



- FY17 reflects FY17 NDAA; Final FY17 Appropriations not known until April 2017
- Outyears: Trump has indicated PresBud 12 should be benchmark: OCO assumptions unclear
- Dynamic spring coming: FY17 CR, delivery of FY18 budget, debt ceiling extension/BCA deal

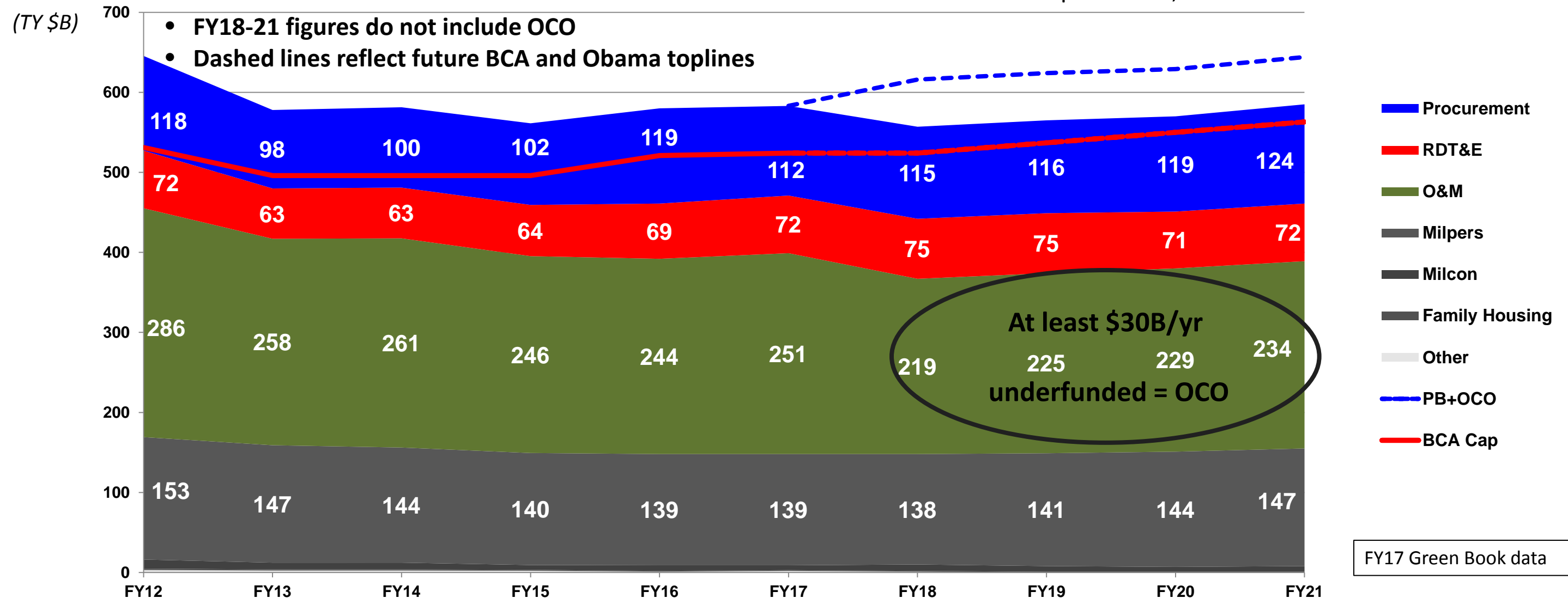
DOD ALLOCATION OF RESOURCES 2012-2021

■ Obama intent has been to:

- Increase resources for investment within flat topline
- Keep personnel expenditures flat by cutting endstrength
- Reduce O&M costs; use OCO

■ Trump vision calls for:

- Higher topline; buy more fighters, ships, missile defense, cyber
- Increases to force structure will drive up MilPers costs
- Focus on readiness will drive up O&M cancelling out savings from reductions to civilian personnel, etc.



WHERE EXTRA INVESTMENT \$ WILL GO

- **Shipbuilding**

- Current annual plan barely keeps pace with retirements from 80's area investment
- Very long cycle sector that is universally accepted as needing massive long term investment

- **Vehicles**

- Important modernization programs in production in Rust Belt states at slow rates

- **Weapons**

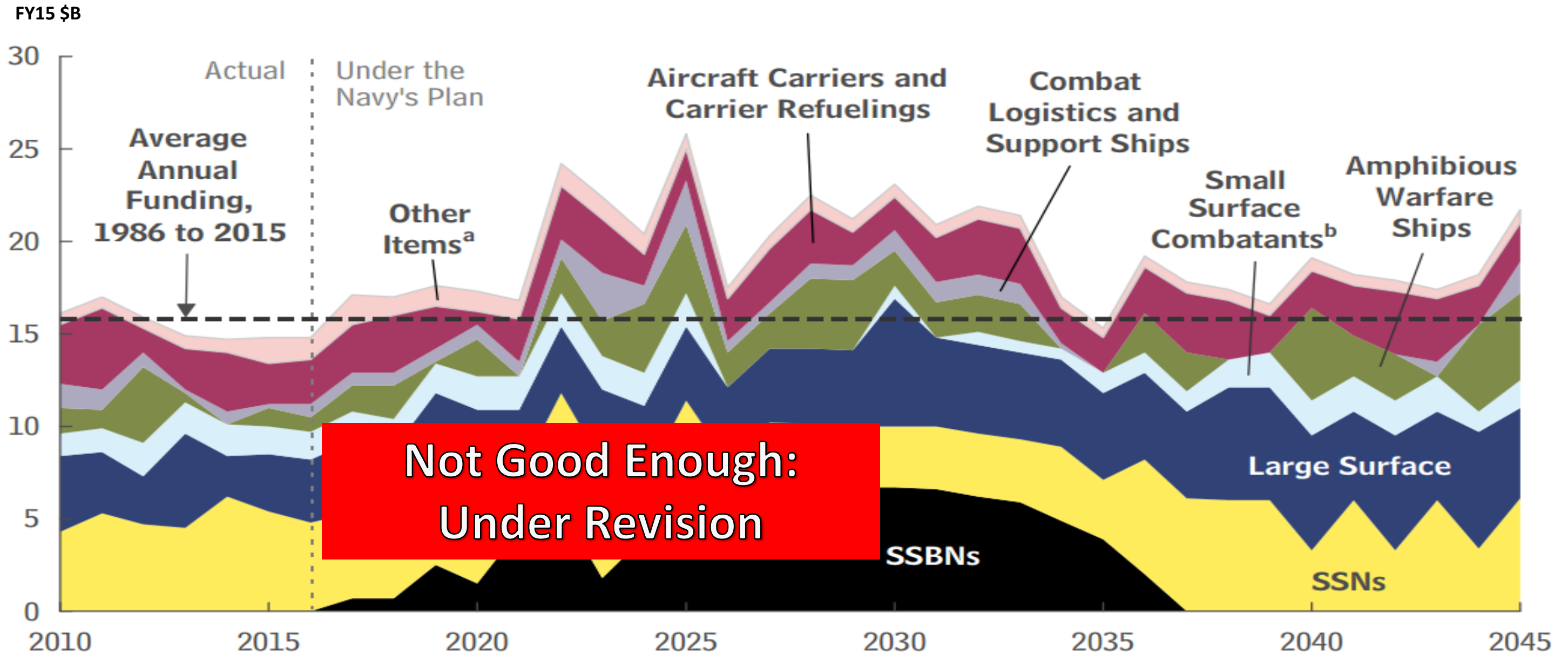
- Consistent shortfall in all planning scenarios
- Several programs in production at or below minimum sustain rates

- **Aviation**

- Aging fleet = declining readiness; requires more O&M and spares funding
- V22, F/A-18, F35 are all in production and need more near investment to lower overall costs

SHIPBUILDING

NAVY 308 SHIP CONSTRUCTION PLAN



Source: Congressional Budget Office based on data from the Department of the Navy.

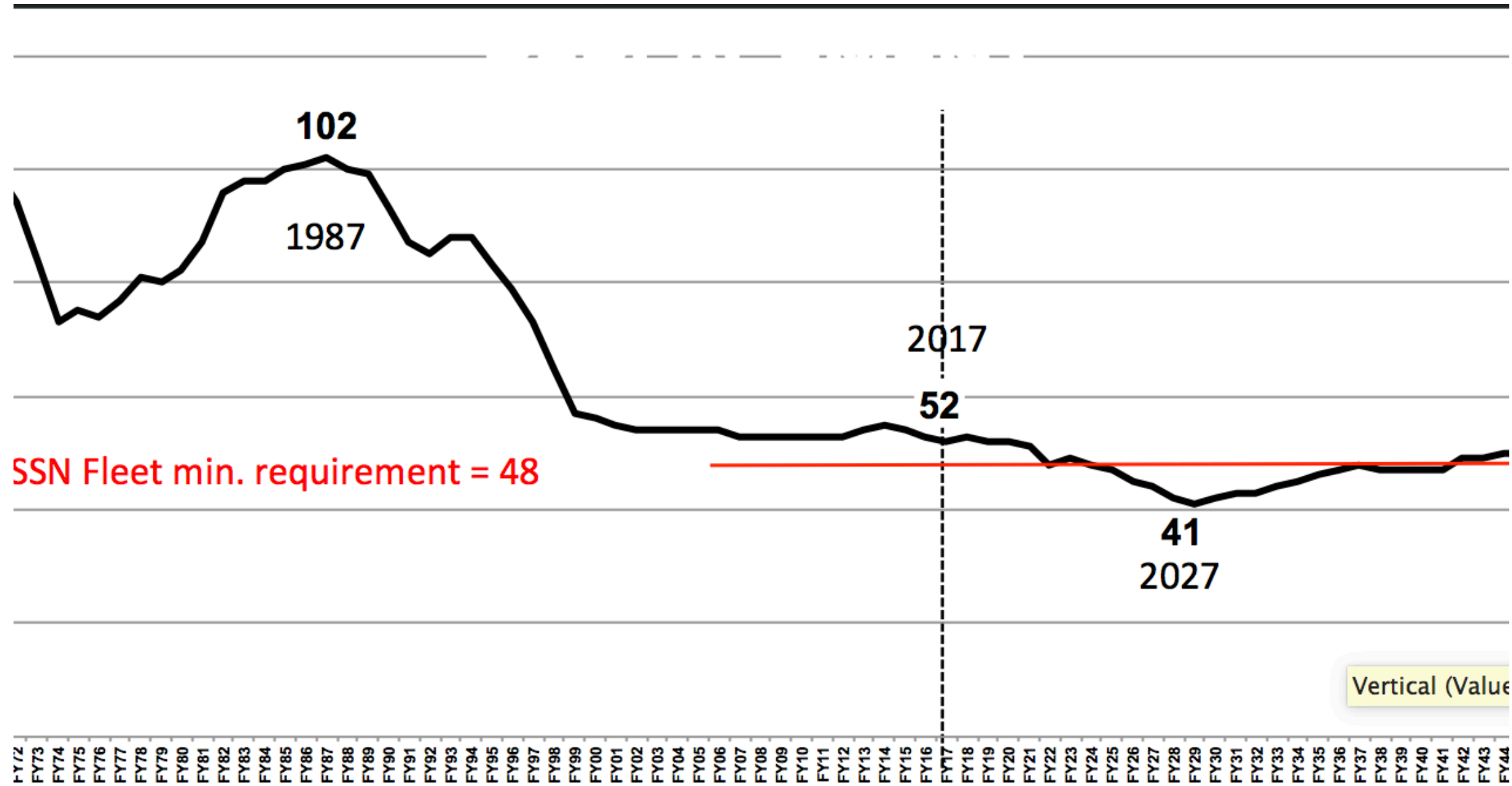
a. Includes ship conversions, ships that are not part of the Navy's battle force (such as oceanographic survey ships) and training ships, outfitting and postdelivery, and smaller items.

b. Costs for the mission packages for littoral combat ships, which are not funded in the Navy's shipbuilding accounts, are not included

CBO Analysis of Navy's Shipbuilding Plan

CURRENT PLAN: TOO FEW, TOO LATE

ATTACK SUB (SSN) FLEET 1970-2046



Navy only now beginning to *start* more ships than it retires annually

“Bathtub” is now unavoidable but depth and duration can be mitigated

Not only more Shipbuilding \$ needed but also more maintenance (O&M)

NAVY'S NEW FORCE STRUCTURE

TARGET FLEET IS NOW 355 VICE 308 SHIPS

Type/Class	2014	2016	Unit Cost	Who Gains?
Aircraft Carriers (CVN)	11	12	\$12B	HII – only CVN yard; 4yr vice 5yr centers
Large Surface (CG, DDG)	88	104	\$1.8B	GD (Bath) vs. HII (Ingalls); 3/yr vice 2/yr
Small Surface (LCS)	52	52	\$0.7B	Open; LMT (WI) and AUS (Mobile) <i>for now</i>
Amphibious (LHA, LX(R))	34	38	\$1.8 – 3.9B	HII (Pascagoula)
Attack Subs (SSN)	48	66	\$3.7B	HII (Newp. News) but also GD (EB); 2/yr in 21
Ballistic Missile (SSBN)	12	12	\$8-11B	GD (EB) = 78%; HII (NN) = 22% (for now)
Combat Logistic Force	29	32	\$0.5B	GD (NASSCO San Diego)
Exped Fast Trans (EPF)	10	10	\$200M	Austal (Mobile, AL)
Exped Spt Base (ESB)	3	6	\$680M	GD (NASSCO San Diego)
Command/Support	21	23	?	Open
Total	308	355	+\$123B	Across first 10-20 years of 30 year plan

Navy's 2016 Force Structure Assessment

Under new plan, GD and HII are primary winners with edge to HII

Extremely long cycles: SSN = 7.5 yrs award to delivery

Nuc reactors are longest lead items; BWXT first to see benefit: Adv Proc in 2018

LMT, RTN, NOC et al to benefit in outfitting, e.g., missile defense

POTENTIAL NEAR TERM SHIP ADDITIONS

CURRENT FY17-21 NAVY SHIPBUILDING PLAN

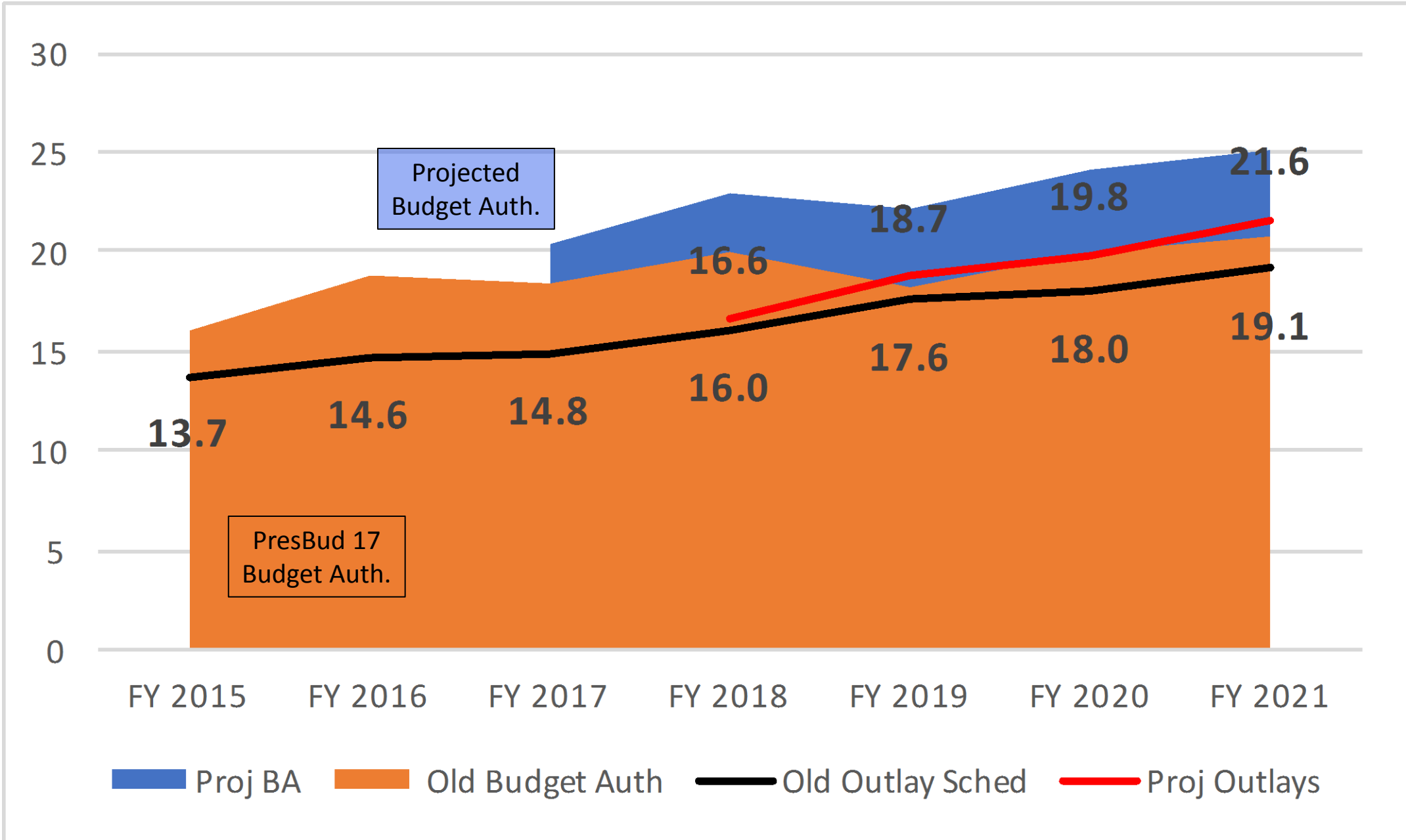
Ship type	FY17	FY18	FY19	FY20	FY21	Total
Ohio replacement (SSBNX) ballistic missile submarine					1	1
Ford (CVN-78) class aircraft carrier		1				1
Virginia (SSN-774) class attack submarine	2	2	2	2	1	9
Arleigh Burke (DDG-51) class destroyer	2	2	2	2	2	10
Littoral Combat Ship (LCS)/Frigate	2	1	1	1	2	7
LHA(R) amphibious assault ship	1					1
LX(R) amphibious ship				1		1
Fleet towing, salvage, and rescue ship (TATS)		1	1	1	1	4
TAO-205 (previously TAO[X]) oiler		1	1	1	1	4
TOTAL	7	8	7	8	8	38

Best guess at near term adds; plan to get to 355 has not been released

Long lead items must be bought 2-4 years ahead of procurement

SHIPBUILDING OUTLAYS WILL ACCELERATE

PROJECTED SCN OUTLAY INCREASES FY 2015-21



Expect *at least* \$2-4B additional annual Budget Authority (BA)

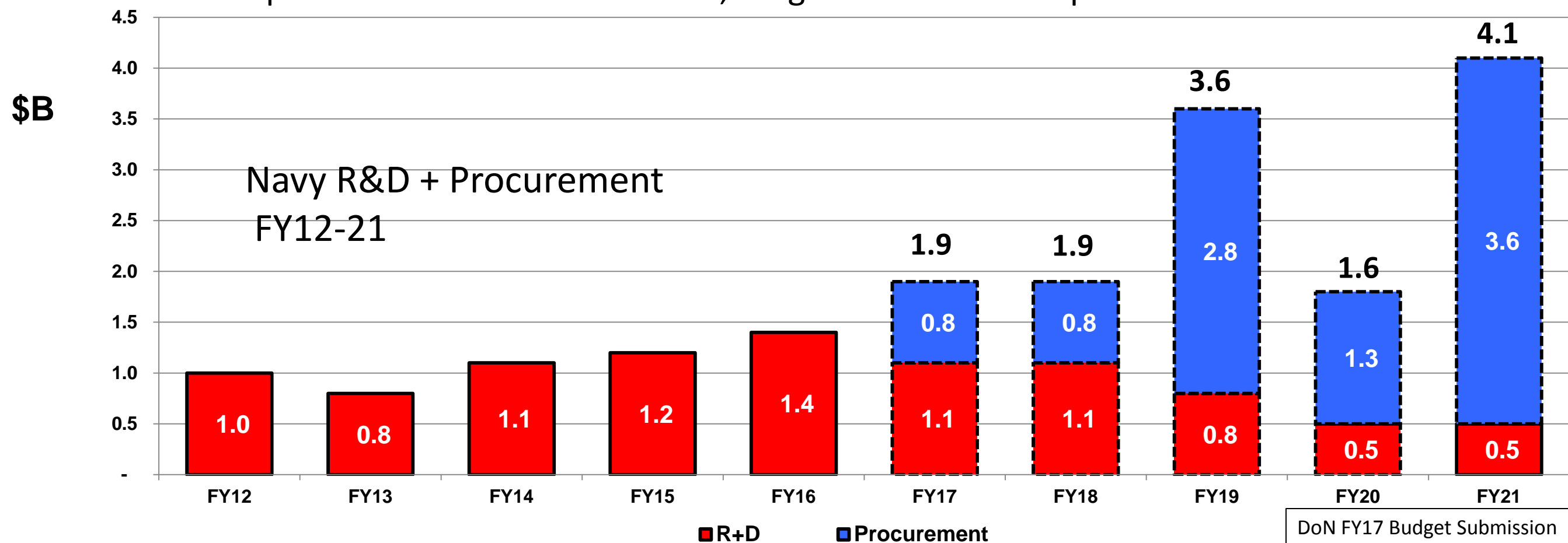
Outlay rates lag BA (8.4% of BA in Year 1, 24% in Year 2, 20% in Yr 3, etc)

We estimate 2021 outlays will be 50% greater than 2016 with *at least* 7.9% CAGR vice current 5.5% if new plan is funded as shown

FY17 Green Book data

COLOMBIA CLASS SSBN

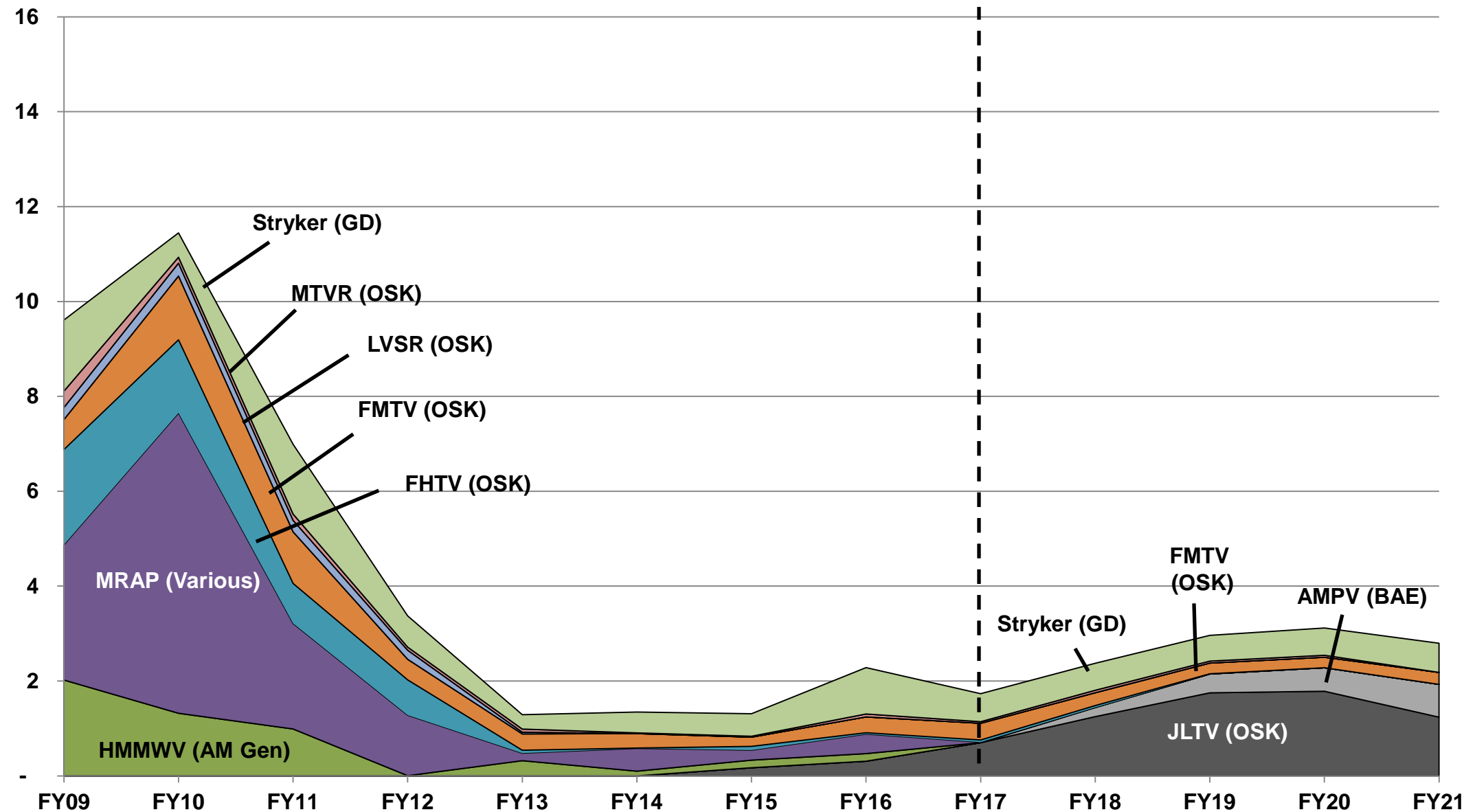
- *The* dominant issue in DoN budget; linchpin of US nuclear strategy
- Cost of first of class = one year's current average *total* for shipbuilding
- 11 more boats @ ~\$8B to be built at rate of one *per year* beginning 2024
- Congress divided over creating separate DoD-wide account
- GD prime with 78% of work share; HII guaranteed 22% + possible add'l VA class subs



VEHICLES

VEHICLE PRODUCTION: “SHOVEL READY”

DOD VEHICLE PROCUREMENT FY09-21



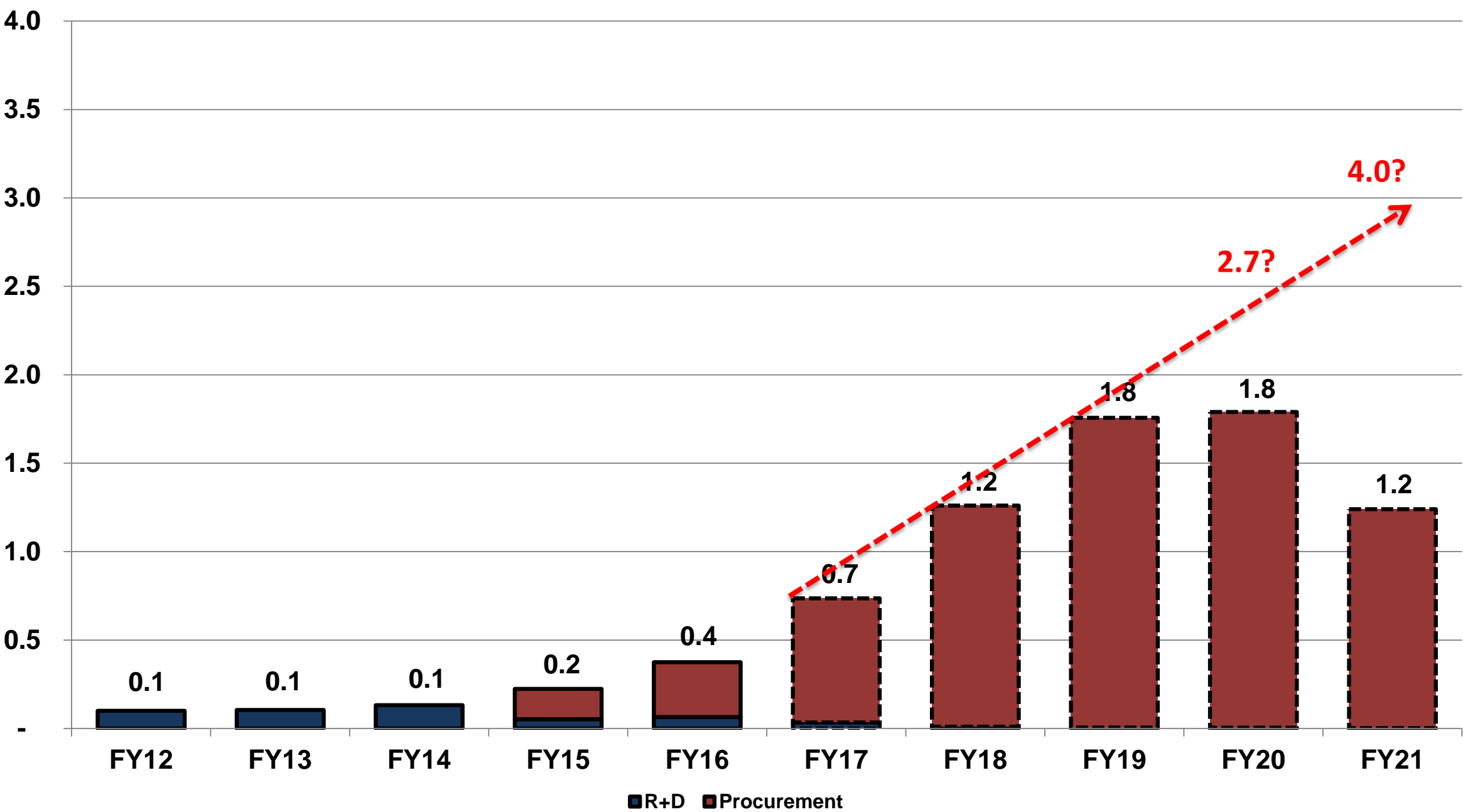
Manufacturing jobs in Rust Belt states!

GD, OSK, BAE have vehicles in production that can easily be ramped up

Hedgeye Analysis based on DoD Budget Data

JLTV PROGRAM CAN GROW (OSK)

JT LIGHT TACTICAL VEH PROCUREMENT \$B



JLTV produced by OSK in WI (went for Trump in 2016)

Increased force structure will drive higher acq objectives for Army (50K) and USMCj (5.2K) . 5K/year too slow

Late FY17 CR will delay FY18 growth

<https://www.asafm.army.mil/Documents/OfficeDocuments/Budget/budgetmaterials/fy17/pforms/opa1.pdf>

OTHER “SHOVEL READY” VEH PROGRAMS

PRESBUD 17 VEHICLE PROGRAMS \$M

Vehicle	FY18 Plan	Company	Location
Stryker Mods	569	GD	MI
Abrams Tanks	530	GD	OH
Bradley Mods	497	BAE	PA
FMTV (Med Trucks)	271	OSK	WI

\$4.1B in FY17 for Army combat and tactical vehicles

Most programs are level-of-effort; funded at minimum levels; can easily execute more \$

Located in key Rust Belt states

<https://www.asafm.army.mil/Documents/OfficeDocuments/Budget/budgetmaterials/fy17/pforms//wtcv.pdf>

WEAPONS

MISSILE PROGRAMS CAN GROW

PRESBUD 17 MISSILES \$M

Weapon	FY18 (PB17) \$	Company	Location
Aegis BMD (SM-3)	727	RTN	AZ
AMRAAM	707	RTN	AZ
AIM-9X	326	RTN	AZ
SDB II	260	RTN	AZ
JASSM	462	LMT	AL
PAC-3/MSE	459	LMT	TX
JAGM	190	LMT	FL

Many of these systems are limiting factors in operational scenarios

Most are moderately to well-funded at level rates. Rates could be easily increased 20-40% if desired

<http://www.secnav.navy.mil/fmc/fmb/Pages/Fiscal-Year-2017.aspx>

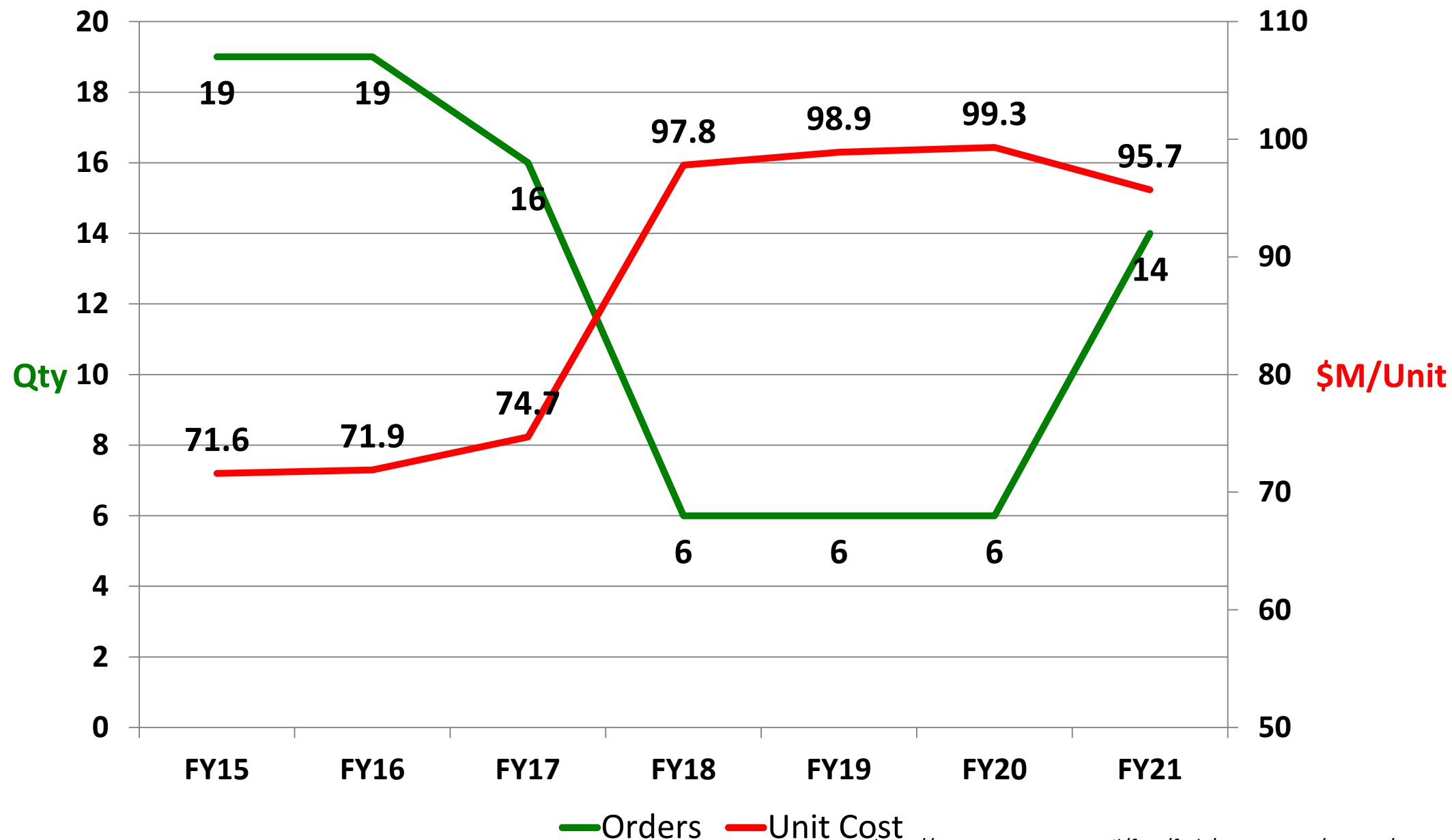
<http://www.saffm.hq.af.mil/Portals/84/documents/FY17/AFD-160208-048.pdf?ver=2016-08-24-102038-590>

http://comptroller.defense.gov/Portals/45/Documents/defbudget/FY2017/budget_justification/pdfs/02_Procurement/MDA_PROCUREMENT_MasterJustificationBook_Missile_Defense_Agency_PB_2017_1.pdf

AVIATION

V22: CASE STUDY FOR MORE INVESTMENT

V22 UNIT COST VS. QTY (PRESBUD 17)



http://www.secnaveavy.mil/fmc/fmb/Documents/17pres/APN_BA1-4_BOOK.pdf

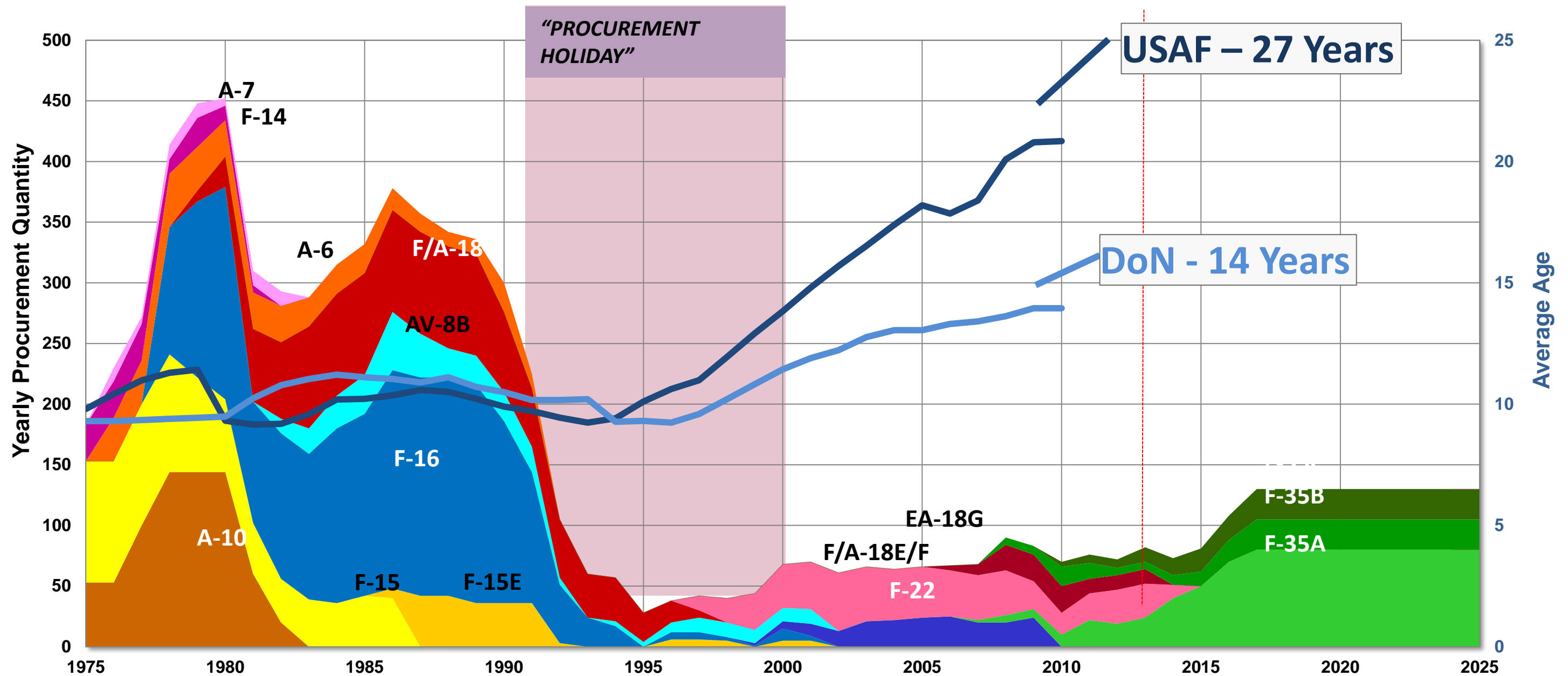
Most over-subscribed acft in USMC; declining readiness

Insufficient funds avail to keep new orders up and unit cost stable

Bell will be laying people off

“Trump Bump” in FY18-21 would save \$1.5B by completing buy in 4 years vice 7

U.S. FIGHTER PROCUREMENT / AGE

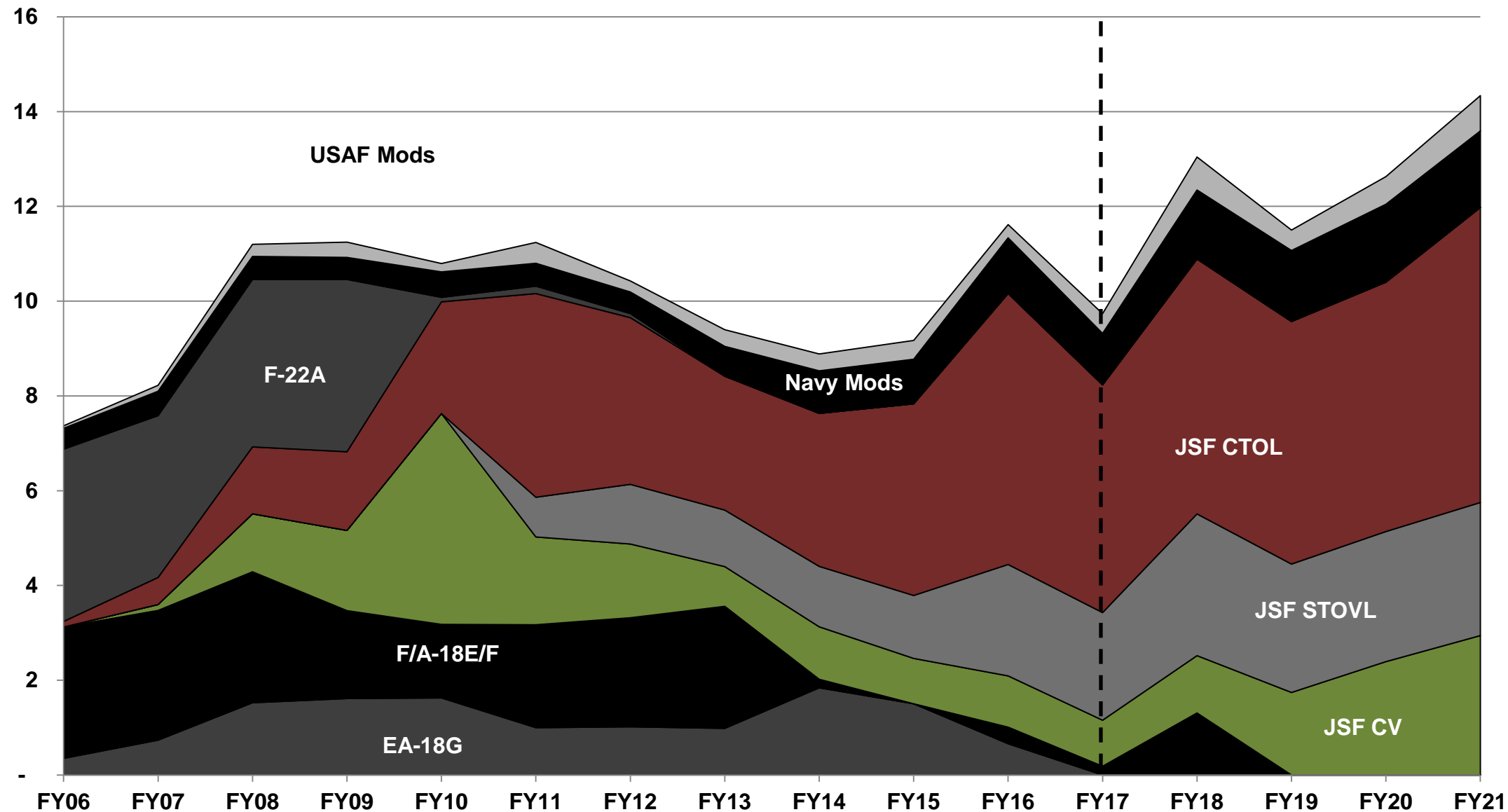


Recapitalization Needed for Aging Fighter Inventory

Hedgeye Analysis based
on AF and DoN Budget
Data

TACAIR SPENDING DUE TO INCREASE

DOD TACAIR PROCUREMENT (PB17)



<http://www.saffm.hq.af.mil/Portals/84/documents/FY17/AFD-160208-044.pdf?ver=2016-08-24-102038-590>

Near add:
extension of
F/A-18E/F
production

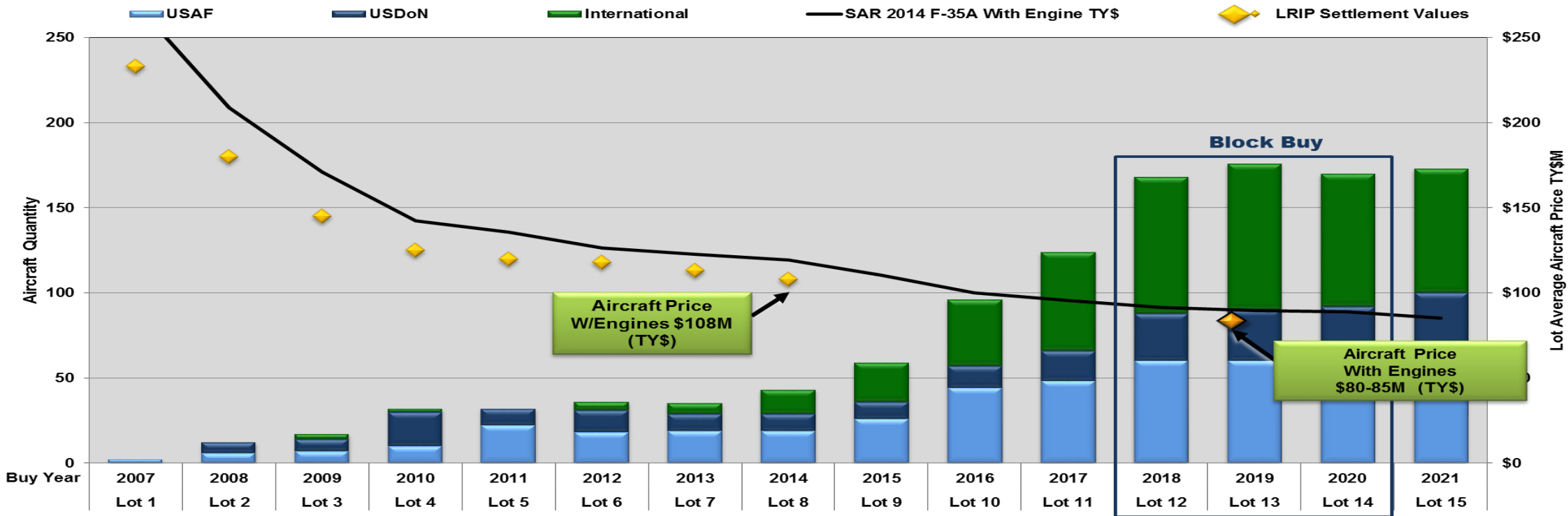
F35 likely *not*
Gen Mattis' first
choice for
incremental \$
but ramp up
must continue

USN can afford
to slide if \$ tight
but CVNs must
have 5th Gen in
2020s

F35: NO ALTERNATIVE FOR USAF/USMC

PROJECTED JSF ORDERS/PRICES

	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21
US (PB17 estimate)	29	34	68	63	70	80	86	105
International (-CA)	14	23	37	56	67	68	60	52
Likely Total Orders	43	57	105	119	137	148	146	157



<http://www.acq.osd.mil/ara/am/sar/SST-2015-12.pdf>

Trump Tweet was negotiation tactic

Slow rate (USAF @48/yr vice original 80) hurting cost curve

USMC and USAF readiness at tipping point. Slow rate creating demand for reman of legacy.

Expect USAF to go to 60/yr, USMC 24-30.

Expect USN to continue to slide

FEARLESS PREDICTIONS

- **Trump will want to come out of the gate showing that he is fulfilling promises**
- **Mattis focus on fundamentals: readiness, modernization, resiliency vs. exotica.**
 - Value added will be test for longevity of “3rd offset” and DIUX efforts
 - Impact on capability will be the test for rescinding personnel policy changes
- **In Feb:** Pentagon posture hearings; first on-the-record statements of direction
- **By April:** Changes to Budget Control Act; Congressional changes to FY17 budget; Trump administration budget submission for FY 2018; extension of debt ceiling
 - **FY17: Expect Congressional supplemental of up to ~\$15B:** readiness, major items from services Unfunded Priority Lists
 - **FY18: Large plus up to baseline**
 - **Get base costs out of OCO; increase O&M, MilPers, Procurement = \$650B + OCO?**

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