



Congressional Budget Office

January 6, 2016

2016 Outlook for Navy Shipbuilding

Presentation at the 2016 Defense Outlook Forum

Eric J. Labs

Senior Analyst for Naval Forces and Weapons

This presentation presents data from and includes other information published in CBO's *An Analysis of the Navy's Fiscal Year 2016 Shipbuilding Plan* (October 2015), www.cbo.gov/publication/50926.

Outline

- The Navy's 2016 shipbuilding plan
- CBO's estimate of the cost of the 2016 plan
- The problem of lead ships
- A larger fleet or not?
- A fleet that conforms with historical funding
 - Potential impact of the Ohio Replacement Program

CBO

An Analysis of the Navy's Fiscal Year 2016 Shipbuilding Plan



OCTOBER 2015

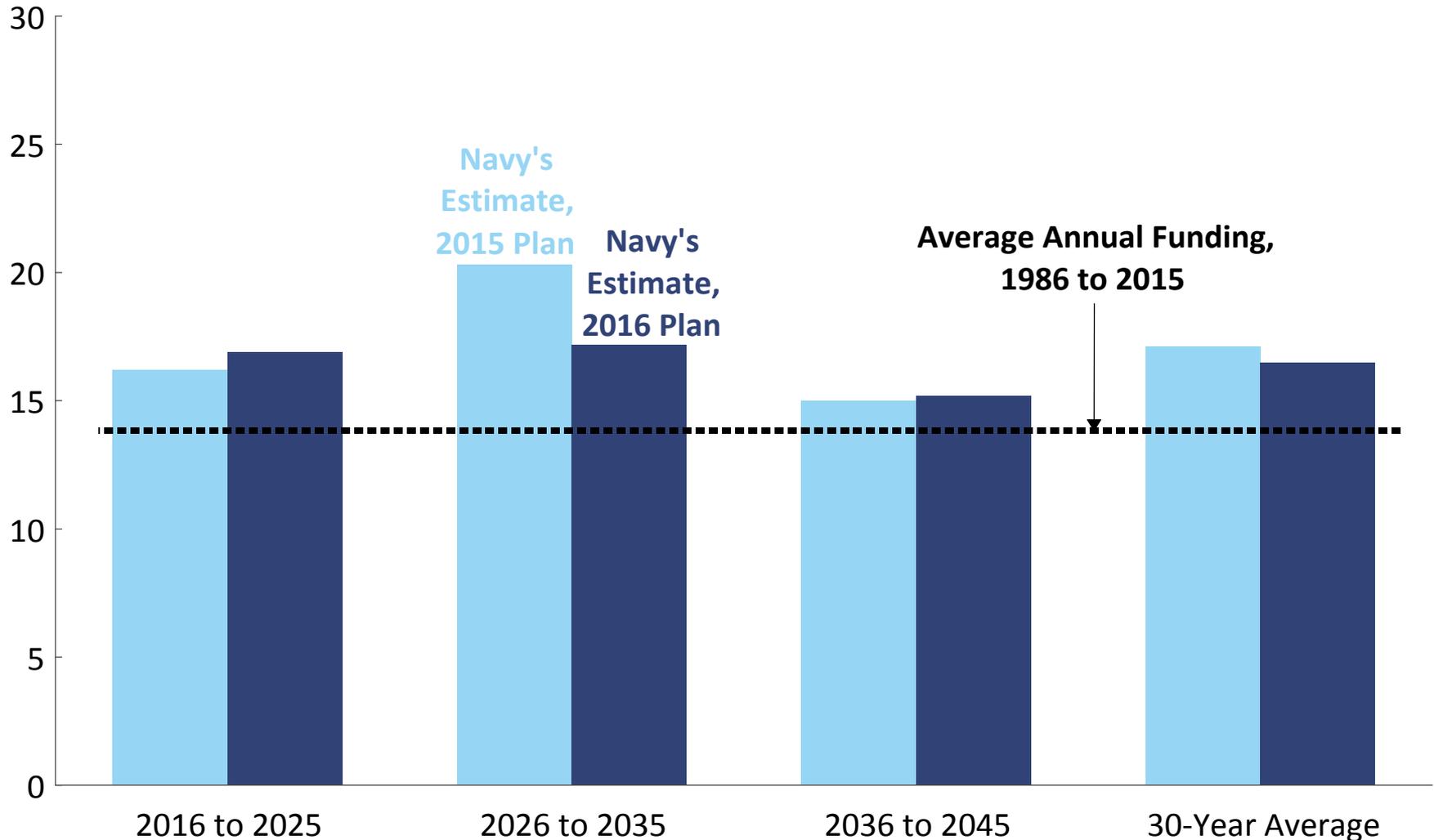
Ship Purchases Under the Navy's 2016 Plan and Recent Actions by the Congress and the Department of Defense (DoD)

Ship Type	Plan 2016–2020	Actions by the Congress and DoD	Plan 2016–2025	Actions by the Congress and DoD
Aircraft Carriers	1	1	2	2
Ballistic Missile Submarines	1	1	2	2
Attack Submarines	10	10	18	18
Destroyers	10	11	20	21
Littoral Combat Ships and Guided Missile Frigates	14	6	29	17
Amphibious Ships	3	3	8	8
Other Support Ships	10	11–12	24	25–26
Total	48	43–44	103	93–94

Congressional action in fiscal year 2016: Added 4 ships in 2016 (some may have been brought forward from future years). DoD plans to buy 12 fewer littoral combat ships starting in 2017.

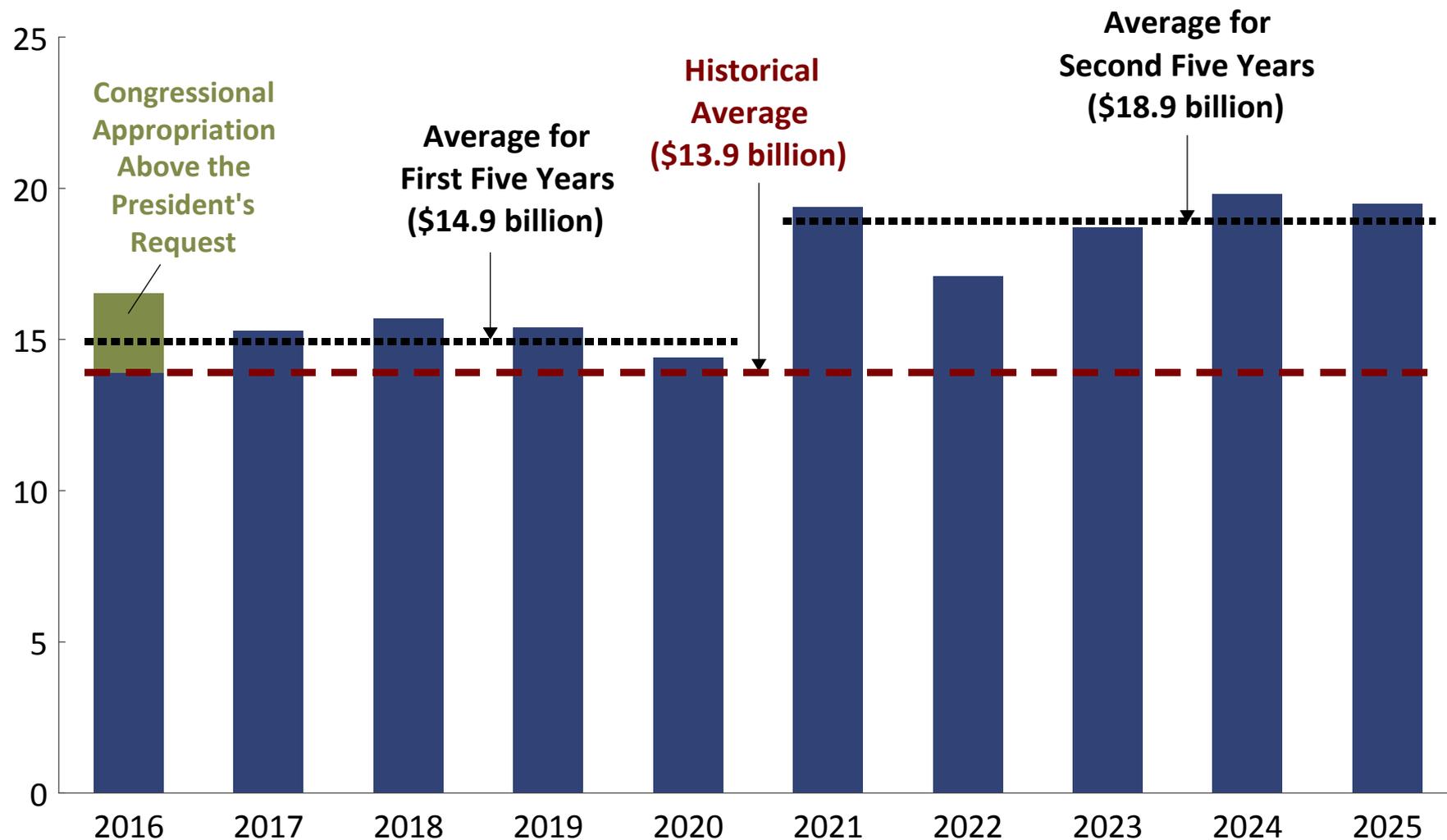
The Navy's Estimates of the Average Annual Costs of New-Ship Construction Under Its 2015 and 2016 Plans

Billions of 2015 Dollars



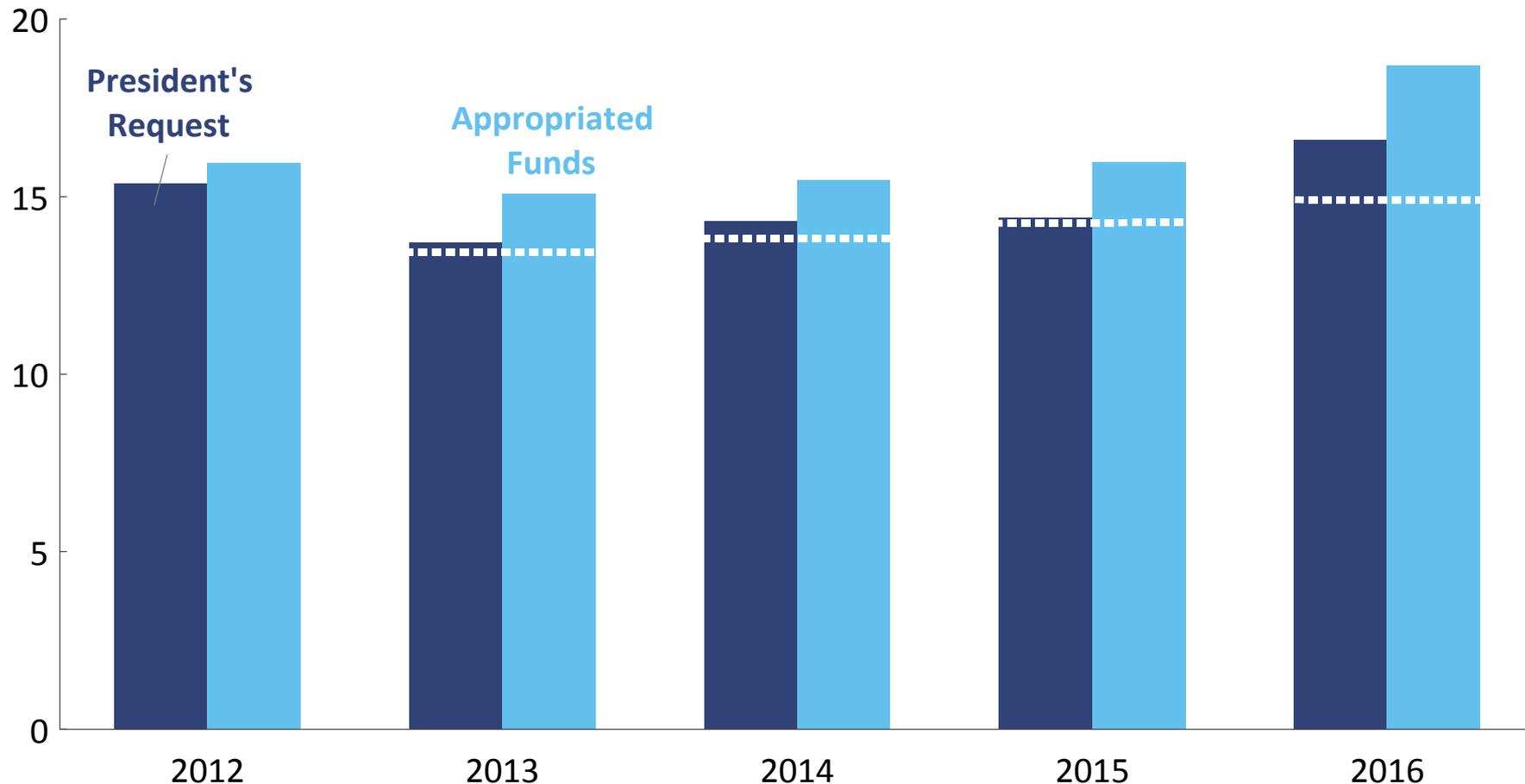
The Navy's Estimates for New-Ship Construction, 2016 to 2025

Billions of 2015 Dollars



Requested and Appropriated Shipbuilding Budgets Under the Budget Control Act

Billions of 2015 Dollars

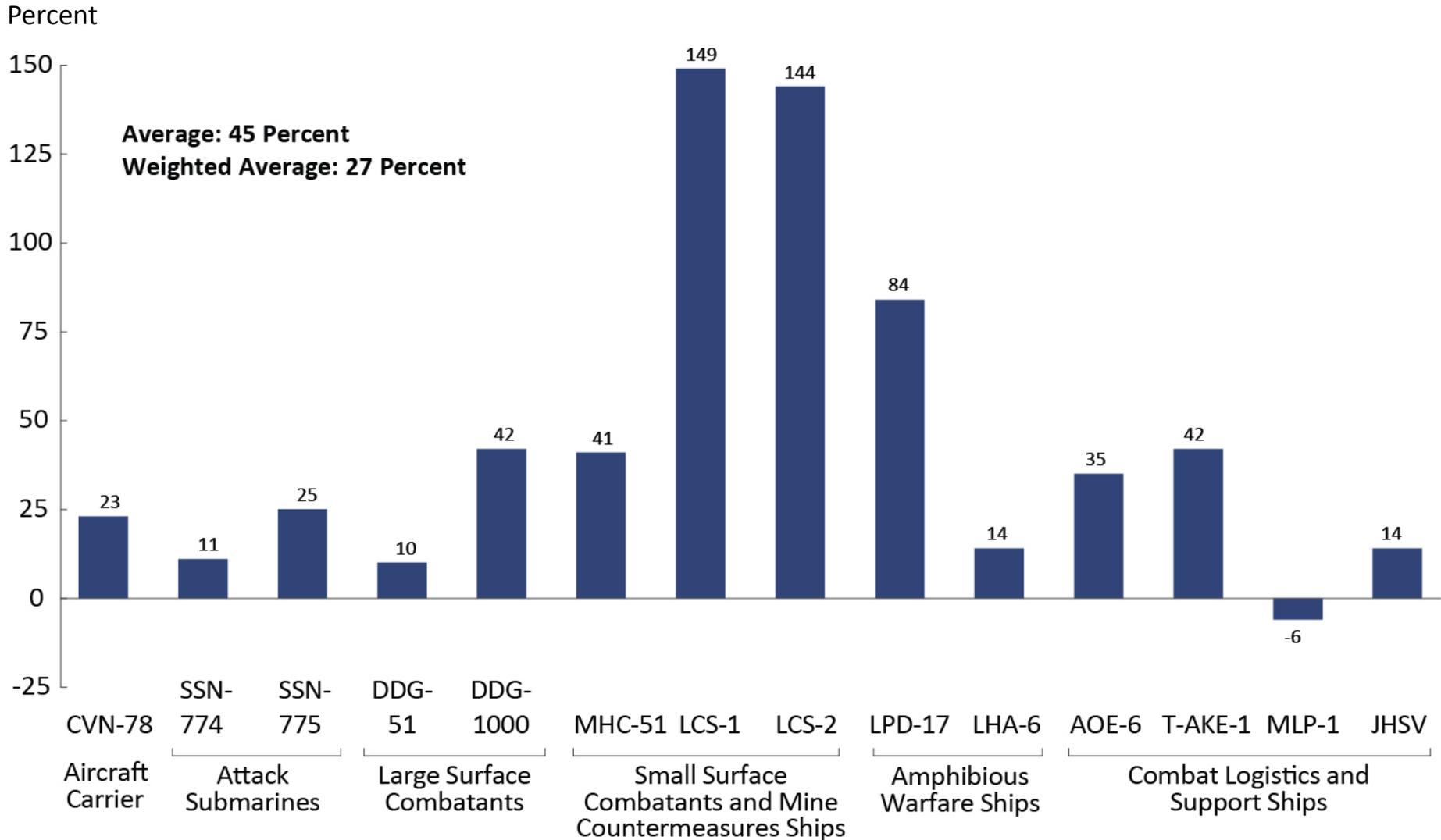


The white dashed line indicates the estimated shipbuilding budget, calculated as the historical share of the Department of Defense's base budget under the BCA, as that act stood at the time of each year's budget submission.

Average Annual Shipbuilding Costs Under the Navy's Plan, by Decade

	Near Term (2016–2025)	Midterm (2026–2035)	Far Term (2036–2045)	30-Year Average (2016–2045)
Navy Estimates (Billions of 2015 Dollars)				
New Ship Construction	16.9	17.2	15.2	16.5
Plus Carrier Refuelings	18.3	18.2	15.9	17.5
Plus All Other Items	19.5	18.8	16.5	18.3
CBO Estimates (Billions of 2015 Dollars)				
New Ship Construction	18.2	19.2	17.8	18.4
Plus Carrier Refuelings	19.6	20.2	18.4	19.4
Plus All Other Items	20.7	20.8	19.0	20.2
Percentage Difference				
New Ship Construction	8	12	17	12
Plus Carrier Refuelings	7	11	16	11
Plus All Other Items	6	11	16	10

Cost Growth in Lead Ships, 1985 to 2015



Short- and Long-Term Challenges to Increasing the Size of the Fleet

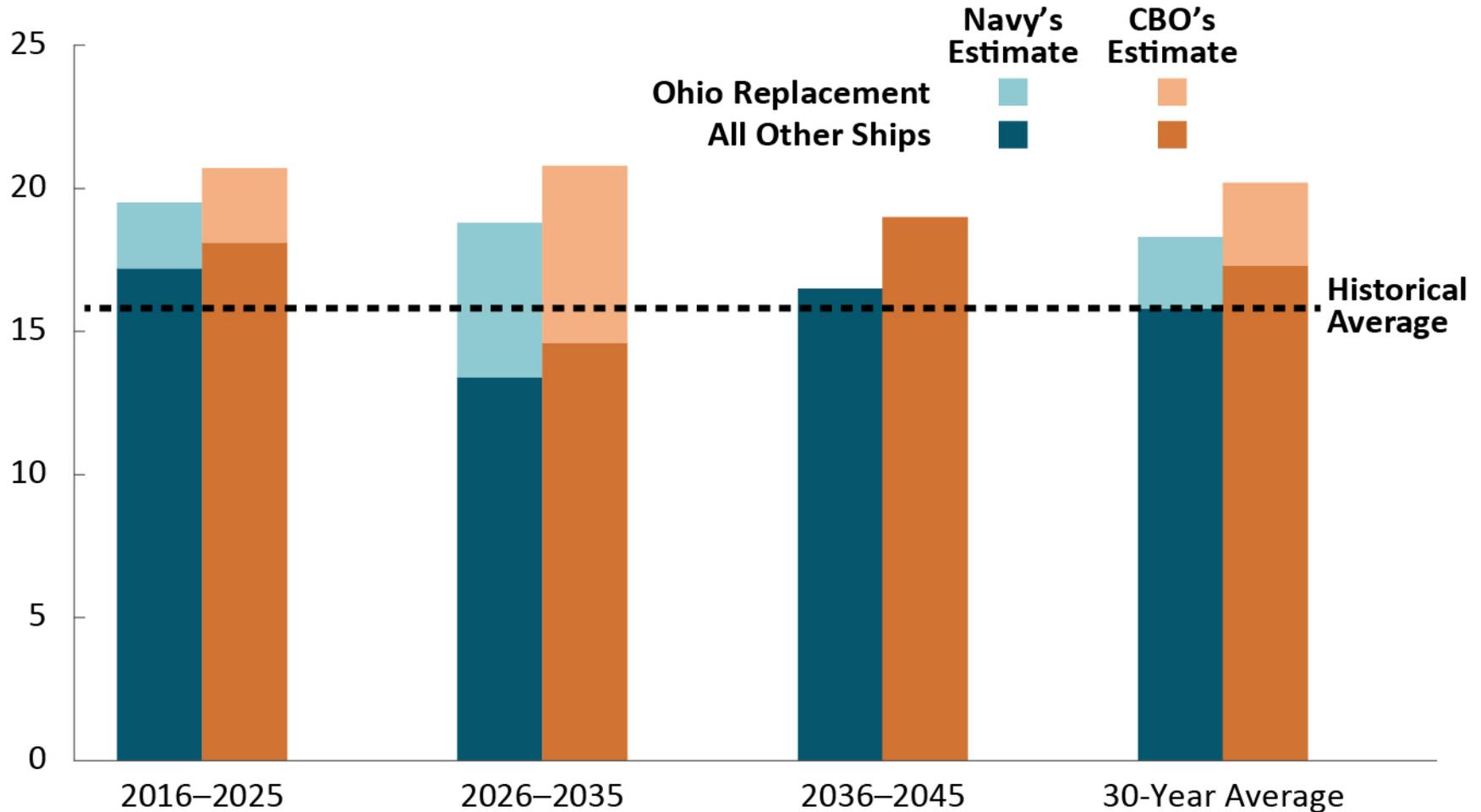
- Budget Control Act
- Broad federal fiscal environment
- Debate on amount of defense spending
- High deployment rates may wear ships out faster
- Renewed focus on Europe may reduce emphasis on naval forces

Short- and Long-term Factors Favoring a Larger Fleet

- Construction momentum
- Rising tensions in the Asia-Pacific region
- Congress has been increasing shipbuilding budgets

The Impact of the Ohio Replacement Program on Navy Shipbuilding

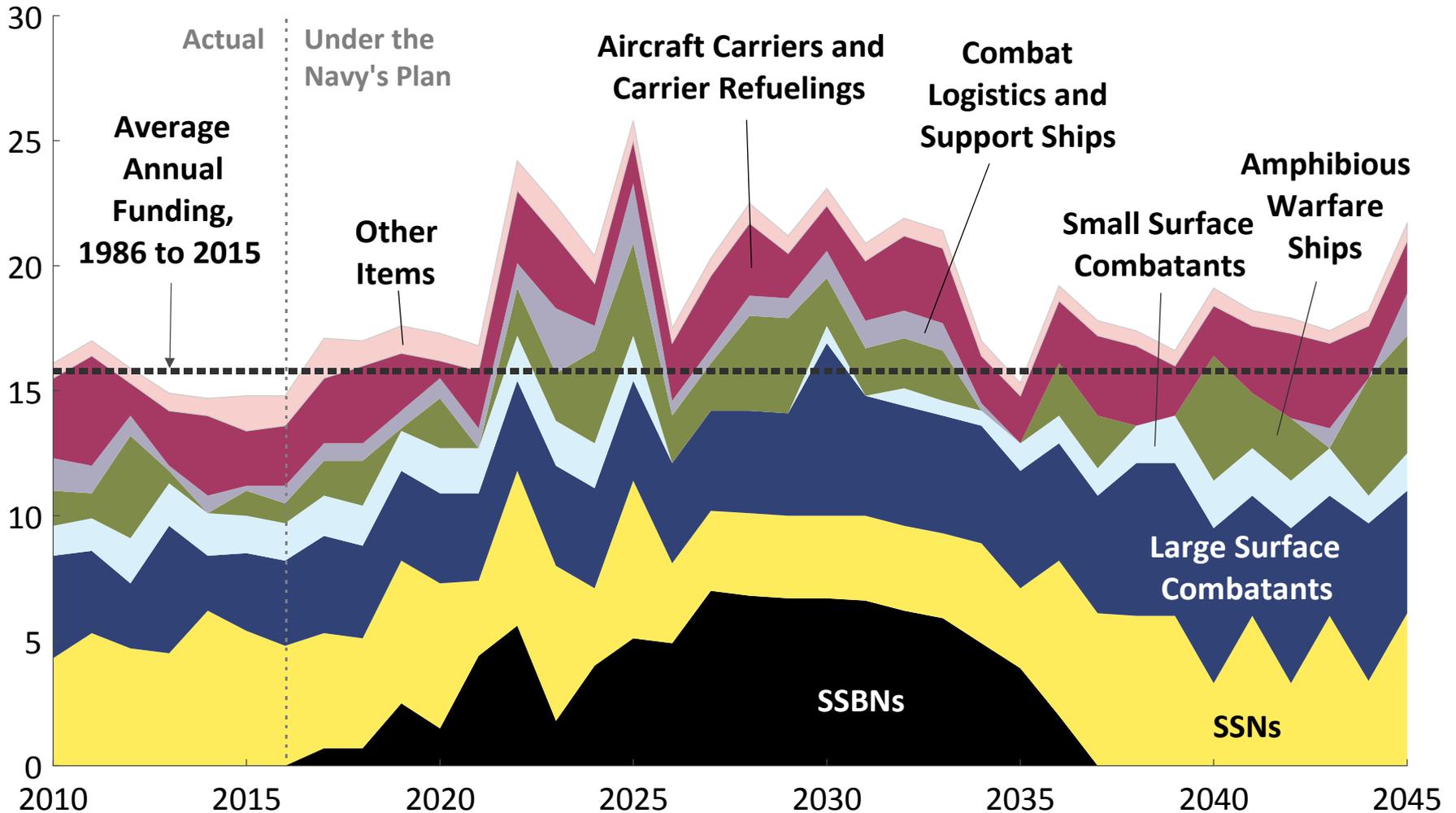
Billions of 2015 Dollars



Historical average for Navy shipbuilding includes new ship construction, refueling of aircraft carriers, ship conversions, outfitting and postdelivery costs, and other items.

CBO's Estimates of Annual Shipbuilding Costs Under the Navy's 2016 Plan

Billions of 2015 Dollars



A Fleet that Conforms With Historical Funding Levels

Ship	Purchases		Inventory in 2045	
	Navy's Plan	Historical Funding	Navy's Plan	Historical Funding
Aircraft Carriers	6	6	10	10
Ballistic Missile Submarines	12	12	12	12
Attack Submarines	45	34	50	37
Destroyers	65	46	82	64
Littoral Combat Ships	67	44	57	34
Amphibious Warfare Ships	23	15	33	27
Support Ships	46	35	61	53
Total	264	192	305	237

Definitions

AOE = fast combat support ship

CVN = nuclear-powered aircraft carrier

DDG = guided missile destroyer

JHSV = joint high speed vessel

LCS = littoral combat ship

LHA = amphibious assault ship

LPD = amphibious transport dock

MHC = coastal mine hunter

MLP = mobile landing platform

SSBN = ballistic missile submarine

SSN = attack submarine

T-AKE = ammunition cargo ship