

DEPARTMENT OF THE NAVY
FISCAL YEAR (FY) 2020
BUDGET ESTIMATES



JUSTIFICATION OF ESTIMATES
MARCH 2019

Operation and Maintenance, Navy
Volume II Data Book

The estimated cost for this report for the Department of the Navy (DON) is included and reported in the Operation and Maintenance, Navy (OMN) book.

The estimated total cost for supporting the DON budget justification material is approximately \$1,803,116 for the 2019 fiscal year. This includes \$81,351 in supplies and \$1,721,765 in labor.

Operation and Maintenance, Navy

VOLUME II
DATA BOOK

TABLE OF CONTENTS

Table of Contents	Exhibit Number Order
Manpower Changes in FTEs	PB-31Q
Advisory and Assistance Services	PB-15
Major DoD Headquarters Activities	PB-22
Professional Military Education	PB-24
Defense Environmental Restoration Projects	Env-30
Summary of Budgeted Environmental Projects	PB-28/28A
Revenue from Leasing Out DoD Assets	PB-34A/B
Fund Support for Quality of Life Activities	OP-34
Spares and Repair Parts	OP-31
Aircraft Inventory	PB-20
Naval Shipyards	OP-5A
Depot Maintenance Summary	PB-61

**INTENTIONALLY
BLANK**

Department of the Navy
Fiscal Year (FY) 2020 President's Budget
Manpower Changes in Full-Time Equivalent Strength
FY 2018 through FY 2020

	U.S Direct Hire	Foreign National Direct Hire	Indirect Hire	Total
1. FY 2018 FTE Strength	195,268	2,098	11,598	208,964
Categorical Changes				
Ship Maintenance	1,383	-3	34	1,414
Fleet Activities	1,239	9	28	1,276
Installation Mgmt/Base Support	352	6	1	359
Supply/Distribution/Logistics Center	823	-53	-12	758
Warfare Centers/Labs	739	0	0	739
Military Support	773	13	-9	777
Cyber	498	0	0	498
Departmental	198	0	0	198
Aviation/MC Depots	-24	0	3	-21
Transportation	-314	0	0	-314
Other	1,156	-40	-209	907
Engineering/Acquisition Commands	-1,216	-10	-45	-1,271
2. FY 2019 FTE Strength	200,875	2,020	11,389	214,284
Categorical Changes				
Ship Maintenance	751	-2	474	1,223
Engineering/Acquisition Commands	744	0	0	744
Fleet Activities	568	0	0	568
Supply/Distribution/Logistics Center	287	0	0	287
Cyber	267	0	0	267
Warfare Centers/Labs	170	0	0	170
Transportation	76	0	0	76
Departmental	44	0	0	44
Aviation/MC Depots	-8	0	0	-8
Other	-1,019	1	-1	-1,019
Military Support	-59	0	0	-59
Installation Mgmt/Base Support	899	0	0	899
3. FY 2020 FTE Strength	203,595	2,019	11,862	217,476

Department of the Navy
Fiscal Year (FY) 2020 President's Budget
Manpower Changes in Full-Time Equivalent Strength
FY 2018 through FY 2020

4. FY 2018 Summary	195,268	2,098	11,598	208,964
WCF (Navy) Total	85,933	536	2,501	88,970
Direct Funded	0	0	0	0
Reimbursable Funded	85,933	536	2,501	88,970
MAE Total	0	0	0	0
Direct Funded	0	0	0	0
Reimbursable Funded	0	0	0	0
MILCON Total	0	0	0	0
Direct Funded	0	0	0	0
Reimbursable Funded	0	0	0	0
O&M, MC Total	15,787	91	3,773	19,651
Direct Funded	15,064	9	454	15,527
Reimbursable Funded	723	82	3,319	4,124
O&M, MC Reserve Total	206	0	0	206
Direct Funded	206	0	0	206
Reimbursable Funded	0	0	0	0
O&M, NAVY Total	91,195	1,315	5,207	97,717
Direct Funded	77,589	1,019	4,714	83,322
Reimbursable Funded	13,606	296	493	14,395
O&M, Navy Reserve Total	810	0	0	810
Direct Funded	796	0	0	796
Reimbursable Funded	14	0	0	14
RDT&E, Navy Total	868	57	2	927
Direct Funded	705	0	2	707
Reimbursable Funded	163	57	0	220
Family Housing, Navy Total	420	99	115	634
Direct Funded	420	99	115	634
Reimbursable Funded	0	0	0	0
Prior BRAC Total	49	0	0	49
Direct Funded	49	0	0	49
Reimbursable Funded	0	0	0	0

Department of the Navy
Fiscal Year (FY) 2020 President's Budget
Manpower Changes in Full-Time Equivalent Strength
FY 2018 through FY 2020

FY 2019 Summary	200,875	2,020	11,389	214,284
WCF (Navy) Total	86,750	467	2,491	89,708
Direct Funded	0	0	0	0
Reimbursable Funded	86,750	467	2,491	89,708
MAE Total	0	0	0	0
Direct Funded	0	0	0	0
Reimbursable Funded	0	0	0	0
MILCON Total	0	0	0	0
Direct Funded	0	0	0	0
Reimbursable Funded	0	0	0	0
O&M, MC Total	16,076	34	3,569	19,679
Direct Funded	15,342	34	659	16,035
Reimbursable Funded	734	0	2,910	3,644
O&M, MC Reserve Total	236	0	0	236
Direct Funded	234	0	0	234
Reimbursable Funded	2	0	0	2
O&M, NAVY Total	95,512	1,263	5,202	101,977
Direct Funded	81,056	920	4,825	86,801
Reimbursable Funded	14,456	343	377	15,176
O&M, Navy Reserve Total	846	0	0	846
Direct Funded	829	0	0	829
Reimbursable Funded	17	0	0	17
RDT&E, Navy Total	950	154	2	1,106
Direct Funded	669	0	2	671
Reimbursable Funded	281	154	0	435
Family Housing, Navy Total	456	102	125	683
Direct Funded	456	102	125	683
Reimbursable Funded	0	0	0	0
Prior BRAC Total	49	0	0	49
Direct Funded	49	0	0	49
Reimbursable Funded	0	0	0	0

Department of the Navy
Fiscal Year (FY) 2020 President's Budget
Manpower Changes in Full-Time Equivalent Strength
FY 2018 through FY 2020

FY 2020 Summary	203,595	2,019	11,862	217,476
WCF (Navy) Total	77,666	91	822	78,579
Direct Funded	0	0	0	0
Reimbursable Funded	77,666	91	822	78,579
MAE Total	0	0	0	0
Direct Funded	0	0	0	0
Reimbursable Funded	0	0	0	0
MILCON Total	0	0	0	0
Direct Funded	0	0	0	0
Reimbursable Funded	0	0	0	0
O&M, MC Total	16,447	34	3,568	20,049
Direct Funded	15,712	34	658	16,404
Reimbursable Funded	735	0	2,910	3,645
O&M, MC Reserve Total	267	0	0	267
Direct Funded	265	0	0	265
Reimbursable Funded	2	0	0	2
O&M, NAVY Total	106,741	1,638	7,345	115,724
Direct Funded	89,328	1,022	6,668	97,018
Reimbursable Funded	17,413	616	677	18,706
O&M, Navy Reserve Total	979	0	0	979
Direct Funded	962	0	0	962
Reimbursable Funded	17	0	0	17
RDT&E, Navy Total	1,019	154	2	1,175
Direct Funded	729	0	2	731
Reimbursable Funded	290	154	0	444
Family Housing, Navy Total	427	102	125	654
Direct Funded	427	102	125	654
Reimbursable Funded	0	0	0	0
Prior BRAC Total	49	0	0	49
Direct Funded	49	0	0	49
Reimbursable Funded	0	0	0	0

This exhibit represents the total civilian FTEs associated with the O&M, Navy and O&M, Marine Corps appropriation, whether funded in the base budget or in the Overseas Contingency Operation Budget Request as part of the OCO for Base Requirements realignment.

DEPARTMENT OF THE NAVY
Fiscal Year (FY) 2020 President's Budget Submission
ADVISORY AND ASSISTANCE SERVICES
(Dollars in thousands)

<u>Total Department of the Navy</u>		<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Management & Professional Support Services				
	FFRDC Work	88,545	56,833	51,083
	Non-FFRDC Work	4,347,469	1,544,216	789,389
	Subtotal	4,436,014	1,601,049	840,472
Studies, Analysis, and Evaluations				
	FFRDC Work	38,072	122,189	12,421
	Non-FFRDC Work	144,651	126,099	70,027
	Subtotal	182,723	248,288	82,448
Engineering and Technical Services				
	FFRDC Work	114,816	138,994	84,133
	Non-FFRDC Work	900,909	1,404,754	1,028,033
	Subtotal	1,015,725	1,543,748	1,112,166
Training and Leadership Development				
	FFRDC Work	0	0	0
	Non-FFRDC Work	90,249	67,535	85,872
	Subtotal	90,249	67,535	85,872
Total				
	FFRDC Work	241,433	318,016	147,637
	Non-FFRDC Work	5,483,278	3,142,604	1,973,321
	Grand Total	5,724,711	3,460,620	2,120,958

DEPARTMENT OF THE NAVY
Fiscal Year (FY) 2020 President's Budget Submission
ADVISORY AND ASSISTANCE SERVICES
(Dollars in thousands)

<u>Operation and Maintenance, Navy</u>		<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Management & Professional Support Services				
	FFRDC Work	17,067	16,833	17,804
	Non-FFRDC Work	1,041,476	410,496	353,592
	Subtotal	1,058,543	427,329	371,396
Studies, Analysis, and Evaluations				
	FFRDC Work	13,383	7,150	7,246
	Non-FFRDC Work	64,895	37,234	35,552
	Subtotal	78,278	44,384	42,798
Engineering and Technical Services				
	FFRDC Work	5,048	11,369	13,331
	Non-FFRDC Work	431,581	470,504	330,872
	Subtotal	436,629	481,873	344,203
Training and Leadership Development				
	FFRDC Work	0	0	0
	Non-FFRDC Work	81,206	64,260	84,632
	Subtotal	81,206	64,260	84,632
Total				
	FFRDC Work	35,498	35,352	38,381
	Non-FFRDC Work	1,619,158	982,494	804,648
	* Grand Total	1,654,656	1,017,846	843,029

Explanation of Funding Changes (FY 2018 - FY 2019)

Management & Professional Support Services

FY18 to FY19 decrease reflects reductions for Mission and Other Flight Operations, Air Systems Support, Ship Operational Support and Training, ShipDepot Operations Support, Combat Communications and Electronic Warfare, OP Meteorology & Oceanography, Weapons Maintenance, Training Support, Recruiting and Advertising, Administration, Military Manpower & Personnel Management, Acquisition, Logistics and Oversight, Enterprise Information Technology and Sustainment Restoration and Modernization.

FY19 to FY20 decrease due to Base to OCO realignment

Studies, Analysis, and Evaluations

FY18 to FY19 decrease for Mission and Other Flight Operations, Aviation Logistics, Warfare Tactics, Cyberspace Activities, Administration and Military Manpower & Personnel Management

FY19 to FY20 decrease due to Base to OCO realignment

Engineering and Technical Services

FY18 to FY19 increase reflects Air Systems Support, Ship Depot Operations Support, and other Weapons Systems Support

FY19 to FY20 decrease due to Base to OCO realignment

Training and Leadership Development

FY18 to FY19 decrease reflects reduction for Specialized Skill Training, And Investigative and Security Services

FY19 to FY20 increase for Specialized Skill Training for expansion of the Ready Relevant Learning effort.

DEPARTMENT OF THE NAVY
Fiscal Year (FY) 2020 President's Budget Submission
ADVISORY AND ASSISTANCE SERVICES
(Dollars in thousands)

<u>Operation and Maintenance, Marine Corps</u>		<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Management & Professional Support Services				
	FFRDC Work	34,683	10,189	7,655
	Non-FFRDC Work	857,569	618,045	286,008
	Subtotal	892,252	628,234	293,663
Studies, Analysis, and Evaluations				
	FFRDC Work	7,081	3,520	1,021
	Non-FFRDC Work	57,141	37,723	11,416
	Subtotal	64,222	41,243	12,437
Engineering and Technical Services				
	FFRDC Work	6,386	23,662	28,502
	Non-FFRDC Work	278,083	99,054	44,749
	Subtotal	284,469	122,716	73,251
Training and Leadership Development				
	FFRDC Work	0	0	0
	Non-FFRDC Work	6,693	1,964	0
	Subtotal	6,693	1,964	0
Total				
	FFRDC Work	48,150	37,371	37,178
	Non-FFRDC Work	1,199,486	756,786	342,173
	*Grand Total	1,247,636	794,157	379,351

Explanation of Funding Changes (FY 2018 - FY 2020)

Management & Professional Support Services

FY18 to FY19 decrease reflects a reduction for Operating Forces, Field LogisticsMaritime Prepositioning, Cyberspace Activities, Base Operating Support and Facilities Sustainment, Restoration and Modernization, Professional Development Education, Marine Corps Air Ground Task Force, Marine Corps Distance Learning, Marine Corps Tactics and Operations Group, Administration, Acquisition and Program Management and Security Programs

FY19 to FY20 decrease due to Base to OCO realignment

Studies, Analysis & Evaluation

FY18 to FY19 decrease reflects a reduction for Operational Forces, Base Operating Support and Field Logistics

FY19 to FY20 decrease due to Base to OCO realignment

Engineering & Technical Services

FY18 to FY19 decrease reflects a reduction for Operational Forces, Base Operating Support and Field Logistics.

FY19 to FY20 decrease due to Base to OCO realignment

DEPARTMENT OF THE NAVY
Fiscal Year (FY) 2020 President's Budget Submission
ADVISORY AND ASSISTANCE SERVICES
(Dollars in thousands)

<u>Operation and Maintenance, Marine Corps Reserve</u>		<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Management & Professional Support Services				
	FFRDC Work	0	0	0
	Non-FFRDC Work	4,676	10,872	0
	Subtotal	4,676	10,872	0
Studies, Analysis, and Evaluations				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	34	0
	Subtotal	0	34	0
Engineering and Technical Services				
	FFRDC Work	0	0	0
	Non-FFRDC Work	17,201	20,369	0
	Subtotal	17,201	20,369	0
Training and Leadership Development				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Total				
	FFRDC Work	0	0	0
	Non-FFRDC Work	21,877	31,275	0
	Grand Total	21,877	31,275	0

Explanation of Funding Changes (FY 2018 - FY 2020)

Management & Professional Support Services

FY18 to FY19 increase for Base Operating Support

FY19 to FY20 decrease due to Base to OCO realignment

Engineering and Technical Services

FY18 to FY19 increase for Base Operating Support

FY19 to FY20 decrease due to Base to OCO realignment

DEPARTMENT OF THE NAVY
Fiscal Year (FY) 2020 President's Budget Submission
ADVISORY AND ASSISTANCE SERVICES
(Dollars in thousands)

<u>Operation and Maintenance, Navy Reserve</u>		<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Management & Professional Support Services				
	FFRDC Work	0	0	0
	Non-FFRDC Work	4,423	4,409	3,771
	Subtotal	4,423	4,409	3,771
Studies, Analysis, and Evaluations				
	FFRDC Work	0	0	0
	Non-FFRDC Work	129	134	0
	Subtotal	129	134	0
Engineering and Technical Services				
	FFRDC Work	0	0	0
	Non-FFRDC Work	421	433	0
	Subtotal	421	433	0
Training and Leadership Development				
	FFRDC Work	0	0	0
	Non-FFRDC Work	2,350	1,216	1,240
	Subtotal	2,350	1,216	1,240
Total				
	FFRDC Work	0	0	0
	Non-FFRDC Work	7,323	6,192	5,011
	Grand Total	7,323	6,192	5,011

Explanation of Funding Changes (FY 2018 - FY 2020)

Management & Professional Support Services

FY18 to FY19 No Change.

FY19 to FY20 decrease due to Base to OCO realignment

Training and Leadership Development

FY18 to FY19 due to decrease in Professional and Operational training

FY19 to FY20 No Change.

DEPARTMENT OF THE NAVY
Fiscal Year (FY) 2020 President's Budget Submission
ADVISORY AND ASSISTANCE SERVICES
(Dollars in thousands)

<u>Aircraft Procurement, Navy</u>		<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Management & Professional Support Services				
	FFRDC Work	0	0	0
	Non-FFRDC Work	194,624	108,091	92,067
	Subtotal	194,624	108,091	92,067
Studies, Analysis, and Evaluations				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Engineering and Technical Services				
	FFRDC Work	0	0	0
	Non-FFRDC Work	31,441	94,630	73,528
	Subtotal	31,441	94,630	73,528
Training and Leadership Development				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Total				
	FFRDC Work	0	0	0
	Non-FFRDC Work	226,065	202,721	165,595
	Grand Total	226,065	202,721	165,595

Explanation of Funding Changes (FY 2018 - FY 2020)

Management & Professional Support Services

FY18 to FY19 decrease for A/C procurement quantities for production support.

FY19 to FY20 decrease for A/C procurement quantities for production support.

Engineering and Technical Services

FY18 to FY19 decrease for A/C procurement quantities for production support.

FY19 to FY20 decrease for A/C procurement quantities for production support.

DEPARTMENT OF THE NAVY
Fiscal Year (FY) 2020 President's Budget Submission
ADVISORY AND ASSISTANCE SERVICES
(Dollars in thousands)

<u>Weapons Procurement, Navy</u>		<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Management & Professional Support Services				
	FFRDC Work	0	0	0
	Non-FFRDC Work	80,170	13,115	0
	Subtotal	80,170	13,115	0
Studies, Analysis, and Evaluations				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	327	0
	Subtotal	0	327	0
Engineering and Technical Services				
	FFRDC Work	0	0	0
	Non-FFRDC Work	1,576	16,664	0
	Subtotal	1,576	16,664	0
Training and Leadership Development				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Total				
	FFRDC Work	0	0	0
	Non-FFRDC Work	81,746	30,106	0
	Grand Total	81,746	30,106	0

Explanation of Funding Changes (FY 2018 - FY 2020)

Management & Professional Support Services

FY18 to FY19 decrease for Rolling Airframe Missile (RAM): Due to lower than projected FY19 Foreign Military Sales procurement quantities, the program was unable to reach the anticipated USN procurement quantity of 120 missiles in FY2019. Instead the FY19 quantity based on the current US/FMS quantities and negotiated FY19 contract pricing is expected to be 108.

FY19 to FY20 decrease due to Base to OCO realignment in accordance with the Department's compliance with the Budget Control Act of 2011

Studies, Analysis & Evaluation

FY18 to FY19 No Change.

FY19 to FY20 decrease due to Base to OCO realignment in accordance with the Department's compliance with the Budget Control Act of 2011

Engineering and Technical Services

FY18 to FY19 increase for Ordnance Support Equipment and Close In Weapons System (CIWS).

FY19 to FY20 decrease due to Base to OCO realignment in accordance with the Department's compliance with the Budget Control Act of 2011

DEPARTMENT OF THE NAVY
Fiscal Year (FY) 2020 President's Budget Submission
ADVISORY AND ASSISTANCE SERVICES
(Dollars in thousands)

<u>Shipbuilding and Conversion, Navy</u>		<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Management & Professional Support Services				
	FFRDC Work	0	0	0
	Non-FFRDC Work	703,865	117,874	87,232
	Subtotal	703,865	117,874	87,232
Studies, Analysis, and Evaluations				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Engineering and Technical Services				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	271,554	489,154
	Subtotal	0	271,554	489,154
Training and Leadership Development				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Total				
	FFRDC Work	0	0	0
	Non-FFRDC Work	703,865	389,428	576,386
	Grand Total	703,865	389,428	576,386

Explanation of Funding Changes (FY 2018 - FY 2020)

Management & Professional Support Services

FY18 to FY19 decrease for DDG-51, Littorail Combat Ship, CVn Refueling Overhauls, Virginia Class Submarine, DDG 1000, LPD-17, LHA Replacement and outfitting.

FY19 to FY20 decrease for DDG-51, Virginia Class Submarine, LHA Replacement, Expeditionary Fast Transport and Towing, Salvage and RescueShips.

Engineering and Technical Services

FY18 to FY19 decrease for DDG-51, CVN Refueling Overhauls, Virginia Class Submarine, LHA Replacement, Expeditionary Fast Transport and FY19 to FY20 increase for DDG-51 which is offset by reductions to CVN Refueling Overhauls, LHA Replacement, Expeditionary Fast Transport and Ship to Shore Connector.

DEPARTMENT OF THE NAVY
Fiscal Year (FY) 2020 President's Budget Submission
ADVISORY AND ASSISTANCE SERVICES
(Dollars in thousands)

<u>Other Procurement, Navy</u>		<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Management & Professional Support Services				
	FFRDC Work	7,382	0	0
	Non-FFRDC Work	591,716	26,886	14,029
	Subtotal	599,098	26,886	14,029
Studies, Analysis, and Evaluations				
	FFRDC Work	0	0	0
	Non-FFRDC Work	221	1,664	-
	Subtotal	221	1,664	0
Engineering and Technical Services				
	FFRDC Work	1,559	0	0
	Non-FFRDC Work	49,462	108,895	9,062
	Subtotal	51,021	108,895	9,062
Training and Leadership Development				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Total				
	FFRDC Work	8,941	0	0
	Non-FFRDC Work	641,399	137,445	23,091
	Grand Total	650,340	137,445	23,091

Explanation of Funding Changes (FY 2018 - FY 2020)

Management & Professional Support Services

FY18 to FY19 decrease across all OPN Lines

FY19 to FY20 decrease due to Base to OCO realignment

Studies, Analysis & Evaluation

FY18 to FY19 increase for Surveillance Towed Array Sensor System (SURTASS)

FY19 to FY20 decrease due to Base to OCO realignment

Engineering and Technical Services

FY18 to FY19 increase reflects additional contract support for the DDG Mod program and Special Purpose Supply Systems

FY19 to FY20 decrease due to Base to OCO realignment

DEPARTMENT OF THE NAVY
Fiscal Year (FY) 2020 President's Budget Submission
ADVISORY AND ASSISTANCE SERVICES
(Dollars in thousands)

<u>Procurement, Marine Corps</u>		<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Management & Professional Support Services				
	FFRDC Work	0	473	0
	Non-FFRDC Work	86,319	32,442	55
	Subtotal	86,319	32,915	55
Studies, Analysis, and Evaluations				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Engineering and Technical Services				
	FFRDC Work	0	0	0
	Non-FFRDC Work	1,310	23,570	19
	Subtotal	1,310	23,570	19
Training and Leadership Development				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Total				
	FFRDC Work	0	473	0
	Non-FFRDC Work	87,629	56,012	74
	Grand Total	87,629	56,485	74

Explanation of Funding Changes (FY 2018 - FY 2020)

Management & Professional Support Services

FY18 to FY19 decreases for Repair and Test Equipment, Next Generation Enterprise Service, Command Post Systems, Comm Switching and Control Systems, Radar Systems, Ground/Air Task Oriented Radar, Intelligence Support Equipment and Joint Light Tactical Vehicle

FY19 to FY20 decrease due to Base to OCO realignment

Engineering and Technical Services

FY18 to FY19 increase for Amphibious Combat Vehicle, Ground Based Air Defense, Radio Systems, RQ-21 UAS, Intelligence Support Equipment

FY19 to FY20 decrease due to Base to OCO realignment

DEPARTMENT OF THE NAVY
Fiscal Year (FY) 2020 President's Budget Submission
ADVISORY AND ASSISTANCE SERVICES
(Dollars in thousands)

<u>Procurement of Ammunition, Navy/Marine Corps</u>		<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Management & Professional Support Services				
	FFRDC Work	0	0	0
	Non-FFRDC Work	3,852	16,552	0
	Subtotal	3,852	16,552	0
Studies, Analysis, and Evaluations				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Engineering and Technical Services				
	FFRDC Work	0	2,750	0
	Non-FFRDC Work	2,522	2,297	0
	Subtotal	2,522	5,047	0
Training and Leadership Development				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Total				
	FFRDC Work	0	2,750	0
	Non-FFRDC Work	6,374	18,849	0
	Grand Total	6,374	21,599	0

Explanation of Funding Changes (FY 2018 - FY 2020)

Management & Professional Support Services

FY18 to FY19 increase additional acquisition requirements for Marine Corps Ground Combat/support system.

FY19 to FY20 decrease due to Base to OCO realignment.

Engineering and Technical Services

FY18 to FY19 increase due to engineering and technical support for Marine Corps Ground Combat/Support System.

FY19 to FY20 decrease due to Base to OCO realignment.

DEPARTMENT OF THE NAVY
Fiscal Year (FY) 2020 President's Budget Submission
ADVISORY AND ASSISTANCE SERVICES
(Dollars in thousands)

<u>Research, Development, Test, and Evaluation, Navy</u>		<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Management & Professional Support Services				
	FFRDC Work	1,615	5,644	1,540
	Non-FFRDC Work	967,538	289,158	40,540
	Subtotal	969,153	294,802	42,080
Studies, Analysis, and Evaluations				
	FFRDC Work	16,236	110,504	3,246
	Non-FFRDC Work	8,669	37,530	11,046
	Subtotal	24,905	148,034	14,292
Engineering and Technical Services				
	FFRDC Work	954	60,387	801
	Non-FFRDC Work	84,667	296,784	80,649
	Subtotal	85,621	357,171	81,450
Training and Leadership Development				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	95	0
	Subtotal	0	95	0
Total				
	FFRDC Work	11,238	103,561	13,387
	Non-FFRDC Work	1,077,110	734,071	135,481
	Grand Total	1,079,679	800,102	137,822

Explanation of Funding Changes (FY 2018 - FY 2020)

Management & Professional Support Services

FY18 to FY19 funding decrease is due to the completion of Physiological Episode studies for root cause corrections. Correctly align and categorize contracted support efforts in support of Future Vertical Lift studies, Precision Strike Tech, Naval Prototypes, Railgun, and Solid State Lasers. C2D2 efforts transitioning from BA05 to BA07 requires a switch from MSS to ETS. Transfer of ONR non-labor MHA support for the Navy S&T programs to Management HQ R&D. SPECTRUM not being reported. Changes in BOCS reporting. Decrease field service rep and spares support, Presidential Helo contracts funded at HQ vs previously NAWC, CH-53K test program ramp down as shifts to production.

FY19 to FY20 funding decreases for completion of MSS for JT non-lethal weapons testing. Decrease of field service rep and spares support. CH-53K test program ramp down as shifts to production. Cancellation of SMART-T and TWTS MITRE Support, Transition of management services to other appropriations, Decreased requirement for CSS.

Studies, Analysis, and Evaluations

FY18 to FY19 funding increase due to startup of Future Vertical Lift project and required studies to initiate Milestone A. Operations Forces Assessment Autonomous Vehicles.

FY19 to FY20 funding decrease due to reduction of Analysis of Alternatives activities, Operations Forces Assessment Autonomous Vehicles, transition of contract vehicles, reduction in Theater Battle Mgmt Core Systems, JT Capability Demonstration being finalized, Decreased requirement for CSS.

Engineering and Technical Services

FY18 to FY19 funding increase Increase in test requirements for F/A-18 improvements, C2D2 efforts transitioning from BA05 to BA07 requires a switch from MSS to ETS, ramp up of the MQ-25 LSI/test team, One time change for SATCOM AoA, software development for G/ATOR, development of Electromagnetic Spectrum Operations Range, Spectrum Services Framework, Joint Light Tactical Vehicle Platform Integration Kit.

FY19 to FY20 funding decrease associated with Functional CSS efforts being moved to other appropriations as program directive, Completion of DT1E/IOTE testing in FY19 for G/ATOR, Transition from R&D to Prod following Milestone C for MADIS, CH-53K test program ramp down as shifts to production, Correctly align and categorize contracted support efforts.

DEPARTMENT OF THE NAVY
Fiscal Year (FY) 2020 President's Budget Submission
ADVISORY AND ASSISTANCE SERVICES
(Dollars in thousands)

<u>Family Housing, Navy (Operations)</u>		<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Management & Professional Support Services				
	FFRDC Work	0	0	0
	Non-FFRDC Work	1,549	1,591	1,618
	Subtotal	1,549	1,591	1,618
Studies, Analysis, and Evaluations				
	FFRDC Work	0	0	0
	Non-FFRDC Work	13,596	11,453	12,013
	Subtotal	13,596	11,453	12,013
Engineering and Technical Services				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Training and Leadership Development				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Total				
	FFRDC Work	0	0	0
	Non-FFRDC Work	15,145	13,044	13,631
	Grand Total	15,145	13,044	13,631

Explanation of Funding Changes (FY 2018 - FY 2020)

Studies, Analysis, and Evaluations

FY18 to FY19 decrease is due to Family Housing Operations Management.

DEPARTMENT OF THE NAVY
Fiscal Year (FY) 2020 President's Budget Submission
ADVISORY AND ASSISTANCE SERVICES
(Dollars in thousands)

<u>Navy Working Capital Funds</u>		<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Management & Professional Support Services				
	FFRDC Work	27,798	23,694	24,084
	Non-FFRDC Work	0	0	0
	Subtotal	27,798	23,694	24,804
Studies, Analysis, and Evaluations				
	FFRDC Work	1,372	1,015	908
	Non-FFRDC Work	0	0	0
	Subtotal	1,372	1,015	908
Engineering and Technical Services				
	FFRDC Work	100,869	40,826	41,499
	Non-FFRDC Work	0	0	0
	Subtotal	100,869	40,826	41,499
Training and Leadership Development				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Total				
	FFRDC Work	130,039	65,535	66,491
	Non-FFRDC Work	0	0	0
	Grand Total	130,039	65,535	66,491

DEPARTMENT OF THE NAVY
Fiscal Year (FY) 2020 President's Budget Submission
ADVISORY AND ASSISTANCE SERVICES
(Dollars in thousands)

<u>Base Closure and Realignment Commission</u>		<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Management & Professional Support Services				
	FFRDC Work	0	0	0
	Non-FFRDC Work	3,212	2,776	2,544
	Subtotal	3,212	2,776	2,544
Studies, Analysis, and Evaluations				
	FFRDC Work	0	-	-
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Engineering and Technical Services				
	FFRDC Work	0	0	0
	Non-FFRDC Work	2,645	0	0
	Subtotal	2,645	0	0
Training and Leadership Development				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Total				
	FFRDC Work	0	0	0
	Non-FFRDC Work	5,857	2,776	2,544
	Grand Total	5,857	2,776	2,544

DEPARTMENT OF THE NAVY
Fiscal Year (FY) 2020 President's Budget Submission
ADVISORY AND ASSISTANCE SERVICES
(Dollars in thousands)

<u>Military Construction</u>		<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Management & Professional Support Services				
	FFRDC Work	0	0	0
	Non-FFRDC Work	10	0	0
	Subtotal	10	0	0
Studies, Analysis, and Evaluations				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Engineering and Technical Services				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Training and Leadership Development				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Total				
	FFRDC Work	0	0	0
	Non-FFRDC Work	10	0	0
	Grand Total	10	0	0

DEPARTMENT OF THE NAVY
Fiscal Year (FY) 2020 President's Budget Submission
ADVISORY AND ASSISTANCE SERVICES
(Dollars in thousands)

<u>National Defense Sealift Fund</u>		<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Management & Professional Support Services				
	FFRDC Work	0	0	0
	Non-FFRDC Work	1,094	0	0
	Subtotal	1,094	0	0
Studies, Analysis, and Evaluations				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Engineering and Technical Services				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Training and Leadership Development				
	FFRDC Work	0	0	0
	Non-FFRDC Work	0	0	0
	Subtotal	0	0	0
Total				
	FFRDC Work	0	0	0
	Non-FFRDC Work	1,094	0	0
	Grand Total	1,094	0	0

Major Headquarters Activities
Department of the Navy

		FY 2018				FY 2019				FY 2020			
		Military Avg. Strength	CIV FTEs	Total Manpower	Total Obligation (\$000)	Military Avg. Strength	CIV FTEs	Total Manpower	Total Obligation (\$000)	Military Avg. Strength	CIV FTEs	Total Manpower	Total Obligation (\$000)
A	<u>DoD Headquarters</u>	1,189	992	2,181	294,425	1,102	1,131	2,233	301,797	952	1,174	2,126	317,272
	MPMC	210	-	210	-	154	-	154	-	208	-	208	-
	MPN	758	-	758	-	711	-	711	-	671	-	671	-
	OMMC	-	-	-	5,507	-	137	137	23,062	-	137	137	23,115
	OMN	-	992	992	288,783	-	994	994	278,592	-	1,037	1,037	294,010
	OMNR	-	-	-	135	-	-	-	143	-	-	-	147
	RPMC	159	-	159	-	159	-	159	-	-	-	-	-
	RPN	62	-	62	-	78	-	78	-	73	-	73	-
B1	<u>Combatant Command Headquarters</u>	156	196	352	64,885	122	194	316	63,026	118	194	312	59,521
	MPMC	48	-	48	-	28	-	28	-	25	-	25	-
	MPN	95	-	95	-	84	-	84	-	83	-	83	-
	OMN	-	196	196	64,885	-	194	194	63,026	-	194	194	59,521
	OPN	-	-	-	-	-	-	-	-	-	-	-	-
	RPN	13	-	13	-	10	-	10	-	10	-	10	-
B2	<u>Major Command Headquarters</u>	766	476	1,242	78,397	764	581	1,345	140,447	695	593	1,288	106,670
	MPMC	116	-	116	-	143	-	143	-	112	-	112	-
	MPN	536	-	536	-	510	-	510	-	483	-	483	-
	OMMC	-	-	-	162	-	74	74	8,316	-	74	74	8,350
	OMMCR	-	26	26	7,246	-	29	29	16,670	-	58	58	14,672
	OMN	-	450	450	70,989	-	478	478	115,461	-	461	461	83,648
	RPMC	79	-	79	-	79	-	79	-	69	-	69	-
	RPN	35	-	35	-	32	-	32	-	31	-	31	-
B3	<u>Component Headquarters</u>	263	220	483	31,882	239	338	577	36,581	218	335	553	35,956
	MPN	253	-	253	-	229	-	229	-	208	-	208	-
	NWCF	-	45	45	-	-	99	99	-	-	99	99	-
	OMN	-	175	175	31,882	-	239	239	36,581	-	236	236	35,956
	RPN	10	-	10	-	10	-	10	-	10	-	10	-

Major Headquarters Activities
Department of the Navy

		FY 2018				FY 2019				FY 2020			
		Military Avg. Strength	CIV FTEs	Total Manpower	Total Obligation (\$000)	Military Avg. Strength	CIV FTEs	Total Manpower	Total Obligation (\$000)	Military Avg. Strength	CIV FTEs	Total Manpower	Total Obligation (\$000)
B5	<u>DoD Direct Report Headquarters</u>	1,707	3,163	4,870	768,269	1,540	3,026	4,566	649,706	1,348	2,986	4,334	638,021
	FHOPS	-	17	17	2,818	-	19	19	3,462	-	19	19	3,537
	MPMC	940	-	940	-	794	-	794	-	780	-	780	-
	MPN	570	-	570	-	541	-	541	-	443	-	443	-
	NWCF	-	-	-	-	-	-	-	-	-	64	64	-
	OMMC	-	1,139	1,139	253,950	-	919	919	192,303	-	889	889	186,758
	OMN	-	1,831	1,831	455,195	-	1,919	1,919	401,577	-	1,847	1,847	397,270
	OMNR	-	70	70	8,779	-	61	61	6,925	-	59	59	6,666
	OPN	-	-	-	408	-	-	-	409	-	-	-	417
	RD TEN	-	106	106	45,015	-	108	108	43,344	-	108	108	41,133
	RPMC	62	-	62	-	62	-	62	-	-	-	-	-
	RPN	135	-	135	-	143	-	143	-	125	-	125	-
	SCN	-	-	-	2,104	-	-	-	1,686	-	-	-	2,240
B6	<u>CCMD Direct Report Headquarters</u>	7	2	9	-	19	1	20	113	9	1	10	113
	MPMC	-	-	-	-	13	-	13	-	3	-	3	-
	MPN	7	-	7	-	6	-	6	-	6	-	6	-
	OMMC	-	-	-	-	-	1	1	113	-	1	1	113
	OMN	-	2	2	-	-	-	-	-	-	-	-	-
B7	<u>MAJCOM Direct Report Headquarters</u>	446	315	761	45,088	425	345	770	41,664	425	343	768	39,755
	MPN	444	-	444	-	425	-	425	-	403	-	403	-
	OMN	-	315	315	45,088	-	345	345	41,664	-	343	343	39,755
	RPN	2	-	2	-	-	-	-	-	22	-	22	-
Grand Total		4,534	5,364	9,898	1,282,946	4,211	5,616	9,827	1,233,334	3,765	5,626	9,391	1,197,308
	FHOPS	-	17	17	2,818	-	19	19	3,462	-	19	19	3,537
	MPMC	1,314	-	1,314	-	1,132	-	1,132	-	1,128	-	1,128	-
	MPN	2,663	-	2,663	-	2,506	-	2,506	-	2,297	-	2,297	-
	NWCF	-	45	45	-	-	99	99	-	-	163	163	-
	OMMC	-	1,139	1,139	259,619	-	1,131	1,131	223,794	-	1,101	1,101	218,336
	OMMCR	-	26	26	7,246	-	29	29	16,670	-	58	58	14,672
	OMN	-	3,961	3,961	956,822	-	4,169	4,169	936,901	-	4,118	4,118	910,160
	OMNR	-	70	70	8,914	-	61	61	7,068	-	59	59	6,813
	OPN	-	-	-	408	-	-	-	409	-	-	-	417
	RD TEN	-	106	106	45,015	-	108	108	43,344	-	108	108	41,133
	RPMC	300	-	300	-	300	-	300	-	69	-	69	-
	RPN	257	-	257	-	273	-	273	-	271	-	271	-
	SCN	-	-	-	2,104	-	-	-	1,686	-	-	-	2,240

Reconciliation of Increases and Decreases

Changes PB 2019 to Current FY 2019:

Decrease in funding due to reductions for historical obligations and reclassification of certain elements as not MHA.

Changes FY 2019 to FY 2020:

DON continues reducing MHA to comply with the FY 2016 NDAA.

PROFESSIONAL MILITARY EDUCATION SCHOOLS

Service: United States Navy

School: Naval War College – College of Naval Command and Staff (Intermediate)

I. Narrative Description: The Naval War College provides Navy and joint intermediate-level professional military education (JPME I), research, analysis, and gaming, and programs, which meet the statutory, joint, and Navy professional military education requirements, in order to:

- Educate future military and civilian leaders for the Department of the Navy and Department of Defense.
- Prepare U.S. and international military officers and civilians to meet theater-level security challenges in naval, joint, interagency, and multinational arenas.
- Enable students to know and assess the geostrategic environment, build global partnerships, develop and execute theater-level military strategy, and integrate maritime capabilities effectively into joint and combined plans and operations which apply strategic and operational art.

II. Description of Operations Financed: Naval War College provides professional military education to build culturally adept, internationally focused leaders prepared for positions of significant responsibility within the national security framework who possess increased intellectual flexibility to address national security challenges during peace and war. The education process involves a rigorous 10-month course of study intended to cultivate critical thinking, broaden perspectives in decision making, build cultural expertise, foster innovation, encourage lifelong learning, and enhance character and integrity. Professional capabilities are enhanced in the naval profession of arms through the study of naval, joint, intergovernmental, and international operating domains.

To meet these goals the College has developed an extensive curriculum based upon three core courses, electives and relevant research programs. In consonance with the *Navy Education Strategy 2025*, the course of study develops joint warfighters and strategic leaders. Graduates think at the theater-strategic and operational levels of war, leveraging all military systems and national and partner capabilities, and are conversant in selecting, allocating, and tasking air, land, maritime, space, and Special Forces in integrated operations. They are prepared to lead planning efforts at the theater-strategic and operational level of war with a broad knowledge of the economic, political and organizational factors and international and domestic environments that influence resource allocation decisions at the theater-strategic level. They are well grounded in the complexity of decision making in volatile, uncertain, complex, and ambiguous conditions and, in those conditions, are prepared to make ethical decisions based on the shared values of the naval profession of arms.

In providing this education, the College expends funds for civilian salaries, textbooks, copyright and printing, equipment, academic coordination and supporting functions.

III. Financial Summary (\$ Thousands):

	FY 2018 <u>Actuals</u>	FY 2019 <u>Estimate</u>	FY 2020 <u>Estimate</u>	FY 18/19 <u>Change</u>	FY 19/20 <u>Change</u>
Mission (O&M)	\$10,281	\$10,524	\$10,638	\$243	\$114
Military Personnel					
School Personnel	\$4,055	\$4,161	\$4,243	\$106	\$82
Total Direct Program	\$14,336	\$14,685	\$14,881	\$349	\$196

Change in costs: The mission (O&M,N) cost changes from FY18 to FY19, and from FY19 to FY20, reflect inflationary increases for civilian personnel and education services and supplies. MILPERS increase of 2 End Strength (ES)/Full Time Equivalent (FTE) from FY18 to FY19. The average cost per student decreases from FY18 to FY19 due to anticipated student load.

IV. Performance Criteria and Evaluation:

	FY 2018 <u>Actuals</u>	FY 2019 <u>Estimate</u>	FY 2020 <u>Estimate</u>	FY 18/19 <u>Change</u>	FY 19/20 <u>Change</u>
<u>Direct Funded:</u>					
Student Input	255	286	286	31	0
Student Load	231	252	255	18	3
Graduates	264	273	286	9	13
 Average Cost per Student Load	 \$62	 \$58	 \$58	 -\$4	 \$0

V. Personnel Summary: (Exclude students)

	FY 2018 <u>Actuals</u>	FY 2019 <u>Estimate</u>	FY 2020 <u>Estimate</u>	FY 18/19 <u>Change</u>	FY 19/20 <u>Change</u>
<u>Military E/S(Total)</u>	28	30	30	2	0
Officers	25	27	27	2	0
Enlisted	3	3	3	0	0
 <u>Military WYs</u>					
<u>(Total)</u>	28	30	30	2	0
Officers	25	27	27	2	0
Enlisted	3	3	3	0	0
 <u>Civilian E/S(Total)</u>	51	54	54	3	0
USDH	50	53	53	3	0
FNDH	1	1	1	0	0
 <u>Civilian WYs</u>					
<u>(Total)</u>	51	54	54	3	0
USDH	50	53	53	3	0
FNDH	1	1	1	0	0

PROFESSIONAL MILITARY EDUCATION SCHOOLS

Service: United States Navy

School: Naval War College – College of Naval Warfare (Senior)

I. Narrative Description: The Naval War College provides senior-level Navy and joint professional military education (JPME II) programs to:

- Educate future military and civilian leaders for the Department of the Navy and Department of Defense.
- Prepare U.S. and international military officers and civilians to meet national security challenges in naval, joint, interagency and multinational arenas.
- Enable students to know and assess the geostrategic environment, build global partnerships, develop and execute national military strategy, and integrate maritime capabilities effectively into joint and combined plans and operations which apply strategic, operational design, and operational art.

II. Description of Operations Financed: Naval War College provides professional military education to build culturally adept, internationally focused leaders prepared for positions of significant responsibility within the national security framework who possess increased intellectual flexibility to address national security challenges during peace and war. The education process involves a rigorous 10-month course of study intended to cultivate critical thinking, broaden perspectives in decision making, build cultural expertise, foster innovation, encourage lifelong learning, and enhance character and integrity. Professional capabilities are enhanced in the joint warfighting and strategic leadership domains.

To meet these goals the College has developed an extensive curriculum based upon three core courses, focused electives, and relevant research programs. In consonance with the *Navy Education Strategy 2025*, the course of study develops joint warfighters and strategic leaders. Graduates think at the national strategic and theater- strategic levels, leveraging national capabilities, all military systems, and partner nations' competencies, and are conversant in selecting, allocating, and tasking air, land, maritime, space and Special Forces in campaigns and major, integrated operations. They are prepared to lead planning efforts at the strategic and theater-strategic levels with a broad grasp of the economic, political and organizational factors and international and domestic environments that influence resource allocation decisions at the strategic level. They are well grounded in the complexity of decision making, designing and executing campaigns and major operations in volatile, uncertain, complex, and ambiguous conditions. In those situations, graduates are prepared to adapt, innovate, communicate, and lead U.S. and international organizations in the achievement of strategic objectives, while making ethical decisions based on the shared values of the profession of arms.

In providing this education, the College expends funds for civilian salaries, text books, copyright and printing, equipment, academic coordination, and supporting functions.

III. Financial Summary (\$ Thousands):

	FY 2018 <u>Actuals</u>	FY 2019 <u>Estimate</u>	FY 2020 <u>Estimate</u>	FY 18/19 <u>Change</u>	FY 19/20 <u>Change</u>
Mission (O&M)	\$6,402	\$6,559	\$6,629	\$157	\$70
Military Personnel					
School Personnel	\$2,675	\$2,745	\$2,799	\$70	\$54
Total Direct Program	\$9,077	\$9,304	\$9,428	\$227	\$124

Change in costs: The mission (O&M,N) cost changes from FY18 to FY19 and from FY19 to FY20, reflect the inflationary increases for civilian personnel and continue to reflect an internal allocation of costs to the senior course based on student throughput, stabilizing over the next several years. Increase of 2 ES/2 FTE from FY18 to FY19. FY19 to FY20 MILPERS and O&M,N cost increases reflect inflation. The average cost per student decreases from FY18 to FY19 due to total direct Professional Military Education (PME)/Joint Professional Military Education (JPME) and overhead cost pool allocations based on student load and Senior/Intermediate student mix.

IV. Performance Criteria and Evaluation:

	FY 2018 <u>Actuals</u>	FY 2019 <u>Estimate</u>	FY 2020 <u>Estimate</u>	FY 18/19 <u>Change</u>	FY 19/20 <u>Change</u>
<u>Direct Funded:</u>					
Student Input	154	184	184	30	0
Student Load	142	177	162	35	-15
Graduates	183	187	184	4	-3
 Average Cost per Student Load	 \$64	 \$53	 \$58	 -\$11	 \$5

V. Personnel Summary: (Exclude students)

	FY 2018 <u>Actuals</u>	FY 2019 <u>Estimate</u>	FY 2020 <u>Estimate</u>	FY 18/19 <u>Change</u>	FY 19/20 <u>Change</u>
<u>Military E/S(Total)</u>	18	20	20	2	0
Officers	16	18	18	2	0
Enlisted	2	2	2	0	0
 <u>Military WYs</u>					
<u>(Total)</u>	18	20	20	2	0
Officers	16	18	18	2	0
Enlisted	2	2	2	0	0
 <u>Civilian E/S(Total)</u>	40	41	41	1	0
USDH	39	40	40	1	0
FNDH	1	1	1	0	0
 <u>Civilian WYs</u>					
<u>(Total)</u>	40	41	41	1	0
USDH	39	40	40	1	0
FNDH	1	1	1	0	0

PROFESSIONAL MILITARY EDUCATION SCHOOLS

Service: United States Navy

School: Naval War College – College of Distance Education

I. Narrative Description: The Naval War College provides Navy and Joint intermediate-level professional military education (JPME I) programs through distance education programs, which meet the statutory, joint and Navy professional military education requirements, in order to:

- Educate future military and civilian leaders for the Department of the Navy and Department of Defense.
- Prepare U.S. and international military officers and civilians to meet theater-level security challenges in naval, joint, interagency and multinational arenas.
- Enable students to know and assess the geostrategic environment, build global partnerships, develop and execute theater-level military strategy, and integrate maritime capabilities effectively into joint and combined plans and operations which apply strategic and operational art.

II. Description of Operations Financed: Naval War College provides intermediate-level professional military education to build culturally adept, internationally focused leaders prepared for positions of significant responsibility within the national security framework who possess increased intellectual flexibility to address national security challenges during peace and war. The distance education programs, derived from the resident curricula, involve a rigorous course of study intended to cultivate critical thinking, broaden perspectives in decision making, build cultural expertise, foster innovation, encourage lifelong learning, and enhance character and integrity. Professional capabilities are enhanced in the naval profession of arms through the study of naval, joint, intergovernmental, and international operating domains.

To meet these goals the College has developed a set of distance learning programs based upon the College's three core courses. In consonance with the *Navy Education Strategy 2025*, the course of study develops joint warfighters and strategic leaders. Graduates think at the theater-strategic and operational levels of war, leveraging all military systems and national and partner capabilities, and are conversant in selecting, allocating, and tasking air, land, maritime, space and Special Forces in integrated operations. They are prepared to lead planning efforts at the theater-strategic and operational level of war with a broad knowledge of the economic, political and organizational factors and international and domestic environments that influence resource allocation decisions at the theater-strategic level. They are well grounded in the complexity of decision making in volatile, uncertain, complex, and ambiguous conditions and, in those conditions, are prepared to make ethical decisions based on the shared values of the naval profession of arms.

The College's Distance Education programs include: the Fleet Seminar Program, the Web-enabled program, the CDROM-based program, and the Naval War College-at-Naval Postgraduate School Program. In providing this education, the College expends funds for civilian salaries, text books, copyright and printing, equipment, academic coordination, and supporting functions.

	FY 2018 <u>Actuals</u>	FY 2019 <u>Estimate</u>	FY 2020 <u>Estimate</u>	FY 18/19 <u>Change</u>	FY 19/20 <u>Change</u>
Mission (O&M)	\$14,525	\$14,884	\$15,077	\$359	\$193
Military Personnel					
School Personnel	\$142	\$146	\$148	\$4	\$2
Total Direct Program	\$14,607	\$15,030	\$15,225	\$363	\$195

Change in costs: The mission (O&M,N) cost changes from FY18 to FY19 and FY19 to FY20, reflect the inflationary increases for civilian personnel and education services and supplies. MILPERS cost changes from FY18 to FY19 and FY19 to FY20, reflect the inflationary increases. The average cost per student remains steady from FY18 to FY19 with the increase from FY19 to FY20 due to inflationary increases offset by a projected decrease in student load.

III. Performance Criteria and Evaluation:

	FY 2018 <u>Actuals</u>	FY 2019 <u>Estimate</u>	FY 2020 <u>Estimate</u>	FY 18/19 <u>Change</u>	FY 19/20 <u>Change</u>
<u>Direct Funded:</u>					
Student Input	4,463	4,700	4,775	487	-225
Student Load					
Graduates					
Average Cost per					
Student Load	\$3.3	\$3.0	\$3.2	\$.3	\$.2

IV. Personnel Summary: (Exclude students)

	FY 2018 <u>Actuals</u>	FY 2019 <u>Estimate</u>	FY 2020 <u>Estimate</u>	FY 18/19 <u>Change</u>	FY 19/20 <u>Change</u>
Direct Funded					
<u>Military E/S(Total)</u>	1	1	1	0	0
Officers	1	1	1	0	0
Enlisted	0	0	0	0	0
 <u>Military FTE</u>					
<u>(Total)</u>	1	1	1	0	0
Officers	1	1	1	0	0
Enlisted	0	0	0	0	0
 <u>Civilian E/S (Total)</u>	59	62	62	3	0
USDH	59	62	62	3	0
FNDH	0	0	0	0	0
 <u>Civilian FTEs</u>					
<u>(Total)</u>	59	62	62	3	0
USDH	59	62	62	3	0
FNDH	0	0	0	0	0

PROFESSIONAL MILITARY EDUCATION SCHOOLS

Service: United States Navy

School: Senior Enlisted Academy

I. Narrative Description: The Senior Enlisted Academy provides professional military education and training to senior enlisted personnel (pay grade E-7 and E-8) for all ratings and warfare communities to better fulfill their leadership and management responsibilities.

II. Description of Operations Financed: The Senior Enlisted Academy program is a two-phase, blended course of study. The first phase is a nine week, web-based, faculty-led, asynchronous curriculum requiring active interface between the students and faculty moderator. The second phase is conducted in-residence for three weeks on Naval Station Newport, where the primary method of curriculum delivery is by staff-facilitated seminars. Additionally, various blocks of instruction are enhanced through lectures featuring subject matter experts from the Naval War College, Washington, D.C., and area colleges and universities. To complete the education process, students attend various events to become more familiar with the formal traditions of Navy life and social protocol. Funding provides for course materials, supplies, printing, and travel as required. Since FY17, successful completion of the Senior Enlisted Academy is a prerequisite for eligibility for promotion to Master Chief.

III. Financial Summary (\$ Thousands):

	FY 2018 <u>Actuals</u>	FY 2019 <u>Estimate</u>	FY 2020 <u>Estimate</u>	FY 18/19 <u>Change</u>	FY 19/20 <u>Change</u>
Mission (O&M)*	\$4,477	\$5,102	\$4,450	\$625	-\$652
Military Personnel					
School Personnel	\$1,385	\$1,421	\$1,449	\$36	\$28
Total Direct Program	\$5,862	\$6,523	\$5,899	\$661	-\$624

Cost Changes: FY19 includes one-time costs of \$700K for Senior Enlisted Academy auditorium expansion.

IV. Performance Criteria and Evaluation:

	FY 2018 <u>Actuals</u>	FY 2019 <u>Estimate</u>	FY 2020 <u>Estimate</u>	FY 18/19 <u>Change</u>	FY 19/20 <u>Change</u>
<u>Direct Funded:</u>					
Student Input	1,321	1,260	1,260	-61	0
Student Load	145	136	136	-9	0
Graduates	1,166	1,260	1,260	0	0
<u>Reimbursable Funded:</u>					
Student Input	12	36	36	24	0
Student Load	1	4	4	3	0
Graduates	12	36	36	13	0
Average Cost per Student Load	\$40.2	\$46.8	\$42.3	\$6.6	- \$4.5

V. Personnel Summary:

	FY 2018 <u>Actuals</u>	FY 2019 <u>Estimate</u>	FY 2020 <u>Estimate</u>	FY 18/19 <u>Change</u>	FY 19/20 <u>Change</u>
Direct Funded					
<u>Military E/S(Total)</u>	19	19	19	0	0
Officers	0	0	0	0	0
Enlisted	19	19	19	0	0
 <u>Military WYs (Total)</u>	19	19	19	0	0
Officers	0	0	0	0	0
Enlisted	19	19	19	0	0
 Civilian End <u>Strength</u>	5	5	5	0	0
USDH	5	5	5	0	0
Foreign Natl Dir Hire	0	0	0	0	0
 <u>Civilian WYs (Total)</u>	5	5	5	0	0
USDH	5	5	5	0	0
FNDH	0	0	0	0	0

PROFESSIONAL MILITARY EDUCATION SCHOOLS

Service: United States Navy

School: Naval Postgraduate School

I. Narrative Description (Statement of Requirements and Mission):

The Naval Postgraduate School supports a program of mid-career, professional, graduate education in order to meet the Navy and Marine Corps requirements for a technically qualified, intellectually equipped Total Force. The graduate education provided by the Naval Postgraduate School plays a critical role in the fulfilling the Navy's need for career long development of Naval officers, producing warriors who are highly advanced, scientifically and technologically, across systems and platforms and with well-developed problem solving skills.

The Naval Postgraduate School is an accredited academic research institution whose emphasis is on study and research programs relevant to the Navy's interests and other parts of the Department of Defense. The programs are designed to accommodate the unique requirements of the service, including time to acquire Joint Professional Military Education (JPME Phase I) while in resident. The Naval Postgraduate School transitions students from one set of skills developed in their undergraduate education to another that meets the Navy's current needs. Selection of personnel for graduate education is based upon outstanding professional performance, promotion potential and a strong academic background.

Curricula are designed to meet the specific requirements of the military communities who sponsor each individual curriculum. Programs adapt rapidly to meet the sponsor's changing requirements, such as increased technical content in the Special Operations curricula or developing curriculum in information technology for the IT warrior community. Naval Postgraduate School curricula are designed for military and defense relevance. Classified courses are taught throughout the various curricula. Many curricula are devoted entirely to specialized military topics not available elsewhere, to include Combat Systems, Information and Electronic Warfare, Joint Command, Control, Communications, Computers, and Intelligence (C4I) Systems, Meteorology and Oceanography (METOC), National Security and Intelligence, Military Operations Research, Space Systems programs, Special Operations, and Undersea Warfare. The Naval Postgraduate School manages the civilian institution program for an additional 170 plus Naval officers attending courses in civilian institutions and AFIT, Law Education program, and a number of short courses for naval personnel.

The Naval Postgraduate School additionally provides: graduate programs online and via video teleconferencing; defense resource management programs; Practical Comptrollership courses; and education programs tailored for international partnering countries on civilian control of the military. Many of these programs are externally funded, but maximize the educational talent that resides at the School.

II. Description of Operations Financed:

Located in Monterey, California, the Naval Postgraduate School campus covers 627 acres of land. Approximately 1,800 students attend the resident graduate degree program and another 1,200 attend graduate degree and certificate programs in a non-resident status. The resident student body promotes a joint and coalition environment, represented by officers from all of the five U.S. uniformed services (Navy, Marine Corps, Air Force, Army and Coast Guard), international officers from approximately 50 other countries, a small number of federal civilian employees and defense contractors. Beyond the graduate education mission, there are; over 900 on-going defense related research projects with faculty and student involvement; over 9,000 enrollments serviced by the School's defense related short courses, conferences, international mobile education teams and distributed learning programs. The programs that support Naval officer education are financed as part of the professional development education program.

The faculty is drawn from a broad diversity of educational institutions and represents a prestigious collection of scholars whom over 99% of tenured faculty have a Ph.D. The site houses state-of-the-art laboratories, numerous academic buildings, a library, government housing and recreational facilities. The Naval Postgraduate School offers classes leading to Master of Arts, Master of Science, Master of Business Administration, several other specialized master's, Engineering, Doctor of Philosophy and Doctor of Engineering accredited degrees in a variety of fields and provides defense related research, short courses, conferences and other educational programs.

III. Financial Summary (\$ Thousands):

	<u>FY 2019</u>				FY	FY
	FY 2018	Budget		FY 2020	18/19	19/20
	<u>Actual</u>	<u>Request</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Change</u>	<u>Change</u>
Mission (O&M)	\$95,085	\$98,768	\$98,768	\$100,787	\$3,683	\$2,019
Military Personnel	\$18,403	\$18,955	\$19,524	\$20,109	\$1,121	\$585
School Personnel						
Total Direct Program	\$113,488	\$117,723	\$118,292	\$120,896	\$4,804	\$2,604
Total Reimbursable Program	\$105,919	\$109,097	\$112,369	\$115,741	\$6,450	\$3,372
Military Personnel Other Services	\$3,695	\$3,806	\$3,920	\$4,038	\$225	\$118
Total Direct and Reimbursable	\$223,102	\$230,626	\$234,581	\$240,675	\$11,479	\$6,094

IV. Performance Criteria and Evaluation:

	FY 2018	FY 2019	FY 2020	FY 18/19	FY19/20
<u>Direct Funded:</u>	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Change</u>	<u>Change</u>
Student Input	1,926	2,073	2,073	147	0
Student Load	1,367	1,674	1,674	307	0
Graduates	2,257	2,380	2,380	123	0
<u>Reimbursable Funded:</u>					
Student Input	22,028	22,028	22,028	0	0
Student Load	2,833	2,833	2,833	0	0
Graduates	22,099	22,099	22,099	0	0
Average Cost Per Student Load	FY 2018	FY 2019	FY 2020	FY 18/19	FY 19/20
	<u>Actuals</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Change</u>	<u>Change</u>
	\$55.6	\$42.7	\$43.5	-\$12.9	\$.8

V. Personnel Summary: (Exclude students)

	FY 2018 Actuals	FY2019 Request	FY2019 Estimate	FY 2020 Estimate	FY 18/19 Change	FY 19/20 Change
<u>Military End Strength (Total)</u>	<u>122</u>	<u>122</u>	<u>122</u>	<u>122</u>	<u>0</u>	<u>0</u>
Officers	68	68	68	68	0	0
Enlisted	54	54	54	54	0	0
 <u>Military Average Strength (Total)</u>	 <u>122</u>	 <u>122</u>	 <u>122</u>	 <u>122</u>	 <u>0</u>	 <u>0</u>
Officers	68	68	68	68	0	0
Enlisted	54	54	54	54	0	0
 <u>Civilian End Strength (Total)</u>	 <u>899</u>	 <u>1,052</u>	 <u>1,052</u>	 <u>1,018</u>	 <u>153</u>	 <u>-34</u>
USDH	894	1,046	1,046	1,012	152	-34
FNDH	5	6	6	6	1	0
 <u>Civilian FTE's (Total)</u>	 <u>776</u>	 <u>1,002</u>	 <u>1,002</u>	 <u>968</u>	 <u>226</u>	 <u>-34</u>
USDH	771	996	996	962	225	-34
FNDH	5	6	6	6	1	0

ENV 30 DERA and BRAC Funds for Environmental Cleanup

(Current \$ Millions - Sites/Installations in Eaches)

Department of the Navy

	---- FY 18 ----		---- FY 19 ----		---- FY 20 ----		---- FY 21 ----		---- FY 22 ----		---- FY 23 ----		---- FY 24 ----		Balance to Complete	
	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>
Active																
Environmental Restoration																
IRP																
<u>Investigation:</u>																
Preliminary Assessment/Site Inspection	17.271	11	6.143	15	3.384	3	0.049	1	0.374	1	0.000	0	0.000	0	0.229	1
Remedial Investigation/Feasibility Study	43.459	68	35.387	73	46.327	70	19.391	38	9.097	21	1.280	6	3.612	3	1.654	5
Potentially Responsible Parties	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0
Investigation Subtotal	60.730	79	41.530	88	49.711	73	19.440	39	9.471	22	1.280	6	3.612	3	1.883	6
<u>Remedial Action (RA):</u>																
Interim Remedial Actions	18.881	5	41.179	19	31.005	18	4.773	9	5.168	5	6.198	3	13.756	4	10.387	5
Remedial Design (including ROD/DD)	2.763	2	3.353	16	8.264	32	5.648	23	3.901	17	1.609	10	1.766	4	0.586	4
Remedial Action Construction	54.775	13	68.726	32	46.492	39	111.628	44	117.875	46	104.450	37	48.412	21	44.675	26
Remedial Action Operations	54.851	177	65.904	200	47.129	203	43.230	207	33.404	204	47.322	209	52.133	203	904.352	229
Building Demolition/Debris Removal	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0
Potentially Responsible Parties	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0
RA Subtotal	131.270	197	179.162	267	132.890	292	165.279	283	160.348	272	159.579	259	116.067	232	960.000	264
<u>Post RA:</u>																
Long-Term Management	33.008	246	30.454	325	31.024	354	25.370	370	19.792	401	20.704	435	22.914	434	510.306	583
Project Closeout	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0
Post RA Subtotal	33.008	246	30.454	325	31.024	354	25.370	370	19.792	401	20.704	435	22.914	434	510.306	583
IRP Subtotal	225.008	522	251.146	680	213.625	719	210.089	692	189.611	695	181.563	700	142.593	669	1472.189	853
MMRP																
<u>Investigation:</u>																
Preliminary Assessment/Site Inspection	2.888	2	9.780	20	0.000	0	0.597	1	1.932	3	0.000	0	0.000	0	17.100	2
Remedial Investigation/Feasibility Study	27.281	43	11.453	35	10.821	38	13.006	35	7.701	17	35.410	23	58.143	29	160.828	26
Potentially Responsible Parties	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0
Investigation Subtotal	30.169	45	21.233	55	10.821	38	13.603	36	9.633	20	35.410	23	58.143	29	177.928	28
<u>Remedial Action (RA):</u>																
Interim Remedial Actions	31.024	7	14.889	9	29.347	6	10.086	6	2.529	3	0.000	0	3.761	4	93.818	6
Remedial Design (including ROD/DD)	7.198	4	2.185	14	1.081	17	1.593	23	1.321	14	1.807	16	3.827	22	18.372	34
Remedial Action Construction	6.702	3	16.725	21	20.451	21	24.814	20	45.072	25	77.214	41	95.385	39	1027.190	83
Remedial Action Operations	0.000	0	0.643	1	0.643	1	0.656	1	0.725	3	1.158	3	0.770	3	2.731	2
Potentially Responsible Parties	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0
RA Subtotal	44.924	14	34.442	45	51.522	45	37.149	50	49.647	45	80.179	60	103.743	68	1142.111	125

UNCLASSIFIED

ENV 30 DERA and BRAC Funds for Environmental Cleanup

(Current \$ Millions - Sites/Installations in Eaches)

Department of the Navy

	---- FY 18 ----		---- FY 19 ----		---- FY 20 ----		---- FY 21 ----		---- FY 22 ----		---- FY 23 ----		---- FY 24 ----		Balance to Complete	
	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>
Active																
<u>Post RA:</u>																
Long-Term Management	1.200	12	2.073	22	1.468	31	1.531	46	2.407	52	2.521	56	2.685	71	156.296	173
Project Closeout	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0
Post RA Subtotal	1.200	12	2.073	22	1.468	31	1.531	46	2.407	52	2.521	56	2.685	71	156.296	173
MMRP Subtotal	76.293	71	57.748	122	63.811	114	52.283	132	61.687	117	118.110	139	164.571	168	1476.335	326
IRP and MMRP Subtotal	301.301	593	308.894	802	277.436	833	262.372	824	251.298	812	299.673	839	307.164	837	2948.524	1179
Management																
DSMOA	12.274	-	9.000	-	11.000	-	9.000	-	10.700	-	11.500	-	11.500	-	82.877	-
ATSDR	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-
Manpower																
Government	36.560	-	36.133	-	35.812	-	35.736	-	35.906	-	37.682	-	37.667	-	305.334	-
Contractor	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-
Manpower Subtotal	36.560	-	36.133	-	35.812	-	35.736	-	35.906	-	37.682	-	37.667	-	305.334	-
Other	15.748	-	11.856	-	11.590	-	11.375	-	10.610	-	9.950	-	9.650	-	98.909	-
Management Subtotal	64.582	-	56.989	-	58.402	-	56.111	-	57.216	-	59.132	-	58.817	-	487.120	-
Active Environmental Restoration Total	365.883	593	365.883	802	335.838	833	318.483	824	308.514	812	358.805	839	365.981	837	3435.644	1179

UNCLASSIFIED

UNCLASSIFIED

ENV 30 DERA and BRAC Funds for Environmental Cleanup

(Current \$ Millions - Sites/Installations in Eaches)

Department of the Navy

	---- FY 18 ----		---- FY 19 ----		---- FY 20 ----		---- FY 21 ----		---- FY 22 ----		---- FY 23 ----		---- FY 24 ----		Balance to Complete	
	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>
BRAC																
BRAC																
IRP																
<u>Investigation:</u>																
Preliminary Assessment/Site Inspection	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0
Remedial Investigation/Feasibility Study	3.874	0	1.911	6	1.178	5	0.431	1	0.000	0	0.000	0	0.000	0	0.000	0
Investigation Subtotal	3.874	0	1.911	6	1.178	5	0.431	1	0.000	0	0.000	0	0.000	0	0.000	0
<u>Remedial Action (RA):</u>																
Interim Remedial Actions	1.047	4	1.449	3	1.244	2	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0
Remedial Design (including ROD/DD)	0.017	1	0.000	0	0.876	3	0.351	1	0.000	0	0.000	0	0.000	0	0.000	0
Remedial Action Construction	107.785	18	103.173	16	36.081	15	33.232	12	43.758	7	10.420	3	23.663	3	53.617	2
Remedial Action Operations	37.150	70	30.445	75	26.419	81	35.603	74	23.914	72	24.751	68	19.002	66	243.776	70
RA Subtotal	145.999	93	135.067	94	64.620	101	69.186	87	67.672	79	35.171	71	42.665	69	297.393	72
<u>Post RA:</u>																
Long-Term Management	14.778	39	10.068	41	15.851	60	12.041	49	9.670	54	10.997	60	8.172	52	136.206	87
Project Closeout	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0
Post RA Subtotal	14.778	39	10.068	41	15.851	60	12.041	49	9.670	54	10.997	60	8.172	52	136.206	87
IRP Subtotal	164.651	132	147.046	141	81.649	166	81.658	137	77.342	133	46.168	131	50.837	121	433.599	159
MMRP																
<u>Investigation:</u>																
Preliminary Assessment/Site Inspection	0.000	0	0.000	0	0.000	0	0.503	1	0.000	0	0.000	0	0.000	0	0.000	0
Remedial Investigation/Feasibility Study	2.374	6	4.682	4	1.471	5	0.000	0	0.000	0	1.468	1	0.368	1	0.000	0
Investigation Subtotal	2.374	6	4.682	4	1.471	5	0.503	1	0.000	0	1.468	1	0.368	1	0.000	0
<u>Remedial Action (RA):</u>																
Interim Remedial Actions	0.854	1	0.226	1	2.313	2	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0
Remedial Design (including ROD/DD)	0.000	0	0.000	0	1.043	2	0.315	2	0.000	0	0.000	0	0.000	0	0.000	0
Remedial Action Construction	13.024	2	10.216	4	19.255	4	10.403	3	13.694	7	2.135	1	0.000	0	0.000	0
Remedial Action Operations	0.027	1	0.000	0	0.027	1	0.000	0	0.000	0	0.153	1	0.200	1	0.459	1
RA Subtotal	13.905	4	10.442	5	22.638	9	10.718	5	13.694	7	2.288	2	0.200	1	0.459	1

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020

Latest Data Update: 1/7/2019

ENV 30 DERA and BRAC Funds for Environmental Cleanup

(Current \$ Millions - Sites/Installations in Eaches)

Department of the Navy

	---- FY 18 ----		---- FY 19 ----		---- FY 20 ----		---- FY 21 ----		---- FY 22 ----		---- FY 23 ----		---- FY 24 ----		Balance to Complete	
	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>	<u>\$ Millions</u>	<u># Sites</u>
BRAC																
BRAC																
MMRP (Continued)																
<u>Post RA:</u>																
Long-Term Management	0.774	4	0.091	3	0.642	8	0.357	10	1.642	16	0.945	17	0.440	18	14.440	21
Project Closeout	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0
Post RA Subtotal	0.774	4	0.091	3	0.642	8	0.357	10	1.642	16	0.945	17	0.440	18	14.440	21
MMRP Subtotal	17.053	14	15.215	12	24.751	22	11.578	16	15.336	23	4.701	20	1.008	20	14.899	22
IRP and MMRP Subtotal	181.704	146	162.261	153	106.400	188	93.236	153	92.678	156	50.869	151	51.845	141	448.498	181
Planning	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0
Compliance	0.000	0	0.585	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0
Management																
DSMOA	5.851	-	3.532	-	3.318	-	3.523	-	3.196	-	2.780	-	4.439	-	15.828	-
ATSDR	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-
Manpower																
Government	9.033	-	13.964	-	14.695	-	14.885	-	14.912	-	13.475	-	13.202	-	63.727	-
Contractor	3.134	-	1.160	-	0.970	-	0.893	-	0.802	-	0.823	-	0.527	-	5.513	-
Manpower Subtotal	12.167	-	15.124	-	15.665	-	15.778	-	15.714	-	14.298	-	13.729	-	69.240	-
EPA Funding	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-
Other	5.736	-	20.475	-	23.008	-	5.237	-	4.764	-	29.843	-	29.756	-	3.007	-
Management Subtotal	23.754	-	39.131	-	41.991	-	24.538	-	23.674	-	46.921	-	47.924	-	88.075	-
BRAC Total	205.458	146	201.977	153	148.391	188	117.774	153	116.352	156	97.790	151	99.769	141	536.573	181
Land Sale Revenue	10.000	-	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-
Prior Year Funds	11.881	-	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-	0.000	-
BRAC Appropriated Funding	183.577	146	201.977	153	148.391	188	117.774	153	116.352	156	97.790	151	99.769	141	536.573	181

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020

Latest Data Update: 2/15/2019

PB28 Environmental Quality Funding

(Current \$ Millions)

Department of the Navy**OPR & MAINT**

Active

Domestic**Compliance**Air

Stationary and Mobile Sources

5.496	5.016	6.083	5.765	6.202	6.325	6.450
-------	-------	-------	-------	-------	-------	-------

Compliance Cross-Cutting Programs

Compliance Education and Training

5.062	5.874	5.734	5.736	5.844	5.901	6.015
-------	-------	-------	-------	-------	-------	-------

Geospatial Information Systems (GIS) and Information Technology (IT)

3.236	2.681	2.567	2.609	2.641	2.679	2.733
-------	-------	-------	-------	-------	-------	-------

Multi-Program Management

9.280	9.157	8.913	8.499	8.857	8.890	8.781
-------	-------	-------	-------	-------	-------	-------

Total Compliance Cross-Cutting Programs

17.578	17.712	17.214	16.844	17.342	17.470	17.529
--------	--------	--------	--------	--------	--------	--------

Compliance Manpower

Compliance Manpower

98.304	104.185	136.789	138.883	141.833	144.654	147.280
--------	---------	---------	---------	---------	---------	---------

Compliance Other

Miscellaneous Compliance Activities

14.585	15.601	11.573	12.234	12.823	12.842	12.961
--------	--------	--------	--------	--------	--------	--------

Compliance Related Cleanup

Other Compliance-Related Assessment and Cleanup

3.757	3.095	2.391	2.449	2.587	2.671	2.741
-------	-------	-------	-------	-------	-------	-------

Planning

Environmental Impact Analysis

11.703	19.380	30.620	15.694	16.557	16.982	16.133
--------	--------	--------	--------	--------	--------	--------

Storage and Disposal

Hazardous Waste (RCRA - C)

37.578	61.009	67.786	42.518	43.201	42.659	43.223
--------	--------	--------	--------	--------	--------	--------

Solid Waste (RCRA - D)

0.172	0.046	2.504	2.630	2.605	2.657	2.710
-------	-------	-------	-------	-------	-------	-------

USTs (RCRA - I)

0.117	0.677	1.149	1.019	1.015	1.035	1.056
-------	-------	-------	-------	-------	-------	-------

Total Storage and Disposal

37.867	61.732	71.439	46.167	46.821	46.351	46.989
--------	--------	--------	--------	--------	--------	--------

Toxic Substances

Controlled Substances

1.404	1.450	0.000	0.000	0.000	0.000	0.000
-------	-------	-------	-------	-------	-------	-------

EPCRA Reporting (TRI and Tier I&II)

3.690	3.671	3.566	4.100	3.843	4.422	4.547
-------	-------	-------	-------	-------	-------	-------

Total Toxic Substances

5.094	5.121	3.566	4.100	3.843	4.422	4.547
-------	-------	-------	-------	-------	-------	-------

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020

Latest Data Update: 2/15/2019

PB28 Environmental Quality Funding(Current \$ Millions)
Department of the Navy

OPR & MAINT	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>
Active (Continued)							
<u>Domestic (Continued)</u>							
Compliance (Continued)							
<u>Water</u>							
Safe Drinking Water	1.791	2.542	2.107	2.054	1.918	1.956	1.995
Spill Prevention and Response/ASTs	12.917	12.371	10.384	10.450	10.628	10.745	10.959
Stormwater	11.678	10.088	11.180	12.308	12.644	12.897	13.155
Wastewater	11.139	9.908	14.140	11.559	12.494	12.986	13.212
Total Water	37.525	34.909	37.811	36.371	37.684	38.584	39.321
Total Compliance	231.909	266.751	317.486	278.507	285.692	290.301	293.951
Pollution Prevention							
<u>Pollution Prevention Other</u>							
Miscellaneous Pollution Prevention Activities	1.344	1.720	0.000	0.000	0.000	0.000	0.000
Total Pollution Prevention	1.344	1.720	0.000	0.000	0.000	0.000	0.000
Conservation							
<u>Archaeology</u>							
Archeological/ Curation	0.238	0.535	0.558	0.725	0.829	0.775	0.789
Tribal Consultation/ Repatriation	0.000	0.243	0.247	0.249	0.250	0.252	0.257
Total Archaeology	0.238	0.778	0.805	0.974	1.079	1.027	1.046
<u>Conservation Cross-Cutting Programs</u>							
Conservation Education and Training	0.012	0.073	0.069	0.067	0.067	0.065	0.066
<u>Conservation Manpower</u>							
Cultural Resources Manpower	3.232	3.967	5.640	5.741	5.878	5.993	6.135
Natural Resources Manpower	12.375	14.164	19.823	20.184	20.566	20.967	21.428
Total Conservation Manpower	15.607	18.131	25.463	25.925	26.444	26.960	27.563
<u>Cultural Resources Other</u>							
Miscellaneous Cultural Resources Activities	1.537	2.069	0.426	0.494	0.269	0.274	0.279
<u>Historic Structures</u>							
Historic Built Environment	0.238	0.620	0.848	1.082	1.074	0.958	0.978

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020

Latest Data Update: 2/15/2019

PB28 Environmental Quality Funding

(Current \$ Millions)

Department of the Navy

OPR & MAINT

Active (Continued)

Domestic (Continued)**Conservation (Continued)**Integrated Natural Resource Planning

Integrated Natural Resources Planning

Listed and At-Risk Species

Marine Mammal Protection

Threatened and Endangered Species; Candidate Species
and Species at Risk or Concern**Total Listed and At-Risk Species**Natural Resources Other

Miscellaneous Natural Resources Activities

Wetlands

Wetlands

Total Conservation**Total Domestic**

	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>
Integrated Natural Resources Planning	10.966	8.921	6.143	6.580	7.958	7.440	7.301
Marine Mammal Protection	12.346	11.459	12.004	12.504	12.509	12.768	13.288
Threatened and Endangered Species; Candidate Species and Species at Risk or Concern	30.470	23.602	23.544	26.435	25.448	26.961	27.972
Total Listed and At-Risk Species	42.816	35.061	35.548	38.939	37.957	39.729	41.260
Miscellaneous Natural Resources Activities	1.061	1.034	1.028	1.046	1.040	1.077	1.116
Wetlands	1.289	0.762	0.923	0.715	0.749	0.764	0.779
Total Conservation	73.764	67.449	71.253	75.822	76.637	78.294	80.388
Total Domestic	307.017	335.920	388.739	354.329	362.329	368.595	374.339

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020

Latest Data Update: 2/15/2019

PB28 Environmental Quality Funding

(Current \$ Millions)

Department of the Navy**OPR & MAINT**

Active (Continued)

Foreign**Compliance**Air

Stationary and Mobile Sources

0.378 0.064 0.124 0.194 0.272 0.277 0.283

Compliance Cross-Cutting Programs

Compliance Education and Training

0.110 0.112 0.170 0.174 0.178 0.182 0.186

Multi-Program Management

0.830 0.890 0.905 0.920 0.941 0.960 0.979

Total Compliance Cross-Cutting Programs**0.940 1.002 1.075 1.094 1.119 1.142 1.165**Compliance Manpower

Compliance Manpower

9.183 9.851 13.040 13.265 13.598 13.870 14.147

Compliance Other

Miscellaneous Compliance Activities

0.977 1.064 8.165 1.147 1.064 1.085 1.107

Storage and Disposal

Hazardous Waste (RCRA - C)

2.819 2.635 7.658 6.646 8.150 8.813 8.989

Solid Waste (RCRA - D)

0.687 0.089 1.029 1.016 1.291 1.317 1.343

USTs (RCRA - I)

0.092 0.080 0.469 0.201 0.214 0.218 0.222

Total Storage and Disposal**3.598 2.804 9.156 7.863 9.655 10.348 10.554**Toxic Substances

Controlled Substances

0.133 0.108 0.307 0.344 0.415 0.423 0.431

Water

Safe Drinking Water

1.483 1.222 2.291 2.306 2.373 2.420 2.468

Spill Prevention and Response/ASTs

0.961 1.092 0.491 0.499 0.528 0.539 0.550

Stormwater

0.329 0.088 0.104 0.215 0.200 0.204 0.208

Wastewater

0.516 0.205 0.780 0.498 0.890 0.908 0.926

Total Water**3.289 2.607 3.666 3.518 3.991 4.071 4.152****Total Compliance****18.498 17.500 35.533 27.425 30.114 31.216 31.839****Conservation**Conservation Cross-Cutting Programs

Conservation Education and Training

0.036 0.046 0.126 0.042 0.058 0.059 0.060

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020

Latest Data Update: 2/15/2019

PB28 Environmental Quality Funding

(Current \$ Millions)

Department of the Navy

OPR & MAINT

Active (Continued)

Foreign (Continued)**Conservation (Continued)**Conservation Manpower

Cultural Resources Manpower

Natural Resources Manpower

Total Conservation ManpowerCultural Resources Other

Miscellaneous Cultural Resources Activities

Integrated Natural Resource Planning

Integrated Natural Resources Planning

Listed and At-Risk SpeciesThreatened and Endangered Species; Candidate Species
and Species at Risk or ConcernNatural Resources Other

Miscellaneous Natural Resources Activities

Total Conservation**Total Foreign**

	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>
	0.233	0.287	0.291	0.296	0.250	0.255	0.260
	0.532	0.542	0.552	0.561	0.572	0.583	0.595
	0.765	0.829	0.843	0.857	0.822	0.838	0.855
	0.145	0.437	0.170	0.283	0.227	0.232	0.237
	0.269	0.448	0.473	0.547	0.622	0.634	0.647
	0.338	0.275	0.262	0.486	0.362	0.369	0.376
	0.014	0.014	0.015	0.015	0.015	0.015	0.015
	1.567	2.049	1.889	2.230	2.106	2.147	2.190
	20.065	19.549	37.422	29.655	32.220	33.363	34.029

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020
Latest Data Update: 2/15/2019

PB28 Environmental Quality Funding

(Current \$ Millions)
Department of the Navy

OPR & MAINT	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>
Active (Summary)							
Environmental Activity Cost Type Totals							
Compliance	250.407	284.251	353.019	305.932	315.806	321.517	325.790
Pollution Prevention	1.344	1.720	0.000	0.000	0.000	0.000	0.000
Conservation	75.331	69.498	73.142	78.052	78.743	80.441	82.578
Total	327.082	355.469	426.161	383.984	394.549	401.958	408.368
 Location Totals							
Domestic	307.017	335.920	388.739	354.329	362.329	368.595	374.339
Foreign	20.065	19.549	37.422	29.655	32.220	33.363	34.029
Total	327.082	355.469	426.161	383.984	394.549	401.958	408.368

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020
Latest Data Update: 2/15/2019**PB28 Environmental Quality Funding**(Current \$ Millions)
Department of the Navy

OPR & MAINT	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>
Reserve							
<u>Domestic</u>							
Compliance							
<u>Air</u>							
Stationary and Mobile Sources	0.192	0.000	0.003	0.000	0.011	0.011	0.011
<u>Compliance Cross-Cutting Programs</u>							
Multi-Program Management	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<u>Compliance Manpower</u>							
Compliance Manpower	2.315	2.219	2.260	2.302	2.354	2.403	2.442
<u>Compliance Other</u>							
Miscellaneous Compliance Activities	0.093	0.089	0.071	0.074	0.072	0.073	0.074
<u>Storage and Disposal</u>							
Hazardous Waste (RCRA - C)	0.325	0.235	0.211	0.208	0.204	0.208	0.223
Solid Waste (RCRA - D)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USTs (RCRA - I)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Storage and Disposal	0.325	0.235	0.211	0.208	0.204	0.208	0.223
<u>Toxic Substances</u>							
Controlled Substances	0.050	0.009	0.007	0.009	0.006	0.006	0.006
EPCRA Reporting (TRI and Tier I&II)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Toxic Substances	0.050	0.009	0.007	0.009	0.006	0.006	0.006
<u>Water</u>							
Safe Drinking Water	0.049	0.000	0.000	0.000	0.000	0.000	0.000
Spill Prevention and Response/ASTs	0.092	0.000	0.000	0.000	0.000	0.000	0.000
Stormwater	0.035	0.000	0.000	0.000	0.000	0.000	0.000
Wastewater	0.014	0.001	0.000	0.000	0.000	0.000	0.000
Total Water	0.190	0.001	0.000	0.000	0.000	0.000	0.000
Total Compliance	3.165	2.553	2.552	2.593	2.647	2.701	2.756
Conservation							
<u>Conservation Manpower</u>							
Natural Resources Manpower	0.038	0.033	0.141	0.143	0.146	0.149	0.152

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020

Latest Data Update: 2/15/2019

PB28 Environmental Quality Funding

(Current \$ Millions)

Department of the Navy

OPR & MAINT

Reserve (Continued)

Domestic (Continued)**Conservation (Continued)**Integrated Natural Resource Planning

Integrated Natural Resources Planning

0.050	0.063	0.071	0.069	0.070	0.077	0.073
-------	-------	-------	-------	-------	-------	-------

Listed and At-Risk SpeciesThreatened and Endangered Species; Candidate Species
and Species at Risk or Concern

0.000	0.000	0.004	0.007	0.008	0.003	0.008
-------	-------	-------	-------	-------	-------	-------

Natural Resources Other

Miscellaneous Natural Resources Activities

0.002	0.002	0.002	0.002	0.002	0.002	0.002
-------	-------	-------	-------	-------	-------	-------

Total Conservation

0.090	0.098	0.218	0.221	0.226	0.231	0.235
--------------	--------------	--------------	--------------	--------------	--------------	--------------

Total Domestic

3.255	2.651	2.770	2.814	2.873	2.932	2.991
--------------	--------------	--------------	--------------	--------------	--------------	--------------

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020

Latest Data Update: 2/15/2019

PB28 Environmental Quality Funding

(Current \$ Millions)

Department of the Navy

OPR & MAINT**Reserve (Summary)****Environmental Activity Cost Type Totals**

	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>
Compliance	3.165	2.553	2.552	2.593	2.647	2.701	2.756
Pollution Prevention	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Conservation	0.090	0.098	0.218	0.221	0.226	0.231	0.235
Total	3.255	2.651	2.770	2.814	2.873	2.932	2.991

Location Totals

Domestic	3.255	2.651	2.770	2.814	2.873	2.932	2.991
Foreign	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	3.255	2.651	2.770	2.814	2.873	2.932	2.991

UNCLASSIFIED

UNCLASSIFIED

PB28 Environmental Quality Funding

(Current \$ Millions)

Department of the Navy

PROCUREMENT

Active

Domestic**Compliance**Air

Stationary and Mobile Sources

6.442

7.990

7.940

2.031

0.000

0.000

0.000

Compliance Other

Miscellaneous Compliance Activities

10.718

8.175

6.450

8.235

8.124

7.822

7.980

Water

Spill Prevention and Response/ASTs

3.527

3.729

3.668

3.875

3.945

4.027

4.108

Wastewater

7.519

11.063

14.146

19.098

21.514

21.921

22.356

Total Water**11.046****14.792****17.814****22.973****25.459****25.948****26.464****Total Compliance****28.206****30.957****32.204****33.239****33.583****33.770****34.444****Total Domestic****28.206****30.957****32.204****33.239****33.583****33.770****34.444**

UNCLASSIFIED

PB28 Environmental Quality Funding
(Current \$ Millions)
Department of the Navy

PROCUREMENT	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>
Active (Continued)							
<u>Foreign</u>							
Compliance							
<u>Water</u>							
Spill Prevention and Response/ASTs	0.824	0.814	0.789	0.802	0.817	0.835	0.851
Total Compliance	0.824	0.814	0.789	0.802	0.817	0.835	0.851
Total Foreign	0.824	0.814	0.789	0.802	0.817	0.835	0.851

UNCLASSIFIED

Budget Position: PB2020
Latest Data Update: 2/15/2019

PB28 Environmental Quality Funding

(Current \$ Millions)
Department of the Navy

PROCUREMENT

Active (Summary)

Environmental Activity Cost Type Totals

	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>
Compliance	29.030	31.771	32.993	34.041	34.400	34.605	35.295
Pollution Prevention	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Conservation	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	29.030	31.771	32.993	34.041	34.400	34.605	35.295

Location Totals

Domestic	28.206	30.957	32.204	33.239	33.583	33.770	34.444
Foreign	0.824	0.814	0.789	0.802	0.817	0.835	0.851
Total	29.030	31.771	32.993	34.041	34.400	34.605	35.295

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020

Latest Data Update: 2/15/2019

PB28 Environmental Quality Funding

(Current \$ Millions)

Department of the Navy

RDT&E	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>
Active							
Domestic							
Compliance							
Air							
Stationary and Mobile Sources	0.623	0.624	0.636	0.645	0.658	0.671	0.685
Compliance Cross-Cutting Programs							
Geospatial Information Systems (GIS) and Information Technology (IT)	0.092	0.092	0.092	0.092	0.094	0.096	0.096
Multi-Program Management	0.060	0.063	0.066	0.068	0.069	0.070	0.072
Total Compliance Cross-Cutting Programs	0.152	0.155	0.158	0.160	0.163	0.166	0.168
Compliance Manpower							
Compliance Manpower	0.449	0.452	0.477	0.482	0.492	0.502	0.506
Compliance Other							
Miscellaneous Compliance Activities	0.076	0.079	0.082	0.085	0.087	0.089	0.090
Planning							
Environmental Impact Analysis	0.684	0.687	0.689	0.697	0.711	0.725	0.530
Total Compliance	1.984	1.997	2.042	2.069	2.111	2.153	1.979
Pollution Prevention							
Pollution Prevention Projects							
Air Pollution Reduction	0.006	0.005	0.005	0.005	0.005	0.005	0.005
Hazardous Material / Hazardous and Solid Waste Reduction	0.060	0.065	0.067	0.072	0.073	0.075	0.079
Total Pollution Prevention Projects	0.066	0.070	0.072	0.077	0.078	0.080	0.084
Total Pollution Prevention	0.066	0.070	0.072	0.077	0.078	0.080	0.084
Conservation							
Archaeology							
Archeological/ Curation	0.590	0.606	0.650	0.685	0.705	0.728	0.736

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020

Latest Data Update: 2/15/2019

PB28 Environmental Quality Funding

(Current \$ Millions)

Department of the Navy

RDT&E

Active (Continued)

Domestic (Continued)**Conservation (Continued)****Conservation Manpower**

Cultural Resources Manpower

Natural Resources Manpower

Total Conservation Manpower**Cultural Resources Other**

Miscellaneous Cultural Resources Activities

Listed and At-Risk SpeciesThreatened and Endangered Species; Candidate Species
and Species at Risk or Concern**Total Conservation****Total Domestic**

	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>
	0.536	0.514	0.549	0.551	0.556	0.558	0.585
	0.714	0.719	0.747	0.755	0.770	0.785	0.795
	1.250	1.233	1.296	1.306	1.326	1.343	1.380
	0.037	0.038	0.039	0.039	0.040	0.041	0.045
	0.035	0.040	0.042	0.042	0.043	0.044	0.044
	1.912	1.917	2.027	2.072	2.114	2.156	2.205
	3.962	3.984	4.141	4.218	4.303	4.389	4.268

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020

Latest Data Update: 2/15/2019

PB28 Environmental Quality Funding

(Current \$ Millions)

Department of the Navy

RDT&E	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>
Active (Continued)							
<u>Foreign</u>							
Compliance							
<u>Compliance Other</u>							
Miscellaneous Compliance Activities	0.091	0.095	0.101	0.104	0.106	0.108	0.109
<u>Storage and Disposal</u>							
Solid Waste (RCRA - D)	0.318	0.320	0.329	0.338	0.345	0.352	0.360
<u>Water</u>							
Safe Drinking Water	0.016	0.017	0.017	0.018	0.018	0.019	0.020
Total Compliance	0.425	0.432	0.447	0.460	0.469	0.479	0.489
Conservation							
<u>Natural Resources Other</u>							
Miscellaneous Natural Resources Activities	0.062	0.065	0.066	0.070	0.071	0.072	0.073
Total Conservation	0.062	0.065	0.066	0.070	0.071	0.072	0.073
Total Foreign	0.487	0.497	0.513	0.530	0.540	0.551	0.562

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020
Latest Data Update: 2/15/2019

PB28 Environmental Quality Funding

(Current \$ Millions)
Department of the Navy

RDT&E	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>
Active (Summary)							
Environmental Activity Cost Type Totals							
Compliance	2.409	2.429	2.489	2.529	2.580	2.632	2.468
Pollution Prevention	0.066	0.070	0.072	0.077	0.078	0.080	0.084
Conservation	1.974	1.982	2.093	2.142	2.185	2.228	2.278
Total	4.449	4.481	4.654	4.748	4.843	4.940	4.830
 Location Totals							
Domestic	3.962	3.984	4.141	4.218	4.303	4.389	4.268
Foreign	0.487	0.497	0.513	0.530	0.540	0.551	0.562
Total	4.449	4.481	4.654	4.748	4.843	4.940	4.830

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020
Latest Data Update: 2/15/2019**PB28 Environmental Quality Funding**(Current \$ Millions)
Department of the Navy**REV & MGT FNDS**

Active

Domestic**Compliance**Air

Stationary and Mobile Sources

0.239 0.248 0.194 0.196 0.200 0.203 0.205

Compliance Cross-Cutting Programs

Compliance Education and Training

0.498 0.503 0.344 0.370 0.376 0.383 0.390

Geospatial Information Systems (GIS) and Information
Technology (IT)

0.000 0.005 0.005 0.005 0.005 0.005 0.005

Multi-Program Management

0.476 0.485 0.000 0.000 0.000 0.000 0.000

Total Compliance Cross-Cutting Programs**0.974 0.993 0.349 0.375 0.381 0.388 0.395**Compliance Manpower

Compliance Manpower

22.091 23.229 14.116 14.994 15.166 15.336 15.516

Compliance Other

Miscellaneous Compliance Activities

10.318 10.403 4.177 4.080 4.123 4.197 4.255

Compliance Related Cleanup

Other Compliance-Related Assessment and Cleanup

1.810 1.780 1.760 2.796 2.838 2.881 2.924

Planning

Environmental Impact Analysis

7.360 7.494 2.218 2.247 2.277 2.322 2.357

Storage and Disposal

Hazardous Waste (RCRA - C)

13.822 13.480 4.326 4.361 4.398 4.437 4.472

Solid Waste (RCRA - D)

8.669 8.794 0.949 0.964 0.980 0.998 1.015

USTs (RCRA - I)

1.832 1.843 1.583 1.585 1.589 1.621 1.647

Total Storage and Disposal**24.323 24.117 6.858 6.910 6.967 7.056 7.134**Toxic Substances

Controlled Substances

0.000 0.004 0.004 0.004 0.004 0.004 0.004

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020

Latest Data Update: 2/15/2019

PB28 Environmental Quality Funding

(Current \$ Millions)

Department of the Navy

REV & MGT FNDS

Active (Continued)

Domestic (Continued)**Compliance (Continued)**Water

Safe Drinking Water

Spill Prevention and Response/ASTs

Stormwater

Wastewater

Total Water**Total Compliance****Pollution Prevention**Pollution Prevention Manpower

Pollution Prevention Manpower

Pollution Prevention Other

Miscellaneous Pollution Prevention Activities

Pollution Prevention Projects

Air Pollution Reduction

Hazardous Material / Hazardous and Solid Waste
Reduction

Water Pollution Reduction

Total Pollution Prevention Projects**Total Pollution Prevention****Conservation**Conservation Manpower

Cultural Resources Manpower

Natural Resources Manpower

Total Conservation ManpowerCultural Resources Other

Miscellaneous Cultural Resources Activities

<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>
0.366	0.355	0.297	0.327	0.305	0.310	0.314
1.425	1.446	1.474	1.502	1.530	1.560	1.589
0.016	0.060	0.061	0.062	0.063	0.064	0.065
1.658	2.109	2.145	2.145	2.145	2.149	2.151
3.465	3.970	3.977	4.036	4.043	4.083	4.119
70.580	72.238	33.653	35.638	35.999	36.470	36.909
0.162	0.153	0.156	0.158	0.161	0.164	0.168
0.057	0.056	0.057	0.058	0.059	0.061	0.062
0.122	0.149	0.150	0.153	0.156	0.158	0.161
0.303	0.335	0.342	0.349	0.356	0.363	0.370
2.393	2.478	2.483	2.503	2.512	2.554	2.587
2.818	2.962	2.975	3.005	3.024	3.075	3.118
3.037	3.171	3.188	3.221	3.244	3.300	3.348
0.032	0.033	0.034	0.034	0.035	0.036	0.037
0.057	0.048	0.048	0.049	0.050	0.050	0.051
0.089	0.081	0.082	0.083	0.085	0.086	0.088
0.326	0.330	0.332	0.334	0.337	0.342	0.347

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020

Latest Data Update: 2/15/2019

PB28 Environmental Quality Funding

(Current \$ Millions)

Department of the Navy

REV & MGT FNDS

Active (Continued)

Domestic (Continued)**Conservation (Continued)****Integrated Natural Resource Planning**

Integrated Natural Resources Planning

0.677 1.125 1.146 1.169 1.192 1.216 1.240

Natural Resources Other

Miscellaneous Natural Resources Activities

0.063 0.064 0.064 0.064 0.065 0.066 0.067

Wetlands

Wetlands

0.492 0.499 0.500 0.501 0.506 0.517 0.524

Total Conservation

1.647 2.099 2.124 2.151 2.185 2.227 2.266

Total Domestic

75.264 77.508 38.965 41.010 41.428 41.997 42.523

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020

Latest Data Update: 2/15/2019

PB28 Environmental Quality Funding(Current \$ Millions)
Department of the Navy**REV & MGT FNDS**

Active (Continued)

Foreign**Compliance**Air

Stationary and Mobile Sources

0.009 0.009 0.006 0.006 0.006 0.006 0.006

Compliance Cross-Cutting Programs

Compliance Education and Training

0.105 0.107 0.000 0.000 0.000 0.000 0.000

Compliance Manpower

Compliance Manpower

1.221 1.243 0.000 0.000 0.000 0.000 0.000

Compliance Other

Miscellaneous Compliance Activities

0.454 0.462 0.128 0.128 0.130 0.132 0.133

Planning

Environmental Impact Analysis

0.975 0.993 0.046 0.046 0.047 0.048 0.048

Storage and Disposal

Hazardous Waste (RCRA - C)

3.518 3.581 0.000 0.000 0.000 0.000 0.000

Solid Waste (RCRA - D)

0.059 0.060 0.005 0.005 0.005 0.005 0.005

USTs (RCRA - I)

0.016 0.017 0.017 0.017 0.017 0.017 0.018

Total Storage and Disposal**3.593 3.658 0.022 0.022 0.022 0.022 0.023**Water

Safe Drinking Water

0.013 0.013 0.013 0.013 0.013 0.013 0.013

Wastewater

0.015 0.015 0.015 0.015 0.015 0.015 0.015

Total Water**0.028 0.028 0.028 0.028 0.028 0.028 0.028****Total Compliance****6.385 6.500 0.230 0.230 0.233 0.236 0.238****Pollution Prevention**Pollution Prevention Other

Miscellaneous Pollution Prevention Activities

0.121 0.122 0.122 0.123 0.125 0.126 0.126

Pollution Prevention ProjectsHazardous Material / Hazardous and Solid Waste
Reduction

0.036 0.037 0.037 0.037 0.038 0.039 0.039

Total Pollution Prevention**0.157 0.159 0.159 0.160 0.163 0.165 0.165**

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020
Latest Data Update: 2/15/2019

PB28 Environmental Quality Funding

(Current \$ Millions)
Department of the Navy

REV & MGT FNDS

Active (Continued)

Foreign (Continued)

Conservation

Cultural Resources Other

Miscellaneous Cultural Resources Activities

Natural Resources Other

Miscellaneous Natural Resources Activities

Total Conservation

Total Foreign

<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>
0.007	0.007	0.007	0.007	0.007	0.007	0.007
0.004	0.005	0.005	0.005	0.005	0.005	0.005
0.011	0.012	0.012	0.012	0.012	0.012	0.012
6.553	6.671	0.401	0.402	0.408	0.413	0.415

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020

Latest Data Update: 2/15/2019

PB28 Environmental Quality Funding

(Current \$ Millions)

Department of the Navy

REV & MGT FNDS**Active (Summary)****Environmental Activity Cost Type Totals**

Compliance

Pollution Prevention

Conservation

Total

<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>
76.965	78.738	33.883	35.868	36.232	36.706	37.147
3.194	3.330	3.347	3.381	3.407	3.465	3.513
1.658	2.111	2.136	2.163	2.197	2.239	2.278
81.817	84.179	39.366	41.412	41.836	42.410	42.938

Location Totals

Domestic

Foreign

Total

75.264	77.508	38.965	41.010	41.428	41.997	42.523
6.553	6.671	0.401	0.402	0.408	0.413	0.415
81.817	84.179	39.366	41.412	41.836	42.410	42.938

NAVY TOTALS**Environmental Activity Cost Type Totals**

Compliance

Pollution Prevention

Conservation

Total

361.976	399.742	424.936	380.963	391.665	398.161	403.456
4.604	5.120	3.419	3.458	3.485	3.545	3.597
79.053	73.689	77.589	82.578	83.351	85.139	87.369
445.633	478.551	505.944	466.999	478.501	486.845	494.422

Location Totals

Domestic

Foreign

Total

417.704	451.020	466.819	435.610	444.516	451.683	458.565
27.929	27.531	39.125	31.389	33.985	35.162	35.857
445.633	478.551	505.944	466.999	478.501	486.845	494.422

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020

Latest Data Update: 2/6/2019

PB28A Environmental Technology

(Current \$ Millions)

Department of the Navy

APPROPRIATION TOTALS	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
RDT&E, NAVY							
Cleanup	0.717	0.640	0.666	0.918	0.936	0.954	0.973
Compliance	26.763	27.185	28.136	26.555	27.077	27.353	27.633
Pollution Prevention	6.090	5.910	7.706	6.424	6.469	6.598	6.733
Unexploded Ordnance	0.717	0.640	0.666	0.918	0.936	0.954	0.973
Total	34.287	34.375	37.174	34.815	35.418	35.859	36.312
Grand Total	34.287	34.375	37.174	34.815	35.418	35.859	36.312

UNCLASSIFIED

UNCLASSIFIED

Budget Position: PB2020

Latest Data Update: 2/6/2019

PB28A Environmental Technology

(Current \$ Millions)

Department of the Navy

ENVIRONMENTAL PROGRAM TOTALS

Cleanup	0.717	0.640	0.666	0.918	0.936	0.954	0.973
Compliance	26.763	27.185	28.136	26.555	27.077	27.353	27.633
Pollution Prevention	6.090	5.910	7.706	6.424	6.469	6.598	6.733
Unexploded Ordnance	0.717	0.640	0.666	0.918	0.936	0.954	0.973
Grand Total	34.287	34.375	37.174	34.815	35.418	35.859	36.312

UNCLASSIFIED

DEPARTMENT OF THE NAVY
Exhibit PB-34A: REVENUE FROM LEASING OUT OF DEPARTMENT OF DEFENSE REAL PROPERTY
FY 2020 PRESIDENT'S BUDGET

	<u>(\$ in Thousands)</u>		
	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Total Revenue from Lease of DoD Real Property	\$ 13,955	\$ 14,234	\$14,519

DEPARTMENT OF THE NAVY
Exhibit PB-34B: PROCEEDS FROM DISPOSAL OF DEPARTMENT OF DEFENSE REAL PROPERTY
FY 2020 PRESIDENT'S BUDGET

DISPOSAL ACTION	<u>(Proceeds in \$ Thousands)</u>		
	FY 2018	FY 2019	FY 2020
1. Special legislation (this property will be conveyed by March 2018)	\$ 650	\$ -	\$ -
(a) Ohana Nui, Joint Base Pearl Harbor-Hickam (JBPHH); Hawaii; Land under lessee owned improvements			
(b) Planned: Facility M&R / environmental restoration per 40 USC 572(b)(5)(B)(ii)			
2. Disposal of excess property by GSA. (Actual amount of proceeds will be determined by GSA and the method of disposal.)	\$ -	\$ -	\$ -
(a) NAVSTA New London; Connecticut; Bldgs. 1001 and 1004			
(b) Planned: Facility M&R / environmental restoration per 40 USC 572(b)(5)(B)(ii)			
3. Disposal of excess property by GSA. (Actual amount of proceeds will be determined by GSA and the method of disposal.)	\$ -	\$ 4,000	\$ -
(a) NIOC Sugar Grove; West Virginia; Disposal of Lower Base			
(b) Planned: Facility M&R / environmental restoration per 40 USC 572(b)(5)(B)(ii)			
4. Disposal of excess property by GSA. (Actual amount of proceeds will be determined by GSA and the method of disposal.)	\$ -	\$ 4,000	\$ -
(a) NSA Mid-South; Tennessee; President's Island			
(b) Planned: Facility M&R / environmental restoration per 40 USC 572(b)(5)(B)(ii)			
Total Department of the Navy:	\$ 650	\$ 8,000	\$ -

UNCLASSIFIED

OP-34 Fund Support for Quality of Life Activities

The Exhibit OP-34 displays total appropriated fund support for the Navy managed Morale, Welfare, and Recreation (MWR) programs. In accordance with DoDI 1015.10, MWR programs are vital to mission accomplishment and form an integral part of the non-pay compensation system. These programs provide a sense of community among patrons and provide support services commonly furnished by other employers, or other State and local governments to their employees and citizens. The MWR programs encourage positive individual values, build resilience, and impact mission readiness. For Navy MWR programs, no funding changes equal to greater than 10% exist between FY 2018, FY 2019, and FY 2020.

OP-34 Fund Support for Quality of Life Activities

Department of the Navy
(Current \$ Millions - Manpower in Eaches)

	<u>FY 18</u>	<u>FY 19</u>	<u>FY 20</u>	<u>FY 21</u>	<u>FY 22</u>	<u>FY 23</u>	<u>FY 24</u>
<u>1205 MIL CON, NAVY</u>							
Child Development and Youth Programs							
<u>Child Development Program (MWR Category</u>							
CD1 Child Development Centers (CDC)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
 Total Support - Revenue-Generating Programs	0.000	0.000	0.000	0.000	0.000	0.000	0.000

UNCLASSIFIED

OP-34 Fund Support for Quality of Life ActivitiesDepartment of the Navy
(Current \$ Millions - Manpower in Eaches)

	<u>FY 18</u>	<u>FY 19</u>	<u>FY 20</u>	<u>FY 21</u>	<u>FY 22</u>	<u>FY 23</u>	<u>FY 24</u>
<u>1804 O&M, NAVY</u>							
Military MWR Programs (without Child Development Program, Youth Program, and Warfighter and Family Support)							
<u>Category A--Mission Sustaining Programs</u>							
A.1 Armed Forces Entertainment	4.527	4.779	4.137	4.300	0.000	0.000	0.000
A.2 Free Admission Motion Pictures	6.500	6.862	5.941	6.174	0.000	0.000	0.000
A.3 Physical Fitness	39.688	41.896	36.273	37.695	0.000	0.000	0.000
A.4 Aquatic Training	2.582	2.726	2.360	2.452	0.000	0.000	0.000
A.5 Library Programs & Information Services (Recreation)	4.658	4.917	4.257	4.424	0.000	0.000	0.000
A.6 On-Installation Parks and Picnic Areas	0.906	0.956	0.828	0.861	0.000	0.000	0.000
A.7 Category A Recreation Centers (Military Personnel)	0.255	0.269	0.233	0.242	0.000	0.000	0.000
A.8 Single Service Member Program	6.304	6.655	5.762	5.987	0.000	0.000	0.000
A.9 Shipboard, Company, and/or Unit Level Programs	10.617	11.208	9.703	10.084	0.000	0.000	0.000
A.10 Sports and Athletics	6.281	6.630	5.741	5.966	0.000	0.000	0.000
Cat. A - Direct Program Operation	0.000	0.000	0.000	0.000	196.764	201.379	205.602
Total Cat. A - Direct Program Operation	82.318	86.898	75.235	78.185	196.764	201.379	205.602
Cat. A - Direct Overhead	115.741	121.319	105.035	109.153	0.000	0.000	0.000
Total Direct Support	198.059	208.217	180.270	187.338	196.764	201.379	205.602
Cat. A - OCO 19	0.000	9.096	0.000	0.000	0.000	0.000	0.000
Cat. A - OCO 18	9.162	0.000	0.000	0.000	0.000	0.000	0.000
Cat. A - OCO 20	0.000	0.000	9.096	0.000	0.000	0.000	0.000
Total Support - Mission Sustaining Programs	207.221	217.313	189.366	187.338	196.764	201.379	205.602
USA/UFM Practice (memo)	153.181	169.562	153.370	159.573	160.837	164.619	168.083
<u>Category B--Community Support</u>							
B.1 Programs							
B.1.1 Community Programs	30.841	32.557	28.187	29.292	0.000	0.000	0.000
B.1.2 Category B Recreation Center (Military & Family Members)	0.052	0.055	0.048	0.049	0.000	0.000	0.000
B.2 Programs							
B.2.2 Recreation Information, Tickets, Tours and Travel Services	0.438	0.462	0.400	0.416	0.000	0.000	0.000
B.2.3 Recreational Swimming	0.166	0.175	0.152	0.158	0.000	0.000	0.000

UNCLASSIFIED

UNCLASSIFIED

OP-34 Fund Support for Quality of Life ActivitiesDepartment of the Navy
(Current \$ Millions - Manpower in Eaches)

	<u>FY 18</u>	<u>FY 19</u>	<u>FY 20</u>	<u>FY 21</u>	<u>FY 22</u>	<u>FY 23</u>	<u>FY 24</u>
<u>1804 O&M, NAVY (Continued)</u>							
Military MWR Programs (without Child Development Program, Youth Program, and Warfighter and Family Support) (Continued)							
<u>Category B--Community Support Programs</u>							
B.3 Programs							
B.3.1 Directed Outdoor Recreation	0.234	0.247	0.214	0.222	0.000	0.000	0.000
B.3.3 Boating Program (Checkout and Lessons)	0.465	0.491	0.425	0.442	0.000	0.000	0.000
B.4 Programs							
B.4.3 Arts and Crafts Skill Development	0.052	0.055	0.048	0.049	0.000	0.000	0.000
B.4.4 Automotive Skill Development	1.605	1.694	1.467	1.524	0.000	0.000	0.000
B.4.5 Bowling (16 lanes or less)	1.975	2.085	1.805	1.876	0.000	0.000	0.000
Cat. B - Direct Program Operation	0.000	0.000	0.000	0.000	35.899	36.741	37.511
Total Cat. B - Direct Program Operation	35.828	37.821	32.746	34.028	35.899	36.741	37.511
Total Direct Support	35.828	37.821	32.746	34.028	35.899	36.741	37.511
Total Funding	35.828	37.821	32.746	34.028	35.899	36.741	37.511
USA/UFM Practice (memo)	33.670	37.270	32.463	33.641	33.579	34.804	35.536
<u>Category C--Revenue-Generating Programs</u>							
C.1 Programs							
C.1.1 Military Clubs (Membership and Non-Membership)	0.096	0.101	0.088	0.091	0.000	0.000	0.000
C.1.2 Food, Beverage, and Entertainment Programs	0.090	0.095	0.082	0.085	0.000	0.000	0.000
C.2 Programs							
C.2.3 Joint Service Facilities and/or AFRCs	0.322	0.340	0.294	0.306	0.000	0.000	0.000
C.4 Programs							
C.4.3 Bowling (Over 16 lanes)	0.125	0.132	0.114	0.119	0.000	0.000	0.000
C.4.4 Golf	0.187	0.197	0.171	0.178	0.000	0.000	0.000
C.4.8 Vehicle Storage	0.035	0.037	0.032	0.033	0.000	0.000	0.000
Cat. C - Direct Program Operation	0.000	0.000	0.000	0.000	0.853	0.873	0.891
Total Cat. C - Direct Program Operation	0.855	0.902	0.781	0.812	0.853	0.873	0.891
Cat. C - Direct Overhead	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Direct Support	0.855	0.902	0.781	0.812	0.853	0.873	0.891

UNCLASSIFIED

UNCLASSIFIED

OP-34 Fund Support for Quality of Life ActivitiesDepartment of the Navy
(Current \$ Millions - Manpower in Eaches)

	<u>FY 18</u>	<u>FY 19</u>	<u>FY 20</u>	<u>FY 21</u>	<u>FY 22</u>	<u>FY 23</u>	<u>FY 24</u>
<u>1804 O&M, NAVY (Continued)</u>							
Military MWR Programs (without Child Development Program, Youth Program, and Warfighter and Family Support) (Continued)							
<u>Category C--Revenue-Generating Programs</u>							
Total Support - Revenue-Generating Programs	0.855	0.902	0.781	0.812	0.853	0.873	0.891
USA/UFM Practice (memo)	1.751	1.938	1.753	1.824	1.839	1.882	1.921
Lodging Program							
<u>TDY</u>							
TDY Lodging - Direct Program Operation	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Funding	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Military Services Exchange							
<u>Military Services Exchange - N/A</u>							
Military Services Exchange - Direct Overhead	68.026	76.419	67.818	69.175	70.558	71.969	73.409
Total Funding	68.026	76.419	67.818	69.175	70.558	71.969	73.409
Wounded Warrior Care and Transition Policy							
<u>Wounded Warrior Care and Transition Policy -</u>							
Wounded Warrior Care and Transition Policy	6.507	6.720	6.699	6.494	6.747	6.727	6.864
Total Funding	6.507	6.720	6.699	6.494	6.747	6.727	6.864
Warfighter and Family Services (WFS)							
<u>Warfighter and Family Services</u>							
Warfighter and Family Services (Non-MWR) - Direct Program Operation	0.451	0.546	0.544	0.549	0.562	0.573	0.584
Total Funding	0.451	0.546	0.544	0.549	0.562	0.573	0.584
<u>Warfighter and Family Services (MWR Category</u>							
Warfighter and Family Services (MWR Cat. A) - Direct Program Operation	97.985	100.724	102.333	103.966	107.205	108.909	109.862
Warfighter and Family Services (MWR Cat. A) - Direct Overhead	11.038	11.379	11.570	11.786	12.062	12.257	12.368
Warfighter and Family Services (MWR Cat. A) - OCO 19	0.000	1.132	0.000	0.000	0.000	0.000	0.000
Warfighter and Family Services (MWR Cat. A) - OCO 18	0.393	0.000	0.000	0.000	0.000	0.000	0.000
Warfighter and Family Services (MWR Cat. A) - OCO 20	0.000	0.000	0.701	0.000	0.000	0.000	0.000

UNCLASSIFIED

UNCLASSIFIED

OP-34 Fund Support for Quality of Life Activities**Department of the Navy
(Current \$ Millions - Manpower in Eaches)**

	<u>FY 18</u>	<u>FY 19</u>	<u>FY 20</u>	<u>FY 21</u>	<u>FY 22</u>	<u>FY 23</u>	<u>FY 24</u>
<u>1804 O&M, NAVY (Continued)</u>							
Warfighter and Family Services (WFS) (Continued)							
<u>Warfighter and Family Services (MWR Category A)</u>							
Total Funding	109.416	113.235	114.604	115.752	119.267	121.166	122.230
USA/UFM Practice (memo)	63.059	64.320	65.607	66.919	68.257	69.622	71.015
Off Duty and Voluntary Education							
<u>Other Voluntary Education</u>							
Other Ed Pgms - Direct Program Operation	4.184	8.977	9.147	8.384	8.690	8.874	9.047
Total Funding	4.184	8.977	9.147	8.384	8.690	8.874	9.047
<u>Tuition Assistance (without Child Development and Youth</u>							
Tuition Asst - Direct Program Operation	90.863	75.239	70.234	63.542	66.068	67.558	69.032
Total Funding	90.863	75.239	70.234	63.542	66.068	67.558	69.032
Child Development and Youth Programs							
<u>Youth Program (MWR Category</u>							
Youth Program - Direct Program Operation	9.978	9.803	9.999	9.199	9.382	9.570	9.762
Youth Program - Direct Overhead	0.569	0.580	0.591	0.603	0.615	0.628	0.640
Total Funding	10.547	10.383	10.590	9.802	9.997	10.198	10.402
USA/UFM Practice (memo)	10.547	9.700	10.590	9.802	9.997	10.198	10.402
<u>Child Development Program (MWR Category</u>							
CD1 Child Development Centers (CDC)	192.273	166.968	188.815	192.392	199.183	199.980	203.975
CD2 Family Child Care (FCC)	7.685	7.900	7.995	8.155	8.318	8.484	8.654
CD3 Supplemental Program/Resource & Referral/Other (PVV)	7.447	10.000	36.500	37.230	37.975	38.735	39.510
CD4 School Aged Care (SAC)	23.822	23.514	23.984	24.464	24.953	24.697	25.190
Total Direct Support	231.227	208.382	257.294	262.241	270.429	271.896	277.329
Child Development - Direct Overhead	2.354	2.219	2.245	2.289	2.335	2.382	2.430
Total Support - Revenue-Generating Programs	233.581	210.601	259.539	264.530	272.764	274.278	279.759
USA/UFM Practice (memo)	187.824	200.551	242.325	248.268	256.921	258.950	264.947

UNCLASSIFIED

UNCLASSIFIED

OP-34 Fund Support for Quality of Life ActivitiesDepartment of the Navy
(Current \$ Millions - Manpower in Eaches)

	<u>FY 18</u>	<u>FY 19</u>	<u>FY 20</u>	<u>FY 21</u>	<u>FY 22</u>	<u>FY 23</u>	<u>FY 24</u>
<u>1806 O&M, NAVY RES</u>							
Military MWR Programs (without Child Development Program, Youth Program, and Warfighter and Family Support)							
<u>Category A--Mission Sustaining Programs</u>							
A.3 Physical Fitness	6.197	8.192	7.990	8.115	0.000	0.000	0.000
A.5 Library Programs & Information Services (Recreation)	0.365	0.483	0.471	0.478	0.000	0.000	0.000
Cat. A - Direct Program Operation	0.000	0.000	0.000	0.000	8.701	8.786	8.967
Total Cat. A - Direct Program Operation	6.562	8.675	8.461	8.593	8.701	8.786	8.967
Total Direct Support	6.562	8.675	8.461	8.593	8.701	8.786	8.967
Total Support - Mission Sustaining Programs	6.562	8.675	8.461	8.593	8.701	8.786	8.967
USA/UFM Practice (memo)	8.076	8.237	8.048	8.195	8.297	8.379	8.552
<u>Category B--Community Support</u>							
Cat. B - Direct Program Operation	0.000	0.000	0.000	0.000	2.059	2.079	2.122
Total Cat. B - Direct Program Operation	0.000	0.000	0.000	0.000	2.059	2.079	2.122
Total Funding	0.000	0.000	0.000	0.000	2.059	2.079	2.122
USA/UFM Practice (memo)	1.384	1.412	1.379	1.404	1.422	1.436	1.466
Lodging Program							
<u>TDY</u>							
TDY Lodging - Direct Program Operation	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Funding	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Warfighter and Family Services (WFS)							
<u>Warfighter and Family Services (MWR Category)</u>							
Warfighter and Family Services (MWR Cat. A) - Direct Overhead	1.262	1.424	1.414	1.408	1.447	1.464	1.497
Total Funding	1.262	1.424	1.414	1.408	1.447	1.464	1.497
USA/UFM Practice (memo)	1.063	1.084	1.106	1.128	1.151	1.174	1.197
Child Development and Youth Programs							
<u>Youth Program (MWR Category)</u>							
Youth Program - Direct Program Operation	0.221	0.225	0.118	0.102	0.072	0.030	0.038

UNCLASSIFIED

UNCLASSIFIED

OP-34 Fund Support for Quality of Life ActivitiesDepartment of the Navy
(Current \$ Millions - Manpower in Eaches)

	<u>FY 18</u>	<u>FY 19</u>	<u>FY 20</u>	<u>FY 21</u>	<u>FY 22</u>	<u>FY 23</u>	<u>FY 24</u>
<u>1806 O&M, NAVY RES (Continued)</u>							
Child Development and Youth Programs (Continued)							
<u>Youth Program (MWR Category B)</u>							
Total Funding	0.221	0.225	0.118	0.102	0.072	0.030	0.038
USA/UFM Practice (memo)	0.154	0.200	0.160	0.163	0.166	0.170	0.173
<u>Child Development Program (MWR Category A)</u>							
CD1 Child Development Centers (CDC)	6.408	4.055	4.118	4.188	4.272	4.357	4.442
CD2 Family Child Care (FCC)	0.011	0.011	0.000	0.000	0.000	0.000	0.000
CD3 Supplemental Program/Resource & Referral/Other (PVV)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CD4 School Aged Care (SAC)	0.516	0.526	0.536	0.546	0.557	0.568	0.579
Total Direct Support	6.935	4.592	4.654	4.734	4.829	4.925	5.021
Child Development - Direct Overhead	0.060	0.061	0.000	0.000	0.000	0.000	0.000
Total Support - Revenue-Generating Programs	6.995	4.653	4.654	4.734	4.829	4.925	5.021
USA/UFM Practice (memo)	4.343	4.047	4.616	4.693	4.781	4.816	4.910

UNCLASSIFIED

UNCLASSIFIED

OP-34 Fund Support for Quality of Life ActivitiesDepartment of the Navy
(Current \$ Millions - Manpower in Eaches)

	<u>FY 18</u>	<u>FY 19</u>	<u>FY 20</u>	<u>FY 21</u>	<u>FY 22</u>	<u>FY 23</u>	<u>FY 24</u>
Military MWR Programs (without Child Development Program, Youth Program, and Warfighter and Family Support)							
<u>Category A--Mission Sustaining Programs</u>							
Civilian Direct FTE	264	342	312	332	332	332	333
Civilian Foreign Direct FTE	95	112	112	112	112	112	112
Civilian Foreign Indirect FTE	67	28	28	28	28	28	28
Civilian UFM/USA FTE	1837	1837	1837	1837	1837	1837	1837
Total Civilians	2263	2319	2289	2309	2309	2309	2310
<u>Category B--Community Support</u>							
Civilian Direct FTE	20	33	30	30	30	30	30
Civilian Foreign Direct FTE	44	33	33	33	33	33	33
Civilian Foreign Indirect FTE	49	49	49	49	49	49	49
Civilian UFM/USA FTE	1670	1670	1670	1670	1670	1670	1670
Total Civilians	1783	1785	1782	1782	1782	1782	1782
<u>Category C--Revenue-Generating Programs</u>							
Civilian Foreign Direct FTE	8	8	8	8	8	8	8
Civilian Foreign Indirect FTE	22	22	22	22	22	22	22
Civilian UFM/USA FTE	61	61	61	61	61	61	61
Total Civilians	91	91	91	91	91	91	91
Warfighter and Family Services (WFS)							
<u>Warfighter and Family Services</u>							
Civilian Direct FTE	4	4	4	4	4	4	4
Total Civilians	4	4	4	4	4	4	4
Off Duty and Voluntary Education							
<u>Other Voluntary Education</u>							
Civilian Direct FTE	6	5	5	5	5	5	5
Total Civilians	6	5	5	5	5	5	5

UNCLASSIFIED

**DEPARTMENT OF THE NAVY
OPERATIONS AND MAINTENANCE, NAVY
SPARES AND REPAIR PARTS
(Dollars in Thousands)**

				FY19/FY20
DEPOT LEVEL REPAIRABLES (DLRs)*	<u>FY 2018^{1/}</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Change</u>
<u>Commodity</u>				
Ships	740,401	506,508	6,586	(499,922)
Aircraft Airframes	1,701,043	1,669,290	363,377	(1,305,913)
Aircraft Engines	1,134,029	1,112,860	242,251	(870,609)
Combat Vehicles	40,761	32,184	29,881	(2,303)
Other				
Missiles	0	0	0	0
Communications Equipment	2,351	99	102	3
Other Miscellaneous	830	1,887	985	(902)
TOTAL	3,619,415	3,322,828	643,182	(2,679,646)

*Includes ICC's 503, 506

				FY19/FY20
CONSUMABLES*	<u>FY 2018^{1/}</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Change</u>
<u>Commodity</u>				
Ships	1,563,832	968,857	6,360	(962,497)
Aircraft Airframes	803,029	735,988	160,775	(575,213)
Aircraft Engines	535,352	490,659	107,184	(383,475)
Combat Vehicles	175,996	174,223	198,091	23,868
Other				-
Missiles	10,820	8,466	9,635	1,169
Communications Equipment	3,482	3,139	3,186	47
Other Miscellaneous	36,084	29,961	20,233	(9,728)
TOTAL	3,128,595	2,411,293	505,464	(1,905,829)

*Includes ICCs: 411,412,416,417,421,422,423,424

^{1/}FY 2018 actuals include supplemental.

PB-20 Aircraft Inventory Exhibit
Department of the Navy - FY 2020 President's Budget

TMS	Category	FY 2018 Actuals					FY 2019 Enacted					FY 2020 Projection				
		Active Navy	Navy Reserve	Active Marine	Marine Reserve	Total	Active Navy	Navy Reserve	Active Marine	Marine Reserve	Total	Active Navy	Navy Reserve	Active Marine	Marine Reserve	Total
AH-1W	Rotary Wing	1	0	30	31	62	1	0	11	35	47	0	0	0	16	16
AH-1Z	Rotary Wing	3	0	95	0	98	3	0	133	0	136	3	0	138	10	151
AV-8B	Attack	4	0	100	0	104	4	0	107	0	111	4	0	101	0	105
C-12C	Transport	3	0	0	0	3	3	0	0	0	3	3	0	0	0	3
C-12R	Transport	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0
C-130T	Transport	2	18	0	0	20	1	19	0	0	20	1	19	0	0	20
C-20G	Transport	1	2	1	0	4	1	1	1	0	3	1	1	1	0	3
C-26A	Transport	1	0	0	0	1	1	0	0	0	1	1	0	0	0	1
C-26D	Transport	7	0	0	0	7	7	0	0	0	7	7	0	0	0	7
C-2A	Transport	34	0	0	0	34	35	0	0	0	35	34	0	0	0	34
C-37A	Transport	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1
C-37B	Transport	0	3	0	0	3	1	3	0	0	4	0	3	0	0	3
C-38A	Transport	2	0	0	0	2	2	0	0	0	2	2	0	0	0	2
C-40A	Transport	0	15	0	0	15	0	17	0	0	17	0	17	0	0	17
CH-53E	Rotary Wing	0	0	136	6	142	1	0	138	6	145	0	0	136	7	143
CH-53K	Rotary Wing	0	0	1	0	1	3	0	4	0	7	3	0	8	0	11
CMV-22B	Tilt Rotor	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6
CQ-24A	UAS	0	0	2	0	2	0	0	2	0	2	0	0	2	0	2
E-2C	Warning	38	0	0	0	38	33	0	0	0	33	27	0	0	0	27
E-2D	Warning	34	0	0	0	34	39	0	0	0	39	46	0	0	0	46
E-6B	Warning	16	0	0	0	16	16	0	0	0	16	16	0	0	0	16
EA-18G	Attack	148	5	0	0	153	155	5	0	0	160	155	5	0	0	160
EA-6B	Attack	0	0	6	0	6	0	0	0	0	0	0	0	0	0	0
EP-3E	Warning	12	0	0	0	12	12	0	0	0	12	12	0	0	0	12
F-16A	Fighter	10	0	0	0	10	10	0	0	0	10	10	0	0	0	10
F-16B	Fighter	4	0	0	0	4	4	0	0	0	4	4	0	0	0	4
F-35B	Strike Fighter	1	0	58	0	59	0	0	81	0	81	5	0	104	0	109
F-35C	Strike Fighter	28	0	0	0	28	39	0	6	0	45	38	0	10	0	48
F-5F	Fighter	0	2	0	1	3	0	2	0	1	3	0	2	0	1	3
F-5N	Fighter	0	29	0	11	40	0	30	0	11	41	0	29	0	11	40
FA-18A	Strike Fighter	2	23	19	13	57	1	22	33	12	68	1	0	0	0	1
FA-18B	Strike Fighter	5	1	0	3	9	3	0	2	6	11	2	0	0	0	2
FA-18C	Strike Fighter	83	27	147	19	276	33	0	134	0	167	33	22	121	12	188
FA-18D	Strike Fighter	15	2	95	0	112	7	0	88	0	95	8	0	78	0	86
FA-18E	Strike Fighter	291	0	0	0	291	309	0	0	0	309	301	0	0	0	301
FA-18F	Strike Fighter	258	0	0	0	258	262	0	0	0	262	264	0	0	0	264
HH-1N	Rotary Wing	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0
HH-60H	Rotary Wing	2	6	0	0	8	0	0	0	0	0	0	0	0	0	0
KC-130J	In Flight Refuel	3	0	44	7	54	1	0	45	11	57	1	0	45	13	59
KC-130T	In Flight Refuel	7	6	0	11	24	6	5	0	10	21	6	5	0	13	24
MH-53E	Rotary Wing	23	6	0	0	29	23	7	2	0	32	21	8	0	0	29
MH-60R	Rotary Wing	262	7	0	0	269	259	7	0	0	266	231	7	0	0	238
MH-60S	Rotary Wing	251	6	0	0	257	247	10	0	0	257	227	10	0	0	237
MQ-4C	Patrol	3	0	0	0	3	7	0	0	0	7	12	0	0	0	12
MQ-8B	Patrol	23	0	0	0	23	24	0	0	0	24	24	0	0	0	24
MQ-8C	Patrol	20	0	0	0	20	32	0	0	0	32	20	0	0	0	20
MV-22B	Tilt Rotor	8	0	262	23	293	6	0	281	24	311	4	0	277	24	305

PB-20 Aircraft Inventory Exhibit
Department of the Navy - FY 2020 President's Budget

TMS	Category	FY 2018 Actuals					FY 2019 Enacted					FY 2020 Projection				
		Active Navy	Navy Reserve	Active Marine	Marine Reserve	Total	Active Navy	Navy Reserve	Active Marine	Marine Reserve	Total	Active Navy	Navy Reserve	Active Marine	Marine Reserve	Total
N EA-18G	Attack	2	0	0	0	2	2	0	0	0	2	2	0	0	0	2
N FA-18C	Strike Fighter	1	0	0	0	1	2	0	0	0	2	2	0	0	0	2
N FA-18D	Strike Fighter	2	0	0	0	2	2	0	0	0	2	2	0	0	0	2
N P-3C	Patrol	3	0	0	0	3	3	0	0	0	3	3	0	0	0	3
N U-1B	Utility	1	0	0	0	1	1	0	0	0	1	1	0	0	0	1
NRQ-21A	UAV	0	0	0	0	0	7	0	0	0	7	0	0	0	0	0
NSH-60F	Rotary Wing	1	0	0	0	1	1	0	0	0	1	1	0	0	0	1
NVH-3A	Rotary Wing	1	0	0	0	1	1	0	0	0	1	1	0	0	0	1
OH-58C	Rotary Wing	5	0	0	0	5	4	0	0	0	4	5	0	0	0	5
P-3C	Patrol	42	12	0	0	54	36	12	0	0	48	5	12	0	0	17
P-8A	Patrol	86	0	0	0	86	91	0	0	0	91	109	0	0	0	109
RC-12M	Utility	1	0	0	0	1	1	0	0	0	1	1	0	0	0	1
RQ-21A	UAV	5	0	13	2	20	11	0	18	2	31	11	0	18	2	31
RQ-23A	UAV	8	0	0	0	8	10	0	0	0	10	10	0	0	0	10
RQ-26A	UAV	2	0	0	0	2	0	0	0	0	0	2	0	0	0	2
RQ-4A	Patrol	4	0	0	0	4	4	0	0	0	4	4	0	0	0	4
RQ-7B	UAV	0	0	9	0	9	0	0	41	8	49	0	0	0	0	0
T-34C	Training Prop	13	0	3	0	16	14	0	3	0	17	13	0	3	0	16
T-38C	Training Jet	10	0	0	0	10	10	0	0	0	10	10	0	0	0	10
T-39D	Training Jet	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1
T-44C	Training Jet	54	0	0	0	54	54	0	0	0	54	54	0	0	0	54
T-45C	Training Jet	193	0	0	0	193	194	0	0	0	194	193	0	0	0	193
T-6A	Training Prop	43	0	0	0	43	43	0	0	0	43	43	0	0	0	43
T-6B	Training Prop	251	0	0	0	251	251	0	0	0	251	251	0	0	0	251
TAV-8B	Training Jet	0	0	16	0	16	0	0	15	0	15	0	0	16	0	16
TE-2C	Training Jet	1	0	0	0	1	1	0	0	0	1	1	0	0	0	1
TH-57B	Rotary Wing	41	0	0	0	41	41	0	0	0	41	41	0	0	0	41
TH-57C	Rotary Wing	79	0	0	0	79	74	0	0	0	74	74	0	0	0	74
TH-67A	Rotary Wing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U-6A	Utility	2	0	0	0	2	2	0	0	0	2	2	0	0	0	2
UC-12F	Utility	6	0	4	0	10	6	0	2	0	8	6	0	4	0	10
UC-12M	Utility	7	0	2	0	9	7	0	2	0	9	7	0	2	0	9
UC-12W	Utility	0	0	5	2	7	0	0	6	2	8	0	0	6	2	8
UC-35C	Transport	0	0	0	2	2	0	0	0	2	2	0	0	0	2	2
UC-35D	Transport	0	0	7	3	10	0	0	7	3	10	0	0	7	3	10
UH-1Y	Rotary Wing	3	0	121	22	146	2	0	128	24	154	3	0	130	22	155
UH-3D	Rotary Wing	0	0	1	0	1	0	0	1	0	1	0	0	1	0	1
UH-60A	Rotary Wing	1	0	0	0	1	1	0	0	0	1	1	0	0	0	1
UH-60L	Rotary Wing	4	0	0	0	4	4	0	0	0	4	4	0	0	0	4
UH-60N	Rotary Wing	0	0	1	0	1	0	0	1	0	1	0	0	1	0	1
UH-72A	Rotary Wing	5	0	0	0	5	5	0	0	0	5	5	0	0	0	5
VH-3D	Rotary Wing	0	0	11	0	11	0	0	9	0	9	0	0	9	0	9
VH-60N	Rotary Wing	0	0	8	0	8	0	0	8	0	8	0	0	6	0	6
VH-92A	Rotary Wing	0	0	0	0	0	2	0	3	0	5	2	0	4	0	6
X-26A	Training Jet	2	0	0	0	2	2	0	0	0	2	2	0	0	0	2
Totals-		2484	171	1201	156	4012	2484	141	1312	157	4094	2405	141	1228	138	3912

**Department of the Navy
Naval Shipyards**

**Naval Shipyards
President's Budget 2020**

Department of the Navy Naval Shipyards

Description

Activity Group Function:

Naval Shipyards provide logistics support for assigned ships and service craft; perform authorized work in connection with construction, overhaul, repair, alteration, dry-docking and outfitting of ships and craft as assigned; perform design, manufacturing, refit and restoration, research, development and test work, and provide services and material to other activities and units as directed by competent authority.

Activity Group Composition:

This budget reflects four Naval Shipyards operating under Mission Funding in FY 2018 through FY 2020. These activities and their locations are:

FY 2018 to FY 2020

Pearl Harbor Naval Shipyard & Intermediate Maintenance Facility (PHNSY&IMF) Pearl Harbor, HI

Puget Sound Naval Shipyard & Intermediate Maintenance Facility (PSNS&IMF) Bremerton, WA

Portsmouth Naval Shipyard (PNSY) Kittery, ME

Norfolk Naval Shipyard (NNSY) Portsmouth, VA

Department of the Navy Naval Shipyards

Department of the Navy – Shipyards SHIP MAINTENANCE – SIX PERCENT CAPITAL INVESTMENT PLAN (Dollars in Millions)

	REVENUE (Maintenance, Repair, Overhaul) <u>3 year average</u>			<u>BUDGETED CAPITAL</u> (Modernization, Efficiency)		
	<u>15-17</u>	<u>16-18</u>	<u>17-19</u>	FY 2018	FY 2019	FY 2020
	\$4,609.4	\$4,913.3	\$5,371.5			
	\$4,913.3	\$5,371.5	\$5,891.6			
	\$5,371.5	\$5,891.6	\$6,185.8			
Revenue (Avg)	\$4,964.7	\$5,392.1	\$5,816.3			
Working Capital Fund	\$0.0	\$0.0	\$0.0			
Appropriations (if applicable)	\$14,894.1	\$16,176.3	\$17,448.9			
Total Revenue	\$14,894.1	\$16,176.3	\$17,448.9			
WCF Depot Maintenance Capital Investment						
Facilities/ Work Environment				\$9.6	\$31.9	\$13.1
Equipment				\$0.0	\$0.0	\$0.0
Equipment (Non-Capital Investment Program)				\$0.0	\$0.0	\$0.0
Processes				\$0.0	\$0.0	\$0.0
Total WCF Investment				\$9.6	\$31.9	\$13.1

**Department of the Navy
Naval Shipyards**

(Dollars in Millions)

Appropriated Funding - List by Appropriation	FY 2018	FY 2019	FY 2020
MILCON	\$155.1	\$240.4	\$108.0
Procurement	\$136.7	\$272.2	\$173.7
Operation & Maintenance	\$296.1	\$290.9	\$407.1
Total Appropriated Funding	\$588.0	\$803.5	\$688.9
 Component Total	 \$597.6	 \$835.4	 \$701.9
Minimum 6% Investment	\$297.9	\$323.5	\$349.0
Investment Over/Under Requirement	\$299.7	\$511.9	\$352.9
 Projected Investment	 12.0%	 15.5%	 12.1%

Department of the Navy Naval Shipyards

Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility (PHNSY&IMF)

PHNSY&IMF, located in Pearl Harbor Hawaii provides both depot level maintenance and non-depot level maintenance for submarines and surface ships assigned to the region.

1. Funding Summary

Source of Funding (\$K)

	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Department of Navy	\$944,882	\$996,693	\$1,047,006
Direct	\$920,575	\$977,063	\$1,015,946
Operation & Maintenance, Navy (Fleet, Base)	\$867,054	\$939,646	\$843,912
Operation & Maintenance, Navy (Fleet, OCO)	\$17,153	\$0	\$132,855
Military Personnel, Navy (Fleet, MPN)	\$36,368	\$37,417	\$39,179
Reimbursable	\$24,307	\$19,630	\$31,060
Operation & Maintenance, Navy	\$1,502	\$1,038	\$1,038
Shipbuilding & Conversion, Navy	\$25	\$21	\$21
Other Procurement, Navy	\$9,560	\$9,397	\$20,530
Procurement, Marine Corps	\$0	\$0	\$0
Other Department of Navy	\$13,220	\$9,174	\$9,471
Department of Defense	\$262	\$146	\$147
Other Orders	\$53	\$56	\$45
Other Federal Agencies	\$0	\$0	\$0
Foreign Military Sales	\$53	\$56	\$45
Other	\$0	\$0	\$0
Total	\$945,197	\$996,895	\$1,047,198

Department of the Navy Naval Shipyards

2. Performance Metrics (See glossary for definitions)

PEARL HARBOR NAVAL SHIPYARD & INTERMEDIATE MAINTENANCE FACILITY METRICS

Item	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>
Unit Cost (\$ per manday)	1,014.17	953.01	976.97
Administrative efficiency	50.5%	52.5%	52.2%
CNO Availabilities Complete	3	3	3
CNO Availabilities in process at end of FY	5	5	3
Homeported Aircraft Carriers Supported (non-depot)	0	0	0
Homeported Submarines Supported (non-depot)	15	14	12.5
Homeported Surface Ships Supported (non-depot)	10	9.5	9.5
Capacity Utilization Rate	112.0%	119.0%	121.0%

3. Performance Data (See glossary for definitions)

PEARL HARBOR NAVAL SHIPYARD & INTERMEDIATE MAINTENANCE FACILITY (\$K)

Estimates (\$K)	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Direct Civilian Labor	\$366,897	\$371,349	\$385,547
Direct Military Labor	\$12,301	\$13,005	\$13,560
Direct Material	\$149,033	\$174,563	\$195,226
Direct Contracts	\$23,216	\$47,776	\$45,336
Other Direct Costs	\$0	\$0	\$0
Overhead Civilian Labor	\$265,133	\$281,439	\$285,037
Overhead Military Labor	\$24,067	\$24,412	\$25,619
Overhead Non-Labor	\$103,720	\$83,521	\$95,960
NMCI	\$830	\$830	\$913
Total	<u>\$945,197</u>	<u>\$996,895</u>	<u>\$1,047,198</u>

Department of the Navy Naval Shipyards

Workload

Workload changes are consistent with fleet requirements and also reflect shipyard process improvements. FY 2018 actual workload reflects less than a 1.0 percent decrease below the FY 2018 estimate included in the FY 2019 President's Budget Estimate.

	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
<u>Total Direct Mandays</u>	<u>762,151</u>	<u>812,744</u>	<u>825,650</u>
<u>Total Mission Mandays</u>	<u>719,153</u>	<u>768,986</u>	<u>785,341</u>
Shipbuilding and Conversion, Navy (ERO, RCOH, etc...)	0	0	0
Carriers	0	0	0
Submarines	426,563	502,044	544,528
Surface Ship	1,346	1,099	1,972
Inactivation Work	0	0	0
Regional Maintenance Center (Non-Depot)	217,355	170,140	157,635
Non-CNO availability Depot Work (RA/TA, CM, Emergent Repair, etc.)	73,889	95,703	81,206
<u>Total Reimbursable Mandays</u>	<u>42,998</u>	<u>43,758</u>	<u>40,309</u>
Shipbuilding and Conversion, Navy (ERO, RCOH, etc...)	0	0	0
Carriers	0	0	0
Submarines	10,043	31,130	26,365
Surface Ship	0	0	0
Inactivation Work	0	0	0
Regional Maintenance Center (Non-Depot)	15,306	11,239	12,550
Non-CNO availability Depot Work (RA/TA, CM, Emergent Repair, etc.)	17,649	1,389	1,394
<u>Total Indirect Mandays</u>	<u>864,058</u>	<u>833,059</u>	<u>843,696</u>
Production and General Overhead	864,058	833,059	843,696
<u>Total Mandays</u>	<u>1,626,209</u>	<u>1,645,803</u>	<u>1,669,346</u>
Straight Time Mandays	1,494,656	1,516,848	1,537,932
Overtime Mandays	131,553	128,955	131,414

Department of the Navy Naval Shipyards

4. Workforce

The majority of the Pearl Harbor workload is highly complex submarine work that requires a skilled workforce. In order to have a skilled workforce ready to accomplish this workload the activity is undertaking appropriate personnel and training initiatives.

WORKFORCE

Item	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Civilian End Strength	5,549	5,708	5,887
Military End Strength	487	487	487
Total Workforce	6,036	6,195	6,374

PHNSY&IMF Apprentice Program

The shipyard apprentice program is a vital element of shipyard workforce revitalization. Focusing on blue-collar production trade skills results in employees that are Department of Labor certified journeymen with technical certificates or associate degrees. Planned apprentice program enrollment is as follows:

Item	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
First year apprentices	179	212	180
Second year apprentices	248	238	205
Third year apprentices	215	215	234
Fourth year apprentices	285	184	200
Total Workforce	927	849	819

Apprentice program costs include apprentice salaries while in a training status, tuition, books, and other instructional costs.

\$K	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Apprentice Program Cost	\$14,941	\$12,664	\$13,059

Department of the Navy Naval Shipyards

5. Infrastructure Accounts (See glossary for definitions)

<u>Estimates (\$000)</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Base Operating Support (OM,N)	\$21,102	\$21,524	\$21,955
Capital Equipment (OP,N)	\$33,144	\$34,344	\$22,442
Facilities Restoration & Modernization (OM,N)	\$32,158	\$18,000	\$0
Facilities Restoration & Modernization (NWCF)	\$0	\$14,106	\$9,239
Military Construction (MILCON)	\$20,462	\$64,580	\$0
Total	\$106,866	\$152,554	\$53,636

PHNSY&IMF CAPITAL EQUIPMENT PROJECT SUMMARY (\$K)		
FY	Project Title	Cost (\$K)
2018	VIRGINIA CLASS PROPULSOR HANDLING SYSTEM	\$4,516
2018	SUBMARINE MAINTENANCE ENCLOSURE	\$4,312
2018	EMERGENCY DIESEL GENERATORS	\$2,608
2018	INFORMATION TECHNOLOGY STORAGE SYSTEM	\$2,182
2018	CRANE, TRUCK MOUNTED, 300 TON	\$2,805
2018	HYDRAULIC COMPONENT TEST SYSTEM	\$1,928
2018	HIGH PRESSURE AIR COMPRESSOR	\$450
2018	ULTRA HIGH PRESSURE WATERJET	\$400
2018	HORIZONTAL BORING MILL	\$3,000
2018	7000 GALLON WASTE WATER COLLECTION TANKS	\$1,195
2018	WINDOWS SERVER SYSTEM	\$3,638
2018	PURE WATER DELIVERY TRAILERS	\$1,057
2018	SYLAN NETWORK	\$5,053
FY Total		\$33,144
2019	UNIX SERVERS	\$1,407
2019	UNIVERSAL CYLINDRICAL GRINDER	\$1,750
2019	VIRGINIA CLASS BOW DOME RING HANDLING SYSTEM	\$1,380
2019	VA CLASS PROPULSOR HANDLING SYSTEM	\$4,091

Department of the Navy Naval Shipyards

2019	CASCON COMMUNICATIONS SYSTEM	\$4,100
2019	TACTICAL LOCAL AREA NETWORK ENCRYPTION	\$1,846
2019	HEAVY LIFT TRANSPORTERS	\$3,260
2019	CNC HYDRAULIC PRESS BRAKE	\$800
2019	55K PSI ULTRA HIGH PRESSURE WATERJET, 4 EA	\$1,800
2019	TANK CLEANING VACUUM SYSTEMS	\$2,760
2019	CRANE, TRUCK MOUNTED, 60T	\$900
2019	NETWORK INFRASTRUCTURE DISTRO LAYER	\$4,500
2019	5-AXIS ROUTER, RUBBER/PLASTICS	\$1,150
2019	VERTICAL TURNING CENTER w/Y AXIS	\$3,400
2019	LWCT TANKS, 7000 GAL, 2 EA TANK 3 & 4 OF 7	\$1,200
FY Total		\$34,344
2020	VERTICAL TURNING CENTER w/Y AXIS	\$3,450
2020	HP AIR COMPRESSOR, 2 EA	\$900
2020	LWCT TANKS, 7000 GAL, 2 EA TANK 5 AND 6 OF 7	\$1,138
2020	HYDROSTATIC PRESSURE TEST TANK IN BLDG 1770	\$770
2020	55K PSI ULTRA HIGH PRESSURE WATERJET, 2 EA	\$900
2020	TANK CLEANING VACUUM SYSTEMS	\$2,500
2020	CRANE, TRUCK MOUNTED	\$851
2020	IT NETWORK	\$4,500
2020	5-AXIS ROUTER	\$1,150
2020	DRYDOCK ELEVATOR DD#1	\$2,475
2020	(EOL REPLACEMENT) VLS LASER CLADDING SYSTEM	\$2,870
2020	CHILLED WATER RIG, 210 TON 2 UNITS	\$938
FY Total		\$22,442

PEARL HARBOR & IMF NSY MILCON PROJECTS SUMMARY (\$K)		
Project Title	FY	COST
ECIP - SALT WATER PUMPING STATION	2018	\$1,430
SEWER LIFT STATION SY-001 & RELIEF SEWER LINE	2018	\$19,032

**Department of the Navy
Naval Shipyards**

	FY Total	\$20,462
WATERFRONT DRY DOCK FACILITY	2019	\$45,000
WATER TRANSMISSION LINE	2019	\$19,580
	FY Total	\$64,580
N/A	2020	\$-
	FY Total	\$-

PEARL HARBOR NAVAL SHIPYARD & INTERMEDIATE MAINTENANCE FACILITY

FY	Hull	Name	Planned Start Date	Planned End Date	Actual Start Date	Actual End Date	Avail Type	Budgeted Mission Direct Labor MD	Budgeted Reimb Labor MD	Actual Mission Direct Labor MD	Actual Reimb Direct Labor MD
FY14	SSN 758	USS ASHEVILLE	11/19/13	07/29/15	02/11/14	12/01/17	EOH	267,131	18,278	368,465	33,893
FY15	SSN 776	USS HAWAII	05/05/15	12/07/16	06/02/15	10/02/17	EDSRA	206,516	39,980	284,185	23,000
FY15	SSN 759	USS JEFFERSON CITY	06/17/15	04/18/17	08/25/15	TBD	EOH	265,175	12,495	TBD	TBD
FY16	SSN 777	USS NORTH CAROLINA	06/21/16	12/06/17	12/13/16	12/01/18	EDSRA	208,145	20,938	277,317	16,937
FY17	DDG 110	USS WILLIAM P LAWRENCE	03/06/17	09/22/17	03/06/17	11/03/17	SRA	1,137	0	1,137	0
FY18	SSN 721	USS CHICAGO	11/08/17	04/23/19	11/08/17	TBD	DSRA	176,591	2,016	TBD	TBD
FY18	DDG 90	USS HOPPER	04/02/18	05/03/19	06/11/18	TBD	DSRA	1,137	0	TBD	TBD
FY18	SSN 780	USS MISSOURI	05/23/18	04/21/20	06/13/18	TBD	EDSRA	292,026	13,300	TBD	TBD
FY18	SSN 771	USS COLUMBIA	08/13/18	10/05/20	Deferred	Deferred	EOH	314,163	4,943	Deferred	Deferred
FY19	SSN 771	USS COLUMBIA	10/19/18	12/10/20	10/19/18	TBD	EOH	324,467	20,061	TBD	TBD
FY19	SSN 766	USS CHARLOTTE	03/26/19	05/21/21	TBD	TBD	EOH	318,856	4,916	TBD	TBD
FY19	DDG 108	USS WAYNE E MEYER	05/06/19	02/14/20	Deferred	Deferred	DSRA	1,137	0	Deferred	Deferred
FY19	DDG 53	USS JOHN PAUL JONES	07/22/19	12/20/19	Deferred	Deferred	DSRA	1,137	0	Deferred	Deferred
FY20	DDG 108	USS WAYNE E MEYER	11/04/19	07/24/20	TBD	TBD	DSRA	1,137	0	TBD	TBD
FY20	SSN 782	USS MISSISSIPPI	03/17/20	02/11/22	TBD	TBD	EDSRA	340,076	27,517	TBD	TBD

NOTES:

1. USS COLUMBIA FY18 EOH was deferred to FY19.
2. USS WAYNE E MEYER FY19 DSRA was deferred to FY20.
3. USS JOHN PAUL JONES FY19 DSRA was deferred past FY20.

Maximum Percent Late	125.1%	Maximum Percent Over MD Budget	41.0%
Average Percent Late	56.8%	Average Percent Over MD Budget	23.5%

Department of the Navy Naval Shipyards

Puget Sound Naval Shipyard and Intermediate Maintenance Facility (PSNS&IMF)

PSNS&IMF, located in Bremerton, Washington provides both depot level maintenance and non-depot level maintenance for carriers and submarines, as well as non-depot maintenance to surface ships, assigned to the Pacific Northwest. PSNS&IMF also provides a significant portion of the required depot level maintenance to carriers and submarines homeported in San Diego, California.

1. Funding Summary

Source of Funding (\$K)

	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Department of Navy	\$2,172,924	\$2,271,021	\$2,314,611
Direct	\$1,856,384	\$1,885,338	\$1,868,647
Operation & Maintenance, Navy (Fleet, Base)	\$1,691,728	\$1,833,348	\$1,605,299
Operation & Maintenance, Navy (Fleet, OCO)	\$114,184	\$0	\$213,551
Military Personnel, Navy (Fleet, MPN)	\$50,472	\$51,990	\$50,797
Reimbursable	\$316,540	\$385,683	\$444,963
Operation & Maintenance, Navy	\$167,621	\$165,637	\$191,096
Shipbuilding & Conversion, Navy	\$234	\$229	\$264
Other Procurement, Navy	\$50,148	\$61,949	\$71,470
Procurement, Marine Corps	\$0	\$0	\$0
Other Department of Navy	\$98,537	\$157,868	\$182,133
Department of Defense	\$1,533	\$3,889	\$4,486
Other Orders	\$241	\$26	\$29
Other Federal Agencies	\$238	\$24	\$28
Foreign Military Sales	\$0	\$0	\$0
Other	\$3	\$2	\$2
Total	\$2,174,697	\$2,274,935	\$2,319,126

Department of the Navy Naval Shipyards

2. Performance Metrics (See glossary for definitions)

PUGET SOUND NAVAL SHIPYARD & INTERMEDIATE MAINTENANCE FACILITY METRICS

Item	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>
Unit Cost (\$ per manday)	796.45	792.55	791.37
Administrative efficiency	61.6%	62.0%	63.3%
CNO Availabilities Complete	8	12	8
CNO Availabilities in process at end of FY	15	7	8
Homeported Aircraft Carriers Supported (non-depot)	2	2	1.5
Homeported Submarines Supported (non-depot)	14.5	14	14
Homeported Surface Ships Supported (non-depot)	5.5	6	6
Capacity Utilization Rate	149.5%	157.0%	159.0%

3. Performance Data (See glossary for definitions)

PUGET SOUND NAVAL SHIPYARD & INTERMEDIATE MAINTENANCE FACILITY (\$K)

Estimates (\$K)	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Direct Civilian Labor	\$972,878	\$1,063,209	\$1,088,591
Direct Military Labor	\$17,891	\$18,456	\$18,033
Direct Material	\$207,604	\$316,717	\$306,289
Direct Contracts	\$168,967	\$55,014	\$44,980
Other Direct Costs	\$51,417	\$77,709	\$121,612
Overhead Civilian Labor	\$517,672	\$526,074	\$509,976
Overhead Military Labor	\$32,581	\$33,534	\$32,764
Overhead Non-Labor	\$202,595	\$180,820	\$193,479
NMCI	\$3,093	\$3,402	\$3,402
Total	<u>\$2,174,697</u>	<u>\$2,274,935</u>	<u>\$2,319,126</u>

Department of the Navy Naval Shipyards

Workload

Workload changes are consistent with fleet requirements and also reflect shipyard process improvements. FY 2018 actual workload reflects a less than 3.6 percent decrease below the FY 2018 estimate included in the FY 2019 President's Budget Estimate.

	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
<u>Total Direct Mandays</u>	<u>2,193,121</u>	<u>2,303,326</u>	<u>2,332,987</u>
<u>Total Mission Mandays</u>	<u>1,643,818</u>	<u>1,692,190</u>	<u>1,635,545</u>
Shipbuilding and Conversion, Navy (ERO, RCOH, etc...)	244,519	124,859	270,082
Carriers	499,289	663,593	536,298
Submarines	92,780	7,170	1,878
Surface Ship	0	0	0
Inactivation Work	0	0	0
Regional Maintenance Center (Non-Depot)	327,952	379,828	359,818
Non-CNO availability Depot Work (RA/TA, CM, Emergent Repair, etc.)	479,278	516,740	467,469
<u>Total Reimbursable Mandays</u>	<u>549,303</u>	<u>611,136</u>	<u>697,442</u>
Shipbuilding and Conversion, Navy (ERO, RCOH, etc...)	28,674	14,805	39,179
Carriers	38,642	71,105	56,404
Submarines	76,670	227,019	107,201
Surface Ship	0	0	0
Inactivation Work	259,672	148,139	338,461
Regional Maintenance Center (Non-Depot)	3,367	2,418	1,322
Non-CNO availability Depot Work (RA/TA, CM, Emergent Repair, etc.)	142,278	147,650	154,875
<u>Total Indirect Mandays</u>	<u>1,828,747</u>	<u>1,859,780</u>	<u>1,946,264</u>
Production and General Overhead	1,828,747	1,859,780	1,946,264
<u>Total Mandays</u>	<u>4,021,868</u>	<u>4,163,106</u>	<u>4,279,251</u>
Straight Time Mandays	3,697,578	3,807,205	3,929,565
Overtime Mandays	324,290	355,901	349,686

Department of the Navy Naval Shipyards

4. Workforce

The majority of the Puget Sound workload is highly complex carrier and submarine work that requires a skilled workforce. In order to have a skilled workforce ready to accomplish this workload the activity is undertaking appropriate personnel and training initiatives.

WORKFORCE

Item	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Civilian End Strength	13,905	14,011	14,135
Military End Strength	680	679	673
Total Workforce	14,585	14,690	14,808

PSNS&IMF Apprentices Program

The shipyard apprenticeship program is a vital element of shipyard workforce revitalization. Focusing on blue-collar production trade skills results in employees that are Department of Labor certified journeymen with technical certificates or associate degrees. Planned apprenticeship program enrollment is as follows:

Item	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
First year apprentices	252	265	300
Second year apprentices	237	239	252
Third year apprentices	253	225	227
Fourth year apprentices	275	248	221
Total Workforce	1,017	977	1,000

Note: Second and subsequent year apprentice numbers for CY and BY are based on normal attrition from initial hires.

Apprenticeship program costs include apprentice salaries while in a training status, tuition, books, and other instructional costs.

\$K	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Apprenticeship Program Cost	\$12,579	\$13,500	\$13,500

Department of the Navy Naval Shipyards

5. Infrastructure Accounts (See glossary for definitions)

<u>Estimates (\$000)</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Base Operating Support (OM,N)	\$33,226	\$33,857	\$34,534
Capital Equipment (OP,N)	\$42,519	\$72,201	\$81,615
Facilities Restoration & Modernization (OM,N)	\$33,150	\$16,488	\$0
Facilities Restoration & Modernization (NWCF)	\$8,131	\$17,800	\$0
Military Construction (MILCON)	\$0	\$0	\$54,590
Total	\$117,026	\$140,346	\$170,739

PSNS&IMF CAPITAL EQUIPMENT PROJECT SUMMARY (\$K)		
FY	Project Title	Cost (\$K)
2018	25 TON PORTAL CRANE - SHIPYARD BREMERTON SITE	\$17,116
2018	MODERNIZE 60 TON PORTAL CRANES	\$6,050
2018	WINDOWS SERVER VIRTUALIZATION PHASE II	\$3,800
2018	DUAL MEDIA DISCHARGE COMPLEX	\$2,875
2018	DD1 RAE SUPPORT STRUCTURE	\$3,450
2018	CASCON COMMUNICATION SYSTEM	\$4,100
2018	FORKLIFTS	\$1,868
2018	50 TON MOBILE CRANE	\$1,560
2018	55 TON MOBILE CRANE	\$1,700
FY Total		\$42,519
2019	RAE SUPPORT STRUCTURES DD1 AND DD5	\$8,875
2019	265T MOBILE CRANE	\$2,200
2019	RLW PCS TANKS 7K	\$2,100
2019	RELIEF VALVE TEST PLATFORM	\$940
2019	CNC SHAFT LATHE	\$15,000
2019	25 TON PORTAL CRANE	\$15,924

Department of the Navy Naval Shipyards

2019	PURE WATER TANKER TRAILERS	\$575
2019	TANK CLEANING VACUUM SYSTEM	\$2,297
2019	PURE WATER TRAILERS	\$4,000
2019	YOKOSUKA FORKLIFTS	\$1,000
2019	CNC VERTICAL TURNING CENTER	\$3,500
2019	TOOL GRINDING MACHINE, CNC	\$1,110
2019	CNC LONG BED LATHE	\$2,000
2019	WASTEWATER TREATMENT SYS (PIER D)	\$7,000
2019	TIMBER SIZER	\$1,750
2019	ABRASIVE BLAST BOOTH	\$1,380
2019	CASCON COMMUNICATION SYSTEM	\$2,550
FY Total		\$72,201
2020	175 TON HEAVY LIFT PORTAL CRANE	\$56,000
2020	CNC LONG BED LATHE	\$2,000
2020	WASTEWATER TREATMENT SYS (PIER D)	\$7,000
2020	TOOL GRINDING MACHINE, CNC	\$1,110
2020	CNC HORIZONTAL BORING MILL (S/56)	\$841
2020	FORKLIFTS, BREMERTON SITE	\$5,631
2020	SCANNING ELECTRON MICROSCOPE	\$690
2020	TANK CLEANING VACUUM SYSTEMS, IMF	\$2,200
2020	HYDRO TEST TANK (ENCAPSULATION)	\$1,500
2020	FORKLIFTS, OFFSITE STORAGE LOCATION	\$575
2020	PUMP TEST STAND MODERNIZATION, IMF	\$4,068
FY Total		\$81,615

PUGET SOUND NSY & IMF MILCON PROJECTS SUMMARY (\$K)		
Project Title	FY	COST
N/A	2018	\$-

**Department of the Navy
Naval Shipyards**

	FY Total	\$-
N/A	2019	\$-
	FY Total	\$-
DD4/PIER 3 MODERNIZATION	2020	\$54,590
	FY Total	\$54,590

PUGET SOUND NAVAL SHIPYARD & INTERMEDIATE MAINTENANCE FACILITY

FY	Hull	Name	Planned Start Date	Planned End Date	Actual Start Date	Actual End Date	Avail Type	Budgeted Mission Direct Labor MD	Budgeted Reimb Labor MD	Actual Mission Direct Labor MD	Actual Reimb Direct Labor MD
FY15	SSN 702	EX PHOENIX	10/01/14	11/30/16	09/03/15	11/30/17	RCD	0	63,698	0	62,213
FY15	SSN 704	EX BALTIMORE	03/01/15	04/30/17	09/03/15	11/30/17	RCD	0	49,676	0	62,139
FY15	NR 01	EX SUBMARINE NR 0001	09/01/15	11/30/17	01/24/17	TBD	RCD	0	17,623	TBD	TBD
FY15	SSN 21	USS SEAWOLF	09/21/15	07/03/16	10/20/15	TBD	DSRA	114,722	31,442	TBD	TBD
FY16	SSN 705	USS CITY OF CORPUS CHRISTI	03/29/16	05/10/17	07/28/16	11/07/17	IA	0	107,965	0	100,747
FY16	SSN 713	USS HOUSTON	03/29/16	05/10/17	07/28/16	11/07/17	IA	0	80,102	0	87,161
FY17	SSBN 730	USS HENRY M JACKSON	10/01/16	09/30/17	04/01/17	02/09/18	ERP	69,772	13,184	99,320	7,883
FY17	SSN 697	EX INDIANAPOLIS	10/01/16	05/31/18	01/24/17	TBD	RCD	0	49,975	TBD	TBD
FY17	SSBN 741	USS MAINE	10/04/16	01/04/19	10/04/16	TBD	ERO	481,223	69,433	TBD	TBD
FY17	SSN 712	EX ATLANTA	11/15/16	05/31/18	01/24/17	TBD	RCD	0	48,444	TBD	TBD
FY17	SSN 700	USS DALLAS	11/30/16	01/15/18	06/15/17	05/24/18	IA	0	101,836	0	95,262
FY17	SSGN 726	USS OHIO	01/18/17	07/11/17	04/25/17	TBD	ERP	90,411	3,615	TBD	TBD
FY17	SSN 716	EX SALT LAKE CITY	6/30/17	8/30/19	12/07/17	TBD	RCD	0	48,444	TBD	TBD
FY17	CVN 70	USS CARL VINSON	09/04/17	10/18/17	09/04/17	10/18/17	CIA	12,729	0	13,471	0
FY18	SSBN 731	USS ALABAMA	10/01/17	09/30/18	06/20/18	TBD	ERP	68,316	9,974	TBD	TBD
FY18	CVN 76	USS RONALD REAGAN	01/09/18	05/08/18	01/09/18	05/14/18	SRA	74,583	5,269	94,849	3,280
FY18	CVN 68	USS NIMITZ	03/15/18	06/15/19	03/01/18	TBD	DP1A3	507,140	35,625	TBD	TBD
FY18	SSN 715	USS BUFFALO	04/03/18	05/20/19	04/03/18	TBD	IA	0	100,426	TBD	TBD

**Department of the Navy
Naval Shipyards**

FY	Hull	Name	Planned Start Date	Planned End Date	Actual Start Date	Actual End Date	Avail Type	Budgeted Mission Direct Labor MD	Budgeted Reimb Labor MD	Actual Mission Direct Labor MD	Actual Reimb Direct Labor MD
FY18	SSN 699	USS JACKSONVILLE	05/01/18	10/02/18	05/01/18	TBD	SLA	0	23,484	TBD	TBD
FY18	SSN 23	USS JIMMY CARTER	07/09/18	01/09/20	07/30/18	TBD	EDSRA	0	284,853	TBD	TBD
FY18	SSN 698	USS BREMERTON	07/09/18	03/28/19	07/09/18	TBD	SLA	0	24,997	TBD	TBD
FY18	CVN 71	USS THEODORE ROOSEVELT	07/15/18	01/15/19	07/15/18	TBD	PIA2	132,908	21,534	TBD	TBD
FY19	SSGN 727	USS MICHIGAN	10/31/18	10/25/19	TBD	TBD	ERP	254,028	6,931	TBD	TBD
FY19	SSN 671	EX NARWHAL	12/20/18	11/30/20	01/03/19	TBD	RCD	0	46,756	TBD	TBD
FY19	SSN 708	EX MINNEAPOLIS-ST PAUL	12/20/18	11/30/20	Deferred	Deferred	RCD	0	49,974	Deferred	Deferred
FY19	CVN 76	USS RONALD REAGAN	01/15/19	05/14/19	01/15/19	TBD	SRA	74,304	6,952	TBD	TBD
FY19	CVN 70	USS CARL VINSON	03/01/19	07/01/20	TBD	TBD	DPIA3	507,076	81,840	TBD	TBD
FY19	SSBN 743	USS LOUISIANA	04/12/19	07/14/21	TBD	TBD	ERO	637,638	74,014	TBD	TBD
FY19	SSN 699	USS JACKSONVILLE	07/02/19	09/07/20	Canceled	Canceled	IA	0	99,994	Canceled	Canceled
FY20	SSN 708	EX MINNEAPOLIS-ST PAUL	12/20/19	11/30/21	TBD	TBD	RCD	0	51,132	TBD	TBD
FY20	SSN 710	EX AUGUSTA	12/20/19	11/30/21	TBD	TBD	RCD	0	51,132	TBD	TBD
FY20	CVN 76	USS RONALD REAGAN	01/14/20	05/12/20	TBD	TBD	SRA	92,717	2,323	TBD	TBD
FY20	SSBN 733	USS NEVADA	04/04/20	02/11/21	TBD	TBD	ERP	137,763	10,147	TBD	TBD
FY20	SSN 717	USS OLYMPIA	06/02/20	06/02/21	TBD	TBD	IA	0	118,276	TBD	TBD
FY20	SSN 724	USS LOUISVILLE	06/02/20	06/02/21	TBD	TBD	IA	0	118,276	TBD	TBD
FY20	CVN 68	USS NIMITZ	06/09/20	07/24/20	TBD	TBD	CIA	10,323	0	TBD	TBD
FY20	CVN 72	USS ABRAHAM LINCOLN	09/11/20	04/05/21	TBD	TBD	PIA2	194,844	54,262	TBD	TBD
FY20	CVN 71	USS THEODORE ROOSEVELT	07/31/20	09/13/20	TBD	TBD	CIA	12,594	0	TBD	TBD

Department of the Navy Naval Shipyards

NOTES:

1. USS CITY OF CORPUS CHRISTI FY16 IA was previously reported in PB19 with a completion date of 12/04/17 and has been corrected to 11/07/17 herein.
2. USS HOUSTON FY16 IA was previously reported in PB19 with a completion date of 12/04/17 and has been corrected to 11/07/17 herein.
3. USS HENRY M JACKSON was previously reported in PB19 with a start date of 10/01/16 (per OPSEC), and has been updated to reflect actual date of 04/01/17 herein.
4. EX SALT LAKE CITY 17 IA was previously reported in PB19 as an FY17 IA and is now execting as an FY18 RCD
5. USS ALABAMA was previously reported in PB19 with a start date of 10/01/17 (per OPSEC), and has been updated to reflect actual date of 06/20/18 herein
6. USS JACKSONVILLE FY19 IA was previously reported in PB19 as an FY19 IA and is now executing as an FY18 SLA
7. USS BREMERTON FY18 SLA was not previously reported in PB19.
8. EX MINNEAPOLIS-ST PAUL FY19 RCD was deferred to FY20

Maximum Percent Late	14.7%	Maximum Percent Over MD Budget	29.2%
Average Percent Late	1.4%	Average Percent Over MD Budget	9.5%

Department of the Navy Naval Shipyards

Portsmouth Naval Shipyard (PNSY)

PNSY is located on Seavey Island, which sits at the mouth of the Piscataqua River across the harbor from Portsmouth, New Hampshire with access to the mainland by two bridges that connect it to Kittery, Maine. PNSY's primary mission is the overhaul, repair, modernization, and refueling of LOS ANGELES Class and VIRGINIA Class nuclear powered submarines.

1. Funding Summary

Source of Funding (\$K)

	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Department of Navy	\$973,506	\$943,135	\$1,051,808
Direct	\$776,851	\$765,204	\$868,034
Operation & Maintenance, Navy (Fleet, Base)	\$742,959	\$749,840	\$767,639
Operation & Maintenance, Navy (Fleet, OCO)	\$19,223	\$0	\$84,717
Military Personnel, Navy (Fleet, MPN)	\$14,669	\$15,364	\$15,678
Reimbursable	\$196,655	\$177,931	\$183,774
Operation & Maintenance, Navy	\$153,921	\$139,267	\$143,840
Shipbuilding & Conversion, Navy	\$269	\$243	\$251
Other Procurement, Navy	\$25,510	\$23,081	\$23,839
Procurement, Marine Corps	\$0	\$0	\$0
Other Department of Navy	\$16,955	\$15,340	\$15,844
Department of Defense	\$3,948	\$3,571	\$3,689
Other Orders	\$188	\$171	\$177
Other Federal Agencies	\$115	\$104	\$108
Foreign Military Sales	\$48	\$44	\$45
Other	\$25	\$23	\$24
Total	\$977,642	\$946,877	\$1,055,674

Department of the Navy Naval Shipyards

2. Performance Metrics (See glossary for definitions)

PORTSMOUTH NAVAL SHIPYARD METRICS

Item	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Unit Cost (\$ per manday)	817.16	872.62	875.67
Administrative efficiency	59.0%	55.2%	57.8%
CNO Availabilities Complete	1	4	1
CNO Availabilities in process at end of FY	4	4	5
Homeported Aircraft Carriers Supported (non-depot)	0	0	0
Homeported Submarines Supported (non-depot)	4	3.5	4
Homeported Surface Ships Supported (non-depot)	0	0	0
Capacity Utilization Rate	132.9%	132.1%	137.9%

3. Performance Data (See glossary for definitions)

PORTSMOUTH NAVAL SHIPYARD (\$K)

Estimates (\$K)	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Direct Civilian Labor	\$376,819	\$391,097	\$419,143
Direct Military Labor	\$10,562	\$11,062	\$11,288
Direct Material	\$134,850	\$110,156	\$146,246
Direct Contracts	\$87,674	\$30,680	\$62,965
Other Direct Costs	\$22,516	\$28,715	\$32,262
Overhead Civilian Labor	\$243,136	\$283,748	\$271,567
Overhead Military Labor	\$4,107	\$4,302	\$4,390
Overhead Non-Labor	\$96,909	\$87,000	\$107,692
NMCI	\$1,071	\$117	\$120
Total	<u>\$977,643</u>	<u>\$946,877</u>	<u>\$1,055,674</u>

Department of the Navy Naval Shipyards

Workload

Workload changes are consistent with fleet requirements and also reflect shipyard process improvements. FY 2018 actual workload reflects a 4.0 percent increase above the FY 2018 estimate included in the FY 2019 President's Budget Estimate.

	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
<u>Total Direct Mandays</u>	896,522	890,793	929,799
<u>Total Mission Mandays</u>	575,301	622,092	678,217
Shipbuilding and Conversion, Navy (ERO, RCOH, etc...)	0	0	0
Carriers	0	0	0
Submarines	535,456	566,785	636,478
Surface Ship	0	0	0
Inactivation Work	0	0	0
Regional Maintenance Center (Non-Depot)	0	0	0
Non-CNO availability Depot Work (RA/TA, CM, Emergent Repair, etc.)	39,845	55,307	41,739
<u>Total Reimbursable Mandays</u>	321,221	268,701	251,582
Shipbuilding and Conversion, Navy (ERO, RCOH, etc...)	0	0	0
Carriers	0	0	0
Submarines	121,367	50,787	68,900
Surface Ship	0	0	0
Inactivation Work	0	0	0
Regional Maintenance Center (Non-Depot)	0	0	0
Non-CNO availability Depot Work (RA/TA, CM, Emergent Repair, etc.)	199,854	217,914	182,682
<u>Total Indirect Mandays</u>	773,289	872,279	848,630
Production and General Overhead	773,289	872,279	848,630
<u>Total Mandays</u>	1,669,811	1,763,072	1,778,429
Straight Time Mandays	1,533,000	1,623,119	1,649,420
Overtime Mandays	136,811	139,953	129,009

Department of the Navy Naval Shipyards

4. Workforce

The majority of the Portsmouth workload is highly complex submarine work that requires a skilled workforce. In order to have a skilled workforce ready to accomplish this workload the activity is undertaking appropriate personnel and training initiatives.

WORKFORCE

Item	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Civilian End Strength	6,023	6,205	6,211
Military End Strength	183	184	184
Total Workforce	<u>6,206</u>	<u>6,389</u>	<u>6,395</u>

PNSY Apprentice Program

The shipyard apprentice program is a vital element of shipyard workforce revitalization. Focusing on blue-collar production trade skills results in employees that are Department of Labor certified journeymen with technical certificates or associate degrees. Planned apprentice program enrollment is as follows:

Item	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
First year apprentices	124	120	125
Second year apprentices	103	123	99
Third year apprentices	102	93	152
Fourth year apprentices	105	95	87
Total Workforce	<u>434</u>	<u>431</u>	<u>463</u>

Note: Second and subsequent year apprentice numbers for CY and BY are based on normal attrition from initial hires.

Apprentice program costs include apprentice salaries while in a training status, tuition, books, and other instructional costs.

\$K	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Apprentice Program Cost	<u>\$13,295</u>	<u>\$13,203</u>	<u>\$14,183</u>

Department of the Navy Naval Shipyards

5. Infrastructure Accounts (See glossary for definitions)

<u>Estimates (\$000)</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Base Operating Support (OM,N)	\$22,507	\$22,957	\$23,416
Capital Equipment (OP,N)	\$30,929	\$85,670	\$22,466
Facilities Restoration & Modernization (OM,N)	\$13,674	\$8,747	\$33,801
Facilities Restoration & Modernization (NWCF)	\$0	\$0	\$3,833
Military Construction (MILCON)	\$61,692	\$149,712	\$4,500
Total	\$128,802	\$267,086	\$88,016

PNSY CAPITAL EQUIPMENT PROJECT SUMMARY (\$K)		
FY	Project Title	Cost (\$K)
2018	RAE ENCLOSURE SYSTEM AND SUPPORT STRUCTURE	\$5,466
2018	EMERGENCY DIESEL GENERATORS	\$1,228
2018	NETWORK DATA STORAGE CLUSTER	\$983
2018	LOCAL TRAFFIC MANAGER	\$600
2018	REFUELING COMPLEX	\$22,652
FY Total		\$30,929
2019	COLLATERAL EQUIPMENT - RUBBER MIXING SYSTEM	\$6,989
2019	COLLATERAL EQUIPMENT - GROUP 1	\$5,400
2019	NSA - SWITCH AND ROUTER SYSTEM - SECNET	\$1,852
2019	HORIZONTAL BORING MILLS	\$2,500
2019	175 TON HEAVY LIFT PORTAL CRANE	\$54,929
2019	REFUELING STORAGE ENCLOSURE	\$7,000
2019	HIGH DENSITY STORAGE SYSTEM	\$7,000
FY Total		\$85,670
2020	RAILCAR MOVERS	\$2,000
2020	DSA - UNIX SERVER SYSTEM REFRESH	\$1,230

**Department of the Navy
Naval Shipyards**

2020	DIESEL GENERATORS	\$1,521
2020	DRYDOCK 2 PROPULSOR ENCLOSURE ANCHORAGE	\$550
2020	PLATE ROLLER	\$515
2020	COLLATERAL EQUIPMENT - B60 WATERJET	\$600
2020	LASER FABRICATOR	\$800
2020	CNC SHAFT LATHE	\$15,250
FY Total		\$22,466

PORTSMOUTH NSY MILCON PROJECTS SUMMARY (\$K)		
Project Title	FY	COST
PAINT, BLAST & RUBBER FACILITY CONSOLIDATION	2018	\$61,692
	FY Total	\$61,692
DRY DOCK #1 SUPERFLOOD BASIN	2019	\$109,960
EXTEND PORTAL CRANE	2019	\$39,752
	FY Total	\$149,712
UMC - RAILCAR SECURE STORAGE AREA	2020	\$4,500
	FY Total	\$4,500

PORTSMOUTH NAVAL SHIPYARD

FY	Hull	Name	Planned Start Date	Planned End Date	Actual Start Date	Actual End Date	Avail Type	Budgeted Mission Direct Labor MD	Budgeted Reimb Labor MD	Actual Mission Direct Labor MD	Actual Reimb Direct Labor MD
FY15	SSN 767	USS HAMPTON	12/07/15	07/28/17	06/08/16	06/22/18	EOH	273,252	2,370	323,904	20,149
FY17	SSN 778	USS NEW HAMPSHIRE	01/10/17	09/17/18	03/13/17	TBD	EDSRA	195,913	6,516	TBD	TBD
FY17	SSN 761	USS SPRINGFIELD	01/13/17	10/06/18	01/13/17	TBD	EOH	214,054	22,942	TBD	TBD
FY17	SSN 779	USS NEW MEXICO	08/15/17	02/05/19	09/28/17	TBD	EDSRA	218,471	19,118	TBD	TBD
FY18	SSN 722	USS KEY WEST	02/12/18	10/18/18	03/13/18	TBD	DSRA	0	98,160	TBD	TBD
FY18	SSN 774	USS VIRGINIA	09/30/18	08/26/20	Deferred	Deferred	DMP	325,447	27,700	Deferred	Deferred
FY19	SSN 774	USS VIRGINIA	11/15/18	01/31/21	11/15/18	TBD	DMP	372,015	25,911	TBD	TBD
FY19	SSN 751	USS SAN JUAN	01/16/19	07/15/19	TBD	TBD	DSRA	67,757	19,758	TBD	TBD
FY19	SSN 781	USS CALIFORNIA	03/15/19	12/05/20	TBD	TBD	EDSRA	260,133	20,506	TBD	TBD
FY19	SSN 752	USS PASADENA	06/13/19	12/10/19	Deferred	Deferred	DSRA	0	86,855	Deferred	Deferred
FY19	SSN 763	USS SANTA FE	09/29/19	07/28/21	TBD	TBD	EOH	311,846	4,138	TBD	TBD
FY20	SSN 768	USS HARTFORD	05/30/20	04/30/22	TBD	TBD	EOH	322,477	10,991	TBD	TBD
FY20	SSN 752	USS PASADENA	08/01/20	04/07/21	TBD	TBD	DSRA	0	85,804	TBD	TBD

NOTES:

1. USS VIRGINIA FY18 DMP was deferred to FY19
2. USS PASADENA FY19 DSRA was deferred to FY20
3. USS SANTA FE FY19 EOH was not previously reported in PB19 as it was previously planned as an FY20 availability but was accelared into FY19.

Maximum Percent Late	24.2%	Maximum Percent Over MD Budget	24.8%
Average Percent Late	24.2%	Average Percent Over MD Budget	24.8%

**Department of the Navy
Naval Shipyards**

Norfolk Naval Shipyard (NNSY)

NNSY, located in Portsmouth, Virginia provides both depot level maintenance and non-depot level maintenance for carriers, and submarines and surface ships assigned to the Mid-Atlantic Region.

1. Funding Summary

Source of Funding (\$K)

	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Department of Navy	\$1,649,753	\$1,683,753	\$1,713,183
Direct	\$1,268,672	\$1,316,656	\$1,415,502
Operation & Maintenance, Navy (Fleet, Base)	\$1,102,551	\$1,246,977	\$1,145,137
Operation & Maintenance, Navy (Fleet, OCO)	\$122,903	\$26,554	\$226,559
Military Personnel, Navy (Fleet, MPN)	\$43,218	\$43,125	\$43,806
Reimbursable	\$381,081	\$367,096	\$297,681
Operation & Maintenance, Navy	\$102,677	\$98,909	\$80,206
Shipbuilding & Conversion, Navy	\$230,577	\$222,115	\$180,115
Other Procurement, Navy	\$29,133	\$28,064	\$22,757
Procurement, Marine Corps	\$0	\$0	\$0
Other Department of Navy	\$18,695	\$18,009	\$14,603
Department of Defense	\$2,632	\$2,535	\$2,056
Other Orders	\$22,192	\$21,378	\$17,335
Other Federal Agencies	\$21,766	\$20,968	\$17,003
Foreign Military Sales	\$426	\$410	\$333
Other	\$0	\$0	\$0
Total	\$1,674,577	\$1,707,665	\$1,732,574

Department of the Navy Naval Shipyards

2. Performance Metrics (See glossary for definitions)

NORFOLK NAVAL SHIPYARD METRICS			
Item	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>
Unit Cost (\$ per manday)	784.31	777.71	811.62
Administrative efficiency	62.0%	57.5%	59.3%
CNO Availabilities Complete	4	7	4
CNO Availabilities in process at end of FY	5	5	7
Homeported Aircraft Carriers Supported (non-depot)	5.0	5.0	5.0
Homeported Submarines Supported (non-depot)	10.0	11.0	12.5
Homeported Surface Ships Supported (non-depot)	35.0	36.0	38.5
Capacity Utilization Rate	129.3%	133.0%	129.6%

3. Performance Data (See glossary for definitions)

NORFOLK NAVAL SHIPYARD (\$K)			
Estimates (\$K)	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Direct Civilian Labor	\$630,756	\$639,703	\$640,757
Direct Military Labor	\$33,842	\$19,994	\$20,304
Direct Material	\$147,134	\$270,924	\$182,111
Direct Contracts	\$257,302	\$134,043	\$208,104
Other Direct Costs	\$24,390	\$32,319	\$49,764
Overhead Civilian Labor	\$408,573	\$429,464	\$423,982
Overhead Military Labor	\$9,376	\$23,131	\$23,502
Overhead Non-Labor	\$160,820	\$157,480	\$183,428
NMCI	\$2,384	\$607	\$622
Total	<u>\$1,674,577</u>	<u>\$1,707,665</u>	<u>\$1,732,574</u>

Department of the Navy Naval Shipyards

Workload

Workload changes are consistent with fleet requirements and also reflect shipyard process improvements. FY 2018 actual workload reflects a less than 0.5 percent decrease below the FY 2018 estimate included in the FY 2019 President's Budget Estimate.

	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
<u>Total Direct Mandays</u>	<u>1,588,346</u>	<u>1,633,493</u>	<u>1,592,618</u>
<u>Total Mission Mandays</u>	<u>960,541</u>	<u>965,939</u>	<u>1,065,545</u>
Shipbuilding and Conversion, Navy (ERO, RCOH, etc...)	0	0	0
Carriers	295,600	332,447	311,087
Submarines	338,701	281,691	284,386
Surface Ship	3,739	1,172	26,693
Inactivation Work	0	0	0
Regional Maintenance Center (Non-Depot)	57,997	77,909	117,777
Non-CNO availability Depot Work (RA/TA, CM, Emergent Repair, etc.)	264,504	272,720	325,602
<u>Total Reimbursable Mandays</u>	<u>627,805</u>	<u>667,554</u>	<u>527,073</u>
Shipbuilding and Conversion, Navy (ERO, RCOH, etc...)	321,571	323,905	188,545
Carriers	28,011	20,605	36,121
Submarines	48,749	33,465	20,501
Surface Ship	0	0	0
Inactivation Work	6,682	4,291	4,123
Regional Maintenance Center (Non-Depot)	0	0	0
Non-CNO availability Depot Work (RA/TA, CM, Emergent Repair, etc.)	222,792	285,288	277,783
<u>Total Indirect Mandays</u>	<u>1,410,245</u>	<u>1,503,599</u>	<u>1,446,240</u>
Production and General Overhead	1,410,245	1,503,599	1,446,240
<u>Total Mandays</u>	<u>2,998,591</u>	<u>3,137,092</u>	<u>3,038,858</u>
Straight Time Mandays	2,676,420	2,905,371	2,805,527
Overtime Mandays	322,171	231,721	233,331

Department of the Navy Naval Shipyards

4. Workforce

The majority of the Norfolk workload is highly complex carrier and submarine work that requires a skilled workforce. In order to have a skilled workforce ready to accomplish this workload the activity is undertaking appropriate personnel and training initiatives.

WORKFORCE

Item	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Civilian End Strength	11,037	10,850	10,850
Military End Strength	571	537	537
Total Workforce	11,608	11,387	11,387

NNSY Apprentice Program

The shipyard apprentice program is a vital element of shipyard workforce revitalization. Focusing on blue-collar production trade skills results in employees that are Department of Labor certified journeymen with technical certificates or associate degrees. Planned apprentice program enrollment is as follows:

Item	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
First year apprentices	364	250	250
Second year apprentices	219	232	232
Third year apprentices	213	212	223
Fourth year apprentices	254	217	204
Total Workforce	1,050	911	909

Note: Second and subsequent year apprentice numbers for CY and BY are based on normal attrition from initial hires.

Apprentice program costs include apprentice salaries while in a training status, tuition, books, and other instructional costs.

\$K	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Apprentice Program Cost	\$17,958	\$13,734	\$13,920

Department of the Navy Naval Shipyards

5. Infrastructure Accounts (See glossary for definitions)

<u>Estimates</u> (\$000)	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Base Operating Support (OM,N)	\$35,620	\$36,332	\$37,059
Capital Equipment (OP,N)	\$30,122	\$80,007	\$47,193
Facilities Restoration & Modernization (OM,N)	\$35,602	\$55,000	\$177,375
Facilities Restoration & Modernization (NWCF)	\$1,465	\$0	\$0
Military Construction (MILCON)	\$72,990	\$26,120	\$48,930
Total	\$175,799	\$197,459	\$310,557

NNSY CAPITAL EQUIPMENT PROJECT SUMMARY (\$K)		
FY	Project Title	Cost (\$K)
2018	EMERGENCY DIESEL GENERATORS	\$3,925
2018	NFPC 25/50 TON FURNACE CONTROL MODERNIZATION	\$550
2018	NFPC SU-8 REPLACEMENT	\$4,905
2018	REACTOR ACCESS ENCLOSURE #4	\$3,675
2018	NFPC LINOCURE MIXER REPLACEMENT	\$955
2018	VERTICAL TURRET CENTER	\$1,350
2018	SUB ARC WELDING SYSTEM	\$720
2018	UNIX SERVERS	\$2,903
2018	VIRGINIA CLASS VPT PLATFORM	\$1,300
2018	MODERNIZE 60 TON PORTAL CRANE	\$3,000
2018	DUAL MEDIA DISCHARGE ENCLOSURES	\$1,840
2018	FREEZE SEAL COMPRESSOR SYSTEMS	\$1,090
2018	VIRGINIA CLASS SAIL RACETRACK PLATFORM	\$478
2018	VIRGINIA CLASS BOW DOME RING HANDLING SYSTEM	\$1,380
2018	VIRGINIA CLASS VERTICAL LAUNCH SYSTEM PLATFORM	\$500
2018	100 TON TRUCK MOUNTED CRANE	\$1,551
FY Total		\$30,122

**Department of the Navy
Naval Shipyards**

2019	T30 COMPLEX	\$1,907
2019	M32 COMPLEX	\$1,570
2019	NCIS COMPLEX	\$354
2019	TANK CLEANING SYSTEMS	\$5,440
2019	100 TON TRUCK MOUNTED CRANE	\$1,551
2019	PORTAL CRANE SERVICE LIFE EXTENSIONS	\$8,000
2019	NFPC SU-12 REPLACEMENT	\$16,500
2019	OILY WASTE/WASTE OIL COLLECTION SYSTEM	\$1,500
2019	M140 #3 REPLACEMENT	\$8,000
2019	CNC 5 AXIS ROUTER	\$1,500
2019	WELDING AND CLADDING SYSTEM	\$1,685
2019	CRAWLERS	\$8,000
2019	DUAL MEDIA DISCHARGE ENCLOSURE	\$4,100
2019	TANK CLEANING VACUUM SYSTEM	\$2,000
2019	FREEZE SEAL TRAILERS (2)	\$2,000
2019	CASCON COMMUNICATIONS SYSTEM	\$2,000
2019	CNC PIPE BENDER	\$2,500
2019	HP AIR COMPRESSOR, 2 EA	\$1,500
2019	NFPC LEICA SCANNERS	\$900
2019	VA CLASS PROPULSOR HANDLING SYSTEM	\$9,000
FY Total		\$80,007
2020	VIRGINIA CLASS PROPULSOR HANDLING SYSTEM	\$13,500
2020	NSA - WIRELESS NETWORK UPGRADE/REFRESH	\$2,500
2020	100 TON HYDRAULIC MOBILE CRANE	\$841
2020	FREEZE SEAL TRAILERS (2)	\$1,296
2020	LARGE CAPACITY CNC PIPE BENDER	\$2,273
2020	NFPC LEICA SCANNERS	\$804
2020	REPLACEMENT HP AIR COMPRESSOR	\$1,352
2020	VA CLASS BOW DOME RING AND SLED	\$920

**Department of the Navy
Naval Shipyards**

2020	LOCOMOTIVES	\$2,561
2020	CNC 5 AXIS WATER JET TABLE	\$1,643
2020	BLAST BOOTH FLOOR #2 FLR REPLACEMENT	\$1,685
2020	COLD SPRAY MACHINE	\$873
2020	ABRASIVE TUMBLER BLASTER	\$1,617
2020	BAR STOCK SAWING CENTER	\$2,181
2020	HYDROSTATIC TEST TANK	\$4,321
2020	HORIZONTAL TURNING CENTER (7)	\$2,667
2020	SUBMARINE CAMELS	\$1,250
2020	TANK CLEANING VACUUM SYSTEM	\$3,032
2020	(EOL REPLACEMENT) CASCON COMMUNICATIONS SYS (2)	\$1,877
FY Total		\$47,193

NORFOLK NSY MILCON PROJECTS SUMMARY (\$K)		
Project Title	FY	COST
PRODUCTION TRAINING FACILITY	2018	\$72,990
	FY Total	\$72,990
SHIPS MAINTENANCE FACILITY	2019	\$26,120
	FY Total	\$26,120
DRY DOCK FLOOD PROTECTION IMPROVEMENTS	2020	\$48,930
	FY Total	\$48,930

NORFOLK NAVAL SHIPYARD

FY	Hull	Name	Planned Start Date	Planned End Date	Actual Start Date	Actual End Date	Avail Type	Budgeted Mission Direct Labor MD	Budgeted Reimb Labor MD	Actual Mission Direct Labor MD	Actual Reimb Direct Labor MD
FY13	SSN 753	USS ALBANY	06/01/13	02/15/15	01/06/14	08/23/18	EOH	239,698	21,902	555,429	34,749
FY13	AS 41	USS McKEE	09/25/13	12/19/14	03/03/14	TBD	IA	0	46,801	TBD	TBD
FY15	SSN 701	USS LA JOLLA	12/01/14	05/01/17	02/03/15	TBD	CONV	0	583,092	TBD	TBD
FY16	SSBN 740	USS RHODE ISLAND	01/22/16	04/22/18	01/27/16	09/13/18	ERO	496,611	71,152	536,523	72,128
FY17	SSN 711	USS SAN FRANCISCO	01/09/17	09/24/20	05/11/17	TBD	CONV	0	627,083	TBD	TBD
FY17	CVN 77	USS GEORGE H.W. BUSH	04/27/17	06/10/17	08/25/17	10/17/17	CIA1A	11,985	125	5,245	65
FY17	MTS 626	USS DANIEL WEBSTER	07/24/17	11/21/17	07/25/17	12/11/17	PEMA	0	68,063	0	34,384
FY17	CVN 69	USS DWIGHT D EISENHOWER	09/17/17	03/17/18	09/17/17	TBD	PIA3	195,243	38,796	TBD	TBD
FY18	SSBN 742	USS WYOMING	02/09/18	05/09/20	03/01/18	TBD	ERO	409,883	62,165	TBD	TBD
FY18	SSGN 729	USS GEORGIA	02/15/18	05/15/19	05/14/18	TBD	ERP	41,266	2,841	TBD	TBD
FY18	LHD 7	USS IWO JIMA	09/17/18	04/19/19	Deferred	Deferred	PMA	13,479	0	Deferred	Deferred
FY19	SSBN 732	USS ALASKA	10/01/18	09/30/19	Deferred	Deferred	ERP	4,224	8,459	Deferred	Deferred
FY19	CVN 77	USS GEORGE H.W. BUSH	11/06/18	03/07/20	TBD	TBD	DP1A2	448,715	45,501	TBD	TBD
FY19	LHD 7	USS IWO JIMA	12/27/18	09/20/19	01/03/19	TBD	PMA	3,848	0	TBD	TBD
FY19	CVN 75	USS HARRY S. TRUMAN	11/15/18	12/29/18	01/14/19	TBD	CIA3B	11,985	113	TBD	TBD
FY19	CVN 69	USS DWIGHT D EISENHOWER	03/01/19	04/14/19	TBD	TBD	CIA3A	11,985	176	TBD	TBD
FY20	SSBN 732	USS ALASKA	10/01/19	09/30/20	TBD	TBD	ERP	34,628	10,453	TBD	TBD
FY20	LHD 1	USS WASP	10/28/19	05/29/20	TBD	TBD	PMA	20,779	0	TBD	TBD
FY20	SSN 770	USS TUCSON	12/10/19	05/10/22	TBD	TBD	EOH	315,594	3,901	TBD	TBD
FY20	SSGN 728	USS FLORIDA	02/01/20	01/15/21	TBD	TBD	MMP	22,789	0	TBD	TBD
FY20	LHD 5	USS BATAAN	06/08/20	04/02/21	TBD	TBD	PMA	19,277	0	TBD	TBD
FY20	SSN 750	USS NEWPORT NEWS	06/11/20	12/08/20	TBD	TBD	DSRA	71,058	52	TBD	TBD
FY20	CVN 78	USS GERALD R. FORD	09/23/20	03/23/21	TBD	TBD	PIA1	38,371	0	TBD	TBD

Department of the Navy Naval Shipyards

NOTES:

1. USS IWO JIMA FY18 PMA was deferred to FY19 and scope of work was reduced.
2. USS ALASKA FY19 ERP was deferred to FY20.

Maximum Percent Late	170.8%	Maximum Percent Over MD Budget	125.6%
Average Percent Late	56.0%	Average Percent Over MD Budget	6.8%

**Department of the Navy
Naval Shipyards**

Glossary

Performance Metrics:

Schedule Adherence: Two metrics, Average Percentage Late and Maximum Percentage Late. The percentage late is calculated by dividing the availability actual duration by the scheduled duration (as stated in the last Presidential Budget).

Manday Budget Performance: Two metrics, Average Percentage Over Manday Budget and Maximum Percentage Over Manday Budget. The percentage over manday budget is calculated by dividing the availability actual mandays by the budgeted mandays (as stated in the last Presidential Budget).

Unit Cost: This metric reports the total cost less direct material, direct contract, other direct, and MILCON per direct labor manday delivered. CY and BY reflect the budgeted values.

Administrative Efficiency: This metric reports the total cost less direct material and indirect costs divided by total cost less direct material. CY and BY reflect the budgeted values.

CNO Availabilities Complete: This metric reports the total number of CNO availabilities completed during the PY. This number will be a projection for CY and BY.

CNO Availabilities in Progress at end of FY: The metric reports the number of CNO availabilities in progress at the end of the PY. This number will be a projection for CY and BY.

Homeported Aircraft Carriers Supported: Number of homeported aircraft carriers supported by activity. Determines activities non-depot workload.

Homeported Submarines Supported: Number of homeported submarines supported by activity. Determines activities non-depot workload.

Homeported Surface Ships Supported: Number of homeported surface ships supported by activity. Determines activities non-depot workload.

Shipyard Capacity Utilization: This metric reports the total workload compared to the modified dry-dock capacity index. CY and BY reflect the budgeted values.

Department of the Navy Naval Shipyards

Performance Data:

Direct Civilian Labor: Includes actual direct civilian labor cost (accelerated by benefits) plus direct overtime cost.

Direct Military Labor: Total military salary cost times percentage of military mandays spent on direct work.

Direct Material: Actual material (piece-part) costs.

Direct Contracts: Includes all contract labor costs.

Other Direct Costs: Includes direct costs not included in direct material and direct contracts. Examples include travel costs and equipment rental costs.

Overhead Civilian Labor: Includes actual overhead civilian labor cost (accelerated by benefits), overhead overtime, differential costs, bonuses, lump sum leave costs, and transportation incentive program costs.

Overhead Military Labor: Total military salary cost less that reported as direct military labor.

Overhead Non-Labor: Includes such non-labor costs as overhead travel, telecommunications, office, shop, and furniture purchases less than OPN \$250,000 threshold, crane maintenance, and Janitorial services.

Infrastructure Accounts: These accounts provide the funding for infrastructure operation, maintenance, and replacement as follows:

Base Operating Support (OM,N): Base Operating Support finances utilities, maintenance, security, transportation, and port operations costs required to support industrial operations.

Capital Expenditures (OP,N): The Capital Budget Authority reflects the financing of essential fleet support equipment and other capital improvements critical to sustaining shipyard operations, improving productivity, meeting health, safety and environmental requirements and lowering production costs.

Facilities Sustainment, Restoration & Modernization (OM,N and NWCF): The Sustainment, Restoration, and Modernization Budget Authority reflect the financing of essential infrastructure maintenance and modernization. Per 10USC 2476, the Sustainment portion of infrastructure investments is not report herein.

Department of the Navy Naval Shipyards

Military Construction (MILCON): The Military Construction Budget Authority reflects the financing of essential infrastructure replacement critical to sustaining shipyard operations, improving productivity, meeting health, safety and environmental requirements and lowering production costs.

Department of the Navy
FY 2020 President's Budget Submission
Operation and Maintenance, Navy

Dollars in Thousands					FY 2019			FY 2020		
Appropriation	Activity Type	Maintenance Type	Weapon System	FY2018 TOA Funded	TOA Funded	TOA Required	% Funded	TOA Funded	TOA Required	% Funded
Operation and Maintenance, Navy	Aircraft	Aircraft and Engine Accessories and Components	14BAM - BAMS-D	29,480	30,070	30,070	100%	30,671	30,671	100%
			CMV-22 JPBL	-	-	-	-	22,968	22,976	100%
			E-6	49,458	63,302	67,372	94%	60,918	60,994	100%
			KC-130J	6,272	13,183	13,664	96%	9,453	12,195	78%
			V-22 PBL	73,124	72,492	74,597	97%	65,250	65,273	100%
		Aircraft and Engine Accessories and Components Total		158,334	179,047	185,703	96%	189,260	192,109	99%
		Basic Aircraft	JSF	488,031	496,048	616,927	80%	634,723	648,850	98%
		Basic Aircraft Total		488,031	496,048	616,927	80%	634,723	648,850	98%
		Engine	CMV-22 PBTH	-	-	-	-	1,936	1,937	100%
			JSF	67,276	160,293	228,299	70%	220,930	236,853	93%
			KC-130J	83,329	56,184	66,297	85%	71,170	79,085	90%
			V-22 PBTH	122,093	86,216	125,772	69%	108,495	108,532	100%
		Engine Total		272,698	302,693	420,368	72%	402,531	426,407	94%
		Other	14RQ7 - Shadow	593	627	627	100%	-	-	-
		Other Total		593	627	627	100%	-	-	-
	All Other Items Not Identified	N/A	BQM-177	2,188	2,960	3,500	85%	2,752	3,500	79%
			GQM-163A	3,687	2,195	2,450	90%	2,307	2,500	92%
			Other	17,148	16,460	16,460	100%	16,581	16,581	100%
			SURTASS	2,016	9,938	9,938	100%	11,395	11,395	100%
		N/A Total		25,039	31,553	32,348	98%	33,035	33,976	97%
	Electronics and Communications Systems	Software	14DTA - JMPS	8,468	7,860	7,860	100%	8,050	8,050	100%
		Software Total		8,468	7,860	7,860	100%	8,050	8,050	100%
	Missiles	Missile Accessories and Components	Various	32,773	27,506	27,506	100%	24,950	24,950	100%
		Missile Accessories and Components Total		32,773	27,506	27,506	100%	24,950	24,950	100%
	Ordnance Weapons and Munitions	Other	14D2T - GUNS	1,077	517	512	101%	534	534	100%
			14D2T - ROCKETS & LAUNCHERS	213	285	285	100%	358	358	100%
		Other Total		1,290	802	797	101%	892	892	100%
	Ordnance Weapons and Munitions	Other	14D2T - JSOW	455	-	-	-	-	-	-
		Other Total		455	-	-	-	-	-	-

Department of the Navy
FY 2020 President's Budget Submission
Operation and Maintenance, Navy

Dollars in Thousands					FY 2019			FY 2020		
Appropriation	Activity Type	Maintenance Type	Weapon System	FY2018 TOA Funded	TOA Funded	TOA Required	% Funded	TOA Funded	TOA Required	% Funded
	Aircraft	Aircraft and Engine Accessories and Components	VH	219	265	265	100%	1,400	1,400	100%
		Aircraft and Engine Accessories and Components Total		219	265	265	100%	1,400	1,400	100%
	Basic Aircraft	Basic Aircraft	C-130T	-	-	-	-	-	-	-
			E-6B	46,380	59,660	59,660	100%	51,938	51,938	100%
			EMER REPR	4,701	2,445	2,445	100%	2,536	2,536	100%
			KC-130J	31,408	34,336	34,336	100%	24,701	24,701	100%
			Basic Aircraft Total	82,489	96,441	96,441	100%	79,175	79,175	100%
		Engine	CFM562A2	24,521	26,506	26,506	100%	19,859	19,859	100%
			T700GE401CL	1,795	1,608	1,608	100%	1,574	1,705	92%
			T700GE401CV	403	-	220	0%	-	-	-
			T700GE401CX	2,623	2,102	2,102	100%	1,340	2,947	45%
			T700GE401L	172	155	155	100%	-	-	-
			T700GE401X	169	156	156	100%	-	-	-
			Engine Total	29,683	30,527	30,747	99%	22,773	24,511	93%
		Other	14RQA - BLACKJACK	-	5,860	6,024	97%	8,602	8,602	100%
			14SEA - Scan Eagle	28,681	8,472	8,472	100%	3,320	3,320	100%
		Other Total		28,681	14,332	14,496	99%	11,922	11,922	100%
	Software	F/A-18 E/F		57	-	-	-	92	92	100%
			Manned Recon Systems	826	598	606	99%	173	173	100%
		Software Total		883	598	606	99%	265	265	100%
	All Other Items Not Identified	N/A	14TOP - TOPSCENE	-	23	-	-	-	-	-
			Engine Containers	26	117	117	100%	93	93	100%
		Other		1,954	1,851	2,947	63%	2,772	2,931	95%
			N/A Total	1,980	1,991	3,064	65%	2,865	3,024	95%
	Electronics and Communications Systems	Software	14DTA - JMPS	166	93	93	100%	100	100	100%
			Software Total	166	93	93	100%	100	100	100%
	Missiles	Surface Communications and Control Systems	SIDEWINDER	-	-	-	-	97	97	100%
			Surface Communications and Control Systems Total	-	-	-	-	97	97	100%

Department of the Navy
FY 2020 President's Budget Submission
Operation and Maintenance, Navy

Dollars in Thousands					FY 2019			FY 2020		
Appropriation	Activity Type	Maintenance Type	Weapon System	FY2018 TOA Funded	TOA Funded	TOA Required	% Funded	TOA Funded	TOA Required	% Funded
	Aircraft	Aircraft and Engine Accessories and Components	14MQ8 - Firescout	7,184	11,742	11,743	100%	12,618	12,618	100%
			E-6	10,604	12,817	12,817	100%	11,834	11,834	100%
			EFTM	2,318	1,925	10,525	18%	5,467	10,585	52%
			KC-130J	224	384	384	100%	357	357	100%
			V-22 PBL	3,640	-	-	-	-	-	-
			Various	1,555	3,033	3,033	100%	3,154	3,154	100%
			VH	996	1,790	1,790	100%	999	999	100%
		Aircraft and Engine Accessories and Components Total		26,521	31,691	40,292	79%	34,429	39,547	87%
		Basic Aircraft	AH-1W	2,281	-	2,457	0%	-	-	-
			AH-1Z	3,105	3,730	3,730	100%	2,449	2,449	100%
			AV-8B	14,779	21,528	24,927	86%	13,781	13,781	100%
			C-2A	19,805	22,409	27,698	81%	5,432	10,093	54%
			CH-53E	41,663	41,976	41,976	100%	43,354	43,354	100%
			E-2C	31,786	9,884	19,071	52%	13,468	17,533	77%
			E-2D	5,869	11,146	11,146	100%	8,683	8,683	100%
			E-6B	-	-	-	-	2,564	2,564	100%
			EA-18G	1,417	5,645	6,525	87%	4,440	5,739	77%
			EA-6B	151	-	-	-	-	-	-
			EMER FA-18	23,448	21,307	30,438	70%	15,856	15,856	100%
			EMER REPR	79,867	76,347	76,347	100%	66,541	66,541	100%
			EP-3E	4,372	5,900	5,900	100%	-	-	-
			FA-18B	2,116	-	-	-	-	-	-
			FA-18C	61,714	44,551	52,022	86%	26,749	39,547	68%
			FA-18D	14,587	17,149	22,008	78%	13,074	20,516	64%
			FA-18E	19,551	13,191	14,680	90%	11,750	13,318	88%
			FA-18F	10,467	14,631	16,120	91%	9,919	11,596	86%
			MH-53E	7,647	10,162	10,162	100%	8,790	8,790	100%
			MH-60R	20,694	44,917	51,254	88%	28,275	32,624	87%
			MH-60S	41,540	51,959	59,062	88%	38,545	43,177	89%
			MQ-8B	-	-	-	-	425	425	100%
			MQ-8C	-	-	-	-	106	106	100%
			MV-22B	27,954	30,498	30,498	100%	52,197	52,197	100%
			P-3C	2,186	-	-	-	-	-	-
			T-34C	1,341	1,650	1,650	100%	1,484	1,484	100%
			T-44C	15,371	25,705	25,705	100%	22,576	25,398	89%
			T-6A	2,903	2,907	2,907	100%	3,129	3,129	100%
			T-6B	941	-	-	-	9,908	12,515	79%
			TAV-8B	1,262	1,184	1,184	100%	-	-	-
			TE-2C	337	-	-	-	-	-	-
			UH-1Y	6,205	11,248	11,856	95%	16,073	16,073	100%
		Basic Aircraft Total		465,359	489,624	549,323	89%	419,568	467,488	90%

Department of the Navy
FY 2020 President's Budget Submission
Operation and Maintenance, Navy

Dollars in Thousands					FY 2019			FY 2020		
Appropriation	Activity Type	Maintenance Type	Weapon System	FY2018 TOA Funded	TOA Funded	TOA Required	% Funded	TOA Funded	TOA Required	% Funded
	Engine		F402RR408B	19,596	37,555	37,555	100%	33,684	33,684	100%
			F414GE400	15,749	17,465	17,465	100%	18,409	18,409	100%
			F414GE400C	102,523	73,296	89,531	82%	88,792	100,301	89%
			F414GE400F	56,452	51,022	58,483	87%	47,811	53,493	89%
			F414GE400H	63,203	67,363	83,725	80%	69,672	78,160	89%
			F414GE400L	110,599	119,992	148,034	81%	133,254	143,973	93%
			F414GE400S	72,899	54,058	67,964	80%	63,503	71,994	88%
			KC-130J	172	584	584	100%	561	561	100%
			T58GE400B	3,242	2,759	2,759	100%	1,636	1,636	100%
			T64GE416	994	3,187	5,312	60%	-	-	-
			T64GE416A	9,548	4,646	5,807	80%	13,725	13,725	100%
			T64GE419	27,888	34,976	32,676	107%	34,800	34,800	100%
	Engine Total			482,865	466,903	549,895	85%	505,847	550,736	92%
	Other		14RQ2 - PUMA	105	375	375	100%	209	209	100%
			14RQ7 - Shadow	1,173	1,157	1,157	100%	-	-	-
			14RQA - BLACKJACK	-	5,576	5,684	98%	9,902	20,431	48%
			14SEA - Scan Eagle	2,693	12,219	12,219	100%	20,765	20,765	100%
			JSF	28,625	25,992	27,907	93%	39,661	41,317	96%
			Various	25,051	30,417	50,841	60%	34,072	50,908	67%
	Other Total			57,647	75,736	98,183	77%	104,609	133,630	78%
	Software		AASP	895	2,025	2,030	100%	2,376	2,359	101%
			ADMACS/ALRE	2,581	7,805	8,971	87%	3,673	3,750	98%
			AEA	16,592	15,550	25,821	60%	9,224	9,731	95%
			AH-1	865	2,573	2,915	88%	711	713	100%
			AH-1W	320	542	934	58%	801	938	85%
			ALR67	2,900	1,347	1,579	85%	6,347	6,384	99%
			AMC&D	118	-	-	-	107	107	100%
			ARC210	199	103	179	58%	253	253	100%
			AV-8B	7,391	6,771	12,331	55%	11,748	12,959	91%
			C-130FRT	471	523	546	96%	518	546	95%
			C-2	121	94	84	112%	108	111	97%
			CAINS/EGI	113	104	461	23%	154	154	100%
			CASS	2,949	3,966	7,193	55%	5,967	6,543	91%
			CXP	153	258	467	55%	-	-	-
			E-2C	27	-	-	-	-	-	-
			E-2D	5,981	8,744	8,744	100%	16,913	19,503	87%
			E-6	702	1,177	1,915	61%	2,183	3,036	72%
			EA-18G	3,878	20,658	34,939	59%	26,666	37,156	72%
			EA-6B	2,895	-	2,896	0%	-	-	-
			EMALS/ALRE	-	-	-	-	4,773	5,798	82%
			EWSSA	18,892	17,491	17,617	99%	19,181	19,649	98%
			F/A-18 A-D	5,661	2,839	8,831	32%	9,546	9,546	100%
			F/A-18 E/F	4,676	3,672	3,886	94%	3,736	3,736	100%
			GPS	351	402	648	62%	471	471	100%
			GPWS	108	220	280	79%	281	281	100%

Department of the Navy
FY 2020 President's Budget Submission
Operation and Maintenance, Navy

Dollars in Thousands					FY 2018			FY 2019			FY 2020		
Appropriation	Activity Type	Maintenance Type	Weapon System	TOA Funded	TOA Funded	TOA Required	% Funded	TOA Funded	TOA Required	% Funded			
			H-53	62	21	21	100%	47	47	100%			
			H53K	-	454	490	93%	1,035	1,284	81%			
			HE-2K	878	4,437	4,437	100%	5,738	5,871	98%			
			Intrepid Tiger	-	-	-	-	8,456	9,388	90%			
			JMPS	1,901	1,960	2,055	95%	2,133	2,657	80%			
			KC-130J	857	1,235	1,313	94%	815	900	91%			
			LAS	432	414	519	80%	579	579	100%			
			LPIA	150	98	115	85%	95	95	100%			
			Manned Recon Systems	1,742	1,754	2,082	84%	1,974	2,027	97%			
			MH-60R/S	3,471	3,147	13,812	23%	2,414	2,589	93%			
			Minotaur	-	-	-	-	3,167	-	-			
			MQ-8	195	359	710	51%	419	812	52%			
			MSMA	284	305	445	69%	243	446	54%			
			P-3C	411	350	381	92%	495	495	100%			
			P-8	3,339	5,039	5,626	90%	4,192	4,235	99%			
			SH-60F/H/HH-60H	321	354	844	42%	-	1,081	0%			
			Support	505	4,529	4,710	96%	3,746	4,913	76%			
			T-45	1,455	2,140	3,270	65%	2,227	3,225	69%			
			TAMMAC	238	139	187	74%	312	312	100%			
			TRITON	-	-	1,915	0%	-	-	-			
			V-22	727	164	236	69%	458	999	46%			
			VH	2,133	4,285	5,007	86%	2,793	2,861	98%			
			Software Total	97,940	128,048	191,442	67%	167,075	188,540	89%			
			Support Equipment	Various	3,675	4,242	5,260	81%	3,640	5,393	67%		
			Support Equipment Total		3,675	4,242	5,260	81%	3,640	5,393	67%		
			All Other Items Not Identified	N/A	14TOP - TOPSCENE	446	452	452	100%	-	-	-	
					AMCM	6,703	6,704	6,704	100%	2,948	2,948	100%	
					AQM-37C	1,444	763	2,418	32%	763	2,418	32%	
					BQM-177	3,425	2,431	4,735	51%	1,931	4,661	41%	
					BQM-34S	3,507	1,918	2,419	79%	2,029	2,519	81%	
					BQM-74E	2,512	2,026	2,729	74%	2,150	2,735	79%	
					Countermeasures	519	484	484	100%	561	561	100%	
					EAF	517	663	1,940	34%	677	1,267	53%	
					Engine Containers	2,044	1,467	1,467	100%	1,303	1,491	87%	
					GQM-163A	2,373	3,209	3,407	94%	2,557	3,550	72%	
					ITALD	-	-	-	-	210	210	100%	
					MATCALs	2,727	1,505	1,152	131%	1,282	1,244	103%	
					MOBILE LAND TARGETS	275	315	1,051	30%	719	1,052	68%	
					NATO Seasparrow	165	2,509	2,509	100%	2,149	2,149	100%	
					Other	48,598	58,608	59,502	98%	44,815	44,914	100%	
					Other End Items	14,938	22,360	22,360	100%	21,788	21,788	100%	
					SMCM	2,109	2,689	2,689	100%	2,413	2,413	100%	
					Sonar Towed Array	1,893	1,001	1,001	100%	846	846	100%	
					SURTASS	2,163	10,868	10,868	100%	10,965	10,965	100%	
					TA/AS-TTSP	1,261	911	967	94%	1,134	1,134	100%	

Department of the Navy
FY 2020 President's Budget Submission
Operation and Maintenance, Navy

Dollars in Thousands					FY 2019			FY 2020		
Appropriation	Activity Type	Maintenance Type	Weapon System	FY2018 TOA Funded	TOA Funded	TOA Required	% Funded	TOA Funded	TOA Required	% Funded
			TMSS	1,370	2,035	2,507	81%	2,438	2,815	87%
		N/A Total		98,989	122,918	131,361	94%	103,678	111,680	93%
	Electronics and Communications Systems	Electronics and Communications Equipment	ALQ-99	10,517	9,375	10,709	88%	10,444	11,728	89%
		Electronics and Communications Equipment Total		10,517	9,375	10,709	88%	10,444	11,728	89%
		End Item	CEC	2,817	3,792	3,792	100%	4,782	4,782	100%
			DCRS	327	369	571	65%	-	-	-
			Manned Recon	9,944	10,131	12,169	83%	8,202	9,680	85%
			Navigation	4,342	3,681	3,681	100%	3,832	3,832	100%
			Other End Items	12,880	12,482	12,482	100%	12,173	12,173	100%
		End Item Total		30,310	30,455	32,695	93%	28,989	30,467	95%
		Other	MATCALs	1,417	1,892	2,474	76%	5,037	6,037	83%
		Other Total		1,417	1,892	2,474	76%	5,037	6,037	83%
		Software	14DTA - JMPS	3,637	3,528	3,528	100%	3,621	3,621	100%
		Software Total		3,637	3,528	3,528	100%	3,621	3,621	100%
		Subassemblies	P-3 Beartrap	891	828	920	90%	723	820	88%
		Subassemblies Total		891	828	920	90%	723	820	88%
	Missiles	Missile Accessories and Components	Other	7,559	9,526	9,526	100%	9,806	9,806	100%
			Various	7,485	8,343	8,343	100%	8,531	8,531	100%
		Missile Accessories and Components Total		15,043	17,869	17,869	100%	18,337	18,337	100%
		Other	14D1T - AARGM	2,505	2,532	3,587	71%	-	-	-
			14D1T - AMRAAM	2,103	1,054	1,102	96%	26	906	3%
			14D1T - CORE	4,379	5,257	5,257	100%	8,454	8,454	100%
			14D1T - HARM	1,126	2,749	2,749	100%	-	-	-
			14D1T - HARM/AARGM	-	-	-	-	3,863	4,414	88%
			14D1T - HARPOON	8,824	7,328	13,285	55%	9,180	13,491	68%
			14D1T - HARPOON SUBS	-	-	-	-	9,255	9,255	100%
			14D1T - HELLFIRE	1,968	1,358	1,596	85%	-	-	-
			14D1T - HELLFIRE/PGMs	-	-	-	-	3,936	4,300	92%
			14D1T - IT (AWIS)	4,615	6,005	6,005	100%	5,322	5,322	100%
			14D1T - LRASM	-	2,041	2,041	100%	8,781	9,757	90%
			14D1T - MAVERICK	873	3,114	3,660	85%	-	-	-
			14D1T - SIDEWINDER (9M)	3,640	2,832	3,661	77%	3,723	4,152	90%
			14D1T - SIDEWINDER (9X)	2,393	3,003	3,514	85%	2,878	3,525	82%
			14D1T - SLAM-ER	3,211	933	2,478	38%	932	2,478	38%
			14D1T - SPARROW (AIR)	139	-	2,948	0%	-	-	-
		Other Total		35,776	38,206	51,883	74%	56,350	66,054	85%
	Surface Communications and Control Systems	AMRAAM		251	423	482	88%	470	470	100%
		ARM		5,400	5,045	5,045	100%	5,519	5,590	99%
		DAW/JDAM		542	370	420	88%	1,685	1,685	100%
		HARPOON/SLAM ER		524	1,104	1,118	99%	289	289	100%
		JSOW		2,975	845	894	95%	1,735	1,905	91%

Department of the Navy
FY 2020 President's Budget Submission
Operation and Maintenance, Navy

Dollars in Thousands					FY 2019			FY 2020		
Appropriation	Activity Type	Maintenance Type	Weapon System	FY2018 TOA Funded	TOA Funded	TOA Required	% Funded	TOA Funded	TOA Required	% Funded
			SIDEWINDER	107	538	576	93%	247	247	100%
		Surface Communications and Control Systems Total		9,799	8,325	8,535	98%	9,945	10,186	98%
	Ordnance Weapons and Munitions	End Item	GUNS	3,965	-	-	-	-	-	-
		End Item Total		3,965	-	-	-	-	-	-
		Other	14D1T - JAGM	-	-	-	-	695	695	100%
			14D2T - AAE	5,594	5,047	9,656	52%	9,978	11,476	87%
			14D2T - AMMO	1,379	1,391	1,636	85%	1,489	1,655	90%
			14D2T - BOMBS	4,768	5,773	6,428	90%	-	-	-
			14D2T - BOMBS/DAW	-	-	-	-	7,739	8,606	90%
			14D2T - CADs/PADs (AEPS)	10,752	12,045	15,860	76%	13,599	15,151	90%
			14D2T - COUNTERMEASURES	2,758	2,624	3,499	75%	3,394	3,772	90%
			14D2T - GUNS	6,439	6,285	7,362	85%	7,370	8,248	89%
			14D2T - JAGM	-	152	315	48%	-	-	-
			14D2T - JATO/RATO	753	361	417	87%	-	-	-
			14D2T - JATOS	-	-	-	-	702	702	100%
			14D2T - JDAM	725	590	590	100%	1,300	1,300	100%
			14D2T - JSOW	2,163	547	547	100%	2,582	2,583	100%
			14D2T - PYROTECHNICS	493	561	611	92%	515	558	92%
			14D2T - ROCKETS & LAUNCHERS	3,693	4,156	5,666	73%	3,875	4,346	89%
			14DWE - FWST	7,429	6,546	6,897	95%	6,813	7,035	97%
		Other Total		46,946	46,078	59,484	77%	60,051	66,127	91%
	Ships	Carrier Incremental Availabilities	CV-CVN	18,960	12,967	12,967	100%	12,522	12,522	100%
		Carrier Incremental Availabilities Total		18,960	12,967	12,967	100%	12,522	12,522	100%
		Continuous Maintenance	AMPHIBS	6,027	6,765	6,765	100%	19,035	19,035	100%
			CG	10,349	15,967	15,967	100%	18,310	18,310	100%
			DDG	13,119	10,020	10,020	100%	55,684	55,684	100%
			LCAC	701	558	558	100%	5,340	5,340	100%
			LCS	13,040	22,276	22,276	100%	19	19	100%
			LSD	6,167	-	-	-	41,419	41,419	100%
			MINESWEEPERS	955	2,265	2,265	100%	4,333	4,333	100%
		Other		53,360	76,132	76,132	100%	191,368	191,368	100%
		Continuous Maintenance Total		103,719	133,983	133,983	100%	335,508	335,508	100%
		Other	AFDL-AFDM-ARS	1,137	437	675	65%	904	1,152	78%
			AGF-LCC	1,038	-	-	-	-	-	-
			AMPHIBS	104,833	78,733	90,335	87%	75,148	81,379	92%
			ARDM-AS	1,330	1,311	3,034	43%	2,394	2,169	110%
			AS-ARDM	5,153	530	530	100%	671	671	100%
			CG	62,878	51,222	57,095	90%	51,509	57,593	89%
			CV-CVN	36,132	34,384	34,926	98%	41,175	39,034	105%
			DDG	199,298	169,424	190,758	89%	158,077	200,438	79%
			DDG-1000	4,990	-	-	-	-	-	-
			LCS	23,284	32,046	34,335	93%	40,646	41,583	98%
			MCM-MHC (A)	16,292	15,790	16,308	97%	14,133	13,904	102%

Department of the Navy
FY 2020 President's Budget Submission
Operation and Maintenance, Navy

Dollars in Thousands					FY 2019			FY 2020		
Appropriation	Activity Type	Maintenance Type	Weapon System	FY2018 TOA Funded	TOA Funded	TOA Required	% Funded	TOA Funded	TOA Required	% Funded
			PC	21,651	30,307	34,067	89%	29,076	28,084	104%
			SSBN	389,037	408,864	411,830	99%	384,767	386,326	100%
			SSN-MTS-SSGN	88,477	95,497	91,859	104%	131,602	136,899	96%
			SSN-SSGN	305,481	297,374	298,301	100%	274,236	274,236	100%
			Other Total	1,261,011	1,215,919	1,264,053	96%	1,204,338	1,263,468	95%
			Ship Maint	-	-	-	-	-	-	-
			AFDL-AFDM-ARS	-	-	-	-	-	-	-
			AGF-LCC	13,567	14,633	15,409	95%	13,446	13,446	100%
			AMPHIBS	102,257	82,988	85,256	97%	107,170	107,170	100%
			ARDM-AS	2,813	-	-	-	-	-	-
			AS-ARDM	2,247	345	345	100%	727	727	100%
			CG	34,664	34,844	35,385	98%	39,865	40,441	99%
			CV-CVN	1,231,056	1,485,797	1,530,944	97%	1,400,111	1,462,608	96%
			DDG	372,671	151,087	155,476	97%	160,616	163,629	98%
			LCS	30,710	19,976	20,948	95%	29,228	29,228	100%
			MCM-MHC (A)	41,754	27,039	27,048	100%	25,618	25,618	100%
			PC	22,464	3,788	3,201	118%	6,036	6,036	100%
			SSBN	608,624	689,931	706,804	98%	374,925	370,104	101%
			SSN-MTS-SSGN	887,052	747,120	837,372	89%	1,268,241	1,279,749	99%
			SSN-SSGN	1,030,970	988,551	1,005,044	98%	1,087,507	1,099,476	99%
			Ship Maint Total	4,380,848	4,246,099	4,423,232	96%	4,513,490	4,598,232	98%
	Aircraft	Aircraft and Engine Accessories and Components	E-6	3,701	3,710	3,710	100%	3,413	3,413	100%
			KC-130J	35	279	279	100%	270	270	100%
			Various	4,007	4,764	5,266	90%	4,419	5,440	81%
			VH	6,440	7,944	10,270	77%	3,101	3,101	100%
			Aircraft and Engine Accessories and Components Total	14,183	16,697	19,525	86%	11,203	12,224	92%
		Basic Aircraft	AH-1Z	440	1,224	1,224	100%	1,251	1,251	100%
			C-20G	1,757	-	-	-	1,287	1,287	100%
			C-26D	58	294	294	100%	150	150	100%
			C-9B	-	-	4,995	0%	-	-	-
			CARRY IN	2,396	-	-	-	-	-	-
			CH-53E	1,568	7,512	7,512	100%	7,964	7,964	100%
			E-6B	-	-	-	-	3,418	3,418	100%
			EA-18G	521	-	-	-	1,063	1,063	100%
			EMER FA-18	6,989	11,436	13,802	83%	-	-	-
			EMER REPR	16,617	28,722	29,317	98%	30,389	30,844	99%
			EP-3E	6,900	-	-	-	-	-	-
			FA-18D	518	339	339	100%	-	-	-
			FA-18E	2,110	2,433	2,433	100%	1,294	2,074	62%
			FA-18F	978	403	403	100%	1,397	1,397	100%
			KC-130J	2,881	4,026	4,026	100%	5,439	5,439	100%
			MH-53E	8,994	8,157	8,157	100%	1,650	1,650	100%
			MH-60R	2,342	3,121	3,121	100%	2,913	2,913	100%
			MH-60S	3,076	4,266	4,266	100%	3,880	4,493	86%
			MV-22B	1,601	1,901	1,901	100%	1,942	1,942	100%

Department of the Navy
FY 2020 President's Budget Submission
Operation and Maintenance, Navy

Dollars in Thousands					FY 2019			FY 2020		
Appropriation	Activity Type	Maintenance Type	Weapon System	FY2018 TOA Funded	TOA Funded	TOA Required	% Funded	TOA Funded	TOA Required	% Funded
			P-8A	5,738	23,681	23,681	100%	13,005	15,606	83%
			T-44C	450	-	-	-	-	-	-
			T-45C	4,558	4,727	4,727	100%	4,581	4,581	100%
			TH-57B	6,963	7,010	7,711	91%	5,720	5,720	100%
			TH-57C	5,415	7,711	8,412	92%	11,441	11,441	100%
			UC-12F	1,278	939	939	100%	239	239	100%
			UC-12M	-	1,267	1,267	100%	1,034	1,034	100%
			UC-12W	192	-	-	-	-	-	-
			UC-35D	-	-	-	-	212	212	100%
			UH-1Y	1,652	863	863	100%	1,347	1,347	100%
			VH-3D	34,482	40,923	40,923	100%	40,378	40,378	100%
			VH-60N	18,433	18,648	18,648	100%	18,672	18,672	100%
			VH-92A	-	-	-	-	1,604	1,604	100%
		Basic Aircraft Total		138,907	179,603	188,961	95%	162,270	166,719	97%
		Engine	250-C20J	2,219	1,664	1,802	92%	2,656	2,656	100%
			250-C20W	-	-	-	-	601	601	100%
			AE3007H	-	3,581	3,581	100%	3,714	3,714	100%
			CFM567B27A	7,069	18,932	21,636	88%	22,856	22,856	100%
			COM FLD TEAM	731	1,293	1,293	100%	1,620	1,620	100%
			JT8D9	-	-	1,250	0%	-	-	-
			MK611-8	1,503	4,326	4,326	100%	2,916	2,916	100%
			PT6A25	481	351	351	100%	74	74	100%
			PT6A34B	4,479	6,007	6,007	100%	7,245	7,245	100%
			PT6A42	4,072	2,068	2,068	100%	2,822	2,822	100%
			PT6A60	1,321	1,301	1,301	100%	853	853	100%
			PT6A68	1,467	9,642	13,474	72%	8,817	8,817	100%
			PWC535A	5,650	3,327	3,327	100%	3,393	3,393	100%
			T56A14G	1,558	696	1,114	62%	-	-	-
			T56A14P	4,654	3,767	3,767	100%	-	-	-
			T56A14T	148	159	159	100%	-	-	-
			T56A425G	2,858	2,022	2,560	79%	1,347	1,482	91%
			T56A425P	8,886	6,696	8,789	76%	5,711	5,711	100%
			T56A425T	74	139	139	100%	92	92	100%
			T56A427AG	286	738	738	100%	752	752	100%
			T56A427AP	5,287	8,709	8,709	100%	9,993	9,993	100%
			T56A427AT	35	144	144	100%	73	110	66%
			T56A427G	1,903	1,585	1,585	100%	1,482	1,482	100%
			T56A427P	10,860	8,430	7,664	110%	9,581	9,581	100%
			T56A427T	83	42	42	100%	86	86	100%
			T700GE401CL	422	406	406	100%	526	526	100%
			T700GE401CX	2,565	2,956	3,119	95%	1,953	3,375	58%
			T700GE401L	198	95	95	100%	-	-	-
			T700GE401X	1,031	825	825	100%	-	-	-
			TPE331-12	1,104	10	10	100%	615	615	100%
			V-22 PBTH	1,124	-	-	-	-	-	-
		Engine Total		72,068	89,911	100,281	90%	89,778	91,372	98%

Department of the Navy
FY 2020 President's Budget Submission
Operation and Maintenance, Navy

Dollars in Thousands					FY 2019			FY 2020		
Appropriation	Activity Type	Maintenance Type	Weapon System	FY2018 TOA Funded	TOA Funded	TOA Required	% Funded	TOA Funded	TOA Required	% Funded
	Other		14RQ2 - PUMA	9,050	9,770	9,770	100%	5,441	5,441	100%
			14RQ7 - Shadow	5,340	5,640	5,640	100%	-	-	-
			14RQA - BLACKJACK	-	-	3,268	0%	39,633	44,612	89%
			14SEA - Scan Eagle	149,820	29,917	29,917	100%	50,548	50,548	100%
			JSF	8,633	100	100	100%	100	100	100%
	Other Total			172,843	45,427	48,695	93%	95,722	100,701	95%
	Software		AASP	4,864	3,245	3,248	100%	3,759	3,759	100%
			ADMACS/ALRE	57	213	277	77%	-	-	-
			AH-1	6,581	4,025	4,372	92%	5,365	5,890	91%
			ALR67	7,200	3,037	3,684	82%	-	-	-
			AMC&D	586	707	747	95%	583	662	88%
			ARC210	115	219	-	-	427	427	100%
			C-130FRT	63	75	154	49%	77	154	50%
			C-2	117	102	103	99%	124	138	90%
			E-2D	2,156	8,780	8,071	109%	6,188	6,188	100%
			E-6	3,517	3,159	5,745	55%	4,676	5,119	91%
			EWSSA	1,656	947	1,116	85%	-	-	-
			F/A-18 A-D	71	-	-	-	-	-	-
			F/A-18 E/F	4,869	2,814	2,814	100%	3,260	3,326	98%
			H-53	167	84	99	85%	257	259	99%
			H53K	-	559	704	79%	1,286	1,288	100%
			HE-2K	872	7,117	7,240	98%	2,549	2,737	93%
			KC-130J	178	354	461	77%	879	948	93%
			LAS	287	372	374	99%	784	784	100%
			LPIA	171	141	165	85%	186	186	100%
			Manned Recon Systems	3,657	6,633	6,776	98%	5,617	5,104	110%
			MH-60R/S	13,817	31,383	36,374	86%	22,663	22,695	100%
			MQ-8	1,460	1,439	3,026	48%	1,567	3,035	52%
			MSMA	774	839	863	97%	1,113	1,275	87%
			P-3C	275	336	366	92%	147	326	45%
			P-8	10,493	12,726	15,208	84%	17,467	18,419	95%
			SH-60F/H/HH-60H	440	5	89	6%	-	-	-
			Support	125	133	157	85%	247	253	98%
			TAMMAC	376	-	-	-	-	-	-
			TRITON	-	-	1,915	0%	-	-	-
			V-22	17,101	4,987	5,650	88%	21,912	23,708	92%
			VH	957	1,969	2,187	90%	3,113	3,585	87%
	Software Total			83,002	96,400	111,985	86%	104,246	110,265	95%
	Support Equipment		Various	34,942	37,871	58,841	64%	43,802	56,802	77%
	Support Equipment Total			34,942	37,871	58,841	64%	43,802	56,802	77%
All Other Items Not Identified	N/A		14TMP - Tomahawk Mission Planning C	22,002	22,454	22,454	100%	22,985	22,985	100%
			14TOP - TOPSCENE	908	1,935	1,972	98%	-	-	-
			14TOP - TOPSCENE - OCO	745	715	715	100%	732	732	100%
			AMCM	15,071	50,397	50,397	100%	13,750	13,750	100%

Department of the Navy
FY 2020 President's Budget Submission
Operation and Maintenance, Navy

Dollars in Thousands					FY2018	FY 2019			FY 2020				
Appropriation	Activity Type	Maintenance Type	Weapon System	TOA Funded	TOA Funded	TOA Required	% Funded	TOA Funded	TOA Required	% Funded			
			BQM-177	-	-	-	-	370	400	93%			
			BQM-34S	501	201	800	25%	201	800	25%			
			BQM-74E	392	194	272	71%	208	272	76%			
			Countermeasures	39	261	261	100%	1,348	1,348	100%			
			EAJ	4,542	8,567	10,941	78%	9,213	13,285	69%			
			Engine Containers	220	-	-	-	-	-	-			
			GQM-163A	283	105	170	62%	476	170	280%			
			MATCALs	1,919	3,288	3,603	91%	2,605	3,891	67%			
			MOBILE LAND TARGETS	239	231	264	88%	231	264	88%			
			NATO Seasparrow	1,035	1,553	1,553	100%	2,066	2,066	100%			
			Other	42,284	40,818	40,918	100%	53,244	53,322	100%			
			Other End Items	22,079	12,480	12,480	100%	14,214	14,214	100%			
			SMCM	162	183	183	100%	-	-	-			
			Sonar Towed Array	3,935	4,881	4,881	100%	5,146	5,146	100%			
			Support	474	699	834	84%	796	834	95%			
			TA/AS-TTSP	139	139	680	20%	142	692	21%			
			TMSS	3,519	1,858	2,384	78%	2,316	3,133	74%			
			N/A Total	120,487	150,959	155,762	97%	130,043	137,304	95%			
			Electronics and Communications Systems	Electronics and Communications Equipment	ALQ-99		3,248	2,135	2,135	100%	2,331	2,331	100%
		Electronics and Communications Equipment Total				3,248	2,135	2,135	100%	2,331	2,331	100%	
	End Item	CEC			7,370	6,526	6,526	100%	9,767	9,767	100%		
					11,363	7,344	7,344	100%	7,408	7,408	100%		
					1,021	1,749	1,749	100%	1,816	1,816	100%		
					7,783	8,670	8,670	100%	8,012	8,012	100%		
					27,537	24,289	24,289	100%	27,003	27,003	100%		
					1,920	6,076	7,048	86%	2,786	4,003	70%		
					1,920	6,076	7,048	86%	2,786	4,003	70%		
					736	683	683	100%	700	700	100%		
				736	683	683	100%	700	700	100%			
	Missiles	Missile Accessories and Components	14TOM - Tactical Tomahawk		1,653	2,470	2,470	100%	2,514	2,514	100%		
				5,572	3,848	3,848	100%	3,518	3,518	100%			
				27,799	20,503	20,503	100%	22,532	22,532	100%			
		Missile Accessories and Components Total			35,024	26,821	26,821	100%	28,564	28,564	100%		
Other		14D1T - AARGM		751	-	-	-	-	-	-			
				5,406	7,736	8,790	88%	8,817	8,920	99%			
				763	2,613	3,209	81%	3,063	3,269	94%			
				3,529	3,673	4,239	87%	7,953	7,953	100%			
				2,848	1,077	2,095	51%	-	-	-			
				-	-	-	-	2,981	3,174	94%			
				2,705	3,380	8,614	39%	7,328	4,851	151%			
				-	-	-	-	937	937	100%			
			460	-	-	-	-	-	-				

Department of the Navy
FY 2020 President's Budget Submission
Operation and Maintenance, Navy

Dollars in Thousands					FY 2019			FY 2020		
Appropriation	Activity Type	Maintenance Type	Weapon System	FY2018 TOA Funded	TOA Funded	TOA Required	% Funded	TOA Funded	TOA Required	% Funded
			14D1T - HELLFIRE/PGMs	-	-	-	-	565	702	80%
			14D1T - SIDEWINDER (9M)	94	490	490	100%	145	145	100%
			14D1T - SIDEWINDER (9X)	17,333	13,503	14,080	96%	14,282	14,621	98%
			14D1T - SLAM-ER	2,517	4,049	5,630	72%	5,513	10,186	54%
			14D1T - SPARROW (AIR)	25	493	1,529	32%	-	-	-
			Other Total	36,431	37,014	48,676	76%	51,584	54,758	94%
			Surface Communications and Control Systems							
			AMRAAM	549	627	639	98%	540	540	100%
			DAW/JDAM	-	140	140	100%	-	-	-
			HARPOON/SLAM ER	-	833	844	99%	691	691	100%
			JSOW	1,852	2,027	2,189	93%	2,671	2,671	100%
			SIDEWINDER	1,169	2,028	2,040	99%	2,541	2,541	100%
			Surface Communications and Control Systems Total	3,570	5,655	5,852	97%	6,443	6,443	100%
			Ordnance Weapons and Munitions							
			End Item							
			GUNS	3,006	5,900	5,900	100%	6,200	6,200	100%
			End Item Total	3,006	5,900	5,900	100%	6,200	6,200	100%
			Other							
			14D1T - SOPGM	250	-	814	0%	-	822	0%
			14D2T - AAE	999	-	-	-	-	-	-
			14D2T - BOMBS	448	1,366	2,115	65%	-	-	-
			14D2T - BOMBS/DAW	-	-	-	-	61	61	100%
			14D2T - CADs/PADs (AEPS)	2,661	373	373	100%	370	370	100%
			14D2T - JDAM	885	1,391	1,591	87%	305	926	33%
			14D2T - JSOW	1,765	4,286	4,823	89%	2,214	2,214	100%
			14D2T - PYROTECHNICS	-	-	110	0%	88	112	79%
			14D2T -SDB II	-	-	-	-	1,605	1,605	100%
			Other Total	7,008	7,416	9,826	75%	4,643	6,110	76%
			Ships							
			Carrier Incremental Availabilities	11,282	14,964	14,964	100%	19,035	19,035	100%
			Carrier Incremental Availabilities Total	11,282	14,964	14,964	100%	19,035	19,035	100%
			Continuous Maintenance							
			AMPHIBS	14,884	7,339	7,339	100%	6,128	6,128	100%
			CG	199,804	170,153	170,153	100%	165,830	165,830	100%
			DDG	68,337	87,055	87,055	100%	550	550	100%
			DDG 1000	1,109	-	-	-	8,062	8,062	100%
			LCAC	4,358	3,249	3,249	100%	-	-	-
			LCS	35,448	23,911	23,911	100%	51,432	51,432	100%
			LSD	162,067	1,060	1,060	100%	-	-	-
			MINESWEEPERS	-	4,174	4,174	100%	8,612	8,612	100%
			Other	8,876	41,909	41,909	100%	12,672	12,672	100%
			Continuous Maintenance Total	494,882	338,850	338,850	100%	253,286	253,286	100%
			Other							
			AFDL-AFDM-ARS	58	-	-	-	79	79	100%
			AGF-LCC	259	-	-	-	-	-	-
			AMPHIBS	13,627	14,491	18,327	79%	21,326	16,816	127%
			AS-ARDM	66	59	59	100%	75	75	100%
			CG	7,051	9,015	11,657	77%	11,793	11,587	102%
			CV-CVN	8,325	5,800	7,137	81%	3,735	4,726	79%

Department of the Navy
FY 2020 President's Budget Submission
Operation and Maintenance, Navy

Dollars in Thousands					FY 2018			FY 2019			FY 2020		
Appropriation	Activity Type	Maintenance Type	Weapon System	TOA Funded	TOA Funded	TOA Required	% Funded	TOA Funded	TOA Required	% Funded			
	Other Total		DDG	38,042	30,715	47,338	65%	71,055	64,638	110%			
			LCS	34,889	145,084	145,283	100%	194,797	194,878	100%			
			MCM-MHC (A)	845	405	405	100%	460	498	92%			
			PC	1,836	2,911	3,271	89%	2,172	2,483	87%			
			SSBN	39,701	30,568	33,092	92%	32,714	36,380	90%			
			SSN-MTS-SSGN	119,276	117,410	110,058	107%	108,051	145,983	74%			
			SSN-SSGN	25,191	26,351	28,173	94%	20,368	21,559	94%			
			Other Total	289,166	382,809	404,800	95%	466,625	499,702	93%			
		Ship Maint		AFDL-AFDM-ARS	1,408	9,403	10,485	90%	-	-	-		
				AGF-LCC	18,975	23,583	24,544	96%	18,362	18,362	100%		
				AMPHIBS	846,537	986,463	1,034,416	95%	1,206,016	1,400,282	86%		
				ARDM-AS	365	-	-	-	-	-	-		
				AS-ARDM	4,112	42,685	42,685	100%	354	354	100%		
				CG	324,492	126,805	171,740	74%	191,004	279,943	68%		
			CV-CVN	583,506	527,126	594,198	89%	633,581	685,181	92%			
	Ship Maint Total		DDG	1,117,845	791,800	1,007,467	79%	774,649	1,007,862	77%			
			LCS	79,282	159,769	205,264	78%	312,651	329,882	95%			
			MCM-MHC (A)	61,627	74,952	80,506	93%	106,726	106,726	100%			
			PC	56,480	38,055	37,979	100%	34,975	49,137	71%			
			SSBN	70,856	74,545	79,773	93%	11,248	33,444	34%			
			SSN-MTS-SSGN	543,306	551,852	707,747	78%	432,788	364,973	119%			
			SSN-SSGN	155,849	107,845	121,494	89%	93,964	135,871	69%			
			Ship Maint Total	3,864,641	3,514,883	4,118,298	85%	3,816,318	4,412,017	86%			
Operation and Maintenance, Navy Total				13,702,499	13,259,432	14,718,128	90%	14,332,821	15,371,388	93%			

Department of the Navy
FY 2020 President's Budget Submission
Operation and Maintenance, Navy Reserve

Dollars in Thousands					FY2018	FY 2019			FY 2020			
Appropriation	Activity Type	Maintenance Type	Weapon System	TOA Funded		TOA Funded	TOA Required	% Funded		TOA Funded	TOA Required	% Funded
Operation and Maintenance, Navy Reserve	Aircraft	Aircraft and Engine Accessories and Components	KC-130J	841		1,674	1,900	88%		1,643	1,643	100%
			V-22 PBL	2,900		3,392	3,819	89%		3,895	3,896	100%
		Aircraft and Engine Accessories and Components Total		3,741		5,066	5,719	89%		5,538	5,539	100%
		Engine	KC-130J	6,047		8,096	9,136	89%		14,297	14,300	100%
			V-22 PBTH	4,034		5,521	6,238	89%		5,908	5,909	100%
		Engine Total		10,081		13,617	15,374	89%		20,205	20,209	100%
		Basic Aircraft	C-130T	20,335		7,800	7,800	100%		12,969	12,969	100%
			EMER REPR	708		1,403	1,403	100%		1,455	1,455	100%
			KC-130J	-		5,995	5,995	100%		3,096	3,096	100%
			KC-130T	12,198		11,390	11,390	100%		13,075	13,075	100%
	Aircraft	Basic Aircraft Total		33,241		26,588	26,588	100%		30,595	30,595	100%
		Engine	T700GE401CL	124		145	145	100%		74	74	100%
			T700GE401L	82		65	65	100%		-	-	-
		Engine Total		206		210	210	100%		74	74	100%
		Aircraft and Engine Accessories and Components	KC-130J	-		62	62	100%		84	84	100%
		Aircraft and Engine Accessories and Components Total		-		62	62	100%		84	84	100%
		Basic Aircraft	AH-1W	2,608		6,939	6,939	100%		-	-	-
			CH-53E	-		3,307	3,307	100%		3,993	3,993	100%
			EA-18G	203		-	-	-		186	742	25%
			EMER FA-18	114		1,342	1,342	100%		83	83	100%
	Aircraft		EMER REPR	4,574		8,950	8,950	100%		7,999	7,999	100%
			FA-18A	303		5,371	5,371	100%		-	-	-
			FA-18C	-		-	-	-		2,330	5,178	45%
			MH-53E	3,823		-	-	-		4,395	4,395	100%
			MH-60R	974		1,387	2,003	69%		1,075	1,075	100%
			MV-22B	3,351		2,245	2,245	100%		3,042	3,042	100%
			P-3C	4,372		5,900	5,900	100%		-	-	-
			UH-1Y	396		-	-	-		-	-	-
		Basic Aircraft Total		20,718		35,441	36,057	98%		23,103	26,507	87%
		Engine	F414GE400C	1,695		239	478	50%		702	702	100%
	Aircraft		F414GE400F	908		481	481	100%		391	391	100%
			F414GE400H	838		638	638	100%		530	530	100%
			F414GE400L	1,742		978	978	100%		1,157	1,157	100%
			F414GE400S	1,066		196	392	50%		553	553	100%
			KC-130J	-		97	97	100%		127	127	100%
			T64GE416A	1,286		1,161	1,161	100%		1,234	1,234	100%
			T64GE419	1,108		1,150	1,150	100%		1,254	1,254	100%
		Engine Total		8,643		4,940	5,375	92%		5,948	5,948	100%

Department of the Navy
FY 2020 President's Budget Submission
Operation and Maintenance, Navy Reserve

Dollars in Thousands					FY2018	FY 2019			FY 2020			
Appropriation	Activity Type	Maintenance Type	Weapon System	TOA Funded		TOA Funded	TOA Required	% Funded		TOA Funded	TOA Required	% Funded
Operation and Maintenance, Navy Reserve	Aircraft	Aircraft and Engine Accessories and Components	KC-130J	-		46	46	100%		60	60	100%
			UC-12W	56		40	40	100%		20	20	100%
	Aircraft and Engine Accessories and Components Total		56		86	86	100%		80	80	100%	
	Basic Aircraft	C-20G	-		1,285	1,285	100%		2,622	2,622	100%	
		C-37A	734		517	517	100%		-	-	-	
	C-37B	1,654		-	-	-		1,015	1,015	100%		
	C-40A	8,610		6,530	6,530	100%		12,696	12,696	100%		
	EMER FA-18	361		-	-	-		-	-	-		
	EMER REPR	796		1,866	2,400	78%		2,030	2,643	77%		
	F-5N	22,491		25,260	25,260	100%		28,768	28,768	100%		
	UC-12W	-		-	-	-		200	200	100%		
	UC-35C	-		-	-	-		266	266	100%		
	UC-35D	533		-	-	-		-	-	-		
	Basic Aircraft Total		35,179		35,458	35,992	99%		47,597	48,210	99%	
	Engine	CFM567B24	367		247	247	100%		-	-	-	
		JT15D5D	30		348	348	100%		341	341	100%	
		MK611-8	-		3,596	3,596	100%		592	592	100%	
		PT6A60	-		1,435	1,435	100%		637	637	100%	
		PWC535A	1,720		2,652	2,652	100%		1,987	1,987	100%	
		T56A14G	130		135	135	100%		275	275	100%	
		T56A14P	846		419	419	100%		854	854	100%	
		T56A14T	30		20	20	100%		20	20	100%	
		T56A16G	4,286		1,482	1,482	100%		1,237	1,237	100%	
		T56A16P	6,770		6,696	6,696	100%		5,124	5,124	100%	
		T56A16T	223		199	199	100%		162	162	100%	
		T700GE401	390		-	-	-		-	-	-	
		T700GE401C	750		714	714	100%		1,093	1,093	100%	
		T700GE401CX	344		326	326	100%		332	332	100%	
	T700GE401X	173		327	327	100%		-	-	-		
	Engine Total		16,059		18,596	18,596	100%		12,654	12,654	100%	
Operation and Maintenance, Navy Reserve Total				127,924		140,064	144,059	97%		145,878	149,900	97%

Department of the Navy
FY 2020 President's Budget Submission

Dollars in Thousands				FY2018	FY2019	FY2020
Appropriation	Activity Type	Maintenance Type	Weapon System	TOA Funded	TOA Funded	TOA Funded
Research, Development, Test, and Evaluation, Navy	Aircraft	Aircraft and Engine Accessories and Components	FA-18B	1,479	-	-
			FA-18C	1,815	-	-
			FA-18D	-	525	387
			FA-18E	295	309	312
			FA-18F	542	1,097	-
			KC-130J	-	-	3,711
			MH-60R	437	614	618
			MH-60S	2,151	2,508	2,084
			MV-22B	1,078	-	2,256
			NP-3D	3,789	2,942	-
			Other	1,325	4,630	4,605
			TH-57C	653	-	-
			Various	9,374	16,837	14,978
		Aircraft and Engine Accessories and Components Total		22,938	29,462	28,951
		Software	MQ-8	659	605	455
		Software Total		659	605	455
	All Other Items Not Identified	N/A	F414GE400C	558	478	492
			F414GE400F	359	481	495
			F414GE400H	334	638	657
			F414GE400L	289	326	335
			F414GE400S	424	392	403
			T56A14G	143	130	133
			T56A14P	464	423	435
			T56A14T	42	44	45
			T56A16G	143	130	133
			T56A16P	464	423	435
			T56A16T	28	29	30
			T56A425P	464	423	435
			T56A425T	14	15	15
			T56A427G	156	159	161
			T56A427P	-	-	781
			T56A427T	20	21	21
			T700GE401CL	199	129	133
			T700GE401CX	271	263	271
			T700GE401L	80	154	158
			T700GE401X	161	156	160
		N/A Total		4,613	4,814	5,728
Research, Development, Test, and Evaluation, Navy Total				28,210	34,881	35,134

Dollars in Thousands							
Appropriation	Activity Type	Maintenance Type	Weapon System	FY2018 TOA Funded	FY2019 TOA Funded	FY2020 TOA Funded	
Aircraft Procurement, Navy	Aircraft	Aircraft and Engine Accessories and Components	F402RR408A	1,900	1,900	1,900	
			F404/F414	295	295	295	
			JSF	51,538	63,716	51,537	
			MQ-8	3,031	4,990	3,848	
			Multi Platform	203	203	203	
			T44	129	258	-	
			T56A425T	209	209	209	
			T64	230	230	230	
			V22 (Cockpit Voice Recorder) 6	1,891	482	2,045	
			V22 Blk A to B 1	2,220	-	-	
			V22 Digital Interoperability - MANGL 7	-	1,170	1,191	
			V22 IASE 4	-	706	-	
			V22 MCOI 5	2,553	2,715	2,766	
			V22 Multi Spectral Sensor	-	-	-	
			V22 N/A 3	3,984	8,010	10,628	
			V22 N/A 9	7,370	7,518	7,667	
			V22 Traffic Collision Avoidance System 8	968	830	1,428	
			Aircraft and Engine Accessories and Components Total	76,521	93,232	83,947	
			Basic Aircraft	AH-1Z/UH-1Y	2,671	5,225	-
				ARC-210	-	-	362
		AV-8B		10,435	7,365	5,405	
		C-12		-	814	607	
		C-130		-	973	698	
		C-130T		2,558	-	-	
		C-2 Brakes		378	1,171	405	
		C-20		500	400	-	
		C-26		-	656	656	
		C-40		2,983	-	4,000	
		CH-53K		-	4,210	14,892	
		CMV-22		-	-	84	
		COM AVC		1,868	15,629	24,981	
		E-2		-	-	1,688	
		E-2C / Technology Insertion		465	474	-	
		E-2C / Technology Upgrades		-	-	484	
		E-6B Carbon Brakes A Kits Installation		195	794	404	
		E-6B CSFIR Phase 2 A Kits Installation		-	-	1,364	
		E-6B FQIS A Kits Installation		120	125	127	

Department of the Navy
FY 2020 President's Budget Submission

Dollars in Thousands				FY2018	FY2019	FY2020
Appropriation	Activity Type	Maintenance Type	Weapon System	TOA Funded	TOA Funded	TOA Funded
			E-6B Fuel Tank Sealant Upgrade A Kits Installation	-	2,073	6,343
			E-6B Kapton Engine Struts A Kits Installation	-	136	138
			E-6B Kapton Lower Lobe A Kits Installation	-	876	2,680
			E-6B Kapton Tail A Kits Installation	-	-	816
			E-6B Seats A Kits Installation	65	99	101
			E-6B SLEP Phase 1 A Kits Installation	6,261	-	-
			E-6B APU A Kit Installation	-	2,398	4,892
			E-6B FAB-T A Kit Installation	511	521	3,535
			E-6B IATS A Kits Installation	1,500	1,530	-
			E-6B Kapton Wings A Kits Installation	244	249	254
			E-6B KGR-72 A Kit Installation	-	81	330
			E-6B MR-TCDL Equipment B Kits Installation	-	8,026	14,967
			E-6B Phase 1 A Kit Installation	2,280	2,326	-
			E-6B Phase 3 A Kit Installation	1,740	1,775	-
			E-6B PNVC B Kit Installation	219	223	1,515
			E-6B RS B KIT Installation	313	319	2,164
			E-6B SLEP Phase 1B A Kits Installation	-	2,474	2,728
			E-6B Tech Upgrade Block A Kits Installation	60	117	-
			E-6B Tech Upgrade Workstations A Kits Installation	113	108	-
			E-6B VTT B Kits Installation	446	455	-
			EP-3E	1,940	1,737	3,201
			F/A-18	2,416	15,433	18,435
			F/A-18 A-D Correction of Discrepancies	38,103	23,885	20,892
			F/A-18 AEA-18G - Unique	1,886	605	2,676
			F/A-18 A-F MIDS	-	-	21
			F/A-18 CNI	1,691	-	-
			F/A-18 LITENING	-	-	280
			F/A-18A-D SLMP	41,382	55,754	31,453
			F/A-18A-F AESA	-	-	498
			F/A-18A-F ATFLIR	315	903	348
			F/A-18A-F Core Avionics Upgrade	2,789	10	1,187
			F/A-18A-F EW Unique	510	720	510
			F/A-18A-F JHMCS	3,828	3,093	-
			F/A-18A-F Network Centric Ops	5,655	3,940	609
			F/A-18EF E/F Correction of Operational Discrepancies	39,920	38,396	58,863

Dollars in Thousands									
Appropriation	Activity Type	Maintenance Type	Weapon System	FY2018 TOA Funded	FY2019 TOA Funded	FY2020 TOA Funded			
Aircraft Procurement, Navy Total			H-1	-	187	218			
			KC-130J	4,054	2,378	24,712			
			MH-60R	85	3,542	4,199			
			MH-60S	5,708	4,353	3,453			
			MQ-4 Triton	2,319	29,988	23,950			
			MQ-8	25	238	335			
			MV-22B	10	8	-			
			P-3	-	116	78			
			P-8 MMA	840	4,037	5,752			
			P-8A	5,068	5,662	473			
			RQ-21A	7,906	-	-			
			SPA	1,672	834	375			
			T45	5,199	11,336	29,368			
			T-6A/B	2,795	6,147	6,053			
			TH57	461	557	1,213			
			UC-35	400	-	-			
			UH-1Y	230	1,200	3,000			
			VH-92A	6,029	9,265	31,187			
			Basic Aircraft Total	219,161	285,946	369,959			
			Electronics and Communications Equipment	AV-8B	309	367	626		
				CH-53E	-	100	237		
				F/A-18 E/F	784	1,200	1,248		
				F-5	-	467	-		
				KC-130J	-	128	40		
				KC-130T	96	143	40		
				MH-53E	174	258	614		
				MH-60R	-	1,234	-		
				MH-60S	-	1,740	-		
				T-34	86	47	-		
			Electronics and Communications Equipment Total		1,449	5,684	2,805		
			Other	H-53E	3,732	3,650	3,050		
				MISC ROR	838	1,483	1,570		
			Other Total		4,570	5,133	4,620		
			Support Equipment	CASS	6,519	4,972	274		
				CSE AVC	80	72	100		
			Support Equipment Total		6,599	5,044	374		
			Electronics and Communications Systems	Electronics and Communications Equipment	Countermeasures	6,601	6,019	4,445	
				Electronics and Communications Equipment Total		6,601	6,019	4,445	
			Aircraft Procurement, Navy Total				314,901	401,058	466,150

Department of the Navy
FY 2020 President's Budget Submission

Dollars in Thousands						
Appropriation	Activity Type	Maintenance Type	Weapon System	FY2018 TOA Funded	FY2019 TOA Funded	FY2020 TOA Funded
Other Procurement, Navy	All Other Items Not Identified	N/A	JHMCS/NVCD	988	-	-
			MHU-191/M CILOP	3,820	3,897	3,975
		N/A Total		4,808	3,897	3,975
	Electronics and Communications Systems	End Item	DCRS	660	656	-
			SSN / SSGN	5,453	6,026	8,334
		End Item Total		6,113	6,682	8,334
		Software	JMPS	4,961	2,326	2,375
		Software Total		4,961	2,326	2,375
	Ships	Carrier Incremental Availabilities	CV-CVN	47,454	86,489	65,115
		Carrier Incremental Availabilities Total		47,454	86,489	65,115
		Continuous Maintenance	CVN	32,971	92,691	98,885
			SSBN/SSGN	-	32,040	9,830
			SSN	1,749	30,219	43,270
		Continuous Maintenance Total		34,720	154,950	151,985
	Other Procurement, Navy Total			98,056	254,344	231,784
Investment Grand Total				441,167	690,283	733,068